Kia ora, gday and welcome to the History of Aotearoa-New Zealand, Episode 2: Moana, part tahi. Last episode we talked about New Zealand as a land, with its natural features, plants, animals and how unique they are in comparison the rest of the world. As you might have guessed from the title, this episode follows along the lines of the Disney film Moana, specifically the song We Know the Way. I would play a clip for you but I'm a bit afraid of the mouse knocking on my door, so I'll just encourage you find it wherever you listen to your music. Anyway, at this point, Aotearoa is without people, the last major land mass in the world to be discovered and inhabited by humans. So how did Tangata Whenua, people of the land, Maori, come to be living in Aotearoa?

About 100,000 years ago, Homo sapiens, living in Africa spread out through the Middle East. Some went west to modern day Europe but we aren't interested in them, at least not until they come in big ships looking for some land colonise. The people we want to follow went around the coast of modern India until they reached South East Asia all the way to about where Taiwan is. This journey took the better part of 40,000 years where there was another major divide in where groups went. Some went south to Australia and became the Aboriginal peoples and would remain there indefinitely. Those who remained were the ancestors of the Melanesians, a group closely related to Polynesians, which Maori are part of. From South East Asia, humans travelled by foot to the islands that make up Malaysia and Indonesia as the sea levels were much lower than the present day due to most of the water on the planet being locked up in ice due to the last ice age and had created small land bridges. It is also thought that rafts may have been used to cross small stretches of water but the technology wasn't quite as sophisticated at this point as it would be when the age of voyaging comes along.

By about 10,000 years ago the sea levels had risen to the point where the land bridges had disappeared and the archipelagos of today would be more easily visible. This meant that any meaningful migration eastward was going to require a significant jump in maritime technology. This jump occurred about 4000 years ago and helped to encourage a network of trade that can be seen in the archaeological record. The problem was that the dugout waka, canoes, that were seeing use were unstable and could only be paddeled, meaning they weren't great for long distances. The two key pieces of equipment that alleviated these major issues were the outrigger and the sail. The outrigger on a waka is the small flotation device attached via poles and rope to the side of the main body. This stabilises the canoe and stops it from tipping over as easily. The sail, of course, gives you greater speed and means you can travel a much further distance with much less effort. Paddling was still used but only when going into the wind, as sails aren't much good in that case.

Apart from that there isn't much else we know about Polynesian waka up until the early 17th century as the cultures of the Pacific never really had a written language at the time and no informative archaeological evidence has been found, especially for rigging and sails as those tend to degrade more quickly. It is hypothesised that perhaps double canoes, meaning the outrigger was instead another full canoe, were used to migrate further east. This has been a hot topic of debate for a number of years as some experts doubt whether the large voyages undertaken by early Polynesians were possible in a double canoe. Others are so adamant that it would have been possible that they went and built their own version of a double canoe just to prove it. One of the more famous modern Polynesian wakas is the Hokule'a, built by Ben Finney and the Polynesian Voyaging Society

in 1975. Hokule'a proved that large double canoes could, in theory, make it between islands in a reasonable amount of time in relative safety, however, she was built with modern materials and design with late Western Polynesian rigging and European sails so its validity as a measure of East Polynesian sailing is disputed. This is important as the distance between islands in West Polynesia which include Samoa, Fiji and Tonga, is much, much smaller than that of East Polynesia, which include the Cook Islands, Hawaii and Easter Island. It isn't until 1769 when Captain James Cook is doing his thing where we get a sketch of a specifically Maori waka by Herman Sporing, who was a naturalist brought on the expedition by Joseph Banks. I'll put the sketch up on the website so you can see it for yourself as it is a really cool piece. This waka chased the Endeavour, Cook's ship on his first voyage, for an hour near Motuhora Island in the Bay of Plenty near Whakatane. This vessel was a double canoe, so the two waka were attached about 30cm apart by a deck, which was fairly standard compared to other Polynesian canoes. The most interesting part was the sail, which Banks himself describes, "we very seldom saw them make use of the sails and indeed never unless when they were to go right before the wind. They were made of mat and instead of a mast were hoisted upon two sticks which were fastened one to each side, so that they required two ropes which answered the purpose of sheets and were fastened to the tops of these sticks; in this clumsy manner they saild with a good deal of swiftness and were steered by two men who sat in the stern with each a paddle in his hand." Again, I suggest looking at the sketch as you will get a better idea of what he is describing but basically a sail between two poles was moved side to side by ropes to adjust for the wind with men steering at the back with paddles. As this canoe was chasing the Endeavour with the wind, sail up, the men shouted and threw rocks at Cook's crew before turning, lowering the sail and paddling back into the wind. This is also shown in the sketch as the men seem to be performing a haka, being led by two cloaked chiefs, one holding a taiaha and the other a mere, weapons we will talk about later when we discuss Maori warfare. Although this sketch and its description are valuable and could give an indication of what pre-Maori Polynesian waka were like, it is by no means concrete evidence.

