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under the wills of
Sir Russell and Lady Grimwade.

'Miegunyah' was Russell Grimwade's home
from 1911 to 1955
and Mab Grimwade's home
from 1911 to 1973.

Indigenous Knowledge Institute

Indigenous Knowledge: Australian Perspectives is the first book in the Miegunyah Indigenous series to be produced by Melbourne University Publishing in partnership with the Indigenous Knowledge Institute at the University of Melbourne.

The Indigenous Knowledge Institute is a Melbourne Interdisciplinary Research Institute that was established in 2020 to support and promote Indigenous Knowledge research as a vibrant field of interdisciplinary activity and new research engagements with Indigenous knowledge-holders around the world. It has since grown to be recognised as a global hub for thought leadership and innovation in Indigenous Knowledge research that works with diverse partners across the world.

The Institute funds grants across various schemes to support and advance Indigenous Knowledge research collaboration, ranging from smaller Community Engagement and Seed Funding grants to larger Indigenous Knowledge Fellowship and Research Theme grants. Seven Indigenous Knowledge Fellows of the Institute have been appointed to the University of Melbourne at the level of Professor in recognition of their consummate experience as leading experts in the rare and highly specialised Indigenous intellectual traditions that they carry.

In 2023, the Institute launched its Doctor of Philosophy - Indigenous Knowledge course at the University of Melbourne to offer new academic pathways for Indigenous knowledge-holders from around the world to pursue research training in Indigenous Knowledge as an interdisciplinary field. Five students are now enrolled in this unique course.

All work of the Institute is governed by its 'Charter for Research with Indigenous Knowledge Holders', which has now become embedded as a central framework for recognising Indigenous Cultural and Intellectual Property across the entire University of Melbourne.

News and uploads of the Institute's events and podcasts can be found on the University of Melbourne's website and social media channels. These include recorded presentations from each of the Institute's annual Symposium on the International Day of the World's Indigenous Peoples.

Distinguished Redmond Barry **Professor Marcia Langton** AO FASSA is an anthropologist, geographer and academic from the Yiman and Bidjara nations of Queensland. Since 2000 she has held the position of foundation chair of Australian Indigenous Studies at the University of Melbourne, and she also serves as Associate Provost. Langton's advocacy journey began as the General Secretary of the Federal Council for Advancement of Aboriginal and Torres Strait Islander People in 1977. Her contributions include work on the Royal Commission into Aboriginal Deaths in Custody and the Aboriginal negotiating panel for the *Native Title Act*. Langton's publications span Aboriginal land tenure, agreement-making, art and film.

Professor Aaron Corn is inaugural director of the Indigenous Knowledge Institute and Coordinator of the Doctor of Philosophy – Indigenous Knowledge degree course at the University of Melbourne. His research collaborations with Indigenous colleagues and communities began in the early 1990s and have fostered meaningful research and teaching partnerships that have promoted greater recognition for Indigenous knowledge holders within universities and beyond. His bestselling book *Law: The Way of the Ancestors,* co-authored with Marcia Langton, was published in 2023. He co-hosts the podcast *The Deep End with Marcia Langton and Aaron Corn*.

Samuel Curkpatrick is a researcher specialising in Australian Indigenous music and philosophical issues of language, epistemology and religion. He has collaborated on music performance and teaching with Yolŋu and Warlpiri ceremonial leaders, exploring creativity and understanding across diverse knowledge traditions. Curkpatrick is a research associate at the Indigenous Knowledge Institute and the Indigenous Studies Unit, Melbourne School of Population and Global Health at the University of Melbourne. He completed doctoral studies in ethnomusicology at the National Centre for Indigenous Studies, ANU, and postdoctoral research in theology and philosophy at the University of Divinity.

INDIGENOUS KNOWLEDGE

Australian Perspectives

Edited by

Marcia Langton, Aaron Corn and Samuel Curkpatrick

THE
MIEGUNYAH
PRESS

Melbourne University Publishing acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woiwurrung peoples of the Kulin nation. We pay respect to elders past, present and future, and acknowledge the importance of Indigenous knowledge.

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Editors' Note on Style and Spelling

For the benefit of readers, a note on our use of the term '*country*' in this volume is necessary. This term is used by many Indigenous Australians to refer to customary estates. Country may include landscapes, seascapes and riverscapes, and may have one or more focal sacred sites. These sites may be terrestrial, marine or riparian. In most Indigenous cultures in Australia, land is regarded not just as a physical resource but as a social one too. It is apparent that men and women speak about their hereditary estates in the context of immediate social relations that arise not only with other people, but also from those relations embedded in places, in consequence of their reverential regard for the sacred and historical resonances of those places.

The Aboriginal English term country (or *kantri* in Kriol) has become commonplace within Anglophone discourse. Use of the term country permits a more careful account of Indigenous cultural and social concerns and aspirations. Country may include land and water, whether owned under Australian title or not, and in the latter case, whether or not under claim of native title or other legislation, or forms of Indigenous governance. Customary management of country involves special knowledge and practices that traditional owners bring to the task.

We do not privilege words borrowed from English with initial capitals as our book is predicated on encouraging deeper understanding of the distinct epistemologies, languages and legal systems indigenous to Australia. Where possible, non-English words are rendered in their established orthographies at the time of writing, as we fully support Indigenous groups working to encourage literacy and consistency in their own

languages and dialects. For guidance on pronouncing A̲nangu and Yolŋu words, see respectively: Parks Australia (2015) 'Fact Sheet: Ulur̲u–Kata Tjut̲a National Park' (web resource); R. D. Zorc (1986) *Yolŋu-matha Dictionary* (Batchelor: Batchelor College).

