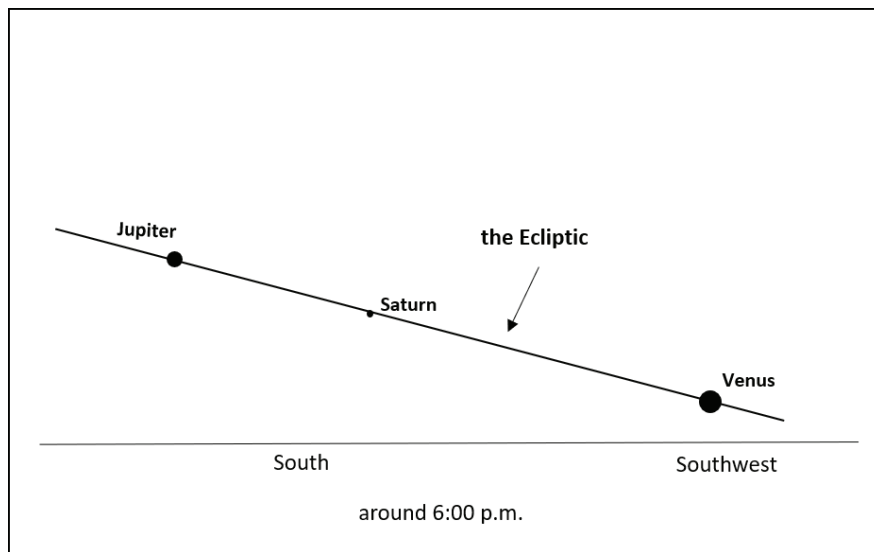
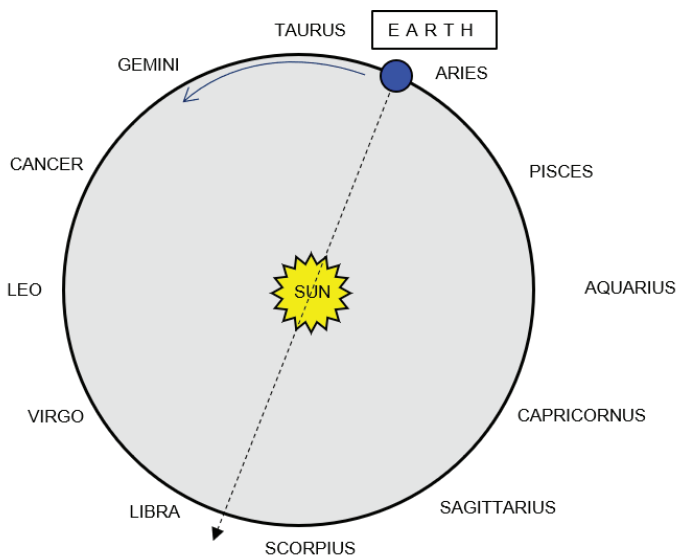


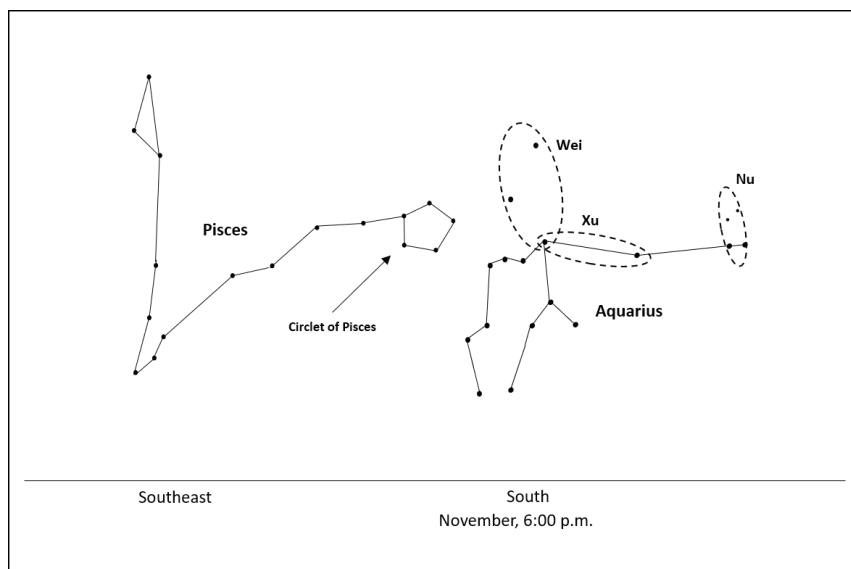
WHAT'S UP?