So now we know the major method of transport for these early seafarers, lets get back to what they were using them for, migration and colonisation. The people of prehistoric South East Asia and into Malaysia, Indonesia and New Guinea were speaking a group of languages modern scholars call Austronesian. When following the development of these languages we can discover where people went and paired with archaeological evidence, when they went there. By 1000BCE, all these new technological innovations had allowed early Pacific peoples to make their way to Vanuatu, New Caledonia and Fiji. Tonga and Samoa followed closely behind possibly being settled around 700-800BCE. To relegate these voyages to a couple of lines really doesn't do them any justice. These voyages were long, hard and fraught with danger comparative in skill and daring to European voyages to the Americas, which wouldn't occur for some time yet. Te Rangi Hiroa, also known as Sir Peter Buck would later describe them as "Vikings of the Sunrise" on account of the migrations generally moving eastwards towards the rising sun. This is a great comparison as it not only describes the early Pacific peoples bravery and tenacity but could also be thought of as a comparison as to why they went on these long voyages, reasons not too dissimilar to that of Scandinavian Vikingr.

These voyages were very deliberate. Navigators made sure they followed the wind in a way that allowed them to return home safely, regardless of whether they found land or not. If land was found, they would usually return home, tell their friends and family and a colonisation effort would

be mounted. These navigators were insanely good at what they did, finding their way via the stars and sun, partly because they had to be, the alternative meant death. Despite only being able to see nothing but water until the horizon, there were ways they spotted terra without having to see dirt and trees. Feeding seabirds wouldn't venture too far from their nests so as to return at night, certain types of clouds would only form over land and could be seen in the sky well in advance of land being sighted and swells and currents of the sea change in relation to where land is. The comparison to Vikings by Buck is great as it not only describes the early Pacific peoples bravery and tenacity but could also be thought of as a comparison as to why they went on these long voyages, reasons not too dissimilar to that of Scandinavian Vikingr. It's hard to say definitively what drove these people to push further and further east, perhaps something simple as overcrowding or not enough resources and land. Alternatively, it could be more social reasons such as warfare or noninheriting sons seeking their fortune. In regard to the former, it may have been a group of people being sent into exile. The island of Tikopia, near Vanuatu, has a traditional tale of forced exile after a territorial dispute that describes such a scene, "the women and children were in the canoes; many of the men swam alongside... the canoes were decorated with barkcloth streamers, as if it were a gala ritual occasion. Wailing, the fold of Nga Faea (the clan) abandoned the land, some of them supporting their chief on the deck of his vessel, holding him aloft in their arms, in the gesture of supreme respect which the Tikopia pay to men of rank... so they went from sight, to be lost forever from the knowledge of men," A grim and dangerous way to begin a hard voyage but maybe they found new land, who knows. There may have also been a more spiritual or religious element too as many Polynesian burials have individuals sitting up facing the east, although it is just as likely that this is more related to the sunrise than some spiritual need to move eastward. The final thought as to why these voyages may have been undertaken is that with sailing and navigation techniques being so strong, the thirst for riches and adventure among the youth may have also been bolstered. Especially if many men were coming back with tales of new land to colonise and make their own, survivorship bias ensuring failed voyages did not return to tell their tales.

So these amazing voyages had led the people of the Pacific to have colonised islands just about as far east as what is today dubbed West Polynesia, that is Samoa, Tonga and the islands in that region. And here they stayed. As far as historians can tell, no major voyages or colonisation attempts were made for the next 2000 years or so. It's unclear why this is, it's possible some archaeological sites haven't been found in East Polynesia that could be dated earlier than that but it's unlikely. It's just one of those mysteries that we may never really know the answer to. This two millennium pause wasn't spent just twiddling their thumbs however. Oh no, this is where we see the beginnings of what you could call a Maori culture, or at least see the foundations being formed. Te Reo Maori, the language of Tangata Whenua, starts to take shape during this period. Religion, the concepts of mana, the idea of prestige, authority or influence and tapu, the idea of something being sacred or forbidden, are formed during this period too. The material culture of Maori was also developing, triangular adzes, different types of fish hooks, construction of monuments and large architecture to show authority and status coupled with fort construction and increased warfare. By the first mellenium CE, a culture we would recognise as Polynesian and at least partly Maori, had formed.

