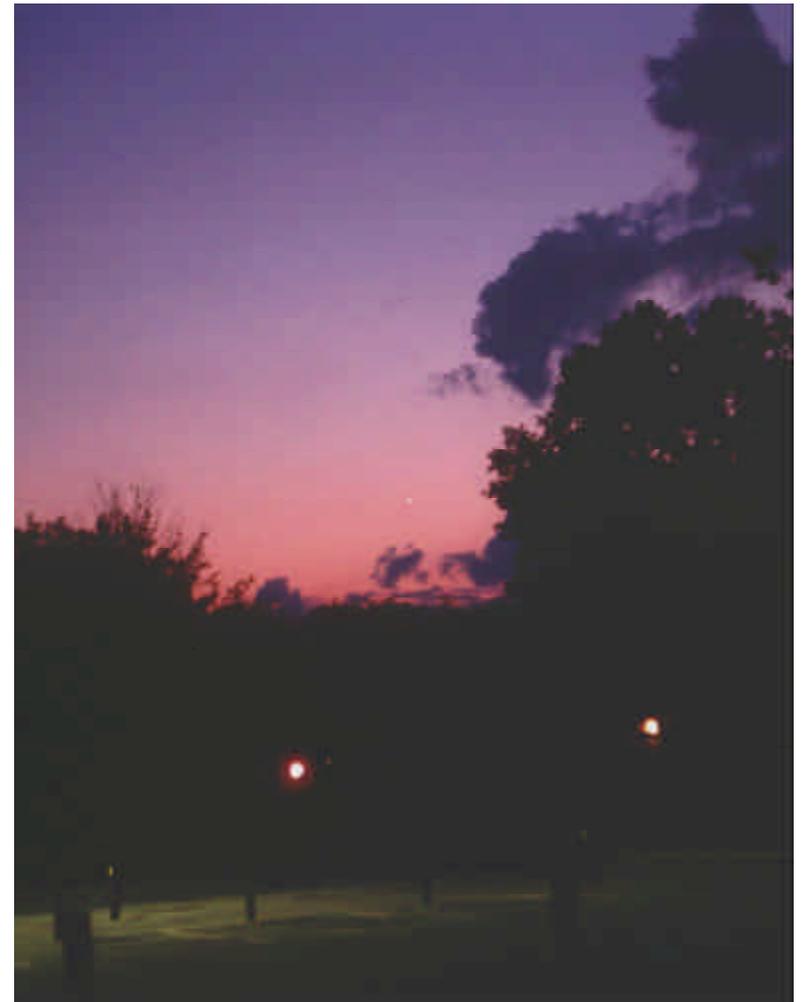


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Summer 2001



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Cover: The close conjunction of Mercury and Venus photographed on the evening of 3 July, 1965 seen from the observatory on the campus of the University of Rochester in Rochester, New York. The “single” star seen between the trees is actually the two planets. *Photo by G. Bouw.*

THE BIBLICAL ASTRONOMER

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EDITORIAL

For over 120 years now, occult organizations such as the Theosophical Society have worked on a program to confuse Lucifer and Jesus. In the past ten years they, through the New Age movement, have gained momentum. When I was first introduced to the movement in the early 1980s, it was an occasional liberal, mainline church which would get caught up in the New Age movement. Now, even in fundamentalist Baptist churches, the New Age movement has made an impact. To that end, most of this issue is devoted to an exposé of the most successful method yet to cause Christians to unwittingly confuse Satan and Christ.

It may seem innocent enough, but the confusion of Lucifer and the morning star, which is the most successful technique yet worked by Satan to disarm the churches, leaves little to do for a church to survive except become a social club. For many years, we've heard that doctrine is divisive. Many Baptist churches in the Cleveland area – and I can only speak of this area – have dropped the “Baptist” from their name. They labor under the delusion that people will more readily accept the church if it is divorced from doctrinal issues. What has happened is that these churches, in order to live up to their new names, have had to compromise doctrine. Dropping “Baptist” from their names was not sufficient.

Likewise Baptist schools who have dropped the word from their names have run into doctrinal issues and can hardly walk the tightrope of pure doctrine and compromise. And since they can no longer be so selective, drugs and fornication have entered the schools and churches through the lowered standards. There is a church in the greater Cleveland area, not a Baptist church but one of those anti-denominational, anti-doctrinal NIV churches which had a scandal about five or six years ago. It turns out that the loving, caring, popular pastor was, according to the church's secretary, a Satanist who would have his way with her any time. Eventually she had enough and confessed, and he left for greener pastures, that is, another unsuspecting church.

Now I realize that not all readers are Baptists, some are Presbyterians, Episcopalians, Lutherans, Anglicans, and others are nondescript. Some are atheists, and others agnostics. I pick on the Baptists because, in my book, they of all people should know better than to confuse Jesus Christ and Satan. But I've found that of all people, Baptists have been absolutely the most stupid about it. To them the issue is unimportant. How do they know this? Why their denominational headquarters told them that there's nothing to it. The Bible has always said that. Dr. So Andso, quoting Dr. No Itall said so, and he's such an honest, scholarly,

good, godly man (Mat. 19:17; Mark 10:18). Why we have the mind of Christ (1 Cor. 2:16), so we can never be mistaken about anything! (1 Cor. 10:12!) What a tangled web the scriptures be when we loose the distinction between you and thee!

So let's use the mind of Christ. Put on your spiritual glasses and find out if the morning star (Rev. 22:16) will be covered with worms in death (Isa. 14:11). If nothing else, you'll learn something about Mercury and Venus, and the runaway greenhouse effect.

How to get a free copy of De Labore Solis

In 1988, the late Walter van der Kamp wrote a history of the philosophy of geocentricity versus heliocentrism, with an explanation of his own small-universe model. Now through the generosity of Paul Ellwanger, the book has been scanned into the computer as a MicroSoft Word document. Paul has offered to make it available free of charge to anyone who would like a soft (electronic) copy. Since his health is suffering and he is overworked, we've decided that the book, as well as the obituaries, will be available through the *Biblical Astronomer*. See the Readers' Forum in this issue for details.

The face on Mars

In Panorama, we present the latest pictures from Mars. The face on Mars is looking less and less like a sculpture left behind by extraterrestrials or antediluvian man.

Coming soon

Several people are involved in writing an astronomy text from a geocentric, creationist position. We expect to have one available soon.

Coming articles for the *Biblical Astronomer* include a history of the High Altitude Atmospheric Research Project. Find out facts from fiction. Also in the next issue we shall look at the role of Cepheid variables in determining the distance scale of the universe.

Also, since postal rates overseas are ascending to astronomical, we'd like to start a trial program to deliver the *Biblical Astronomer* as an Adobe PDF document. With a color printer and a bit of ingenuity, a reader can receive the quarterly in a form not yet possible by standard mail. Pricing has not yet been set. Experimental versions will soon be available on the web site (see inside front cover for URL). The file will be about half a million bytes in size.

THE MORNING STARS

Gerardus D. Bouw, Ph.D.

Did you know that there are two morning stars? Most people have at one time or another seen Venus as the morning star, but many go through their entire lives without ever glimpsing the second morning star, Mercury. Of course, when these two objects appear in the evening, they are called evening stars. But because of the nature of their orbits, they spend most of their time in the morning sky.

On July 3, 1965, around 8:00 P.M. Eastern Standard Time, Venus and Mercury appeared separated by only 0.04 degree (2.4 minutes of arc or about one twelfth of the apparent diameter of the moon). A sharp-eyed individual can resolve down to about one minute of arc (0.017 degree). To the casual observer, they appeared as a single object. Though they were in the evening sky at the time, this was the best opportunity for millions of people to see Mercury, given that Venus is the brightest object in the sky after the moon. The photo above shows Venus (upper left) and Mercury (lower right) through the University of Rochester's Alvin Clark refractor at the time of closest conjunction. (From a transparency taken by the author.) The redness of Mercury is quite apparent in the color original.



Mercury

In June 2001, NASA announced that the first Mercury orbiter mission is about to go into full-scale spacecraft development. Called MESSENGER (which stands for MErcury Surface, Space ENvironment, GEochemistry, and Ranging), plans are to launch the orbiter in March 2004. If successful, in April 2009 it will begin to orbit Mercury for one year. MESSENGER will not be the first spacecraft to visit Mercury, however. In 1974 and 1975, Mariner 10 flew past it three times, observing less than half the planet. Below is a Mariner 10 photo of Mercury's ringed Caloris Basin (left, center) from NASA.

Mercury is the closest planet to the sun, only 36 million miles away. Because it is so close to the sun, it never strays more than 28



degrees from the sun. That angular distance is roughly one and a half times the width of one's fist when held at arms length. Mercury takes 87.97 earth-days to orbit the sun. With an eccentricity of 0.2056, Mer-

cury's orbit is the most elliptical of all the planets except Pluto. Mercury's day, measured from star rise to star rise, is 58.646 earth-days, but because of its short year, the time from sunrise to sunrise is 176 earth days. Its rotational period is coupled to its year in the ratio 3:2, that is, three Mercurial days take two of its years. In other words, one Mercurial year takes 1½ of its days.

Mercury's diameter is 3049 miles (4878 km) and its mean density is 5.42 times as dense as water. By comparison, the earth's density is 5.52 times as dense as water. When compared in uncompressed state, the density of Mercury is highest of all the planets: 5.5 gm/cm³ versus earth's 4.0. That density suggests that it is 60 to 70 percent metals by weight, and 30% silicates. This implies that Mercury's core is large, extending ¾ of the way out to the surface. Mariner 10 showed that Mercury has a magnetic field about one percent as strong as earth's. This suggests that Mercury's core is molten, or partially molten, probably consisting of nickel and iron. The existence of the field poses a bit of a problem for evolutionary astronomers because after billions of years, the core should have cooled and solidified long ago. The field is inclined 7 degrees to Mercury's rotational axis.

Mercury has a barely detectable atmosphere. It consists of trace amounts of hydrogen and helium. Detected by Mariner 10, the atmosphere is probably made up of solar wind particles caught in Mercury's gravitational field. As the gravity is too weak to hold the hydrogen very long, the atmospheric composition is 42% helium, an equal amount of sodium, and about 15% oxygen. Other gasses make up the last 1%.

