THE URSAS

By

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We continue our series of articles about the witness of the stars to the gospel of out Lord Jesus Christ. Our last article, "Cetus," appeared in issue number 104. In this issue we look at the two bears, Ursa Major and Ursa Minor. As usual, we look beyond the Greek forms to ancient times and find that these two constellations also originate from the Fertile Crescent, consistent with the belief that the constellations date from the time of creation.

The Bears that never were

For centuries our skies have included the constellations of Ursa Major and Ursa Minor; the big and little bear. In the English-speaking world we know them better as the big and little dippers. Their depiction as bears is a long tradition and, even though no one has yet to find a bear-shaped figure for the Little Dipper, H. A. Rey found the figure of a bear for Ursa Major (see Figure 2 in this article, page 12). Despite Rey's creative view, however, the bears are universally represented with long tails, and Arabic star names speak of ears and other body parts for both bears.

When we look around the world, however, we find that only the Greeks, Finns, Siberians, and American Indians saw these asterisms as bears. Among the latter, some tribes accounted for the long tails by supposing the bears had been hurled into the sky by their tails, which stretched in the effort. Others supposed that bears were created with long tails but, by one mechanism or another, ended up with short tails. Typical among the latter was the story about a bear who went ice fishing with his tail only to have it frozen into the ice. When he pulled real hard, his tail snapped off, and ever since then, all bears have had short tails. A couple of tribes among whom the Algonquin concluded that whoever originally called the two asterisms, "Bears," had never seen the animal. Because most of what we know of the constellations came from the Greeks, our Western star charts have featured the bears as far back as we can see.

Bring on the bears

Surprisingly, it has taken hundreds of years to piece together the Greek myths and origins of the two bears. Strabo wrote that the Little Bear was not recognized by the Greeks until about 600 B.C. Two other ancient authorities, Aratus and Homer, knew nothing of the bears before about 550 B.C. According to Strabo, it was Thales of Miletus (ca. 624-547 B.C.) who introduced the Greeks to the constellation as a superior navigational aid. At the time, the Greeks were navigating by the seven stars known as the Big Dipper. Phoenician ships used the seven stars of the Little Dipper.

Now at that time, the star we know as Polaris was twelve degrees from the Pole. The star, Kochab served as pole star, even though it was located about five degrees from the Pole. To appreciate just how close Polaris is to the Pole, consider Fig. 1 on page 8: In the sixth century B.C. the Pole was located under the final "s" of Ursus in the header, and level with the star Yildun. At that time, the star Polaris was 12° 24' from the Pole. Today, the Pole is located about a tenth of the way from Polaris to Yildun.

The Phoenicians called the Little Dipper, *Doube*, which means "guide." The seven stars guided Phoenician ships in their journeys throughout the world; thus the name of the asterism. Thales was familiar with the ship navigation techniques of his era. After he settled in Greece he tried to convince Greeks of the superiority of using *Doube* for navigation. He thus introduced them to the word.

When the Greeks heard the word, *doube*, they must have heard it as *dobe*, the Semitic word for bear. Thus they dubbed the Little Dipper the *Phoenician Bear*. Their seven guide stars, in turn, were also "doube," in that they had the same purpose; and they had a similar configuration. That asterism became the Big Bear, to distinguish it from the Phoenician Bear, which was too hard to say and soon became the Little Bear.

Enter the myths

The myths about the ursas, major and minor, were introduced before 350 B.C. Condos² has pieced together the two versions of the Greek myth devised to explain the origins of the two constellations. The main character is either called Phoenice or Callisto. She was a huntress who hunted with Artemis, also called Diana. One day, while hunting alone, she was

¹ See H1677 in Strong's Concordance.

² Condos, Theony, 1997. Star Myths of the Greeks and Romans: A Sourcebook, (Phanes Press: Grand Rapids), pp. 197-205.

forced by Zeus. She kept the incident secret from Artemis until the latter saw that Phoenice was with child. In anger, Artemis changed her into a bear. Phoenice (in bear form still,) had a son, Arcas. He was raised by her father, Lycaon.