Hi. Welcome back to Eastern Standard Time. It gets dark nice and early now so that we can get outside and enjoy our night skies and still get a good night's sleep. I know that the previous installment's constellation quiz not only had a lot of constellations to be named, but many were the smaller and more obscure constellations in our sky. I hope you tried to fill in the names anyway and that you were able to identify at least the more familiar ones. The answer key is at the bottom of the page. Now comes a *mea culpa*. The course of events (both in life and in the motions of the Earth and Moon) caused me to miss giving you proper notice of the partial lunar eclipse that occurred in the early morning hours of November 19th. I hope that you heard about it from another source and, if the morning was clear, you had a chance to observe it. I'll try to have a report on it in the next article.

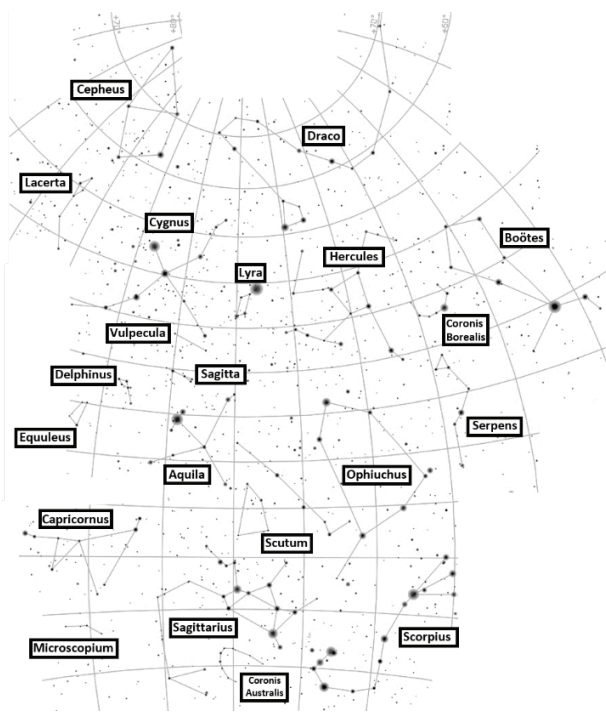
The lineup of planets in our sky right now is another good opportunity to contemplate the concept of the *ecliptic*. You may or may not remember that the ecliptic is an imaginary line in the sky that marks the path that the Sun appears to follow among the stars over the course of a year. We know that the Sun is not what's moving, that it is really the Earth moving in its orbit around the Sun. The stars that the Sun appears to pass in front of during the year have been grouped into the twelve constellations that we call the *Zodiac*. Right now, the Sun appears to be among the stars of *Libra* just on the verge of crossing into *Scorpius* as shown in the diagram. The planets also appear to follow the ecliptic as we (and they) orbit the Sun. When you go outside after sunset, draw an imaginary line in the sky connecting Venus, Saturn, and Jupiter (and the Moon if it is visible on that day). This line marks the ecliptic in the sky.



Speaking of the zodiac, in our journey through the constellations, Sagittarius was the last zodiacal constellation we talked about. This time, let's look at *Aquarius* and *Pisces*. *Aquarius, the Water Bearer*, covers a lot of area in the sky and is composed mostly of dim stars with the exceptions of third-magnitude *Sadalmelik* and *Sadalsuud*. Sa'd means 'luck' in Arabic. Roughly translated, these star names are "the lucky stars of the king" and "the luckiest of the lucky", respectively.¹ The outline of Aquarius is that of a young man pouring water from a jar. The most popular story is that this water bearer is Ganymede, the son of King Tros (who gave the city of Troy its name.) This set of stars is also home to three of the lunar mansions of Chinese star groupings. They are *Nu* (girl), *Xu* (emptiness), and *Wei* (rooftop). Moving east from Aquarius, we come to *Pisces, the Fish*.



In one story passed down to us, while Aphrodite and her son Eros were hiding in the reeds on the banks of the Euphrates River (hiding from a hundred-headed dragon sent by Gaia), two fish swam up and carried them to safety on their backs. In another version, Aphrodite and Eros *became* the two fishes. In either case, these fishes are commemorated in our sky today as the constellation Pisces. The star pattern contains the easily recognizable *Circllet of Pisces*, a loop of stars marking the head of the westernmost fish. The tails of the two fishes are connected tail-to-tail by a chain of stars.



You can reach me at astroblog@comcast.net with any questions and comments. This is What's Up? installment #54.

¹ Ridpath, I. (2018). *Star tales*. Cambridge, The Lutterworth Press. My go-to source for constellation tales.

Barry