The surface of Mercury resembles the moon. The largest known crater on Mercury is the Caloris basin, some 810 miles (1300 km) in diameter. (Any crater more than 125 miles, i.e., 200 km, in diameter is called a *basin*.) The edge of the basin can be seen in the photo mosaic on the previous page. One interesting feature detected by Mariner 10's three fly-bys¹ is the rubble directly opposite the Caloris basin. When the violent event creating the basin happened, whatever its cause, whether impact or ejection, the shock wave went through Mercury's center and roughened and rippled surface directly opposite the basin. A picture of that area is reproduced on the next page.

At Mercury, the sun is eleven times as bright as it is at earth. Mercury's daytime temperatures exceed 850 degrees Fahrenheit at its equator, hot enough to melt lead. On the other temperature extreme, in

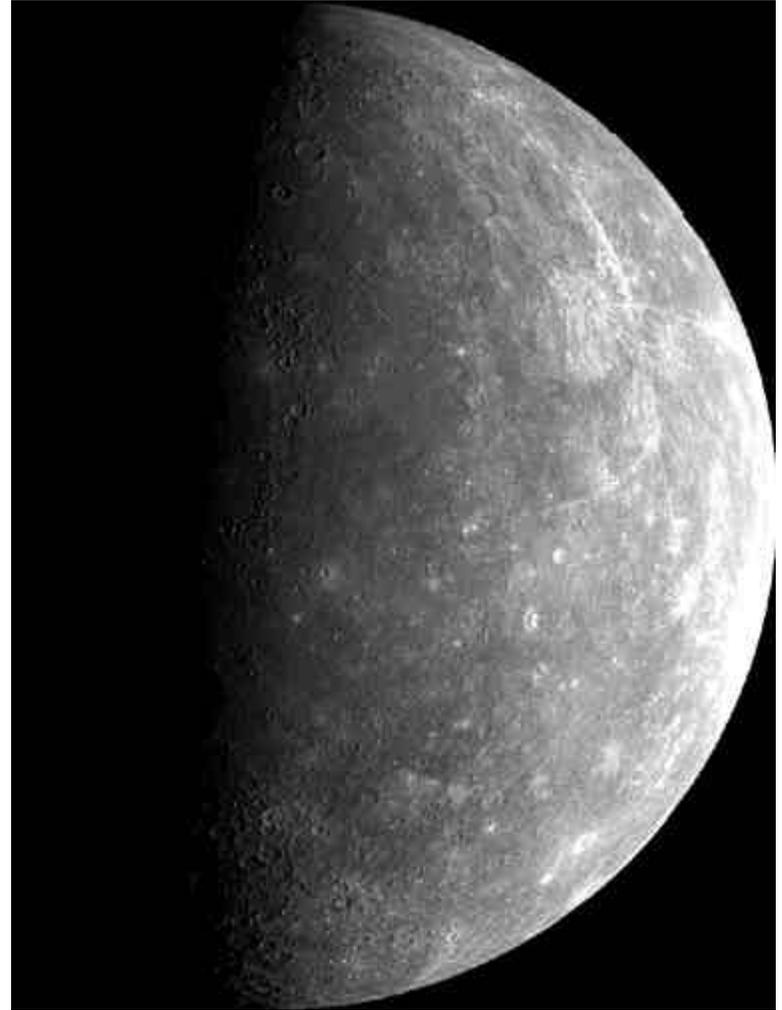
¹ Mariner 10 was launched November 3, 1973, flew past Venus on its way out to Mercury, and then flew past that planet on March 29, 1974 at a distance of 440 miles (705 km). It flew by Mercury a second time on September 21 for that year, and a third and final time on March 16, 1975. During these passes, it photographed 45% of Mercury's surface.

1991, researchers at Caltech (California Institute of Technology) bounced radio waves off Mercury and received bright echoes from its poles. The radio “signature” suggested that ice exists inside Mercury’s polar craters; in areas that never see sunlight, where the temperature is as low as 280 below zero Fahrenheit (-160 C). The ice may originate from outgassing, that is, water rising from the interior of the planet, or it may be due to cometary material that has fallen on Mercury.



Antipodal point from the Caloris Basin. (Courtesy, Calvin J. Hamilton)

Moon-like, desolate, hot, dry, with only a trace of an atmosphere, Mercury is a most inhospitable place. One might conclude because of its nearness of the sun that Mercury would have the hottest surface temperature of all the planets, but that would be a mistake. There is a planet with an even hotter surface, and we shall consider it next, but before we do, here is one more photo of Mercury, a mosaic created from more than 140 images taken by Mariner 10 as it left Mercury on its first fly-by.



(Courtesy Mark Robinson, Northwestern University)

Venus

After the sun and moon, Venus is the brightest permanent object in the sky. Its diameter is 7565 miles (12,104 km) and its mean density is 5.25. The average distance of Venus from the sun is 67 million miles (107 million km). In earth days, its rotational period is 243.0 days and that is retrograde, meaning that instead of the sun rising in its east, the

sun on Venus rises in the west. Its year is 224.7 of our days. The mean surface temperature of Venus is 855 F (726 K), hotter than Mercury at its equator.

Venus's atmosphere is a deadly mix of 96% carbon dioxide (the so-called "greenhouse gas") and 3% nitrogen, with 0.1% water vapor. Sulfuric acid was also found in its atmosphere, particularly in the clouds by which Venus is perpetually shrouded (see photo on the next page). Its atmosphere is so dense that the air pressure on the surface is 90 times as great as that on earth (15 lbs. per square inch). Seen from earth, the clouds are cream-colored, and looking up from its surface, the sky is orange.

Venus is sometimes mentioned as an example of a runaway greenhouse effect. Environmentalists like to terrorize people into giving up individual liberties by insisting that if they don't give up their automobiles, that the earth will turn into another Venus. Although this type of fear mongering helps make environmentalists rich and keeps politicians in power, it is absolute nonsense!

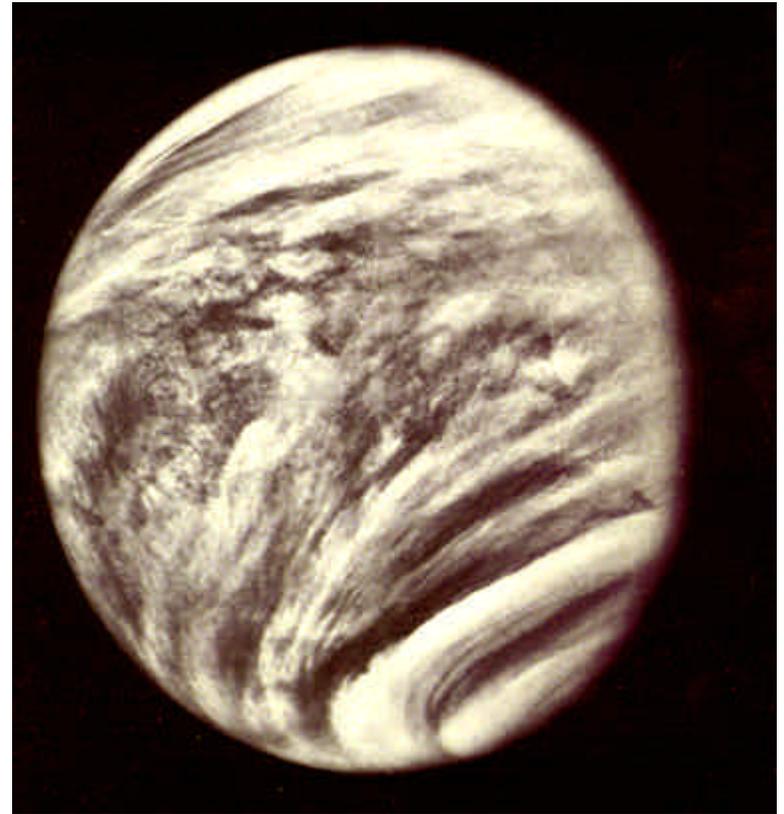
When space probes of the late 1950s and early 1960s showed Venus to be at least 750 °F (400 °C), scientists quickly realized that the greenhouse effect alone could not account for the heat. Still wanting to maintain a power base in the environmental movement, the late Carl Sagan (who ruined his health with sin) proposed an "enhanced" greenhouse effect.² When the term didn't take, ten years later Rasool and de Bergh added water vapor and proposed the "runaway" greenhouse effect.³ That term stuck. In 1973, however, Janssen reported that his team could find "no evidence of water vapor in the lower atmosphere of Venus ... it remains to be shown that a 'greenhouse' mechanism can be supported with the present constraints on the water vapor content."⁴ When the two Russian probes Venera 9 and 10 landed on Venus in 1975, the November 3, 1975 issue of *Aviation Week and Space Technology* had this to say about the Venus greenhouse theory:

Data and photographs returned from Venera-9 and -10 Soviet Venus lander spacecraft portray a well-lighted rocky surface belonging to a young, evolving planet. ... Venus is a planet in an early cool-down phase of evolution rather than in a final stage of suffocation in a thickening atmospheric greenhouse.

² Sagan, C., 1960. *Astrophysical Journal*, **65**:352.

³ Rasool, S. L., and C. de Bergh, 1970. *Nature*, **226**:1037.

⁴ Janssen, M. A., et al. 1973. *Science*, **179**:994.



A view of cloudy Venus from 720,000 km from Mariner 10 one day after its closest encounter with the planet. A mosaic of ultra-violet images.

Though the context of the quote is evolutionary, it does open the question of just how “young” can Venus be. Firsoff, remarking on Sagan’s original “enhanced greenhouse” speculation, had this to say:

An adiabatic atmosphere of a mass envisaged by Sagan [now known to be twice as massive –*Ed.*] is possible only if it is heated from below. In other words, the surface of Venus would have to be kept at a high temperature by internal sources. If this were so, Venus would have been still hotter in its aphroditological [a fancy term corresponding to “geological” where the prefix geo- refers to earth; here aphrodito- refers to Aphrodite, the Greek name for

Venus –*Ed.*] past, and its atmosphere would have been lost by molecular dissipation even more effectively than was the primitive atmosphere of the Earth.⁵

When it comes to the runaway greenhouse “effect,” if it had been going on for hundreds of millions or billions of years, why does Venus have any atmosphere left? Over that many years, the greenhouse effect should have caused the atmosphere to evaporate away, leaving only a small residue. The Venerian situation violates the second law of thermodynamics if the mythological ages are adhered to, whether or not the fable of the greenhouse effect is true, which it clearly is not.

