‘Star of wonder’ still leaves astronomers wondering about its origin_122004

December 17, 2004
Posted: 12/17/04

Some astronomers suggest the Magi observed a series of astrological portents, each of which has been individually suggested as the Star of Bethlehem.

'Star of wonder' still leaves astronomers wondering about its

origin

By Margie Wylie

Religion News Service

WASHINGTON (RNS)–In Matthew's Gospel, it's the apparition that heralds the birth of Jesus. Today, it features in Christmas trappings from tree toppers to carols to cards. No children's Nativity play is complete without its tinfoil likeness above the storied stable.

But what was the Star of Bethlehem?

Suggestions have included a comet, a supernova, meteors, bright-shining planets–even a UFO. The truth may be more subtle.

Using reconstruction software and the historical record, astronomers increasingly have come to believe the three wise men “following yonder star” may have been interpreting astrological omens so esoteric only the learned would have noticed anything unusual in the night skies.

While scientists disagree on the particulars, “one thing is absolutely certain,” said Mark Kidger, an astronomer with the Instituto de Astrofisica de Canarias in Spain's Canary Islands. “Whatever the Star of Bethlehem was, it was not an extraordinarily spectacular object.”

King Herod hadn't seen the sign that drew the Magi to Judea. Even the meticulous astronomical observations of the Chinese show nothing truly spectacular in the years around Jesus' probable birth date.

In fact, this “star” may not have been visible at all.

Michael Molnar proposes the heavenly sign was an eclipse of the planet Jupiter that took place in the constellation Aries, among other regal

portents, on April 17 of the year 6 B.C.

That morning, just before dawn, Jupiter, a planet associated with kings, emerged from behind the sun to rise in the east, appearing as a morning star. Later that day, the moon moved in front of Jupiter.

While such events can be dramatic, this one was invisible, lost in the glare of the noonday sun. Even so, the Magi would have predicted it, argues Molnar, a retired Rutgers University astronomer who lives in Warren, N.J.

“It was something very subtle, only something an astrologer would have seen as important,” he said.

The event happened in Aries, which ancient astrologers thought ruled the fate of several Near East kingdoms–including Judea, which was struggling under the yoke of Roman rule. Hence, Molnar concludes, the wise men would have read the birth of a new Jewish ruler, perhaps even the long-prophesied Messiah, in this configuration of heavenly bodies.

Kidger, author of “The Star of Bethlehem: An Astronomer's View,” disagrees.

Events like the one Molnar described are not all that rare and so wouldn't have excited seasoned skywatchers, he said. He noted the moon moved in front of various planets almost 200 times between 20 B.C. and 1 B.C.

Kidger argues that what the Magi observed was a series of astrological portents, each of which has been individually suggested as the star.

Together, they led up to a not particularly brilliant, but long-lived nova–a distant, exploding star–recorded by the Chinese in 5 B.C.

Three times in a few months during 7 B.C., Jupiter and Saturn came close together, or were in conjunction, in Pisces. In 6 B.C., Kidger notes both a massing of planets in Leo and Molnar's observation about Jupiter's eclipse

in Aries.

As sign followed sign, culminating in the appearance of a “new star,” they struck out for Jerusalem, site of Herod's court.

According to Chinese records, the 5 B.C. nova appeared low in the eastern sky in the constellation Aquila and lasted 70 days. If the Magi arrived in Jerusalem two months after they set out, Kidger said, the new position of the Earth would have made the nova appear to hover in the south over Bethlehem, where Herod directed them.

Molnar begs to differ. Tying a rational explanation of the star to pagan superstitions can make scientists uneasy, so they often start by searching for a unique astronomical event and then attempt to tie it into the astrology of the time–as Kidger has done, Molnar said.

But, he argues, Hellenistic astrology was the high science of its day and surely the lens through which the Magi would have viewed the world.

Astrologers' associations of Pisces or Leo with Judea date to the 15th century or even later–long after the time of Jesus, Molnar said.

Likewise, he sees no reason for ancient astrologers to associate a nova, even one lasting 70 days, with Jesus' birth, since new stars were ignored in Hellenistic astrology.

But in the case of the 6 B.C. eclipse of Jupiter, he argues, there were many impressive portents in play.

Not only was Jupiter eclipsed by the moon, which greatly increased its power and influence, but the planet had just emerged from behind the sun and was stationed in the east–two more factors pointing to a regal birth. In addition, the sun, moon, Jupiter and Saturn all were massed in Aries, characteristics of the horoscope of a "divine and immortal person," as one

prominent Roman astrologer wrote.

Molnar's theory uses the astrology of the day to explain several aspects of the star story that have defied logic for years.

When they arrived in Jerusalem seeking a future Jewish king, the wise men said they had “seen his star in the east.”

Yet they were traveling westward to reach Judea, probably from Persia or Babylon.

And when they left Jerusalem, the star “went before them” on their southward journey, then “stood over” Bethlehem.

Molnar believes the wise men were using common Greek astrological jargon to describe Jupiter's movements.

In modern terms, what they noted “in the east” was Jupiter's re-emergence from behind the sun and its appearance as a morning star on April 17, the day it was eclipsed by the moon.

Then, on Aug. 23, the planet appeared to change its direction of movement across the sky because Earth overtook Jupiter as each traveled along its orbital path.

It's the same optical illusion a car or train rider experiences when an overtaken vehicle appears to stop, then move backward.

Astronomers call it retrograde motion today, but the Magi saw the planets “move before” the stars–travel in the same direction across the sky–as they made their way south to Bethlehem.

Finally, on Dec. 19, Jupiter seemed to stand still in the skies, or to “stand above,” for a number of days before it changed directions once again.

Called stationing, this is what planets appear to do just as the Earth overtakes them.