These issues and additional sources may be further engaged through the following publications: Marcia Langton and Aaron Corn, *Law: The Way of the Ancestors* (Port Melbourne: Thames & Hudson Australia, 2023); Marcia Langton, 'The Edge of the Sacred, the Edge of Death: Sensual Inscriptions', in Bruno David and Meredith Wilson, eds, *Inscribed Landscapes: Marking and Making Place*, 253–69 (Honolulu: University of Hawai'i Press, 2002); and Samuel Curkpatrick, Sarah Bacaller and Wanta Jampijinpa Pawu, 'Who Is Country? A Hermeneutic Strategy toward Philosophical Responsiveness in Australia', *Parrhesia: A Journal of Critical Philosophy* 38 (2023): 44–69.

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Introduction

Local Wisdom, Expansive Vision: Australian Perspectives on Indigenous Knowledge

Samuel Curkpatrick, Aaron Corn and Marcia Langton

MANY PEOPLE IN Australia and around the world are curious about Aboriginal and Torres Strait Islander culture, law and relationships with their lands, waters and skies. Today, Australia is home to many rich Indigenous knowledge traditions that originated scores of millennia ago. These traditions carry understandings of ancestral histories of occupation, coastal inundations and other major climate changes, as well as patterns of behaviour for how to live well on *country*, manage the environment, provide for material needs and maintain a social balance. This knowledge is traditionally taught and conveyed through rich bodies of ceremonial law that integrate oratory, song, dance and design. These knowledge traditions have shaped forms of society and governance, and patterns of ecological management, thereby helping life to flourish over countless generations. By learning more about these knowledge traditions, we encounter unique ways of thinking and of experiencing life, enriching our relationships with the many different people and places around us.

The term *Indigenous knowledge* encapsulates these numerous, multilayered expressions and activities as they uniquely shape the experiences of Indigenous peoples. The term also represents the efforts of scholars, both Indigenous and otherwise, to advocate for policies and practices

that recognise the immense value of these traditions, and to work towards greater and more meaningful engagement with them. As well as supporting knowledge practices that are indigenous to local contexts to improve health, economic and cultural livelihoods, organisations like the United Nations call for institutions and governments to do more to safeguard and sustain humanity's global cultural and intellectual diversity. For example, the introduction to the United Nations' *Convention on Biological Diversity* affirms that the many 'skills and techniques' of Indigenous peoples should be regarded as 'valuable information to the global community[, not only] those who depend on it in their daily lives, but to modern industry and agriculture as well … [as] traditional knowledge can make a significant contribution to sustainable development'.[1]

Such aspirational statements cast a broad vision for a more inclusive and diverse humanity. Such statements also reveal an inherent tension within the concept of Indigenous knowledge, which is upheld as something of global value while at the same time affirming that Indigenous knowledge is characteristically bound to localised environments and cultures. This conceptual tension plays out between the recognition of universal value and the prioritisation of local autonomy.

Perspectives on Indigenous knowledge in Australia are not isolated from this local–global dynamic. Assertions of cultural and intellectual autonomy are often affirmed with direct reference to the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP).[2] Similarly, the tone and literary style of such declarations influence the stated principles of professional organisations working closely with Indigenous communities. For instance, the *Garma Statement on Indigenous Music and Performance*, developed by Indigenous leaders and academics at the Garma Festival in 2002, calls for the establishment of local knowledge centres in Aboriginal communities, the founding of a national recording project under the guidance of senior Aboriginal men and women as a national research priority, and the repatriation of songs from archives and libraries to local communities. The opening of the Garma statement reads:

> Songs, dances and ceremonial performances form the core of Yolŋu and other Indigenous cultures in Australia. It is through song, dance and associated ceremony that Indigenous people sustain their

> cultures and maintain the law and a sense of self within the world. Performance traditions are the foundation of social and personal wellbeing, and with the ever-increasing loss of these traditions, the toll grows every year. The preservation of performance traditions is therefore one of the highest priorities for Indigenous people.
>
> Indigenous songs should also be a deeply valued part of the Australian cultural heritage … Indigenous performances are one of our most rich and beautiful forms of artistic expression, and yet they remain unheard and invisible within the national cultural heritage.[3]

Two of this book's editors, Marcia Langton and Aaron Corn, worked directly with Aboriginal leaders in delivering this statement and presently work with many other colleagues on ways to sustain enduring solutions to its call through longitudinal initiatives such as the Indigenous Data Network.[4] Over the past two decades, academics across Australia have worked closely with Indigenous leaders and communities to pursue many such objectives. This has involved scholars from diverse and disparate disciplinary backgrounds working together in new intercultural contexts. Many scholars have developed responsive research methodologies that prioritise Indigenous self-determination and leadership, and tangible outcomes that directly benefit local Indigenous communities.

It is this longitudinal commitment to the applied and collaborative nature of Indigenous knowledge research in Australia that gives this research its unique flavour when compared with other kinds of Indigenous-related research around the world. Applied and collaborative approaches, such as those found in this book, also contrast directly with traditional methodologies of ethnographic documentation, which have tended to cast Indigenous informants as sources of information and data, instead of recognising their expertise and agency as knowledge producers and research collaborators in their own right.[5] By prioritising applied and collaborative approaches, Australian academics have sought ways to enfranchise Indigenous knowledge-holders as peers into the academy on grounds of the rare and highly specialised intellectual traditions that they carry.

