Polynesian islands had been [2] by the 13th century. When European explorers arrived in the Pacific in the 17th and 18th centuries, they were impressed by the local canoes. European ships were much stronger, but the indigenous [3] were considerably faster when under sail.

What we now know is that Polynesians sailed across open ocean – out of sight of land – long before this occurred elsewhere. And to make these [4] possible, they built remarkable ocean-going canoes. The canoes had two hulls – so are sometimes called 'catamarans'. They were equipped with large paddles, but these were not a form of [5]. Instead the paddles were positioned at the back of the canoe to make steering the vessel possible.

All these ocean-going canoes had sails. Polynesian sails were [6] in shape and made from the 'pandanus' plant, which grows on nearly all Pacific islands. It was also necessary to make warm clothing, as even in tropical waters people could get cold on long voyages. Materials like wool and cotton were [7] to Polynesians. However, the paper mulberry tree grows on most Pacific islands and its bark was remarkably flexible and was used in the manufacture of clothing.

Next we come to the issue of navigation at sea. How did Polynesians find their way, once they were out of sight of land? We know that they did not have the magnetic compass, which told other navigators which direction was north. But the Polynesian navigators understood where numerous stars [8] on the horizon. And using this, they could identify 32 different directions. However, this information about the stars was extremely complex and therefore remembering it all was a challenge. So the navigators had created long and complicated songs to help them [9] all the information they needed.

Using the stars to navigate was effective – so long as the sky was clear. But when it was cloudy, the navigators couldn't see the stars. How did they find direction then? Well, they still knew which way to sail the canoe by studying the waves, which usually came from predictable directions in the Pacific at different times of the year.

Sometimes they were sailing between islands they had visited before. But very often they were trying to find new islands. How did they know that land was [10], just over the horizon? Well, there were various techniques. The navigators were experts at recognising those particular birds whose habitat was the open ocean, and those that lived close to islands. So this was one way they knew that land wasn't far away. They were also skilled at noticing changes to the sea itself. The [11] of the water is constant in that part of the Pacific but its colour could vary in the [12] of land, and that was something else that they were able to detect.

Well, as technology developed, traditional voyaging all but died out. The Polynesian peoples travelled by steam ship and later aeroplane, like everyone else. However, in recent history, there has been [13] interest in traditional voyaging. It began in 1976 when a new canoe named Hokule'a was built as a [14] of traditional Polynesian vessels. This canoe was sailed from Hawai'i to Tahiti, a distance of more than 4000 kilometres across open ocean. And all the navigation was done using the techniques I've [15] today – the crew did not use modern instruments on the voyage. Since then there has been a remarkable renaissance of traditional voyaging. Numerous canoes have been [16] in different Polynesian countries, which have sailed to almost every part of the Pacific. And the Hokule'a has now completed a 3-year circumnavigation of the world. As well as sailing, these voyages have sparked renewed interest among Polynesians in learning about their traditional cultures. The canoes themselves operate as floating classrooms teaching young people about, [17], the music their ancestors once enjoyed. Another aspect of this has been the teaching of Polynesian languages, some of which were in danger of dying out.

Now one thing I'd like to add is…

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