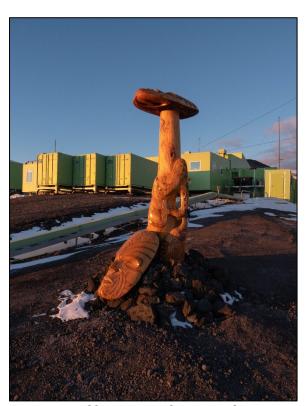
## The New York Times



## The Maori Vision of Antarctica's Future

Maori may have been first to reach Antarctica, in the seventh century. But the past matters less than what lies ahead, Indigenous scholars say.

A post carved by Fayne Robinson at the Scott Base, a New Zealand Antarctic research station. The carving is called Te Kaiwhakatere o te Raki, which translates to "navigator of the heavens."

By Sabrina Imbler July 2, 2021,

The voyager Hui Te Rangiora, the story goes, had sailed his vessel south in the early seventh century in search of new lands when something alien appeared on the horizon. He saw enormous, barren summits jutting out of the sea and into the sky. He saw unfamiliar shapes in the waves: tresses waving at the surface, animals that dove to great depths and seas of pia, the Polynesian name for the white tuber called arrowroot. Hui Te Rangiora had sailed his vessel from the tropics to Antarctica.

The ethnologist Stephenson Percy Smith reached this conclusion in 1899, when he wrote about this Polynesian narrative in a history of the Maori people, the early Polynesian settlers of New Zealand. Mr. Smith identified the bare rocks as icebergs, the wavy tresses as brown strands of bull kelp and the deep-diving animal as a sea lion or walrus. Perhaps the most convincing shred of evidence is the narrative's term for the frozen ocean: Te tai-uka-a-pia, in which tai means sea, uka means ice, and a-pia means "in the manner of arrowroot." When scraped, arrowroot flesh looks uncannily like snow. So from Hui Te Rangiora's perspective, icebergs might have resembled mounds of powdered pia.

"It's fascinating to imagine what it must have been like to see those things, to try to make them familiar to us," said Krushil Watene, a Maori expert on Indigenous philosophies at Massey University in Auckland. Dr. Watene is an author on two studies published recently, with Priscilla Wehi, a conservation biologist at the University of

Otago in New Zealand, that explore the historical and future links between Indigenous peoples and Antarctica.

The first study, published in the Journal of the Royal Society of New Zealand, plumbed literary, oral and artistic archives for historical accounts of Maori in Antarctic and subantarctic regions. The second, published in Nature Ecology and Evolution, looks ahead, proposing an Indigenous framework to manage and conserve the southernmost continent.

The authors hope to apply to Antarctica the Maori principle of kaitiakitanga, the concept of guardianship and stewardship of the environment. Their suggestions include getting more Indigenous voices in Antarctic governance and granting Antarctica legal personhood.

"It's about valuing a place in its own right and protecting it for its own sake," Dr. Watene said.

Early voyages south



The sun setting over pressure ridges near the Scott Base on Ross Island in Antarctica.

In early June, when the authors' first paper came out, the media seized on the suggestion that Hui Te Rangiora may have reached Antarctica as early as the seventh century. "Maori may have discovered Antarctica 1,300 years before Westerners," one headline proclaimed.

If Hui Te Rangiora indeed made it to the frozen continent more than 1,000 years ago, his voyage would shatter the record of the previous first-confirmed sighting of the continent, by a Russian ship in 1820. But the authors were surprised that the news

media latched onto this anecdote, as they did not intend to popularize what they saw as an imperial narrative of people discovering new land.

"It's not simply about which humans were in Antarctica first," Dr. Wehi said. "It's actually about these linkages that have gone on for many hundreds of years and will go on into the future."

Similarly, the researchers were not the first to learn that Maori voyagers may have reached Antarctica so long ago; the feat was known in certain communities, such as those near Bluff, the southernmost town in New Zealand, Dr. Watene said. She and her colleagues relied on the archive of oral tradition to understand the early connection between Maori and Antarctica.

"People have very clear transmission roots of the knowledge and very sure methods for passing on information," Dr. Wehi said, pushing back on the notion among some historians that oral tradition is an unreliable source.