As fate would have it, Arcas grew up to become a guardian of Zeus's sacred precinct, and one day Phoenice wandered into the area. Hunted by her son and his company, she tried to escape but was captured. Ultimately Zeus remembered his tryst with her, and honored her by placing her in the sky.

There are several variations to the tale, the main difference lying in who places her in the sky, Zeus or Artemis. Condos resolves the two tales by resolving the constellations, both of whom are thoroughly confused in Greek mythology. The resolution is that the Big Bear was Zeus's tribute to Callisto, while the Little Bear was Artemis's tribute to her as Phoenice.

Actually, these myths tie together several ancient themes and names associated with one or both constellations. Phoenice and the Phoenician link is obvious. The name Arcas derives from Arktos, a name applied to Ursa Minor even earlier than the Phoenician time. It is reflected in the name of the star, Arcturus. From it we derive our word, "arctic."

Before the bears

Having discovered the origin of the bears to be a linguistic quirk, it is not surprising that Ursa Minor cannot be made to look like a bear, even assuming that ancient eyes were a lot more sensitive than ours. Let us now go back in time to look at what the two constellations looked like before the bears arrived on the scene.

Homer refers to the two constellations in his works,³ calling them both *wagons*. Aratus also knew them as wagons. Other Greeks thought them the two nurses of Zeus, Helice (who is also Histoe) being Ursa Major, and Cynosura Ursa Minor. No other civilization mentions the nurses, but others mention the wagons and we shall have more to say about that when we look at the constellations individually. Before we do we should note that among the star lists, that of Hipparchus is the oldest and lists only seven stars for Ursa Major. Hyginus lists 22, and Ptolemy lists 27. This shows that the constellation was enlarged after Hipparchus.

³ Homer. *Iliad*, 18.487, and *Odyssey*, 5.273.

Ursa Minor

The Arabs followed the Greeks in picturing the constellations in the sky, so it is not surprising that Ursa Minor is called Al Dubb al Asghar, the lesser bear. Before that, however, they saw a bier, a place to rest or transport a coffin. They called the three stars in that tail, Benat al N'ash al Sughra, meaning daughters of the lesser bier. We shall speak more of this under Ursa Major. Still earlier, the constellation was a fold or pen to protect cattle. The stars β and γ were called the two calves, and α the young he-goat.

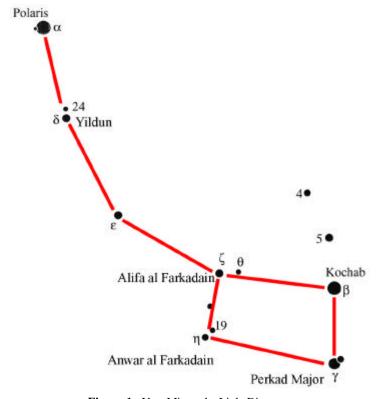


Figure 1: Ursa Minor, the Little Dipper.

Among other nations, Egypt saw the jackal of Set, the Danes the throne of Thor or the smaller chariot; and the Finns saw a little bear. Another name, which appears rarely, is *Alrucaba*, which has been applied to both Polaris and the constellation. It means a wain or vehicle and appears

in the Alfonso tables, presumed to have been put there by its Hebrew editor. The Old Germans called the constellation *Tramontane*, and the Italians applied the name to Polaris as recently as 1511. Thence it also came to be known as the Lode Star. Tramontane appears to be the same as Mons Coelius, the mountain of heaven. Reference is made by some to the Mount of the congregation in the sides of the north mentioned in Isaiah 14:13 and the mountain of God referred to in Ezekiel 28:14. Tramontane was also known as Mount Ash, of which more in Ursa Major.