Much of the mystery of Venus involves its atmosphere. The perpetual cloud cover means that most of the surface has to be mapped by radar, and most of that from earth although several satellites have done so. The Russians, however, have landed on Venus seven times between 1972 and 1982. Two photos one taken by Venera 9 and the other by Venera 10 and both corrected for “fisheye” distortion are reproduced on the next page. The article from which the figure comes examined the rock strewn (Venera 9) and sandy (Venera 10) surfaces. Given the density of the Venerian atmosphere, little erosion was expected, but that is not the case. The report claims that there are at least two weathering processes going on.

One operates on a scale of decimeters to meters and is responsible for the fracturing of a layered source rock and the subsequent downslope movement of the fragments. Mass-wasting, perhaps activated by venusian quakes or by unknown geologic processes, is likely the agent. Another geomorphic degradation process occurs on the scale of a centimeter or less and is responsible for the rounding of edges and the pitting of rock surfaces. The agents of this process are not known, but atmospheric action, perhaps in connection with volcanic episodes, may be the cause.⁶

Though once called earth’s twin and sister planet because they were so alike in size, Venus turns out to be every bit as inhospitable as Mercury, if not more so. There is one more thing that Mercury and Venus have in common: because they are inferior planets –whose orbits lie between the sun and earth – they exhibit phases just like the moon. Having looked at the physical features of these two morning stars, let us next look at the effect their existence has had on mankind.

⁵ Firstoff, V. A., 1968. *The Interior Planets*, (London), p. 103.

⁶ Florensky, C. P., L. B. Ronca, and A. T. Basilevsky, 1977. *Science*, **196**:869.



ВЕНЕРА-9 22.10.1975
ПРЕОБРАЗОВАНИЕ 17.01.1976
ИППИ АН СССР



ВЕНЕРА-10 25.10.1975
ПРЕОБРАЗОВАНИЕ 17.01.1976
ИППИ АН СССР

Mercury in mythology

Mercury is a Latin word. Mercury, or Mercurius, was the Italian god of merchandise (merx) and merchants. After the expulsion of the Tarquins (Etruscan League), Rome frequently suffered grain shortages.⁷ In 495 B.C., after trying a variety of deities, the Greek god Hermes was introduced into Rome under the Italian name of Mercurius.⁸ His temple on the Aventine in the city of Rome became a sort of headquarters of the corn trade and of the merchants engaged in it, but he was soon worshipped by traders in general. His annual festival fell on the 15th of May, which date was chosen because that was the day of Maia, the mother of Hermes. According to Pliny, Mercury was also called Apollo, the sun god.

Hermes

Hermes was the name of the Greek god adopted by the merchants of Rome. It was also the Greek name for the planet Mercury. His father was Zeus (Deus, meaning god), and his mother's name was Maia, daughter of Atlas who may have been the Tiras of Gen. 10:2. The name, Hermes, is itself supposedly hard to trace, but Hislop finds that Hermes is an Egyptian synonym for "son of Ham."⁹ "Her" is a form of the name Horus, the Egyptian god of the sun, and "mes" means "draw forth" and can mean "son of" as in *Ramesses* and *Tothmes*.

The earliest center of Hermes worship seems to be at Arcadia where he was worshipped as the god of fertility and where the nature of his ceremony links him with Bacchus. In literature and in cult he was linked with the protection of cattle and sheep. In some regions he bore the title of the ram-bearer, and so he is often portrayed bearing a sheep on his shoulders. Because of this, he was also connected with the pastoral deities of vegetation, especially Pan and the nymphs. This latter is how he is presented in the *Iliad* (xiv. 490), the epic hymn to Hermes, and by his Homeric titles. In the *Odyssey*, which event Sir Isaac Newton dates contemporary with Solomon, Hermes appears mainly as the messenger of the gods and the conductor of the dead to Hades (Hell). As such, he ranks among the chthonian gods, a god of the underworld, that is, a god of Hell.

⁷ Rome's power base was wine. That is why Rome had no interest in conquering the regions further north than Northern France, Southern England, Southern Germany, etc., because one could not grow wine there. The growth of grain for bread was not economically profitable.

⁸ Livy 2. 21, 7; 27,5.

⁹ Hislop, A. 1916. *Two Baylons*, (Neptune, NJ: Loizeau Bros.), p. 25-26.

Among the chthonian duties are the functions of a dream-god, so he is called the “conductor of dreams,” and the Greeks offered him their last libation (drink offering) before sleep. His role as messenger landed him the responsibilities of god of roads and doorways; he was protector of travelers. He was the god of good luck, and any treasure casually found was considered a gift from Hermes. He was the god of gain, both honest and dishonest. The latter made him the god of thieves.

Later in Egypt, Hermes was equated to Toth, the god of wisdom. Toth was the scribe of the gods and the lord of divine words. To Hermes was attributed the authorship of all the strictly sacred books which were usually called *Hermetic* by Greek authors. The writings attributed to him were a mixture of Greek philosophy, especially Stoic, and were more or less mystical and Gnostic in tone. There were 42 such writings, according to Clement of Alexandria (A.D. 150-215).

The name of Hermes became popular in Alexandria in the third century A.D. where the hermetic principles influenced the writings of Origen (A.D. 185-254). Using them, he composed his own personal version of the Bible commonly called the *Septuagint*. Although Origen was condemned as a heretic, he strongly influenced Eusebius and Constantine who together established the political (ecclesiastical) structure of the Church of Rome. Origen’s writings also exerted a strong influence both on Augustine, who gave to the Church of Rome its theology, and on Jerome, who gave the Church of Rome its Latin Bible, based on Origen’s Septuagint.

The men of Alexandria, particularly those contemporary with Origen, devised *hermeneutics*, the science, or art of interpretation or explanation, especially of the Holy Scriptures. Today the Alexandrian hermeneutic principles are stronger than ever. But they march to the drumbeat of a false god.

Venus in Mythology

Venus was a Latin goddess. In her original form she represented beauty and growth in nature. She had two temples in Rome, one in the grove of Libitina, with whom she was wrongly identified, and the other near the Circus Maximus. Both had as their dedication day August 19, on the festival of the *Vinalia rustica*, a fact which points in the direction of skilled cultivation as the human work of which she was protectress. The old Latin deity was eventually absorbed by the Greek Aphrodite, and assumed the characteristic of a cult of human love, which in her original form she had never possessed.

From her Latin name we obtain words like win, winsome, wont, wean, wish, venerate, venereal, venom, venial, and venison. This last stems from her identification with Diana, goddess of the hunt. She was also called Cytheria.

Unlike for the planet Mercury, where Rome absorbed the entire Greek counterpart, Hermes, into its spiritual, social, political, and astronomical life, Venus remained pretty much independent and free of Greek influence. By that I mean simply this: when it comes to the planet Mercury, the Greek name of the planet was Hermes, which is Mercury by another name. However, when it comes to the planet Venus, the Latin name is *Veneri* while the Greek name was *not* Aphrodite but *Eosphorus*, a male deity. As such we need not here expound further on the nature of Aphrodite other than to say that the original Aphrodite was Semitic, not Greek, and that she arose from the sea, and that her most distinctively Semitic title is *Urania*, signifying the queen of heaven (Jeremiah 7:18 and 44:17-25) or, literally, “she whose seat is in heaven.”

We find, then, that except for the Romans, the planet Venus was associated with male deities or characters. Of the various ones, who are all variations on a theme, the most prominent is Eosphorus. Lesser names include Ellil.

Eosphoros

According to Hesiod’s *Theogony*, Eosphorus was the son of Eri-genia, also called Eos, and Astraeus.¹⁰ The name literally means “early light bearer.”

Although often translated as “morning star,” that translation is more poetic than literal. “Dawn star” is a better translation. The reader will note the prefix “Astra” in the father’s name. Indeed, Hesiod implies that all the stars were born of this couple, or, at least, all the brightest ones. Hence, the sense of star is implied more by the mythological ancestry of the god than by his name.

Eosphoros is mentioned in Homer’s *Iliad* (written ca. 850 B.C.). Lattimore, in his translation of the *Iliad*, translates the name as “dawn star.”¹¹

¹⁰ Hesiod, ca. 700 B.C. *Theogony*, lines 378-382: “And Eos bare to Astraeus the strong-hearted winds, brightening Zephyrus, and Boreas, headlong in his course, and Notus. ... And after these Eri-genia bare the star Eosphorus and the gleaming stars with which heaven is crowned.”

¹¹ Lattimore, R., 1951. *The Iliad of Homer*, (Chicago: Chicago University Press) book 23, line 226, p. 456.

Now besides Eos meaning dawn, we derive our word “east” from it. Eosphoros was the Greek name of the planet Venus when it appeared in the eastern or morning sky. When it appeared in the western or evening sky, the Greeks called it Hesperus, meaning “evening.” At its root, the name pertains to west. From Hesperus we get our English words despair, the loss of hope (esperance), and desperate.

In Greek mythology, Hesperus was the son (or brother) of Atlas. (Recall that Hermes’s mother was the daughter of Atlas.) In any case, in the Greek pantheon, neither Eosphoros nor Hesperus counted for much, if anything at all. Most surviving Greek references to the names are found in the writings of Plato.

Ellil

Because of the heavy influence of Greek and Roman civilization on our own, we tend to regard their influence as the only one worthwhile. But Rome and Greece were preceded by Medo Persia and Babylon, so it behooves us to consider their influence, too. Consider the Sumerian god, Ellil. Ellil was the leader of a rebellious younger generation of Sumerian and Akkadian gods. The old interpretation of his name was “lord of the wind and air.”¹² His epithet is “King of all populated lands,”¹³ that is to say, god of this world.¹⁴ Whether or not he was ever directly associated with the planet Venus remains unknown. Many make the assumption based on a fallacious exposition of Scripture.

