

### Connecting the dots

**By Vernon Whetstone**

*Amateur Astronomer*

Well, fellow space fans, since there is nothing particularly exciting happening in the sky this week, how about we go back to the mailbag—or in this case—the inbox.

The question is, “Where did the constellations come from?”

As with most astronomical questions, there is no one simple answer. Generally it depended on where you live. Different areas had different names for the same group of stars.

Anytime the human mind sees a series of dots, the most natural thing it wants to do is connect them into a visible pattern. Such is what happened when our ancestors looked up into the sky. Their minds began to connect the dots into the patterns we see today.

Let's take, for example, the Big Dipper (or Ursa Major for its correct name).

Many Native American cultures saw it as a bear. Others saw it as the familiar dipper. In England it is called “The Plough”, others in Europe saw it as a wagon (“the Wain”).

However, generally speaking, the constellations as we know them today have a history reaching back to the ancient Babylonian, Greek, and Roman astronomers.

Now, that is not meant to leave out the Chinese, because their astronomers connected the dots into their own unique set of constellations.

When explorers began to sail south of the equator they discovered another whole separate set of stars no one from the northern hemisphere had ever seen. Astronomers began to connect those dots and name their own set of constellations and draw them into maps.

In the southern hemisphere there was, for example, Telescopium, the Telescope; Horologium, the Clock; Microscopium, the Microscope and Grus, the Crane.

There began to be so many of those maps, each of them different with differing constellation names, that it became very confusing. So, in 1930 the International Astronomical Union codified the sky into 88 distinct constellations—northern and southern hemispheres—and established their boundaries.

Those are the constellations we look at today.

Many are very easy to identify, the aforementioned Big and Little Dippers for example. Orion is easy to find (right now it is in the eastern sky just before sunrise) and Scorpius in the south is very easy because it looks like what it supposed to be.

Now, just understand this. Just because the stars look close together in the same pattern does not mean they are close. Often they are many light years apart.

For example, let's go back to the Big Dipper. The upper left star of the cup is 81 light years away, the lower left star is 84, the upper right is 124, and the lower right is 79. The first star out on the handle is 81 and so is the next one, but the end star in the handle is 101 light years away.

Just remember, the sky is not a flat plate, it is three-dimensional.

SKY WATCH: Tonight, Wednesday, Aug. 28, the moon is at third quarter and will be below the Pleiades star cluster. Saturday, the moon and Jupiter will be close in the early morning sky and on Monday, Sept. 2 it will be near Mars. Both about an hour before sunrise

NEXT WEEK: More astronomical blathering.