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INDIGENOUS PACIFIC APPROACHES TO CLIMATE CHANGE

Aotearoa/New Zealand

Lyn Carter

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Series Editors
Pamela J. Stewart
Department of Anthropology
University of Pittsburgh
Pittsburgh, PA, USA

Andrew J. Strathern
Department of Anthropology
University of Pittsburgh
Pittsburgh, PA, USA

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Lyn Carter
University of Otago
Dunedin, New Zealand

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Series Editors' Preface

Knowledge Encounters: Planning for Climate Change in Aotearoa/New Zealand

Lyn Carter's study, as she explains, is a companion and a counterpart to Jenny Bryant-Tokalau's study of environmental issues and adaptation among Pacific Islands peoples. The overall messages of these two books dovetail clearly: indigenous environmental knowledge is an important resource in plans and practices for both mitigation of the effects of environmental changes and adaptations to these changes by innovative future-oriented strategies. Dr Carter's study, in this book, presents us with a very special and instructive insight into this complex arena of problems, by focusing on her own Māori group, Kai Tahu Iwi, in the South Island of New Zealand. It also deals continuously and seriously with how Māori/Iwi and their TEK (Traditional Ecological Knowledge) are engaged with national-level government planning for environmental management, in a context of looming and actual climate change. The ideal of combining, rather than opposing, Māori TEK and what is labelled as scientific knowledge is explored productively in this book. The essential point is that TEK and its creative applications can add valuably to efforts to handle the social impacts of climate change.

Dr Carter's forward-looking and inspiring approach links together worlds that are more often kept separate. She begins with Māori myths, or origin stories, about the world, especially those relating to the tension between the environmental deities of the land and the sea. Māori groups' stories also link them to the broader Pacific islands, areas from which their

ancestors came, to inhabit what their famous explorer Kupe is said to have called Aotearoa, land of the long white cloud. We ourselves have visited the beach area in Rarotonga, in the Cook Islands, held locally to be the launching place for the first canoes that sailed to Aotearoa. We have watched how the ocean waves beat on the reef and how there is a favorable passage out from the bay via a gap in the reef. A feature of Dr Carter's book is that she acknowledges and brings to life this connection with Polynesian seafaring history.

Māori see themselves as belonging equally to land and sea and the struggle for dominance of the *atua* or deities of these two parts of the lifeworld. Her account always starts from some aspect of TEK, and then moves to examine the engagement of Māori tribespeople (*iwi*) with the New Zealand government and its own attempts to develop an environmentally sensitive program for the use of resources. Central to this process is the need to recognise Māori *mahika kai*, places that are resources for food, and how to maintain these without environmental degradation. One of the many interesting parts of the book deals with Kati Huirapa hapu and their efforts to restore and maintain wetlands around the estuaries of the Waikōuaiti and Waihemo rivers that are catchments for the *inaka* (whitebait) fish. The Kāti Huirapa name for the wider catchment area involved is Matainaka, pointing to the importance of the whitebait as a food source. Whitebait are freshwater fish, and salt water encroachment and floods place their habitat at risk, so Kāti Huirapa have researched the most appropriate grasses to grow at river edges that give stronger protection for the inaka spawning sites than the native grasses which they were previously replanting there.

Dr Carter's comments here are twofold. One is to point out the significance of place, or more precisely emplacement. As our author aptly notes: "The name [Matainaka] recalls the place, the place recalls the stories, the stories recall the whakapapa [genealogies]; and from that each group knows how they belong and fit within the environment". Her formulation here applies, beyond the immediate context, on a pan-Pacific basis, and emphasises why place names are so evocatively significant in projects of environmental restoration and conservation.

Other arenas in which Māori groups are closely involved, along with nongovernmental organisations (NGOs) and government initiatives, are sand-dune reclamation and protection against erosion, and also blue carbon sink creation in which mangrove swamps, beds of sea grasses, and tidal marshes in their pristine forms act as traps for carbon and help to reduce greenhouse gas emission. When wetlands are drained or damaged, the carbon is released into the atmosphere. Māori stewardship of such

coastal areas is therefore vital. Issues that remain include those that have to do with the environmental impact of dairy agriculture, and of commercial logging activities that reduce forest cover. These issues go beyond TEK and its Māori version MEK (Māori Ecological Knowledge), but there is a special role for Māori values in the coastal contexts where much Māori settlement of the South Island took place. Throughout, Dr Carter insists both on the importance of traditional knowledge and on its dynamic capacities for change. In general, then, her book is a powerful exemplification of the significance of indigenous ideas in the sphere of environmental studies. The first Māori explorers would have brought with them much IK (Indigenous Knowledge) from the earlier settlement of the Pacific Islands and their ancestral progenitors there; but the interest of the Māori case, especially of Kai Tahu in the South Island (Te Wai *Pounamu* in Māori terms) lies in how they adapted their IK to new ecological circumstances, for example by extraction of sugar from the Ti tree and the creation of storage pits for sweet potatoes.