Helel

In our quest for names of Venus, we next consider Isaiah 14:12:

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!¹⁵

¹² Ephesians 2:2 Wherein in time past ye walked according to the course of this world, according to the prince of the power of the air, the spirit that now worketh in the children of disobedience.

¹³ Luke 4:5-7 And the devil, taking him up into a high mountain, showed unto him all the kingdoms of the world in a moment of time. ⁶And the devil said unto him, All this power will I give thee, and the glory of them: for that is delivered unto me; and to whomsoever I will I give it. ⁷If thou therefore wilt worship me, all shall be thine.

¹⁴ 2 Corinthians 4:4 In whom the god of this world hath blinded the minds of them which believe not, lest the light of the glorious gospel of Christ, who is the image of God, should shine unto them.

¹⁵ I will not pursue the difference in punctuation in the editions of the King James. The 1611 had question marks instead of exclamation marks. Translations undertaken during the Reformation go either way, and in English, it makes very little difference.

The Hebrew words translated “Lucifer son of the morning” are *helel ben shachar*. Critics these days variously prefer “morning [or day] star son of the morning [or dawn].” The literal translation is more difficult than one may wish admit or even at first suspect. One possible translation is “bright one, son of the morning,” but we cannot know which translation is best until we find the meaning of the Hebrew word, *helel*.

Let us first establish the time to which the proverb applies. The context of the chapter is a time afar off from the days of Isaiah. Isaiah wrote during the time that Israel went into exile. Judah would not be taken to Babylon for roughly another 120 years. Babylon was not at war with either Israel or Judah at the time Isaiah prophesied. The events and promises of verses 1-3 in Isaiah 14 have never yet happened, nor has the fate of Babylon mentioned in verse 23 come to pass. So, though a partial fulfillment can be seen of the prophecy, all is not yet fulfilled. This concurs with the ancient view that there is yet a future fulfillment to come, a time when Israel will be restored (Lev. 26:44-45), and Babylon will once and for all time be desolate in all its forms, physical, spiritual, and economic. The likely time of fulfillment is thus the destruction of Babylon described in Revelation 18.

Next, we consider the person Helel. Some scholars, even some conservative scholars, maintain that Helel is none other than the king of Babylon, against whom the proverb is directed according to the fourth verse. Jarchi and the Babylonian Talmud apply it to Nebuchadnezzar. This they hold even though Nebuchadnezzar did not die the violent death prophesied here in verses 19 and 20. Others, seeing the depiction of the end of a reign, think that the end of ancient Babylon is meant. If that were so, then the last king of Babylon was Belshazzar, and it should be to him that the prophecy be applied. The problem is that none of the kings of Babylon was as prideful and cruel as Helel is depicted in this chapter. For instance, though Nebuchadnezzar was very powerful, he was not even as cruel as the Assyrians who took Israel to its exile. Anyone who has read the scriptures knows this as true. Besides, as Origen pointed out in *De Principiis*, book 4, chapter 1, no earthly king of Babylon ever fell from heaven (v. 12) or, for that matter, was ever the son of the morning. Nor were the dead stirred up for any king of Babylon (v. 9). Clearly, as Ironside retorted to the suggestion that the proverb applies solely to the king of Babylon: “These words cannot apply to any mere mortal.”¹⁶

Helel (also spelled Helal), others maintain, is a mythical Canaanite god:

¹⁶ Ironside, H.A. 1952. *Isaiah*, (Neptune N.J.: Loizeaux Bros.), p. 88.

The use in these verses [12-15 – *Ed.*] of material derived from Canaanite myths is unmistakable, and the point is made that the meaning of what the tyrant has done is set forth in the myth of Helal, the Day Star or “Light giver” (cf. Vulg. “Lucifer”), son of Shahar, Dawn. It is a manifestation on earth of the ultimate conflict set forth in the myth in timeless terms. We know that there was a god Shahar in Canaanite (Ugaritic) mythology, the god of dawn or of the morning star (cf. Theodore H. Gaster, “A Canaanite Ritual Drama,” *Journal of the American Oriental Society*, LXVI [1946], 49), and “Helal, son of Shahar” is mentioned apparently in one of the texts from Ugarit.¹⁷

The word “apparently” in the last sentence of the quote is disturbing. Is there, or is there not, a mention of Helel in any Canaanite text? Likewise, John Day echoed the uncertainty when he wrote that: “Is. 14:12-15 is universally regarded as containing a fragment of Canaanite mythology....”¹⁸ It may well be “universally regarded,” but to date I’ve found no specific reference. Continuing with the *Interpreter’s Bible* quote:

The passage before us preserves the Canaanite form of a nature myth, telling of the attempt of the morning star to scale the heights of heaven, surpassing all other stars only to be cast down to earth by the victorious sun.^{18, 19}

The authors of the above quotes assume that “morning star” is the correct translation of Helel. No evidence is presented proving that translation correct, though the article by Gaster is referenced. If one examines the Gaster article, the following Canaanite story unfolds.²⁰

Excited by El’s virility, the women Asherat (which is Asherah and Ishtar) and the Virgin (‘Anat, who the Canaanites called “our Lady”) offer their lives either as daughters or wives to El. El, whom the Canaanites regarded as an old man, chooses them as wives, and each woman bears him a son. The one bore him Shachar (morning in Isaiah 14:12, or dawn) and the other bore Shalim (evening or dusk). Upon hearing the news of their births, El, the immortal, opens the treasuries

¹⁷ *The Interpreter’s Bible*, (Abingdon Press), 5, pp. 261-262.

¹⁸ Day, John, 1985. *God’s Conflict With the Dragon and the Sea: Echoes of a Canaanite myth in the Old Testament*, (NYC: Cambridge University Press), p. 132.

¹⁹ Cf. Gunkel, H., 1921. *Schöpfung und Chaos in Urzeit und Endzeit*, (Göttingen: Vandenhoeck & Ruprecht), pp. 133-34.

²⁰ Gaster, T. H., 1946. “A Canaanite Ritual Drama: The Spring Festival at Ugarit,” *Journal of the American Oriental Society*, 66:49-76.

of heaven and earth for the four, and they are deified to immortality. No mention is found in the tablet of Shachar having fathered a son, Helel who appeared in the morning as the planet Venus. Other Mid-East sources say that Shachar and Shalim are twins, having the same mother. Though Gaster equates Shachar with the morning star and Shalim with the evening star, that does not follow from either the Canaanite account or from Gaster's chain of thought. Their identities as morning and evening are clearly established in myth and, in the case of Shachar, by Scripture.

So, what does Scripture have to say about Helel? Consider the meaning of the Hebrew name, a task made more difficult because it occurs only once in Scripture. Strong's Hebrew Dictionary states that *Helel* (no. 1966) stems from *halal*, (no. 1984) and says it means: to be clear, to shine, to make a show, to boast, to be (clamorously) foolish, to rave, to celebrate [a word rapidly replacing "worship" in churches these days, –*Ed.*], and to stultify. The A.V. translators add: to be mad or feign madness, to give in marriage, to sing praise, to be worthy of praise, to rage, to be renowned. Julius Furst, in his *A Hebrew and Chaldee Lexicon*, on pages 363-364 says of *halal*: "Halal means to boast, to be clamorously foolish, to mislead, an enemy." Another adds the definition of "far off god"; that is, a god who keeps his distance or, alternatively, one who is far off from God. Researching a little deeper, we find that Helel can also mean vapid logic, that is, mystery.²¹

Finally, the Hebrew word, helel, which is translated Lucifer in Isaiah 14:12, wandered into English through Greek and German. I refer to the Greek *Helios*, the sun god. In German, this became *hellen*, from which came the word *helder*, meaning, "clear" or "shiny." But there is also a sense of "blinding," that is, blinded by the light, in this; and thus helel entered English as "hell," a covered place, a place of darkness as if blinded, a place "far off from God." So, the source of our word hell is the helel referred to in Hebrew. Helel, when split apart can read bright or clear god, or god of hell.

Lucifer

Gaster's chain of thought tries to dismiss the obvious distinction drawn in Isaiah 14:12 between Shachar (morning) and Helel (Lucifer). To dismiss the difference, Gaster writes "... in Isaiah 14:12—another mythological passage—the rebel *par excellence* is called *Helel ben Šachar*, 'Daystar, son of the Dawn,' who may surely be identified with our

²¹ 2 Thessalonians 2:7 For the mystery of iniquity doth already work: only he who now letteth *will let*, until he be taken out of the way.

[Shachar].” In a footnote, he justifies equating Shachar and Helel as the same person on the grounds of “matitutinal” (sic) reference.²²

Hislop examines the Hebrew, Helel, and concludes that: “The name [translated –*Ed.*] Lucifer, in Isaiah, is the very word from which Eleleus, one of the names of Bacchus, evidently comes. It comes from ‘Helel,’ which signifies ‘to irradiate’ or ‘to bring light,’ and is equivalent to the name Tithon.”²³

Hislop notes that Phaëthon claimed to be the son of the sun but was reproached because he was instead the son of Merops (a mortal) and Clymene,²⁴ his mother. She, in turn, passed herself off as Aurora (the dawn) in the mystical sense of a woman giving birth to light. Therefore, her son was held up as the great Light-bringer, who was to enlighten the world – Lucifer, the son of the morning, who was the pretended enlightener of the *souls* of men. According to the *Pancarpium Marianum*, chapter 41, pp. 171-172, the Virgin of Rome is given the title: Aurora, pregnant with light, with the enlightener of the world.

The pagan traditions pertain to the mystery religion (Rev. 17:5) which centers on the person of Satan. As Hislop shows again and again, the characters of myth all represent the same personages, viz. Satan and his mother-bride. Thus Phaëton is identified with Janus, who is called “Pater Matutinus,” father of the morning, by Horace. Matutinus is a correlate of Matuta, goddess of the morning. Thus Janus, as Matutinus, is the “son of the morning.”

Matuta is identified with Ino after she and her son were changed into sea divinities. From then on, Ovid reports, Matuta’s most common name was *Leukothoë*. Leukothoë or Leukothea has a double meaning: first, to light or set on fire, and second, to glean. The latter ties her to the constellation and character of Virgo the virgin who has, in her hand, gleaned ears of grain (the star Spica). So she figuratively bears the light giver, and so Leukothea gives “virgin” birth to a son, Lucifer, who also assumes the title of the sun.