Ethnomusicology, a discipline of two of this book's editors, Aaron Corn and Samuel Curkpatrick, has perhaps the longest history of these

intercultural academic collaborations in Australia. The Centre for Aboriginal Studies in Music at the University of Adelaide built its entire curriculum and research program around ceremonial exchanges with Aṉangu leaders from the community of Indulkana (Iwantja) in the Western Desert as early as the 1970s, and funded two senior lectureships for Aṉangu ceremonial leaders as early as the 1980s.[6] The spirit of those transformative early exchanges now greatly informs the work of the Indigenous Knowledge Institute at the University of Melbourne, which funds and supports new interdisciplinary research grounded in robust partnerships within Australia and beyond as a means of regularising respectful and mutually beneficial engagements with Indigenous knowledge and its holders across the whole of the academy.[7] The Indigenous Knowledge Institute's Fellowship scheme, for example, has enabled research-active Indigenous leaders to be appointed as full professors to undertake research of immediate interest to their own communities, while the institute's new research training course, the Doctor of Philosophy—Indigenous Knowledge, is designed to open new academic pathways for Indigenous knowledge-holders from Australia and beyond with demonstrable experience in maintaining or revitalising Indigenous knowledge practices, such as cultural, language, ceremonial or environmental practices.[8]

This volume itself is a direct outcome of the very first research colloquium convened online by the Indigenous Knowledge Institute with colleagues from across Australia in early 2021. It vividly demonstrates the interdisciplinary breadth of Indigenous knowledge research in Australia. Featuring chapters by specialists with wide-reaching expertise in human geography, anthropology, ethnomusicology, history, linguistics, social science, environmental science, geology, cultural astronomy, construction management, public health, education and creative arts, it aims to foster respect for Indigenous knowledges and cultures, promoting best-practice methods for documenting, sustaining and engaging with them, and raise awareness about how these perspectives can inform new approaches to addressing contemporary global challenges.

Many chapters here were written by Indigenous thinkers and educators who have long histories of proactively building on their own intellectual traditions to engage with Western institutions in more relevant ways. Across the diverse topics addressed by each author, Indigenous knowledge emerges

as a repository of intergenerational observation, and wisdom that can be continually reinterpreted and applied to new contexts for the empowerment of Indigenous communities in Australia and elsewhere. In compiling this volume, we assert that now is the time for Indigenous knowledge to be even better valued and supported within the academy globally, to ensure that the rich intellectual traditions of Indigenous peoples around the world can enable new forms of human inquiry and understanding to emerge.

This volume is divided into four parts.

Part I: Deep Knowledge introduces some of the primary sources of Indigenous knowledge in Australia, which extend into deep time and history, while also encompassing the intimate relationships between people and place. Marcia Langton, Samuel Curkpatrick and Ella Reweti introduce some distinctive characteristics of Australian Indigenous knowledge in relation to global discourses on intellectual and cultural diversity. Wanta Jampijinpa Pawu, Aaron Corn, Samuel Curkpatrick and Brian Djan̲girrawuy Gumbula-Garawirrtja explore the close relationship between being and knowing within Warlpiri and Yolŋu knowledge traditions, and the importance of engaging with ancestral knowledge for community wellbeing. Nicholas Reid, Patrick D. Nunn, Bianca McNeair, Lena Djabíbba, Roselyn Kumar and Ingrid Ward provide insight into the immense time-depth of Indigenous knowledge by considering narratives collected from twenty-nine locations around Australia that recount the rise of ocean levels between 15 000 and 7000 years ago. Duane Hamacher and Martin Nakata survey the study of Indigenous astronomy, detailing how both scientific and cultural knowledge are read from the stars.

Part II: Knowledge Expression introduces some of the complex and nuanced forms through which traditional knowledge is expressed. Clint Bracknell and Rachel Nordlinger consider how the many diverse languages spoken across Australia sustain understandings of ecology and place, and how multilingualism shapes social relations. Clint Bracknell and Sally Treloyn survey a range of song and dance traditions, arguing that greater engagement with these traditions can support social adaptation

to environmental crises. Samuel Curkpatrick considers the connection between metaphor and ethics within Indigenous thought traditions, looking to the ways in which Yolŋu knowledge can shape dynamic partnerships with non-Indigenous musicians. Angela Lynch, Marcia Langton and Jacqueline Healy consider the importance of traditional healing practices, introducing an innovative program run by the Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara (NPY) Women's Council that supports *ngangkaṟi* (traditional healers) to work alongside Western-trained medical professionals.

Part III: Knowledge in Country explores how knowledge is shaped through engagements with the lands, waters and skies that surround and sustain Indigenous communities. Paul Gordon and Jesse Hodgetts share the story of how Thikarrbila (Echidna) came to be, introducing the reader to pedagogical processes of learning on country. Mike Ross and Hannah Robertson set out effective principles for working with traditional knowledge-holders to design buildings that are not only functional but further the cultural aspirations of Indigenous communities. Sue Jackson, Lisa Palmer, Joe Morrison, David Cooper, Mona Liddy and Liz Sullivan explore how Indigenous concepts of water rights are interwoven with cultural practices, and the disjunction between those concepts and dominant approaches to water management in Australia. Margaret Ayre, Djalinda Yunupiŋu, Jonathan Wearne, Rrawun Maymuru, Mandaka Marika and Gathapura Munuŋgurr introduce a long-running and highly successful approach to educative workshops run by Yolŋu people that aim to improve land and sea management practices.

Part IV: Hearing Our Voices looks to examples of how Indigenous knowledge has underpinned and inspired political activity through the assertion of an Indigenous voice within contemporary Australian society. Diana James, Nganyinytja Ilyatjari and Mantatjara Wilson detail the emergence of women's cultural and political organisations in central Australia, culminating in the formation of the NPY Women's Council during an era of emergent land rights and increasing self-determination for Aṉangu people. Finally, Geraldine Atkinson and Marcus Stewart, co-chairs of the First Peoples' Assembly of Victoria from 2019 to 2023, outline the functions and ethos of this organisation and consider cultural authority as an inalienable basis of sovereignty from which treaty negotiations might proceed.

