

## Ancient Voyaging Capacity in the Pacific: Lessons for the Future

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Forthcoming (2021) in  
The Cambridge History of the Pacific Ocean Vol 2  
edited by Paul D’Arcy, Anne Hattori and Jane Samson.

*We carry the cultural and historical inheritance of ocean navigators of peerless skill  
and their courageous kin who crossed vast distances before the tribes of Europe had  
ventured forth from their small part of the earth.*

Sir Ratu Kamisese Mara, 1999<sup>1</sup>

## Introduction

Some six to ten thousand years ago, humans migrated from Southeast Asia and populated the myriad islands of the vast Pacific Ocean. Their voyaging and maritime technologies were unique and unparalleled elsewhere, and evolved over time into specialised local knowledge.<sup>2</sup> While the catamaran-style vessels<sup>3</sup> of the eastern Pacific have received global exposure, the other remarkable

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<sup>1</sup> Sir R. Mara, ‘Opening address’, *Pacific Vision Festival*, Auckland, New Zealand, 26 July 1999. <http://dev.iwise.com/pVvWv> accessed 2 July 2013

<sup>2</sup> The origins and chronology of settlement patterns of Pacific peoples is unclear. Archeological research in the area is hampered by the effect tropical conditions and changing coastlines have on remains. Contemporary research is bringing the conventional “out of Taiwan 3000 years ago” origin story into question, much as the single exit from Africa story of modern humans is currently in question. The authors remain agnostic on this subject as it has little bearing on the matters in discussions in this chapter. First colonists arrived in the north-west Pacific (now known as Micronesia) and Solomons/Vanuatu/New Caledonia chains, 3-4000 years ago, the central Oceania archipelagos (Fiji, Samoa, Tonga) over 3,000-years ago and from there throughout eastern Polynesia beginning some 2,000 ago, with the final outliers of Hawai‘i, Rapanui and Aotearoa reached -700-1200 CE. Return, backwash and cross migration is assumed to have occurred in many areas. See E. Matisoo-Smith and J. Robin, ‘Origins and dispersals of Pacific peoples: Evidence from mtDNA phylogenies of the Pacific rat’ *PNAS* 101 (24) (2004), 9167-9172; P. Sosres et al. ‘Ancient Voyaging and Polynesian Origins’, *The American Journal of Human Genetics* 88 (2011), 239-247; Y. Moodley, et al, ‘The Peopling of the Pacific from a Bacterial Perspective’, *Science* 23 January (2009) 323 (5913), 527-530; and P. Kirch, “Peopling of the Pacific: A Holistic Anthropological Perspective,” by University of California, Berkeley, *Annual Review of Anthropology*, 39 (2010), 131-148.

<sup>3</sup> The signifier “canoe” has been used generically since European contact to describe Indigenous craft, sailed or paddled, and is now so ingrained in the literature to defy re-branding – even though the term implies insubstantial craft though they were often massive, blue-water, long-range, planked-hull sailing vessels. The terms “vessel” and “sailcraft” are used here rather than “canoe” where possible.

and multiple vessel design evolutions that occurred across the Pacific are less well illuminated in the literature. We use the examples of the *drua* class of vessel that emerged in central Oceania, including Samoa, Tonga and Fiji, and the *TePuke* of Taumako in the Solomon Islands to illustrate how technologies evolved and became attuned to various maritime and terrestrial environments, adapting to and exploiting local materials, tools, and weather and ocean conditions.<sup>4</sup>

Today, the ancestors of these master navigators and naval architects are facing the greatest threat to their existence, a growing global climate emergency. Contemporary Oceania is beset by challenges arising from an unfortunate trifecta: the decline of Indigenous practice and knowledge due to the arrival and subsequent colonisation by outsiders from the Western world over the last 400 years, a lack of adequate and affordable sea transport systems that support economic or sustainable development, and climate change. This chapter alerts readers to the urgency of rescuing and re-establishing Indigenous sciences, sailcraft design, seafaring traditions, and voyaging practices for reasons of both cultural preservation and future sustainability. In this troubled context, important lessons can be distilled from Pacific Indigenous maritime technologies to inform and inspire current and future generations as they seek to develop decarbonised shipping solutions to provide essential connectivity across atolls, islands and archipelagos in an increasingly climate challenged ocean.

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<sup>4</sup> The term voyaging is often used to describe long distance and exploratory activities. We use the term “seafaring” to include *all* Indigenous practices of sailing, navigation, voyaging, and wayfinding.