The most overt reference to Lucifer claiming the title of the sun is found in Pliny’s *Natural History*, written about A.D. 50:

Beneath the Sunne a goodly faire starre there is, called *Venus*, which goeth her compasse, wandering this way and that, by turnes: and by the very names that it hath, testifieth her emulation of Sunne and Moone. For all the while that shee preventeth²⁵ the

²² *Ibid.*, pp. 71-72, with footnote 102a on p. 72. The footnote reads: “The fact that Helal is here called ‘son of sahar’ need create no difficulty. This may mean simply ‘matitutinal’.” *Matutinal* means “of, relating to, or occurring in the morning; early.”

²³ Hislop, A., 1916. *The Two Babylons*, (Neptune, NJ: Loizeaux Bros.), p. 318.

²⁴ Ovid, *Metam.* ii, 11, 179-184.

²⁵ Prevent in the sense of precede or anticipate (think pre-ventilate).

morning, and riseth Orientall before, she taketh the name of *Lucifer* as a second sun hastening the day. Contrariwise, when shee shineth from the West Occidentall, drawing out the day light at length, and supplying the place of the Moone, shee is named *Vesper*. This nature of hers, *Pythagoras* of Samos first found out,²⁶ about the 42 Olympias: which fell out to bee the 142 yeere after the foundation of Rome. Now this planet, in greatnesse, goeth beyond all the other five: and so cleere and shining withall, that the beames of this one starre cast shaddowes upon the earth. And hereupon commeth so great diversitie and ambiguitie of the names thereof: whiles some have called it *Iuno*, others *Isis*, and other-some the Mother of the gods. By the naturall efficacie of this starre, all things are engendered on earth. For whether she rise East or West, she sprinkleth all the earth with dew of generation, and not only filleth the same with seed, causing it to conceive, but stirreth up also the nature of all living creatures to engender.²⁷

At this point, we have found several similarities in meaning between Lucifer and Helel:

1. Both are called “son of the morning.”
2. Both are said to be light bearers or to bring light.
3. Both are cast from heaven.
4. Both aspire to replace the sun, a type of Christ.
5. Both mislead people by assuming titles to which they have no right.
6. Both are identified with the sun in mythology.
7. Both are associated with mysterious (occult) religions.

There are far, far more similarities between the character of Lucifer and Helel, than between Helel and Eosphorus. Likewise, there are far more similarities between Lucifer and Mercury, than between Lucifer and Eosphorus. We conclude that the translation of Helel into Lucifer is an exact match, and that the morning star is interpolated into the text since neither in Hebrew do the words morning star (*shachar kokab*) appear in the text, nor is it etymologically derivable from the names Helel, Mercury, Hermes, Venus, Hesperus, or Vesper. The translation of Helel as “morning star” or “day star” is based purely on mythology and that is

²⁶ Pythagoras is here credited with recognizing that Lucifer and Vesper were one and the same planet, i.e., Venus.

²⁷ Holland, Philemon: translator, 1601. *The Historie of the World: Commonly called, the Naturall Historie of C. Plinius Secundus*. (London), Chap. 8. I have removed the only one of Holland’s comments from the quote.

circumstantial evidence at best. Just what is wrong with that we shall discover shortly.

THE DAY STAR AND MORNING STARS IN SCRIPTURE

Next, we examine two titles in Scripture. Both titles figure in the confusion over the translation of Lucifer. The first is the title of “Day Star,” and the second is the title of “Morning Star.”

The Day Star

The title “day star” occurs once in Scripture, and that is 2 Peter 1:19:

We have also a more sure word of prophecy; whereunto ye do well that ye take heed, as unto a light that shineth in a dark place, until the day dawn, and the day star arise in your hearts.

The first thing that makes this passage significant is that in Greek the word used is *phosphoros*, reminiscent of *Eosphoros*, the name of Venus when it appears in the morning sky. This is the only place where the Greek word occurs. I think it significant that in all my research, I have not found a single Greek text where *phosphoros* referred to the planet Venus. When referring to Venus, the *ancient* Greek, at least, is always *Eosphoros*.

As for the meaning of day star, in the context it refers to the Lord Jesus Christ, the Sun of righteousness, and as such this verse is a cross reference to Malachi 4:2, viz.

But unto you that fear my name shall the Sun of righteousness arise with healing in his wings; and ye shall go forth, and grow up as calves of the stall.

So the day star is the sun. With this agree the Syriac Version, Gill, and less directly, the Ethiopic Version.

It is noteworthy that in Jerome’s Latin *Vulgate*, the “day star” of 2 Peter 1:19 is the Latin word, *Lucifer*. Since Tertullian, Gregory the Great, Augustine, Jerome, Origen, Hippolytus, and even Jerome himself all acknowledged that Lucifer was an original name of Satan, this is doubly curious. Nevertheless, as the *Vulgate* is not in the line of

preserved text, any argument based on it against the preserved text is moot.

The morning stars

The Scripture mentions multiple morning stars. The only place it does is in Job 38:7. The context starts in the fourth verse:

⁴ Where wast thou when I laid the foundations of the earth? declare, if thou hast understanding.

⁵ Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it?

⁶ Whereupon are the foundations thereof fastened? or who laid the corner stone thereof;

⁷ When the morning stars sang together, and all the sons of God shouted for joy?

The events of verses 5 and 6 refer to the third day of creation when the dry land appeared. When coupled with Psalm 104:1-9,²⁸ this indicates that the angels were already created at that time that the foundations of the earth were laid (Psalm 104:5). Psalm 104:3a apparently refers to the second day. What follows in Psalm 104:4 suggests that the angels were created no later than the second day. The morning stars are set apart from the sons of God, which are the angels in the greater context of Psalm 104. Since Adam had yet to be created, the sons of God cannot be the godly line, that is, the godly descendents of Adam. The sons of God seem to have created or specially prepared bodies (Psa. 2:7²⁹; Heb. 10:5³⁰; Lu. 3:37³¹). The body of Jesus was prepared to make the incarnation possible, and because the blood of animals appointed in the

²⁸ Psalm 104:1-9 – Bless the LORD, O my soul. O LORD my God, thou art very great; thou art clothed with honour and majesty. ²Who coverest *thyself* with light as *with* a garment: who stretchest out the heavens like a curtain: ³Who layeth the beams of his chambers in the waters: who maketh the clouds his chariot: who walketh upon the wings of the wind: ⁴Who maketh his angels spirits; his ministers a flaming fire: ⁵Who laid the foundations of the earth, *that* it should not be removed for ever. ⁶Thou coveredst it with the deep as *with* a garment: the waters stood above the mountains. ⁷At thy rebuke they fled; at the voice of thy thunder they hasted away. ⁸They go up by the mountains; they go down by the valleys unto the place which thou hast founded for them. ⁹Thou hast set a bound that they may not pass over; that they turn not again to cover the earth.

²⁹ I will declare the decree: the LORD hath said unto me, Thou *art* my Son; this day have I begotten thee.

³⁰ Wherefore when he cometh into the world, he saith, Sacrifice and offering thou wouldst not, but a body hast thou prepared me.

³¹ Which was *the son* of Enos, which was *the son* of Seth, which was *the son* of Adam, which was *the son* of God.

Levitical code was totally inadequate to take away sins, the incarnation was necessary. The birth and death of Jesus Christ were not conformed to a physical order already in existence, but the reverse. The physical order was deliberately structured to make the two events possible. The birth and the death of Jesus Christ were the cause, not the consequence of creation. In that way they preceded the creation, even as Revelation 13:8 says: Jesus Christ was “slain from the foundation of the world.”³²

For all we know from Scripture and common understanding, there are two morning stars and a multitude of angels or sons of God. If you can accept it, the two morning stars Mercury and Venus type the anger and the grace of God respectively.

The Morning Star

In Job 38 we saw the morning stars, plural; but the singular, morning star, appears twice in Scripture. Both occurrences are found in the Revelation. The first is Revelation 2:28 in the message to the angel of the church at Thyatira. At the close of the message, this promise is given in verses 26-28:

²⁶ And he that overcometh, and keepeth my works unto the end, to him will I give power over the nations:

²⁷ And he shall rule them with a rod of iron; as the vessels of a potter shall they be broken to shivers: even as I received of my Father.

²⁸ And I will give him the morning star.

If one looks at church history over the past 1,968 years, one can divide the time into seven segments, even as the seven messages to the angels of the churches. If one does so, then the Thyatira church age ranges from about A.D. 500 to about A.D. 1300. It is at least interesting, if not significant, that at the end of the era there began the movement to place the Scripture – the word of God – into the hands of the common man. John Wycliffe translated from Latin into English, though it would take the invention of the printing press to truly place the Bible into the hands of the common man. For this, Wycliffe is called the “Morning Star of the Reformation.”

The second place where the morning star is singularly mentioned is in Revelation 22:16. Whereas the context of Revelation 2:28 is the arrival of the word of God, i.e., the Scripture, to the peoples of the

³² Arthur C. Custance, 1975. *Noah's Three Sons: Human History in Three Dimensions*, Vol. 1: The Doorway Papers, (Grand Rapids: Zondervan), cf. p. 233.

world, the context here is the arrival of the Word of God (Rev. 19:13³³) in person into the world, that is, the arrival of God himself:

I Jesus have sent mine angel to testify unto you these things in the churches. I am the root and the offspring of David, *and* the bright and morning star.

It is clear that Jesus himself claims to be the bright and morning star. By saying “bright,” Jesus implies that the morning star we call Venus is a type of himself. By further implication, then, considering the characteristics associated with Mercury, the lesser “morning star” which is barely bright enough to be recognized as such, is Lucifer.

Why do men insist that Lucifer is the morning star Venus?

The characteristics of the person of Helel in Isaiah 14:12 match the characteristics of the Latin figure of Lucifer. They do not match the characteristics of the “bright and morning star,” a title that properly refers to the Lord Jesus Christ. Furthermore, except for the fact that we, in the Occident refer to Venus as the morning star, neither the Hebrew nor the Greek, nor the Latin call Venus the morning star. All the sons of the morning throughout mythology have names which translate literally to something else, although Venus may be suggested in the context.