PART I

Deep Knowledge

CHAPTER 1

The Responsibility and Gift of Indigenous Knowledge

Marcia Langton, Samuel Curkpatrick and Ella Reweti

IN AUSTRALIAN UNIVERSITIES, *knowledge* has largely been understood as a creation of Western history and discourse traditions. Almost all other knowledge systems have been excluded, or their existence and value denied as beneath the standards of Western traditions. Assumptions about what knowledge is, its sources and potential uses, reflect various scientific and humanistic attempts to understand relations within the natural and human world and our place within them. In many respects, Indigenous knowledge traditions found across Australia are no different in their intellectual scope and profundity, although the ways in which knowledge is expressed and incorporated into patterns of life are markedly distinct. Also unique is the Australian Indigenous understanding of the world as originating in a sacred past and saturated by ancestral patterns and precedents, an ontological difference that contrasts radically with Enlightenment presuppositions of a neutral and universal order. Even amid these differences, we can observe deeply human questions that underpin diverse knowledge traditions globally: how are we to live well with others? How can we sustain abundant environments and nourishing cultures? How might connections to place and generations past strengthen our cultural, political and economic futures?

Over millennia, Aboriginal and Torres Strait Islander peoples have continuously created, maintained and adapted rich and complex knowledge traditions steeped in unique relations between people and place. They have developed nuanced understandings of local ecologies, the behaviours of human and non-human species, weather, celestial bodies, and the healing properties of plants; developed sophisticated forms of governance, diplomacy, performance and art; and imagined their place within the cosmos in profound and poetic ways.[1] The ingenuity of embedding these bodies of knowledge within localised activities and observations of the natural world is difficult to overstate. Australian Indigenous knowledge has largely been transmitted through the patterns of everyday life—in relations between kin or activities like hunting and preparing food, learning to navigate through complex terrains, understanding seasonal patterns, as well as within formal ceremonial activities. In recognition of the sacred origins of knowledge, organised ceremonial teaching practices, including lyrical and performative means of communicating knowledge, and artistic practices such as painting, design, weaving and dance, have been important means for expressing ancestral knowledge in tangible and accessible forms. Around the country, millennia-old artwork found on rock walls and in caves attests to the sorts of designs that would have been painted on bodies in preparation for ceremony, and on ritual and domestic objects.

Such abundant forms of knowledge are uniquely inscribed within living connections of people and place.[2] Maintaining these connections is essential to sustaining ancestral knowledge and, subsequently, to living healthy, interconnected lives. Beyond localised expressions of Indigenous knowledge, the recognition of Indigenous epistemologies has become crucial to sustaining global cultural and environmental diversity. There is increasing recognition that Indigenous knowledge, while necessarily embedded within specific places and communities, holds the potential to impact the wellbeing of all. As a living conversation between our ancestral pasts and the ancestral futures that we leave behind, Indigenous knowledge is both a responsibility and a gift.[3]

Garma Mäk: An Invitation to Learn through Yolŋu Law

Each year since 1997, an Aboriginal festival has been held at a place called Gul̲kul̲a in Northeast Arnhem Land, in the Northern Territory. The

traditional owners of the land, the Gumatj clan, joined other Yolŋu clans with special affiliations with Gul̲kul̲a, to host a traditional ceremony—the Garma. At this week-long gathering, the Yolŋu invite others to come and learn about their culture, religion and philosophy.

In 1999, Dr G. Yunupiŋu, a leader of the Gumatj clan, carved a wooden object called *Mäk* (Maak).[4] Diamond shapes on the *Mäk* represented the sparks that leapt from a wildfire as it spread across the land. 'Like a fire, the truth burns,' he explained. 'That's how we know it is the truth.' It was his intention, he said, to have his invitation to learn Yolŋu knowledge of the environment spread across the land in this way. Translated by Merrkiyawuy Ganambarr-Stubbs, the *Mäk* invited each Yolŋu group that had come to the Garma ceremony to learn about and share in Yolŋu law:

> This *Mäk* is a declaration by the Yolŋu leaders ... The Garma ceremony [public performance and wisdom] is an enactment of the meaning of being Yolŋu, of being human, as we understand this through our cultural inheritance from our ancestors. Our performance of the ceremony embodies the meanings of our traditions, enshrined in sacred places. To those of us who participate, Garma restores our spirit to a state of harmony and balance in the world, purifying us and bringing us to a deeper understanding of our duty to respect and share the legacy of our knowledge ...
>
> The first *Mäk* is to introduce the concept of Yolŋu knowledge systems as ancient foundations, ways of comprehending the world that have sustained Yolŋu societies. Our traditions provide us with the knowledge and the skills to harvest the bounty of the land and the sea for the satisfaction of our needs, and the opportunity to enjoy life. Through the ideas of Garma we explore our humanity. We, the Yolŋu, Aboriginal people of Northeast Arnhem Land, believe that our intellectual traditions are relevant to people of other societies, and are especially important to universities and institutions in which people seek to expand human knowledge.
>
> The second *Mäk* is to share the vision of Garma. This ceremony reminds us of our duty to pursue knowledge, to discover and teach in co-operation with others, acknowledging the potential of all

> individuals to contribute equally according to their own capacity. It reminds us to acknowledge our bonds of common humanity, and thus the unity that we celebrate in the Garma ceremony reminds us of the necessity to work with others for the common good.[5]

This invitation to respect and share in the legacy of ancestral knowledge has characterised the work of many Yolŋu researchers and educators. It expresses a desire to be recognised and a deep concern over the future of traditional Yolŋu knowledge, especially in relation to the environment and the encroachment of inappropriate ecological and conservation practices imposed by federal and territory governments. G. Yunupiŋu explained the importance of governments working alongside traditional knowledge systems in this way:

> Caring for the country is what we have done for tens of thousands of years and we intend to keep doing that … We know that the best, and in fact the only, way to do it is to take advantage of both traditional and contemporary knowledge systems. We want to make sure that Aboriginal people learn about contemporary methods and that non-Aboriginal people learn about our knowledge and experience.[6]

Like many senior Aboriginal leaders across the country, G. Yunupiŋu inherited a profound body of ancestral knowledge. This was necessarily earned through diligent practice and political duties. G. Yunupiŋu's sense of self and his place in the world was shaped by great ancestral forces, and he had a matchless gift for explaining to *Balanda* (non-Yolŋu) the body of law that eventually became his responsibility to uphold. It was through the responsibility to live by that knowledge and to extend it to others, that the power and influence of that knowledge was realised. He described his worldview in this way:

> We have our own laws, repeated in ceremonial song cycles and known to all members of our clan nation. Sung into our ears as babies, disciplined into our bodies through dance and movement—we have learnt and inherited the knowledge of our fathers and

> mothers. We live on our land, with our laws, speaking our language, sharing our beliefs, and living our lives bound together with the other great clan nations of the Gove Peninsula … Our allegiance is to each other, to our land and to the ceremonies that define us. It is through the ceremonies that our lives are created. These ceremonies record and pass on the laws that give us ownership of the land and of the seas, and the rules by which we live. Our ceremonial grounds are our universities, where we gain the knowledge that we need.[7]

Recognising Indigenous Knowledge Globally

It is widely recognised that Indigenous cultural autonomy and economic capacity are essential to sustaining Indigenous knowledge traditions. The recognition of Indigenous knowledge in legislation and the implementation of international rights-based frameworks are also crucial to protecting and enabling appropriate forms of engagement with those traditions.

Since the mid-twentieth century, there has been increasing international interest in the practical application of Indigenous knowledge to address issues of sustainable development and productivity, in industries including agriculture, fisheries, horticulture, forestry, environmental management and health. This increased attention to Indigenous knowledge has required the development of frameworks and safeguards for its use. The United Nations Secretariat of the Convention on Biological Diversity has played an important role in enshrining the protection of Indigenous knowledge within international law. Its acknowledgement of the value of the skills and techniques of Indigenous resource managers, and support for policies aimed towards sustaining biological diversity, are critical.[8] Significantly, Article 8(j) of the convention provides that:

> The use of Indigenous traditional knowledge, innovations and practices should only occur with the approval and involvement of the Indigenous or local community and that any benefits that arise from its use is to be shared with the people or community from which that knowledge originated.[9]

International law and frameworks such as this convention have encouraged dialogue between nation states and Indigenous people, as well as

across local, national and international forms of governance.[10] Despite an increased awareness of the importance of preserving and promoting Indigenous knowledge, persistent threats to its ongoing expression and viability remain. For example, the extent to which natural and cultural diversity is intertwined is not always recognised in the call of environmentalists to protect 'wilderness', at the expense of Indigenous economic development and traditional resource rights.[11]

Since Indigenous knowledge traditions are highly localised and complex, rendering written accounts of that knowledge has involved collaboration with researchers across a range of disciplines, such as ethnomusicology, linguistics and geography. Outsiders do not typically have access to such knowledge unless they are directly engaged with traditional owners, encountering that knowledge *first-hand* in the social, ecological and performative contexts within which it is embedded. Nevertheless, research collaborations have not always been beneficial for Indigenous people, or even benevolent in their intentions. Some academics have selectively appropriated Indigenous expertise for their own benefit and with little appreciation for the beliefs and practices underpinning the knowledge.[12] The commercialisation of Indigenous knowledge without consent or benefit-sharing arrangements is another pressing concern that is only exacerbated by political and economic disparities.[13]

Despite the ubiquitous exploitation of Indigenous knowledge, many meaningful approaches to working with Indigenous knowledge-holders and traditions have developed over recent decades.[14] This has required sensitivity to relational and institutional power dynamics that potentially undermine, marginalise and exclude that knowledge from mainstream discourses. Success in collaboration depends on highly qualified and experienced collaborators with a high level of commitment to the integrity of Indigenous laws and traditions. There is also a need for Indigenous collaborators to have a clear understanding of their rights within such engagements, as reflective of international human rights law, intellectual property law, and title to land and resources; for the intellectual value of their knowledge to be duly credited; and for the accurate documentation of knowledge expressions, including ecological knowledge.[15] Undertaken with responsibility and integrity, collaborative research with Indigenous knowledge-holders can support the aspirations and priorities

of Indigenous groups, who perceive opportunities to preserve knowledge practices and secure the recognition of rights to that knowledge under international law.

Responding to Indigenous Knowledge in Australia

Within Australia, legislative recognition of Indigenous cultural and intellectual property by governments would significantly benefit the preservation of Indigenous knowledge. So, too, would formal acknowledgement of the unique cultural, social and historical contributions of Aboriginal and Torres Strait Islander peoples, by enhancing the visibility and respect for Indigenous people and knowledge within the broader national consciousness. Legislative responses to Indigenous knowledge in Australia should also provide a stronger basis for Indigenous people to negotiate terms of engagement and collaboration, ensuring their participation in research, commercial activities and governance while maintaining their cultural integrity.

This, in turn, would generate tangible community benefits. Countries with established legal frameworks that support the rights of Indigenous communities to control their knowledge generally provide stronger protections for these peoples. In Australia, however, the lack of rights afforded Indigenous peoples in the Constitution—and the absence of any mention of the special status of Indigenous people—falls short of full protection for Indigenous knowledge systems.

This shortfall highlights the importance of volumes such as this, driven by Indigenous writers, artists, scientists, academics and community, in collaboration with non-Indigenous colleagues. It exemplifies how ancient knowledge systems remain relevant today, precisely because they shape present experience as they come to work alongside other forms of knowledge, respectfully and expansively. It is this very multidimensionality that makes Indigenous knowledge not only intellectually evocative, but useful for, and often critical to, a wide range of purposes and contexts that are important to Aboriginal and Torres Strait Islander peoples as they grapple with the relentless impacts of modernity.