Rolleston, Seiss, and Bullinger claim that the most ancient view of the Little Dipper was that of a sheepfold. They start with one of the star names in Ursa Major, namely *Dubhe*, which means herd. In Arabic, *dubah* means cattle. Furthermore, the Hebrew word, *dober*, (Strong's H1699) is translated as "fold" in Micah 2:12. *Dobeh*, (Strong's H1679), means strength, or stronghold. Both Ursas are said to be strongholds to protect flocks, with Ursa Minor holding the little flock (Luke 12:32⁴).

The star names in UMi

- α **Polaris**, Phoenice. The Finns called it *Taehti*, the star atop heaven's mountain. The Arabs, *Al Jadi*, young he-goat, which by the 1700s had been shortened to Juddah. Also spelled as *Al Gedi*.
- β **Kochab**, which is Hebrew for star. Bullinger renders it as awaiting him who is to come.
- γ Al Pharkadian, the calves; also: redeemed, that is, peculiar flock. β and γ were dubbed the guardians of the pole some time before 500 B.C.
- δ **Yildun**, a Turkish name meaning excellent star.
- ζ Alifa al Farkadian, the dim one.
- η Anwar al Farkadian, the bright one.

From this we can only conclude that the original asterism was never a bear. The original form may well have been seen as an enclosure to protect a flock, be they sheep, goats, or cattle. In terms of scriptural prophecy, the only reference to little flock is found in Luke 12:32, where the context is to first seek the kingdom of God (v. 31). The kingdom of God is a spiritual kingdom, not an earthly one as exemplified by the kingdom of heaven. The context is a people that are not members of the Gen-

 $^{^4}$ Luke 12:29-32— And seek not ye what ye shall eat, or what ye shall drink, neither be ye of doubtful mind.

³⁰ For all these things do the nations of the world seek after: and your Father knoweth that ye have need of these things.

³¹ But rather seek ye the kingdom of God; and all these things shall be added unto you.

³² Fear not, little flock; for it is your Father's good pleasure to give you the kingdom.

tile nations (v. 30), thus most likely believing Jews. As we are currently in the kingdom of God, according to Scripture,⁵ so the reference is to believing Jews with most likely, the 144,000 mentioned in Revelation 7 and tribulation saints included in that set. This is indeed a small flock when compared to the number of believing Gentiles and the number of unbelieving Jews.

Ursa Major

We commented earlier on the myths and the various significations of Ursa Major, the Big Bear. We now consider a word that is related to bear, namely bier. Other related words are bear (to carry), bairn (a babe, as one borne), burden, fertile, differ, offer, etc. A bier is a platform on which a corpse or coffin is placed before burning or burying. It may be mobile.

Before we begin that, let us examine what the asterism has meant to the peoples of the past.

In North America, the Algonquins and Narragansetts saw them as bears, which most likely came from European traders such as those of Tarshish. Contact between the Algonquins and the Celts was broken in the fifth century A.D. The speculation that the Indians got the bear from the Sanskrit via the Siberians came from Whitney's *Century Dictionary* from about the turn of the eighteenth to nineteenth centuries. It was later embellished by evolutionists to incorporate the land bridge supposed to exist between Siberia and Alaska.

The ancient Syrians called it a wild boar; the Irish King David's chariot (an Irish king), the French the great chariot or the Car of Boötes. The Greeks are said to have called it *Amaxa*, meaning axle, but that was probably a reference to Ursa Minor. The Swedes and Goths called it Kar's Vagn, meaning Karl's chariot, where Karl was a name for Thor. The Poles called Ursa Major the heavenly wain. Until the 1800s the later Syrians saw a bier. Egypt, ever the odd man out, saw a bull's thigh or foreshank.⁶ The Chinese called the seven stars the Government. Ancient India saw *sugi*, the wain, or Libra's yoke. The English saw a plough, with the dipper's handle stars as the handle of the plough and the cup the plowshare. Others saw the three stars in the handle as a team of oxen pulling the plough.

⁵ The kingdom of heaven is only mentioned in Matthew; the kingdom of God occurs in Matthew, the other gospels, and beyond.