We also saw that the early Christian church clearly understood that Helel was a proper noun, and that Lucifer matched him not only in the meaning of the name, but also in character. In English literature, Lucifer is not called the morning star much earlier than A.D. 1050. In a book called *Christ and Satan*, dating from circa A.D. 1000, Satan is called Lucifer. These are the earliest references in English.

New Agers themselves admit that Lucifer, the Helel of Isaiah 14:12, is none other than Satan. Of course, they claim that Satan has been misunderstood and misrepresented in Scripture. In other words, they claim God is a liar.

Luciferians recognize that the Chinese worship of the dragon, and the Egyptian and Hindu worship of the cobra, are the worship of forms assumed by Lucifer. They believe that Lucifer is personally in charge of earth’s planetary evolution. In this way, they claim he is man’s creator. They also believe that in his evolutionary capacity Lucifer “nourishes” all mankind, having fostered the genius of Freud, Einstein, Picasso, Karl Marx, Jung, Mahatma Gandhi, and Hillary Clinton. Lucifer

³³ And he *was* clothed with a vesture dipped in blood: and his name is called The Word of God.

arrived here 18½ million years ago from Venus, they say. At some time in the future, Maitreya, the savior all faiths are awaiting, will, in a physical body, allow Lucifer to inhabit him. This will not happen until mankind is “freed from the unreasoning fear” of his name – whence the term and goal of the “Luciferic initiation.” The number 666 is Lucifer’s sacred number, and it is to be used as often as possible to hasten Lucifer’s appearance. Also, it is to serve as a signal for help to UFOs, whose inhabitants are servants of Lucifer. This latter explains why Christian authors report that people claiming to have been abducted by aliens show characteristic signs of demonic possession.

So, what happened that the early Christians knew Lucifer as Satan, and that Satanists know Lucifer is Satan, but modern Christians say that there is no Lucifer and that the title of morning star, a title claimed by the Lord Jesus Christ to himself, is to be applied to Satan in Isaiah 14:12? What happened started at the time of the Reformation and the Enlightenment, when men began to question the veracity of the text of Scripture. New archaeological discoveries and information about Babylonian, Canaanite, Greek, and Mesopotamian religions were allowed to alter the meaning of the words of Scripture, a “new hermeneutics” as old as Genesis 3:1.

A quick summary of Reformation translations and their rendering of Isaiah 14:12 will show the extent of the influence of the new hermeneutics, even in the early days of the Reformation. The following translations use morning star:

Luther’s German;³⁴ the Swedish, which is based on Luther’s; Italian Diodati, Dutch Statenbijbel.

The French Segond reads brilliant star.
LXX: Eosphoros, with Lucifer in the English note.
The Russian says day star

The following translations use Lucifer:

The 1569 Spanish DeReina and its 1602 revision by Valera; the Roman Catholic Douay-Rheims; Coverdale; Geneva; Great Bible; Matthews; Danish; and both early and late Wycliffe Bibles.

Among modern versions:

³⁴ Since Luther did not accept Revelation as canonical, he would not have acknowledged any conflict.

The NIV uses morning star.

NASV reads star of the morning.

The (N)RSV reads Day Star

Berkeley Modern Language: shining gleam.

The New World Translation (Jehovah's Witness) reads shining one.

The NKJV reads Lucifer.

The Living Bible reads Lucifer.

Many of these Bibles have margin notes suggesting or even recommending another reading. For instance, the note to Isaiah 14:12 in the Geneva Bible says: "Thou that thoughtest thy selfe most glorious, and as it were placed in heauen: for the morning starre that goeth before the sunne, is called Lucifer, to whome Nebuchad-nezzar is compared."

And what of the commentators? Most can go either way, and none go very deep into the analysis. However, there are three that have particular bearing on the matter of Isaiah 14:12. The occult has long insisted that Jesus and Lucifer are one and the same, and this is implicitly acknowledged by at least a handful of commentators in the past century:

... "[T]he morning star" ... The title belongs of right to Christ (rev. xxii. 16), therefore about to be assumed by antichrist, of whom Babylon is type and mystical Babylon the forerunner (Rev. xvii. 4, 5). The language is primarily drawn from that of Satan himself, the spirit that energized the heathen world power Babylon, that now energizes the apostate church, and shall at last energize the last secular antichrist (the fourth kingdom little horn) and his champion, the false prophet (the third kingdom little horn), the harlot's successor, who shall oppress *Israel*, as the fourth kingdom little horn oppresses the *Gentile* world³⁵

Thus Fausset recognized the Luciferic initiation decades before it surfaced on the popular level. There is more:

Lucifer – "day star." A title truly belonging to Christ (Rev. 22:16), "the bright and morning star," and therefore hereafter to be assumed by Antichrist.³⁶

³⁵ Fausset, A. R. *Bible Encyclopaedia and Dictionary: Critical and Expository*, (Grand Rapids: Zondervan), "Lucifer" entry, p. 439.

³⁶ Jamieson, R., A. R. Fausset, and D. Brown, 1964. *Commentary: Practical and Explanatory on the Whole Bible*, Revised Edition, (Grand Rapids: Zondervan), p. 525.

[T]he title daystar is truly Christ's but will be confiscated by the antichrist of whom Babylon is a type and mystical Babylon is a forerunner. And Satan will assume it, who is the spirit that energizes the apostate church and shall at last energize the secular antichrist ... and his champion the false prophet.³⁷

And so we conclude that the recent movement in Christian churches to place the morning star or day star in Isaiah 14:12 is not only ill founded on historical, spiritual, and exegetic grounds, but helps to set the stage for the rise of the antichrist. The morning stars mentioned in Scripture appear to correspond to the two inner planets, Mercury and Venus. The characteristics of Mercury fit Satan entirely, including the association with business. So the lesser of the so-called morning stars, Mercury, is a type of Satan. The characteristics of the bright morning star, Venus, are ill defined and contradictory in the pagan world, there being no consensus other than brightness and a herald of the dawn. The theme of love is present, as is the theme of judgment, but both concepts are corrupted in the pagan mythology. The Scripture is clear, the planet Venus is a type of Christ in that his first advent heralded the dawn of an era of pure grace, and the second advent will herald the dawn of an era of pure peace. Those are the two morning stars that sang together in Job 38.

Return to the old paths

Thus saith the LORD, Stand ye in the ways, and see, and ask for the old paths, where *is* the good way, and walk therein, and ye shall find rest for your souls.³⁸

The Lord's appeal, voiced by Jeremiah, has special significance for us today. Our Christian institutions of higher learning have been usurped by the advocates of a new, "better" hermeneutics, new methods, new data, new this, and new that (Acts 17:21). The path that gave the British a worldwide empire, what made them great, was adherence to the King James Bible. Not until the United Kingdom officially rejected its Holy Bible (1881) did the empire start to crumble. By rejecting it, they rejected the word of God, containing the very words of God, and replaced it with the scholarship of man. They rejected the Book that evangelized the world. Ditto the United States which is a falling star, a declining world power, rotting from within because its people, too, has rejected the word of God.

³⁷ Spence, H. D. M., 1913. *The Pulpit Commentary: Isaiah*.

³⁸ Jeremiah 6:16a.

Once there were two vocabularies: a sacred and a secular. There were two streams of literature, a sacred and a secular. When in the sixteenth century men worked on translating the Holy Bible into the common language of men, particularly English, most searched for the meanings of the words used in the original languages in their use in the sacred writings. Thus, the vocabulary was built on a like foundation, but increasingly men looked to secular literature and mythology for the meanings of sacred words, and so they lost their meaning and their foundation.

It was not until the 1750s that the secular overtook the sacred in ruling over the meaning of the “original” words. Plato took precedence over Polycarp: a sodomite took precedence over a saint – literally. The Bible dictionaries and lexicons were revised, the sacred meanings occulted. In the resulting Babel of words, a new mythology originated. Two myths dominated, neither of which was ever widely held by the bishops of the early churches and never subscribed to by the blood-bought laity of whom the rebel bishops lived in fear. The first myth is that only the “original autographs” were inspired, which means that what we have now, even in the original languages, is not inspired, as it is not the original document. Implicit in that view is the belief that God did not bother to preserve his words in pure form, though some say that the “originals” can be reconstructed by scholarship. Obviously it does not occur to them that without the “original autographs” to compare them to, there is no way to know whether or not the “original” has been restored by scholarship.

The second myth is that no translation is inerrant, or inspired, and so cannot be the words of God. The only group that believed and practiced these myths were the “scholars” at Alexandria, the ones who gave us the new, modern hermeneutics.

So, some may wonder, what’s wrong with using secular literature to find out the meaning of sacred words, many of which occur only once in Scripture? Consider the modern usage of these words, all found in the Authorized Bible, and compare their secular meanings with the way the words are used in the A.V., and you will see:

alien, allowance, angel, ass, astrologer, babes, bastard, bay, blessed, bondage, gay, grace, grove, justification, mad, meat, mistress, passion, pollution, queen, righteousness, saints, and salvation, just to name a few.

Now imagine if a scholar 1,000 years from now found a King James Bible and turned to 21st century secular writings to find the theo-

logical meanings of some of these words. He'd get an extremely perverted view, wouldn't he?

The same has happened with the morning stars of the Bible. Rather than looking at the opinions of the saints, the opinions of hell-bound sinners were preferred. Some scholars, notably Westcott and Hort, actually taught that believers, Christians (Acts 11:26), were *more likely to lie* than the blaspheming critics of the sacred text. And these men control the minds, and thus the writings and teachings, of the churches around the world this day, the early days of the 21st century. What kind of spirit would lead a man to insist that the same title, the Morning Star, be applied to Satan as well as Christ, even though it is only associated with Christ in Scripture, is not required linguistically, and only based on pagan mythology? The Lord help us remain and regain the old path.

I've got the paper with me—we now have trigonometric parallax distances as far out as 3C279. ... That's a quasar that's six billion light years away.