CHAPTER 2

Being and Knowing

Wanta Jampijinpa Pawu, Aaron Corn, Samuel Curkpatrick and Brian Djaṉgirrawuy Gumbula-Garawirrtja[1]

I'll tell you a true story. My family were travelling to Kulpulurnu, the Rain dreaming place. There's permanent water there, but it was 100 kilometres more to go. They had all run out of water, and they were thinking they're not going to make it. But because the old fella, my step-grandfather, had that knowledge of looking for water, he found a tree called wurrkali *[bloodwood]. That tree holds water. That water was enough to get them to Kulpulurnu and, if he didn't do that, well I wouldn't exist here. Yeah, because of his knowledge, he managed to get them to Kulpulurnu, to their homeland. So, you can see why the emu's names and stories really talk about how you feed on knowledge. It will save you because you will use this knowledge, or the knowledge will use you. The desert is a place where your knowledge needs to be updated all the time. Let's put it that way! You know, it has to be in tip-top shape. If you lack that knowledge, you might end up killing your family.*

Wanta Jampijinpa Pawu

AS A WARLPIRI leader, being and knowing are intimately connected for Wanta Pawu. In environments full of potential dangers, knowledge feeds our bodies and minds. It quenches, nourishes and sustains. Knowledge makes the land our home and helps us *become* our homes. Our lives are enmeshed in life-giving patterns of place, ecology, family and community that can give everyone the possibility of learning how,

as Pawu often puts it, to carry home within. Knowledge is curated over time and generations, joining those who are gone with those yet to be. It helps us navigate life by locating us within a dynamic system known as *kurawarri* (law) to the Warlpiri people that shapes purposeful belonging and links us to things in creation—places and ancestors, plants and animals, earth and sky, day and night.[2]

In this chapter, we discuss how being and knowing, and also thought and practice, in Australia have long been shaped by Indigenous traditions of law.[3] We draw on Warlpiri and Yolŋu examples from the Tanami Desert and Northeast Arnhem Land, the respective ancestral homes of co-authors Pawu and Gumbula-Garawirrtja, to show how Warlpiri *kurawarri* and Yolŋu *rom* (law) codify complex knowledge systems that nourish and guide people throughout their lives, while also mediating lived experiences through a wide array of corresponding ceremonial practices. Ultimately, we demonstrate how knowing in these traditions is anchored in a bedrock of ancestral laws that prevents stasis by allowing for new understandings and relationships to be cultivated in response to continuous growth and change.

Knowing through Doing

The Western academic tradition usually compartmentalises knowledge into discrete disciplines that tend to disintegrate Indigenous knowledge systems from the people who are their agents, the places that shape their meaning, and the daily practices that maintain their cohesion.[4] It also privileges text as the normative medium of knowledge documentation and dissemination, maintaining an overly rigid distinction between theory and practice.[5] Indigenous intellectual traditions across Australia, however, emphasise processes of *knowing through doing* as their own dominant means of holding and transmitting knowledge. In Indigenous epistemologies, merely *knowing about* something in abstract is not considered to be a true form of knowing. True knowing requires a demonstrated capability in knowledge application. The common Yolŋu verb *marŋgi*, with its tripartite meaning, sheds further light on this distinction. It simultaneously means 'to know,' 'to be able to' and 'to have rights in', indicating that lifelong learning is a function of one's birthright to share and benefit from the vast store of their people's ancestral knowledge.[6] Even before children can walk and talk, their families

encourage them to begin learning their inherited knowledge traditions, because babies are said to *rom-gal'-gal'maranhamirri* (crawl with law).

Indigenous knowledge systems across Australia have typically been codified over scores of millennia into many extensive ceremonial repertoires of names, songs, dances and designs that attentively integrate people's understanding of themselves and each other with places and environments where they live and travel. These ceremonial repertoires are typically attributed to the original ancestors or *old people* of the many different Indigenous groups across Australia, who named, shaped and populated their homelands long ago and knew how to read the world around them. Participation in ceremonies, at whatever capacity one might have to do so, is therefore considered to be an intrinsically human trait.[7]

While the academy has gradually come to accept ceremonies as conduits for cultural ideas and values, perhaps even spiritual and political ones, rarely does it recognise their innate veracity as independent conduits for knowledge documentation and dissemination. This remains one of the main barriers to enfranchising Indigenous knowledge-holders into the academy on grounds of the rare and highly specialised intellectual traditions that they alone often carry at the highest level.[8] Ethnomusicology, a discipline in which all authors here have been engaged, perhaps has the longest history in Australia of collaborative intellectual exchanges with Indigenous ceremonial leaders. The entire teaching curriculum and research program of the Centre for Aboriginal Studies in Music at the University of Adelaide was founded in the 1970s on longitudinal intellectual exchanges with A<u>n</u>angu ceremonial leaders from Indulkana in the Western Desert, which saw two of those leaders appointed to academic positions as senior lecturers in the 1980s.[9]

Appointments such as Pawu and Gumbula-Garawirrtja's as full professors to the Indigenous Knowledge Institute at the University of Melbourne, where all authors of this chapter worked at the time of writing, are among our latest approaches to overcoming this barrier, with the aim of enabling new forms of academic inquiry and dissemination to emerge.[10] Another has been our recent creation and delivery of the Doctor of Philosophy—Indigenous Knowledge, which is coordinated by the Indigenous Knowledge Institute and is chiefly designed for Indigenous knowledge-holders from Australia and beyond to pursue higher research

training in a field of immediate interest.[11] The Indigenous Knowledge Institute is a Melbourne Interdisciplinary Research Institute hosted by the University of Melbourne's Faculty of Science, which has been instrumental in enabling this vision.

The ceremonial repertoires held and deployed by such elders do not merely transmit static information from one generation to the next. Rather, they form the basis of rich intellectual traditions through which new ideas can be debated, new meanings negotiated, and new consensuses built, so that each new generation of a community can determine for themselves what it means to live well. While gravely threatened today by the lingering consequences of colonisation and the newer demands of contemporary life,[12] these intellectual traditions nonetheless sustained complex land and sea management practices that enabled humanity to flourish across Australia for countless generations.