⁶ There is in the Dendera star chart a figure that looks like a cattle leg, but given the uncertainties in scale introduced by the oddities of the zodiacal constellation placements, it is not clear to this author whether Ursa Major is the leg or the cherub (ox-like figure) holding the jackal (Ursa Minor) on what appears to be a tray.

The ursas as biers or wagons was prominent among the early Arabs, the later Syrians, and the English. From the latter originated Arthur's Chariot (wain). The "arth" part of Arthur relates to bear, and Uther means wonderful. (Arthur's father, Uther, assumed the surname Pendragon, meaning son of the dragon, after a dragon-like comet appeared in the sky). The constellation was usurped by the myth of Arthur. The real Arthur ruled the Britons from ca. A.D. 521-542. On the mainland, the Nordic appellation, Karl's Wain, was later assumed for Charlemagne (ca. A.D. 742-814).

Arcturus and his sons

We now consider the Hebrew appellation for the constellation of the Big Dipper. Allen mentions the names *Kalitsah* and *Parashah* applied to the asterism or an individual star. The former means safety, and the latter means guiding star. One immediately sees the "ayish" in the Semitic (probably Persian) *Parashah*. *Ayish* appears twice in the Bible, and both times it is translated as Arcturus. Both occurrences are in Job, namely, 9:9 and 38:32.8 Although greatly out of favor these days, Arcturus is the correct (and earliest) translation of *ayish*. Modern versions lean towards the Arabic term for the Big Dipper, namely *Banat Na-ash al Kubra*, the daughters of the Great Bier, meaning the mourners. That is not how the Hebrew scripture reads, however. We have seen before, especially under the constellation Draco, where relying on the Arabic meanings has totally violated the Scripture's integrity, not to mention abandonment of history.

There is really no great mystery associated with the identification of Arcturus (or Ayish, if one must) and his sons. Ayish means assembler, gatherer (as a shepherd gathers his flock), and we noted guiding star before as its full name. The sons of Arcturus are the seven stars known as the Big Dipper (Ursa Major). The star at the tip of the handle (η) is called "Benet Nash" which means son of Ash. The word Arcturus signifies a gatherer (as into a fold); bear-watcher; or consuming (fire). It recalls the Spirit speaking in Revelation 2:7, 11, 17 etc. addressing the spirits of the seven churches (Rev. 1:20). As the Little Dipper was a type of the Jewish remnant, the Big Dipper is a type of the Gentile remnant, the believers of the Gospel.

⁷ Cooper, Bill, 1995. After the Flood, (Chichester: New Wine Press), p. 81.

⁸ Job 9:9 Which maketh Arcturus, Orion, and Pleiades, and the chambers of the south. Job 38:32 Canst thou bring forth Mazzaroth in his season? or canst thou guide Arcturus with his sons?

The star names in UMa

There appears to be much confusion in the literature about which star is the brightest in the Big Dipper. Some have even speculated that their brightness has changed over the centuries, and that may well be true, but if one will refer to the figure of Ursa Major on the next page, one will note that the usual rule for assigning Greek letters to stars in a constellation was not followed for the Big Dipper. The Greek letter alpha (α) is supposed to be assigned to the brightest star in the constellation, beta (β) to the second brightest, and so on. When it came to the Big Dipper, the rule was abandoned. The stars are labeled in order from the front of the dipper to the end of the handle without any consideration for their relative brightness.

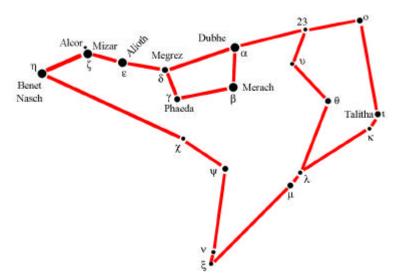


Figure 2: Ursa Major, after H. A. Rey.