– Hugh Ross, on the Ankerberg Show, 2000

Editor's note: In my files over the years, I've collected a considerable amount of data about astronomical objects. 3C279 happens to be one of those. It's redshift is 0.53, which means it's roughly 300 Mpc or one billion light years away. A parallax of six billion light years is 5.3×10^{10} arcseconds, ten million times better than the best we can observe optically. A parallax that small, even six times as big for one billion light years distant, would be subject to from year-long to hour-long scintillation due to interstellar and intergalactic media, and even to the solar wind. Unfortunately, this is typical of the rash and dishonest statements by Dr. Hugh Ross.

READERS' FORUM

The *Biblical Astronomer* exists to encourage and strengthen the faith of believers more than it does to be an evangelistic tool. True, in the latter case, it can serve to demolish impediments to faith, and we have heard of and seen several cases where it did lead to faith in the Lord Jesus Christ, but mostly we hear responses such as found in the following letter sent by a long-time reader of the *Astronomer*.

I have read your statements on page 56 [issue no. 96] – “ignorance is bliss,” the final words...you wrote. I heard “Hank,” the “Bible Answer Man” say: “Oh, it really doesn’t say what it seems to.” But the evidence that [the time of Joshua’s long day can be fixed] conclusively to within twenty minutes is revolutionary. ...

So the evidence for the long day is that compelling, huh? ... Your statements on page 56 are most helpful. ... It’s that certain that the long day did, in fact, occur. I needed that assurance, and do need it. Don’t we all.

– Bob

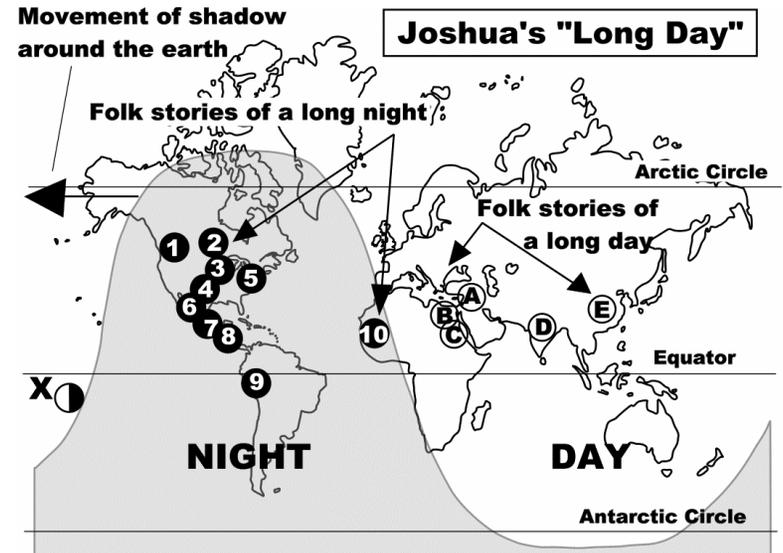
I replied by sending Bob a map such as this one of Joshua’s long day. The one reproduced on the next page was done by Malcolm Bowden of the United Kingdom. There, the circle, half black, half white and marked by an “X” in the Pacific Ocean is the location of a tale of a long sunset.

A special offer to B.A. readers

The following came from Paul Ellwanger of Texas.

I take this opportunity to let you know that I now have *De Labore Solis* [by Walter van der Kamp, 1988] on my PC in two megabytes. That of course includes the several graphics in that book. The vdK family gave me permission to do that.

I am willing to send a complimentary copy to any of your readers who may have on-line PC access and are able to open and read items in the Microsoft Word format. I also have the three obituaries written at the time of Walter’s death, all in a single attachment. For them to have me send that 2 megabyte book attachment, they would need only to tell me that they heard about the book’s availability through you.



While in the process of scanning the book, I put Walter's handwritten addendum into print and had Dick Elmendorf proofread it for me. I made a special effort to reproduce the book in the exact format of the original. In addition to finding a few typographical errors in the original, I added the year of its self-publication, since that was not included in the original.

And that is the offer. In more recent e-mail correspondence with Mr. Ellwanger, he requested that the book be freely distributed through the resources of the Biblical Astronomer. The files can thus be downloaded on the web from <http://www.biblicalastronomer.org> as a Word file, a Zip file, an Adobe PDF file, or a self-extracting file. Any of the files, particularly the Word file, can also be sent as e-mail attachments. Anyone desiring a copy can visit the above web site or send an e-mail requesting the files to gbouw@bw.edu.

Earthquakes and changes in the length of a day

The following e-mail arrived a month or so ago:

I have read a review of your book, written by Mr. Graham. While he was rather unprofessional, he raised a point I hadn't ever known about. He said the earth's rotation has been seen to vary

with certain earthquakes. I briefly looked at some websites which indicate this effect (rotational variation due to seismic activity) is not well understood. Can you comment on this also? As an aside, I have been discussing these related issues (evolution, long ages, a-centricity) with fellow Christians. Interestingly, even the most orthodox (i.e., firmly accept biblical truth, so accept special creation) sometimes are shy of young earth because long ages is pounded into their heads from all sides and are almost universally sure that the earth moves. Truly, our adversary is wily. Incidentally, we homeschool. In Christ, we pray, James <><

In 1898, Gerber³⁹ showed the gravitational field to be consistent with an advanced potential. Furthermore, according to a passage in Misner, Thorne, and Wheeler's *Gravitation*, the cosmos would fight the displacement of a central object (the earth in the geocentric case). Could it be that it is the changes in the firmament's rotation rate induce the earthquakes? Our physics really can't tell, as near as I can determine.

³⁹ Gerber, P., 1898. *Zeitschr. f. Math. u. Physik*, **43**:93. An English translation of the paper can be found starting on page 61 of *The Geocentric Papers*, which is available from the Biblical Astronomer (see back cover of this issue).

PANORAMA

Dark energy

A strange repulsive force of “dark energy” pervades every nook and cranny of the universe, a team of scientists said in May, but the force not only pushes against the master force of gravity – it also has astrophysicists’ heads spinning.

While gravity binds planets, stars and galaxies together, dark energy tugs on the fabric of time and space, pushing galaxies apart ever faster and faster into the farthest reaches of the universe. The evidence came in a recent Hubble space telescope observation of the most distant supernova (exploding star) ever detected. The supernova appears brighter than it should if the universe had been expanding at a steady rate. The new finding suggests that a decelerating universe holds galaxies relatively close together and objects in them would have appeared brighter because they would be closer. The trouble is that with this finding and others in the past three years, the universe is beginning to look like a complex mixture of dark energy, normal matter and dark matter (an invisible form of matter). Of course, it could also be because there is no evolution, or stars were more massive in the early days of creation, or the universe isn’t all that old, or But let’s continue with the story as told by the discoverers.

The dark energy finding [that is, the brightness of the supernova] closes a loophole left by the second-greatest cosmological finding of the past century – that the universe is not merely expanding (this is Edwin Hubble’s finding of the 1920s, widely noted as the greatest cosmological finding of the past 100 years) but its expansion is accelerating. Merely a year ago many astronomers were skeptical that the universe was accelerating, despite supernovae (exploded star) observations published in 1998 that suggested space is expanding faster today than long ago – just the opposite of conventional cosmological wisdom.

Now, the observation of the farthest supernova ever detected puts a “big nail in the coffin of alternative theories,” says astrophysicist Michael Turner of the University of Chicago. The dark energy confirmation [? –*Ed.*] comes on the heels of other closed loopholes that have shaken up the astrophysics world and lent more support to the accelerating universe idea. For instance, in the past three years, scientists have discovered that the universe is flat. This finding and others are knocking down an explanation for variations in the brightness of supernovae – that some type of cosmic dust simply absorbs the light.

The discoverers propose several theories to explain the apparent acceleration of the universe's expansion rate. Some say it could percolate from the vacuum of space. Laboratory experiments show that seemingly empty space is actually seething with virtual particles that wink in and out of existence. [We call the sea of "virtual particles" the *firmament*. –Ed.]

Another group invokes another idea called *quintessence* (for "fifth essence") which proposes a repulsive field embedded in space, not unlike a gravitational field or a magnetic field. Under that hypothesis, the field was created in the early moments of the universe along with the other forces in nature, and now stretches across the universe like a spider web. As the universe expanded and cooled, gravity and quintessence were locked in an arm wrestle for dominance over space. Both fields weakened with the universe's expansion. But ultimately quintessence won out over gravity and took control to push galaxies apart.

Other astronomers dismiss both theories and view dark energy as just a basic feature of the universe. To them, trying to explain it is as pointless as trying to explain why earth was the right distance from the sun for life to develop. It just turned out that way; if it didn't, we wouldn't be here to ask the question. Typically, the same scientists would dismiss out-of-hand the suggestion that God just created the universe that way. Men who subscribe to the Godless episteme of modern science invariably end up being hypocrites.

The firmament theory offers an explanation not proffered by the others. The gravitational force equation relates mass to density. At least, it does so for things in our every-day experience, even to the scale of the solar system. But for very small things, like electrons and protons, the mass depends not on the density but on the linear size (wavelength) of the object. The larger the object, the smaller its effective mass. The same is expected to be the case for the very largest objects in the universe, even to the very universe itself.

If we insist long enough that life exists on Mars, eventually people will believe it

The latest in the effort to find life on Mars, and thus to discredit the Holy Bible, involves a meteorite found in the Western Sahara last December. It may contain water that could have come from below the surface of Mars, French researchers say. It is the fourth rock to be classified as a nakhlite (Martian) because of its mineral composition. A detailed analysis of various forms of hydrogen within the rock suggests it was exposed to water from below the surface of Mars.

The speculation is based on the barest of evidence. By measuring the ratio of hydrogen (one proton in the nucleus) to deuterium (one proton and one neutron in the nucleus), researchers can tell if the rock was exposed to water and, possibly – and this is the big “if” – where that water came from. “We detected a very low deuterium/hydrogen ratio, close to a reading for the Earth,” said Dr. Phillipe Gillet, director of the National Institute for Sciences of the Universe in France. The obvious conclusion that it is probably terrestrial holds no water for the French team. “Our interpretation is that this refers to a fluid that came from the planet’s interior, not its surface,” he added.

