

environmental features such as rivers and oceans. How are these associations chosen—who gets their place in the sky and why? It has been theorized that storytelling plays a major role in what names are created and passed down, especially those reflecting events in local history such as migration stories. The idea is that the groups of stars are mnemonic devices that aid in telling the associated stories. The story of Perseus (below) is an example.

3. Static or evolving sky knowledge. Is their cosmology and resulting sky knowledge static, or are changes and ‘evolution’ built in? A way to probe this is to ask about transient phenomena such as eclipses, comets, and meteor showers. A related theme is the loss of sky knowledge: do people see their sky knowledge as changing, and what do they see as the future of their sky knowledge? They may hold to the myth of the Golden Age in which people today believe that the generations before them had more knowledge, were more skilled, lived better lives, etc. This is where checking the ethnographic record and other historical documents can be informative.
4. Acquisition and transmission of knowledge. The origins, evolution, and projected future of knowledge concerning the sky. How do people learn about the sky? Who holds what kind of sky knowledge? What is common knowledge and what is specialized knowledge?
5. Cross-cultural sky and formal education. How do people negotiate or reconcile sky knowledge that they learn in school with that of their culture? For example, four planets are easily visible in the night sky (Venus, Mars, Jupiter, and Saturn), yet students are taught there are eight or nine planets in our solar system—two or three cannot be seen with the naked eye. How is this ‘correct’ yet invisible knowledge handled?
6. Historical remnants. In another twist on the cross-cultural sky, there is the opportunity to investigate if celestial terms are borrowed from neighbours, trade partners, or European languages. For example, the names of the outer planets should all be from European languages, since they were only discovered in the last two centuries and are not visible without the aid of a telescope. Scholars have a detailed understanding of western, Egyptian, Islamic, Babylonian, and Chinese astronomy and astrology and it is possible to tease out elements of these in local cultures, thus revealing the possibility of historical contact. Calendar elements such as the days of the week are common cultural borrowings.

These are the broader issues explored by cultural astronomy researchers. In order to address these issues, data collection methods amount to learning as much as possible about the sky within a culture. In order to identify celestial bodies correctly in the field, researchers first need to learn the sky in their local culture. Learning the sky at home can be a phenomenological experience that aids in both learning the sky in the field and asking better questions about the sky during data collection.

## 15.3 Learning the Night Sky

Holbrook and Baleisis (2008), a primer aimed at undergraduate students who have no stargazing experience and little astronomy knowledge, includes some simple exercises for learning how to measure distances across the sky. This chapter is aimed at academics who are not used to stargazing yet are very good at learning and processing information and are familiar with astronomy and the names of celestial bodies. In the 1920s, astronomers successfully worked together to standardize the names of celestial bodies and the constellation boundaries, which resulted in the International Astronomical Union (IAU) names used today by astronomers all over the world (cf. Delporte 1930). I will use these IAU names throughout this chapter unless otherwise indicated.