"Why wouldn't we find a continent if we found the most isolated islands in the world?" asked Keolu Fox, a genetic researcher at the University of California, San Diego, who is Native Hawaiian and was not involved with the studies. Native Hawaiians and the Maori are both Polynesian peoples.

Dr. Fox pointed to a traditional double-hulled voyaging canoe built in 1975 that has sailed around the world using traditional Polynesian way-finding techniques. "Do we literally need to saddle up Hokulea to prove it to you?"

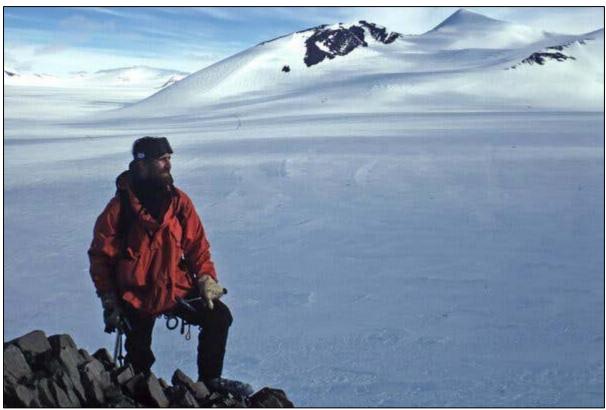
In the fall of 2020, the authors held a series of virtual seminars to bring together researchers and the Maori community to discuss this history. (The coronavirus pandemic derailed their original plan to meet in person.) Participants shared stories that expanded the team's knowledge of existing narratives, like that of Hui Te Rangiora, and revealed numerous new ones to the participants, Dr. Watene said.

The team also consulted traditional carvings, some of which depict Hui Te Rangiora's voyage and the presence of the southern oceans in early Polynesian seafarers' navigational maps of the sky. And archaeologists have observed ovens, middens and stone tools on subantarctic islands dating back as early as the 14th century, suggesting that Polynesian people lived in the region for at least one summer.

The researchers found many more connections than expected in more recent history. In 1840, the Maori sailor Te Atu became the first New Zealander to sight the Antarctic Coast while aboard a United States expedition in the southern oceans. Near the turn of the 20th century, Maori sailors were recruited onto whaling expeditions for their harpooning expertise. And from the 1950s onward, three Maori men joined the New Zealand Antarctic Program as a foreman, a seaman and a diesel engineer. The engineer, Robert Sopp, carved a figurehead, inscribed with a proverb about friends, to present to McMurdo Station, one of the United States' Antarctic outposts.

Two researchers who were not involved with the study, Sandy Morrison and Aimee Kaio, work with tribal groups to learn more about these community-held histories. "I

expect there will be a great many more narratives that are still to come to light," Dr. Wehi said.



Dan Hikuroa, a lecturer in Maori studies at the University of Auckland in New Zealand, did his graduate research in Antarctica in the late 1990s. Credit...via Daniel Hikuroa

Dan Hikuroa, a senior lecturer in Maori studies at the University of Auckland who spoke at the seminar, did his graduate research in Antarctica more than 20 years ago. He spent 78 days on the icescape leading an expedition to map the geology and document the creatures and plants fossilized in Jurassic-age rocks to better understand how the ancient supercontinent Gondwana broke apart.

What first struck him about Antarctica was the deafening silence. He remembers sitting down and hearing a rustling noise with a tempo. The sound, he soon realized, came from a vein on his forehead that brushed against his balaclava as it throbbed with blood. In that moment, he forgot about being a scientist and felt "how my sense of being was being realized by connecting with the place," Dr. Hikuroa said. During the rest of his summer there, he spent long moments sitting and staring out into the piercingly clear horizon, at the curvature of Earth.

When Dr. Hikuroa returned to finish his graduate program, he spent time with family. "All my Maori aunties loved that their boy had been to Antarctica," he said. But then his uncle pulled him aside and asked, "When are you going to do anything that's of use to us?"

Dr. Hikuroa took his uncle's advice to heart. He got a postdoctoral position studying climate change, and now focuses his research on working with and for Maori communities. He did not think about going back to the Southern Ocean until the seminar in 2020, when he learned that Maori may have ventured there centuries ago.