As Pawu has elsewhere explained with respect to Warlpiri law, in the demanding environments of the Tanami Desert, Warlpiri intellectual traditions equip people to simply be and feel at ease in the dynamic environments of their own homes.[13] At the heart of Indigenous knowledge systems across Australia lies the tenet that everything is related and that people's sense of *being at ease* comes through working towards an ever-deepening understanding of our place within the universe. All communities are connected by sprawling kinship networks that encourage people to respect and care for each other and their respective homelands as a legal obligation. The ceremonial codification of Indigenous laws both formalises and sacralises the relationships of people to their homelands and the eternal ancestors who also reside there, while ceremony repertoires themselves are seamlessly integrated across their classical media of names, songs, dances and designs in ways that encourage people to understand how everything in creation, including the whole of humanity, is ecologically and ancestrally connected to everything else.[14]

The *warlalja* (kinship) system, for example, that regulates traditional marriage and inheritance laws in Warlpiri society is itself based on the appearance of a highly recognisable natural phenomena in the night sky of the Southern Hemisphere—the constellation Crux or the Southern Cross. This system is effectively a synergetic relationality engine that distributes all people in Warlpiri society across four intermarrying

ceremonial groups, who hold hereditary rights to the myriad homelands and ceremonial repertoires across the Tanami Desert. The basis of this system in the way the Southern Cross appears is itself a constant reminder that we humans are made of the same stuff as everything else at an atomic level, and that the gaining of ceremonial knowledge requires keen attentiveness to natural forms and cycles.[15]

This kind of attentiveness emphasises *knowing* as an active lifelong pursuit over *knowledge* as something that is received and static.[16] It is also widely recognised across Australia that knowing is best pursued through ceremonial contexts in which multiple descent groups participate. In Yolŋu society in Northeast Arnhem Land, formal alliances between related groups are called *reŋgitj*, which technically means 'body', but in the sense of a 'body corporate' of constituent member groups. Knowledge generated in *reŋgitj* ceremonial contexts is considered the most definitive. The overall quality of a ceremony is indexical to the number of people who gather for it, while the greater the number of different groups they represent, the more definitive the knowledge generated there will be. Yolŋu people will therefore often explain the credentials of their knowledge by referring to the various *reŋgitj* ceremonial contexts through which they acquired it.[17] The very best of ceremonial contexts for debating new ideas, negotiating new meanings and building new consensuses can only be accessed by cooperation with multiple other groups. This further obliges and incentivises communities to remain connected via sprawling kinship networks that encourage people to respect and care for each other and their respective homelands.

Feeding on Knowledge

In Indigenous languages across Australia, richly nourishing foods that are particularly good for children are used as common metaphors for knowledge. At an epistemic level, knowledge is a form of nourishment that enriches and sustains our lives and, like food procurement itself, can only be accessed by exercising keen attentiveness to natural forms and cycles.[18] In the Tanami Desert, for example, the Southern Cross dips beneath the horizon at the end of the hot season around October each year and, when entirely obscured in this way, it is characterised by Warlpiri people as a giant *yarla* (yam) that indicates it is time to commence annual ceremonies.

In this sense, ceremonies themselves are seen as gatherings where people come together, often from over vast distances, to feast on knowledge.

Much like teaching a child where and how to dig for yams, or to find honey in the forest by following a line of bees back to their hive, the search for richer knowledge also requires us to look and dig beyond the appearances and surfaces of things to find resources and nourishment that nature often hides in plain view. The Southern Cross, once again, exemplifies this understanding. It is but one part of a much larger constellation that Warlpiri people recognise as the Flying Emu, which mostly comprises dark nebulae that are hidden against the shimmering backdrop of the Milky Way and can only be seen clearly on the night of a new moon. The Coalsack Nebula is the Flying Emu's head, and it adjoins the Southern Cross, which he wears as a crown. In ceremonies, Warlpiri people traditionally wear a single white feather on their headbands to represent the Southern Cross as the Flying Emu's crown.

Nestled amid the stars of the Milky Way, which Warlpiri people see as their ancestors' eternal home, the Flying Emu is revered as the ultimate teacher and an aspirational figure of ceremonial learning to whom all should aspire. His cyclical ascendancy, as he wheels through the sky every night, is a key inspiration among Warlpiri people for the quest for knowledge itself and the pathway to ever greater wisdom through personal devotion to ceremonial attainment. Just as it is the role of males of the emu species to sit on nests and rear chicks, the Flying Emu gathers the novice emu chicks in his care and asks them, 'Who wants to learn how to fly?' Unlike the Flying Emu constellation, the emu in nature is a flightless species of bird. So when a Warlpiri elder asks young children, 'Who has ever seen an emu fly?', it is a paradoxical riddle designed to spark curiosity, lateral thinking and attentiveness to the surrounding world in the young, and hopefully instil in them a passion for lifelong learning that leads them to earn knowledge and ascend to greater wisdom through lives of cyclical ceremonial participation.[19]

The idea that, like food sources, richer knowledge can often be hidden by nature in plain view, yet be readily attainable by those taught how to find it, is also common among Yolŋu groups of Northeast Arnhem Land. Before his sad passing, Gumbula-Garawirrtja was a Yolŋu elder of the Gupapuyŋu group, which has several different descent branches, all of whom trace descent from the eternal fierce honeybee ancestor N̠iwud̠a,

who founded Djiliwirri as their *wäŋa-ŋaraka* (bone-country) or capital homeland long ago. Gumbula-Garawirrtja's older *wäwa* (brother), Joe Neparrŋa Gumbula, who had built a successful academic career of his own before passing in 2015,[20] once described this ancestral bond thus: 'My *waŋarr* [ancestor] is from the paperbark tree for I am a Honeybee. Djiliwirri is like a home. That's where we belonged in ancestral times before everything started.'[21]