For comparison, the three other nakhlites have also been exposed to water, but in their case, the water came from the surface. Despite the apparent certainty of the claims, experts are concerned that the water could be just the result of contamination after the Martian rock landed on earth.

Dr. Monica Grady of the Natural History Museum in London, England, is more candid:

“Desert meteorites are often badly weathered, and water exchanges very easily during weathering so it could be contamination.” Dr. Gillet admits that contamination is a possibility,



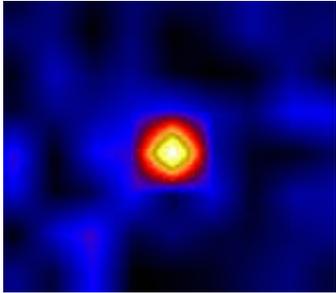
The watery Martian rock. [Courtesy Bruno Festay]

but his optimism is buoyed by a report last year, that the Mars Global Surveyor spacecraft in orbit around the planet saw what might be evidence of recent running water on its surface. No definition of “recent” was offered.

First focused x-ray images

We are all familiar with how lenses focus light to produce an image. That is how cameras work, and how telescopes work. But have

you ever wondered how one can focus xrays? In a dentist's office, the x-rays are not focused at all. The beam goes through the flesh, and through the teeth which cast a shadow on the film. It is the shadow that the dentist interprets.



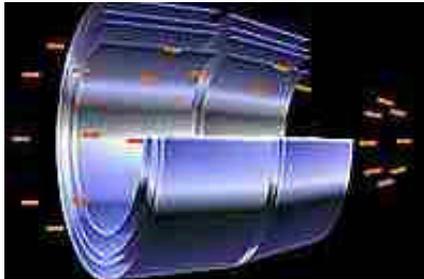
Focused x-ray image of Cyg X-1

Now scientists at NASA's Marshall Space Flight Center have obtained the first focused x-ray image of the x-ray source, Cygnus X-1. It doesn't look like much, but it's a significant start.

Hard x-rays are photons with about the same energy as medical x-rays (> 10 keV), or $\sim 20,000$ times more energy than visible light. Such

x-rays reveal some of the most violent phenomena in the Universe, including colliding galaxies, fiery stellar explosions, and hot disks that swirl around black holes. Astronomers have flown hard x-ray detectors before, but until now, none could focus the radiation to produce crisp images with high sensitivity.

"Focusing hard x-rays is difficult, because they are absorbed by conventional lenses and mirrors," explains Ramsey, the team leader. "The only way to reflect a hard x-ray photon is to bounce it from a mirror at grazing incidence – that



A cutaway diagram of nested grazing incidence hard x-ray mirrors

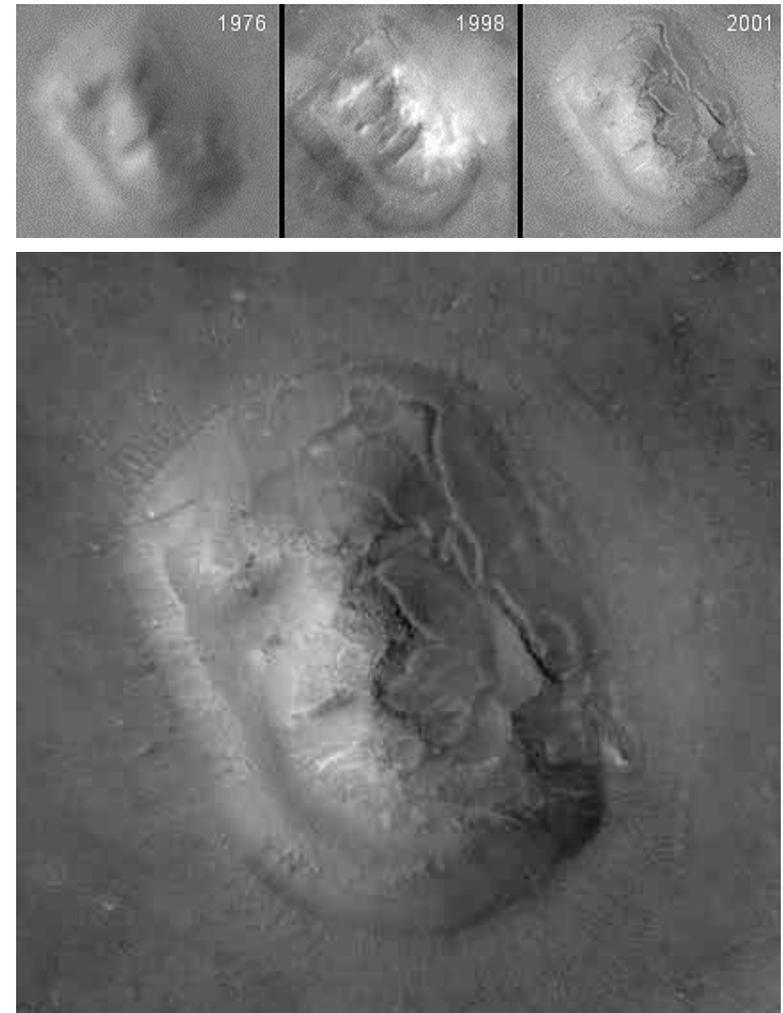
is, at a very shallow angle."

It's a little like skipping stones across a stream. The rock (or x-ray photon, as the case may be) will skip only if it glances off the surface at a small angle. "The reflection angles for x-ray mirrors are just a few arcminutes," says Ramsey. "That's why x-ray mirrors are shaped like long cylinders."

The face on Mars revisited

In the Winter 1998 issue of the *Biblical Astronomer*, No. 83, page 5, we presented an article about the face on Mars, which many believe was carved by ancient astronauts or antediluvian man. In the following issue, Spring 1998, No. 84, page 27, we presented a Mars Orbiter photo

which had then recently been taken. Now, NASA has released an even higher resolution photo of the area. The photo below shows the three pictures side by side: the original 1976 photo which started the controversy, the 1998 photo which did not settle the controversy, and the 2001 photo which, if the second law of thermodynamics is true, will also not settle the matter.⁴⁰ The reader can decide for himself.



⁴⁰ One of the corollaries of the second law is that the truth will not be believed, that people will believe rumors over facts, and that to them, truth is stranger than fiction.

The quest for the missing neutrinos continues

Since the mid-sixties, astronomers have been observing neutrinos from the sun, and over that entire time the number of neutrinos detected falls way short of what's expected. Is the problem unique with the sun, or is it a flaw in theory? As part of an effort to answer that question, physicists have buried a huge neutrino detector in the Antarctic ice. Writing in the March 22 edition of *Nature*, an international collaboration of 119 physicists and astronomers reports the first observation of high-energy neutrinos using the AMANDA Telescope, a large array of buried detectors designed to detect the fleeting signs of high-energy subatomic particles from the farthest reaches of space.

Neutrinos are invisible, uncharged, nearly massless particles that can travel cosmological distances. Unlike the photons that make up visible light, or other kinds of radiation, neutrinos can pass unhindered through two light years of solid lead with only a 50-50 chance of being stopped. AMANDA will allow the detection of high-energy neutrinos as well the direction they came from. This offers a chance to study such extraordinary phenomena as colliding black holes, gamma-ray bursters, the violent cores of distant galaxies and the wreckage of exploded stars.

Sunk more than a mile (one-and-a-half kilometers) beneath the South Pole, AMANDA is designed to look not up, but down, through the Earth to the sky in the Northern Hemisphere. Since neutrinos can fly straight through the earth, it is the logical direction to point the telescope because no other, confusing high-energy events will pass through the earth. The earth between the detector at the South Pole and the northern sky filters out everything but neutrinos.

AMANDA consists of 677 optical modules, each the size of a bowling ball, arrayed on electrical cables set deep in the ice beneath the South Pole and arranged in a cylinder 500 meters in height and 120 meters in diameter. The glass modules at the heart of AMANDA work like light bulbs in reverse, capturing the faint and fleeting streaks of light created when the occasional neutrino crashes head on into another particle such as a proton. The subatomic collision creates a muon, another subatomic particle that, conveniently, traces an ephemeral trail of blue light through the ice in the same direction from whence the neutrino came.

The results are based on AMANDA observations of high-energy atmospheric neutrinos, neutrinos created when cosmic rays crash into the Earth's atmosphere. While astrophysical in nature, they are not the cosmic neutrinos coveted by scientists. Instead, they simply prove that the AMANDA detector is a working neutrino telescope.

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

TITLES AVAILABLE FROM THE B.A.

Orders can be honored only if accompanied by payment in United States currency either by cheque drawn on a U.S. bank or cash. US orders add 15% postage. Orders outside North America please add \$5 per item, \$2 per audio tape (sorry, the US Postal Service quadrupled postage this year).

BOOKS AND TAPES

The Book of Bible Problems. The most difficult “contradictions” in the Bible are answered without compromise. “A classic,” writes Gail Riplinger. 266 pages, indexed. \$12

Geocentricity. The best, most comprehensive book on the topic of geocentricity. 400 pages, 45 figures, scripture and general indexes. In Europe, *Geocentricity* may be purchased for £12.50 (postpaid in the U.K., postage by quotation otherwise) from Brian V. Lamb, Quarryside, Castletown, Caithness, Scotland KW14 8SS. \$15

The Geocentric Papers, A compendium of papers, most of which appeared in the *Bulletin of the Tychonian Society*. A technical supplement to *Geocentricity*, including articles on geocentricity, creationism, and the Bible itself. (120 pages, 8.5x11 gluebound.) \$15

New-Age Bible Versions, by Gail Riplinger. The critics love to attack the author, but they never, ever address the **real** issue, *viz.* the occult influence in the modern versions. A real eye-opener. 600+ pages. \$15

Geocentricity Videotape. Martin Selbrede gives a first rate presentation of geocentricity. Good quality tape. (American VHS only.) \$20

A Creationist Scenario for the Creation. Dr. Bouw presents a scientific approach to the creation act demonstrating that it is possible to derive a biblical scientific model of creation. (American VHS.) \$20

Thinking Psych-Economically Interviews. Economist Dr. Arthur Sharron interviews Dr. Bouw on the scientific inerrancy of scripture and the decline of Biblical authority. (Two programs, American VHS.) \$20

(Continued on the inside front cover.)