He was not surprised by that theory. "Definitely not," Dr. Hikuroa said, noting the quality of traditional Maori voyaging technology and mastery of navigation. "You could take any one of those navigators and put them anywhere in the Pacific blindfolded," he said, adding that they would have found their way back if the sky was clear and the stars were out.

Jacqueline Beggs, an ecologist at the University of Auckland, banded Adélie penguins in Antarctica during the summer of 2001. Her partner, Peter Wilson, who for a time spent every Christmas in Antarctica running the Adélie penguin program, had shared so many stories of penguins and inescapable sunlight that Dr. Beggs wanted to go, too. She remembered feeling like a fish out of water — not because of her heritage but her gender. "There wasn't much of a sense of presence of Maori or women on that continent," she said.

Like Dr. Hikuroa, Dr. Beggs had not known that early voyagers may have reached Antarctica. As a sailor with a history of seafaring on both the white and Maori sides of her family, she was thoroughly impressed. "There's no way I could contemplate going to Antarctica," she said, adding that the farthest south she has sailed is to the subantarctic Campbell Island. "It would have been a long and incredibly dangerous voyage south," she said.

In 2013 Fayne Robinson, a Ngai Tahu carver, carved a post called Te Kaiwhakatere o te Raki, which translates to "navigator of the heavens," at Scott Base, a New Zealand Antarctic research station. The head looks upward into the sky to symbolize celestial navigation, and the post celebrates past explorers who had ventured to the arrowroot-colored continent.



Jacqueline Beggs, an ecologist at the University of Auckland, with banded Adélie penguins in Antarctica in 2001.

## Antarctica, a Person?

Dr. Wehi and Dr. Watene hope this now-visible history might make a stronger case for future Indigenous management of Antarctica. The continent is governed by the 1959 Antarctic Treaty, which specified that the continent be used exclusively for peaceful purposes and that all scientific research done on there would be made freely available. New Zealand, one of the first 12 signatories to the treaty, is in the midst of resetting its Antarctic research strategy. One section of the treaty, which came into effect in 1998, will most likely be up for review in 2048, and environmental protections such as the prohibition of mining could be revised or rejected by signatories.

In fewer words, it's a good time to reframe what the continent's priorities should be.

In 2016, Antarctica's Ross Sea was designated the world's largest marine protected area. The sea teems with Antarctic toothfish, a lucrative fishery, and the and its new status agreement allows fishing in certain areas while entirely protecting others. As New Zealand resets its strategy, it will evaluate whether this hybrid model has been effective. The researchers point to a 2010 assessment that analyzes the toothfish fishery's long-term sustainability through a Ngai Tahu lens of best fishing practices. Some of these practices include setting minimum catch and size limits and protecting stocks over seamounts, where the toothfish spawn.

More generally, the researchers call for more meaningful Indigenous presence in Antarctic governance, such as partnerships with the Antarctic and Southern Ocean Coalition, an international alliance of organizations working on conservation. Dr. Watene also emphasized that Indigenous voices could be a driving force setting policy in local communities. For example, the researchers suggest increasing the visibility of the Maori Antarctic relationship in gateway cities such as Christchurch, where people stop over before traveling farther south.

"You're stuck for days and days, and you need something to do," Dr. Wehi said. "It's a real opportunity to inform people, and for people in those cities to present their vision of Antarctica."

The authors' most ambitious proposal would grant Antarctica legal personhood, giving the natural formation the same rights as a human being. This conservation tactic has succeeded with the Whanganui River in New Zealand, the Atrato River in Colombia and all rivers in Bangladesh. In the case of the Whanganui, the river can now be represented in court and appointed two guardians to speak on its behalf.

Dr. Hikuroa expressed support for this idea, adding that an Indigenous worldview would also consider the Southern Ocean its own personality.

Dr. Beggs noted that while Maori are one of the nearest Indigenous peoples to Antarctica, she hoped that other Native peoples might also influence the future of the continent.

"We as a global community all have a responsibility as kaitiakitanga guardians for that special place," Dr. Beggs said, "to ensure it is looked after for generations to come."