Figure 15.8.

Sirius and Orion setting in the west. These are the Egyptian Isis and Osiris.

In the Tropics, the Celestial Poles will be low on the horizon and difficult to use for navigation. People tend to use rising and setting stars and both bright and faint stars. They may use a formal 360-degree 'compass' of stars (Ammarell 1999; Goodenough 1953), or, as I found in Fiji, they just use a convenient star that happens to be in the direction that they are going (Holbrook 2002). Some of these navigation stars may have names, or asterism names, but it is also possible that they have not been named.

Navigation practices are rapidly changing due to a variety of factors, and many traditional techniques have not been recorded. Researchers have used navigation practices to probe human cognitive processes, mental maps, and memorization across cultures. The details of which stars are used when, and the acquisition and transmission of knowledge, are of interest to cultural astronomers.

15.6.3 Calendar markers

In addition to determining if the local calendar is based on observations of the Sun, Moon, stars, or some combination, there may be physical markers on the horizon that are meant to align with certain celestial
p. 362 bodies indicating a special day. The ↳ Ngas of Nigeria have an observing platform, and notches have been noted in the opposite hillside. Their 'priest' watches for the Moon to rise in line with certain notches to mark the calendar. The film *Cosmic Africa* shows a Dogon 'priest' watching for the Pleiades which would indicate the onset of seasonal rains (Rogers and Rubin 2002). Cultural astronomers are interested in the material remains indicating long-term observations of the sky such as fixed observing locations perhaps marked by a stone or a building and notches on the horizon, or perhaps a second marker building built on the horizon. Such observation sites have to be shifted over time as the heavens shift, which allows cultural astronomers to use old and new alignments to fit astronomical dates.