The culture of these islands was also interesting and mostly different to what was going on in Europe at the time. Most cultures were matrilineal, that is your status and succession was based upon who your mother was, not your father. This is a similar system to what Scotland had in the Middle Ages as it was a good system for succession. You couldn't easily tell if a man was your father. He could certainly tell you he was your father and others could agree but unless you knew for damn certain your mother was faithful to your father and you had a witness to your conception, there wasn't much of a way to know. On the other hand, it was fairly easy to tell if someone was your mother,

there were usually witnesses to your birth and you... emerging from your mother. It's a lot harder to fake that. This may have been as a response to men being on long voyages often and women being left in charge of the home front. Another interesting aspect of society in this period was that it was matrilocal. This means the man moved to the location of his wife upon marriage. As colonisation continued further east, however, Polynesian society moved to a more cognatic system, status and succession was looked at through the lens of both mother and father as well as patrilocality, women moving to the location of their new husbands. The suggested reason for this change in culture has been the larger and larger distances between islands and the resulting reduction in voyages. In short, the people were mobile so their society reflected a culture of mobility.

As people moved further east, they of course brought with them a variety of different plants and animals to feed themselves with or for companionship. Dogs, pigs, taro, yam, gourds and breadfruit were all brought in the waka to their new island homes. As we talked a bit about last week, rats also came with them but this was involuntary, rats just like to ride in boats for some reason. Now, all these items can be easily traced as to where they came from and support the idea, along with genetic evidence, that early Pacific peoples came from South East Asia. There is one spanner in the works though, something that doesn't quite belong. Listeners from countries other than New Zealand will know it as the sweet potato, me and my fellow kiwis however, know it by a different name. The mighty kumura! This classic, traditionally and frankly quintessentially kiwi vege is our spanner. Why? Cause it comes from South America, not Polynesia or South East Asia. It really shouldn't be there given the prevailing idea of where Polynesian peoples came from. So how do we think it got to be in Aotearoa? There are two main hypotheses, that either East Polynesians went to South America, hung out there for a bit and came back with it or that South Americans came over to East Polynesia and brought it with them. To prove his theory, that of the latter, Thor Heyerdahl built a modern waka and successfully sailed it 8000km across the Pacific from South America in 1947, which you may have seen in the movie Kon Tiki. Although this proved that it was possible that there may have been some sort of contact between Polynesia and South America, the lack of any sort of physical, cultural, genetic or other evidence that South American peoples came to the islands of the Pacfic makes the former theory more plausible. It should be noted this is still a currently hotly debated topic that could change in the not too far future given more evidence.

Around 1000CE, East Polynesia was colonised from the west and from there, about 200 years after that, Aotearoa was set upon by man for the first time. As with why Polynesian peoples went voyaging in general, it isn't really known why people migrated from East Polynesia. Dates as to when New Zealand, dubbed South Polynesia, was colonised are still disputed and varied from 800CE to 1150CE through radiocarbon dating. More modern estimates and evidence suggest 1000CE-1200CE due to more accurate technology and more analysis of historic forest clearance. In particular, evidence from the eruption of the Tarawera Volcanic Complex in 1314, resulting in a distinctive ash layer in the geological record. This has been used as an easy and obvious marker to date archaeological sites with none thus far dating for the 13th century. The most accurate date we have at this stage is colonisation between 1230 and 1280. There are also various other, shall we say, wilder theories about who Aotearoa was colonised by. The most famous one that keeps cropping up is that the Celts somehow made this far south. Others state Chinese, Phoenician, Egyptian and others all got here first. There virtually no evidence to suggest any of these theories are correct and are generally rejected by the academic community. Evidence from the islands around New Zealand also support the dating of about 1200CE for colonisation. Sites in the Chatam Islands date to around

1500, although adzes and ornaments in earlier styles can be found, potentially indicating unfound sites. On Enderby Island fishhooks have been found dating to 1350CE with other evidence suggesting a brief settlement in the mid 1200s. The Kermadec and Norfolk Islands also have settlements dating to the 1200-1400s. Additionally, most of these islands would have needed to have used New Zealand as a stopping point to get to so given all that evidence, it is very unlikely that New Zealand was colonised prior to the 13th century.

As the centuries progressed into the 1400s and 1500s, evidence of voyaging reduces. This could have been due to climates change creating rougher seas and windier weather or some other cultural or social change, it's hard to know. In saying that, voyaging was never fully lost as it is reported that a navigator and priest of Raiatea in the Society Islands told Captain Cook in 1769 of trading voyages still occurring between Tahiti and Tonga, a 5450km round trip.

For us though, the great era of voyaging is over. The sea, coast and maritime technology still remain as a staple of Maori culture but Tangata Whenua won't be making any voyages like that seen in the last few thousand years. They didn't really need to, they had found the largest landmass in the Pacific beaten only by Australia in size. The resources were bountiful and the opportunities limitless. Untouched by man, they could expand uninterrupted into their new permanent home, the Land of the Long White Cloud.

If you want to ask a question, give feedback or anything else you can contact me through email at historyaotearoa@gmail.com or you can find me on Twitter at HistoryAotearoa or even Facebook at History of Aotearoa New Zealand Podcast. Haere tu atu, hoki tu mai. See you next time!