- α **Dubhe**: flock; also called Dubb, bear. It is reported on the back of the bear.
- β **Merach**, Hebrew for flock, Arab for purchased. Allen says *Al Marahk*, Arabic for loin.
- Phaeda with various spellings: visited, guarded, numbered (Psa. 147:4). Allen says from Arabic Al Falidh, meaning thigh.
- δ **Megrez**: not translated by Rolleston. Allen stays with the Arabic, *Al Maghrez*, root of the tail.

- ε **Alioth**: she-goat. The name is recent, originating with the first edition of the Alfonsine Table. It may mean fat tail of the eastern sheep. Later editions changed it to *Aliare* and *Aliore*, white of the eye.
- Mirak, the original name of Mizar. Scalinger changed Mirak to Mizar. In Hebrew Mizar means little one, in Arabic, girdle or waist-cloth. Allen claims the name, Mirak, derives from the Arabic *Anak al Banat* meaning neck of the daughter or goat of the mourners. Mirak has also been applied to β and ε. The nineteenth century defenders of the witness of the stars only recognized Mizar as meaning small, o separate. That name better fits its neighbor, Alcor.
- 80 **Alcor**: the lamb. Allen reports that the name derives from *Al Khawwar*, the faint one. The Greeks thought it to be the lost Pleiad⁹ and dubbed it *Alopex*, the fox. It is still a test of good eyesight to be able to resolve the two stars. Physically, Alcor lies three light years beyond Mizar. The figure below plots the relative distances to each of the seven stars in the Dipper.



- η **Benet Naish**: Arabic for daughters of the assembly (Ash). The star is more commonly called **Alkaid**, meaning assembled. Allen expands the name to *Ka'id Banat al Na'ash*, meaning governor of the daughters of the bier, that is, chief mourner.
- θ Sarir Banat al Na'ash: throne of the mourners (Allen).
- Talitha: Ulug Beigh, the Arab astronomer's, Al Phikra al Talitha. Allen says Phikra should be Kafzah, in which case it means third spring of the gazelle. The allusion is that each of the three pairs of twin stars along the bottom of the bear represent the footprints of a gazelle's jump.
- μ,λ Tania Australis and Tania Borealis respectively, representing the second spring of the gazelle.
- v, ξ Alula Borealis and Alula Australis respectively. They represent the first spring of the gazelle.
- o **Muscida**: the muzzle. The name appears to originate in the Middle Ages.

⁹ See Bouw, G., 1999. "The Bible and the Pleiades," B. A., **9**(87):4.

 π^1 , π^2 Also called **Muscida** at times. Locate north of o. σ^1 , σ^2 **Al Thuba**: the gazelle. These are to the North-North-East of star 23.

χ El Kophrah: protected, covered. Hebrew, redeemed, ransomed.

Finally, for some of the other names associated with Ursa Major, Bullinger lists some meanings: Amaxa, or Amaza, as an alternate name for Alcor, the Pleiad, means "coming and going." Callisto is sheepfold, set, or appointed. Finally, Helice of Helike means company of travelers, that is, pilgrims. All in all, the constellation does exhibit overtones of the theme of salvation in our Lord Jesus Christ.

Engineers On Management

A man in a hot air balloon realized he was lost. He reduced altitude and spotted a woman below. He descended a bit more and shouted: "Excuse me, can you help me? I promised a friend I would meet him an hour ago, but I don't know where I am."

The woman below replied: "You're in a hot air balloon hovering approximately 30 feet above the ground. You're about 2 degrees west longitude and about 52 degrees north latitude."

"You must be an engineer," said the balloonist.

"I am," replied the woman, "How did you know?"

"Well," answered the balloonist, "everything you told me is technically correct, but I've no idea what to make of your information, and the fact is I'm still lost. Frankly, you've not been much help at all. If anything, you've delayed my trip."

The woman below responded: "You must be in management."

"I am," replied the balloonist, "but how did you know?"

"Well," said the woman, "you don't know where you are or where you're going. You have risen to where you are due to a large quantity of hot air. You made a promise which you've no idea how to keep, and you expect people beneath you to solve your problems. The fact is you are in exactly the same position you were in before we met, but now, somehow, it's my fault."

—From the Internet