Dr Carter not only introduces us to the world of Māori knowledge but also painstakingly takes us through Māori encounters with government legislation, the work of NGOs, and international concerns in the field of environmental protection and renewal. Her book, along with the companion book in this same series by Dr Bryant-Tokalau on Fiji and other regional island case studies, puts Pacific knowledge systems and practices firmly in the contemporary intellectual picture as embodying creative efforts to deal with the existing and likely future impacts of climate change in the world at large (other case studies in the Pacific have foregrounded this perspective: see Stewart and Strathern, 2015 and 2018; Strathern, Stewart, Carucci, Poyer, Feinberg, Macperhson, 2017).

Pittsburgh, PA, USA

Pamela J. Stewart (Strathern)
Andrew J. Strathern

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The ideas for this book came from conversations with my University of Otago colleague and Pacific researcher, Jenny Bryant-Tokalau in 2015. Discussions about the many ways Pacific peoples have been finding indigenous solutions to environmental disasters, including the impact of climate change, were at the forefront of the conversations and subsequent research. It became apparent that here in Aotearoa/New Zealand (A/NZ) there is a dearth of adaptation strategies and practices happening (indigenous knowledge informed or otherwise). During the course of the conversations, two books emerged: one that examines the Pacific Island Countries' (PIC) responses to climate change; and another one that examines A/NZ's lack of response and what indeed they could learn from their Pacific neighbours. In short, A/NZ needs to take note and heed the lessons from the Pacific.

My research and writing has been focused on areas that concern (mainly) my own Māori tribal group (Iwi), Kāi Tahu. More importantly the ecological knowledge discussed in some examples refers to the region where I live and experience the knowledge and practices first-hand. With the identified threats from sea-level rise, flooding, and wildfires come potential changes to the way we currently experience our cultural landscapes and environment. The challenges facing our future generations will demand flexible decision-making in how to adjust and plan for those challenges. These may include relocations and future limits to accessing our mahika kai (resources), many of which are part of the coastal and wetland ecologies that fringe our tribal territories. The present generations are looking at ways to lessen the impact on our vulnerable resources to ensure

future access and use. The knowledge added to the many ways of knowing how to work with our environment will help alleviate any cultural and environmental tipping points that may affect the mahika kai. The many stories within the book come from research into the past, conversations with elders in the present, and offer dreams and aspirations to take this wisdom into the future. I therefore acknowledge those Kāi Tahu who came before, those who are still living, and those who will come later into a world much changed through the impact of climate change. I acknowledge too the many colleagues both within A/NZ and internationally who have contributed their thoughts and research to my own, which has enabled the continuing conversation in indigenous knowledge frameworks as relevant ways of understanding and operating in the world.

Kā mihi mahana atu ki a koutou, kā rangatira kairangahou i ēnei mātauranga, i ēnei whawhai.

Tēnā koutou katoa.

Contents

About the Series Editors

Pamela J. Stewart (Strathern) and Andrew J. Strathern are a wife-and-husband research team who are based in the Department of Anthropology, University of Pittsburgh, and co-direct the Cromie Burn Research Unit. They are frequently invited as international lecturers and have worked with a number of museums to assist them in documenting their collections. Their published work includes over 50 books and over 250 articles, book chapters, and essays on their research in the Pacific (mainly Papua New Guinea and the South West Pacific region, e.g. Samoa and Fiji); Asia (mainly Taiwan, and also including Mainland China and Japan); and Europe (primarily Scotland, Ireland, and the European Union countries in general); and also New Zealand and Australia. Their most recent co-authored books include *Witchcraft, Sorcery, Rumors, and Gossip* (2004); *Kinship in Action: Self and Group* (2011); *Peace-Making and the Imagination: Papua New Guinea Perspectives* (2011); *Ritual: Key Concepts in Religion* (2014); *Working in the Field: Anthropological Experiences Across the World* (Palgrave Macmillan, 2014), and *Breaking the Frames: Anthropological Conundrums* (Palgrave Macmillan, 2017). Their recent co-edited books include *Research Companion to Anthropology* (2015); *Exchange and Sacrifice* (2008) and *Religious and Ritual Change: Cosmologies and Histories* (2009 and the updated and revised Chinese version: 2010). Stewart and Strathern's current research includes the topics of cosmological landscapes; ritual studies; political peace-making; comparative anthropological studies of disasters and climatic change; language, culture and cognitive science; and Scottish and Irish studies. For many years they served as Associate Editor and General Editor (respectively) for

the *Association for Social Anthropology in Oceania* book series and they are co-series editors for the *Anthropology and Cultural History in Asia and the Indo-Pacific* book series. They also co-edit five book series: *Ritual Studies*; *Medical Anthropology*; *European Anthropology*; and *Disaster Anthropology* and *Anthropology and Cultural History in Asia and the Indo-Pacific* and they are the long-standing co-editors of the *Journal of Ritual Studies* [Facebook: https://www.facebook.com/ritualstudies]. Their webpages, listing publications, and other scholarly activities are:

http://www.pitt.edu/~strather/ and
http://www.StewartStrathern.pitt.edu/