Gumbula further explained that the collection of honey from the *mayku* (the giant paperbark tree species) at Djiliwirri is like the entry of people into the homeland of Djiliwirri itself. The *ga<u>n</u>iny* is an elongated, double-ended wooden lance that the Gupapuyŋu group uses to open the thick, multilayered bark of the *mayku* and harvest the honey nested inside. It is also an important emblem of Gupapuyŋu ownership in Djiliwirri by right of descent from <u>N</u>iwu<u>d</u>a. Like so many other ceremonial assets across the classical media of names, songs, dances and designs, items like the *ga<u>n</u>iny* help the eternal ancestors who remain ever-present in the Yolŋu homelands to recognise and care for their living kin, while simultaneously repelling and expelling intruders. When a Gupapuyŋu boy is being formally readied for initiation into manhood, he is dressed and publicly displayed in brilliantly feathered woven cords that represent forest vines encircling the *mayku*. He stands with his arms outstretched obliquely above his head like tree branches, while a *ga<u>n</u>iny* bearing a Gupapuyŋu ceremonial design is thrust back and forth towards his torso, like a hive being harvested for honey, to focus his attention on imminently receiving <u>N</u>iwu<u>d</u>a's knowledge.[22]

Executive Wisdom

For Warlpiri people, the Flying Emu exemplifies all the qualities of executive wisdom and good judgement, attained through a life of devotion to learning through ceremonial law, that are desirable in a consummate Warlpiri leader. Across Australia, the most advanced levels of knowledge applied by such leaders in both ceremonial and everyday settings are generally understood to be intrinsically difficult to attain. Ceremonial leaders are trained to practise a kind of executive wisdom that both models and regulates preferred attitudes and social behaviours. They exemplify and moderate the respectfulness, humility, good judgement and responsible

conduct they aim to encourage in others, and are expected to do so with great intelligence, tact and patience.[23] It is interesting to note that this ideal is not dissimilar to the Ancient Greek notion of *φρόνησῐς* (phronesis), which is the kind of wisdom that can be applied to practical action through good judgement and excellence of character and was proposed by Aristotle to be a necessary condition for all virtuous and ethical action.[24] In Australia, however, the ideal of executive wisdom is also grounded in Indigenous epistemologies of knowing through doing. Just as there is no true knowing without demonstrable application, no-one can truly embody wisdom unless they know how to wield it responsibly.

In Warlpiri society, individuals like Pawu, who have earned entry into ceremonial leadership ranks, are known as *yuwarlpiri* (people-keepers).[25] Ceremonial leaders must become experienced teachers who can ultimately replace themselves with suitable successors. Their generosity when teaching engaged students is therefore typically boundless. While interest, aptitude and familial birth can influence advancement through ceremonial learning, these factors alone do not guarantee eventual admission to ceremonial leadership. The pathway to leadership is a long, arduous and costly personal investment with limited likelihood of success, and which is largely contingent on a student's willingness to succeed in the face of many personal inconveniences and challenging learning experiences. Formal ceremonial learning requires prospective leaders to excel in the immense endeavours of learning, executing and directing all ceremonial processes across the classical media of oratory, song, dance and design, and to implement their legally binding outcomes.[26]

In Yolŋu society, *d̲alkarramirri* (powerful) leaders, like Gumbula-Garawirrtja and Gumbula, are trained to sing extensive repertories of inherited traditional songs while simultaneously directing large-scale public ceremonies in their entirety. They are also chiefly responsible for directing their often lengthy and complex preparation, requiring them to train and organise large groups of performers and artisans. However, because Yolŋu society organises all descent groups under two intermarrying constitutions of law, called Yirritja and Dhuwa, the term *d̲alkarramirri* is used exclusively for Yirritja ceremonial leaders, while a common Dhuwa equivalent is *djirrikaymirr*.[27] *D̲alkarramirri* and *djirrikaymirr* leaders are charged with the vital tasks of faithfully maintaining expansive bodies of ancestral knowledge

about their homelands, while simultaneously growing and extending their traditions to accommodate reinterpretations of old understandings and respond to new ideas and arising circumstances of celebration, loss, negotiation and commemoration.[28] In doing so, they also project an aesthetic of great awe and reverence for the *maḏayin* or immense natural beauty of all creation, which is a fundament of Yolŋu law and ceremonial expressions that, in sacred designs, are said to exude a shimmering *bir'yun* (brilliant) quality.[29] In these ways, each generation of *ḏalkarramirri* and *djirrikaymirr* leaders contributes their own wisdom to the greater body of received ancestral knowledge, like each new layer of ash deposited on an old family campfire site.[30]

Ceremonial songs also carry language that typically extends well beyond everyday vocabularies and preserves old words for complex ideas found nowhere else. In addition to being prolific ceremonial singers, leaders also use these extended song vocabularies in formal oratory settings when teaching students, mounting arguments, mediating disputes and negotiating fair outcomes. Their formidable command of language can therefore demonstrate their wisdom in ways that vastly outclass less experienced interlocutors, particularly when speaking about important and challenging topics in sensitive yet compelling ways.[31] In this respect, developing the ability to maintain one's respectfulness, humility and dignity, especially when facing uncertainty and adversity in complex negotiation and mediation situations, is a requisite skill for all such leaders. Leaders can also develop expertise in different specialisations, such as conveying the succession of ownership in homelands between different descent groups, healing and administering medicines to the ill, birthing and midwifery, training warriors for combat and espionage, plotting long journeys over vast stretches of land and sea by navigating the night sky and deep currents, and timing travel to align with seasonal harvests and ceremonial commitments.

Because respect and humility are so highly valued and encouraged as desirable traits, ceremonial leaders often behave with a gentleness and grace in everyday settings that render them almost invisible to outsiders. In stark contrast to the Western trope of the intellectual as hero, they will often sit back and listen while their younger students are deputised to act on their behalf. They nonetheless remain fully engaged in all important discussions

and wield ultimate legal authority in making formal decisions. Leaders will also often assert, however, that no-one can ever truly hold ultimate authority. This is firstly because ceremonial responsibilities should ideally be distributed evenly among different interrelated descent groups in a society, and secondly because all authority vested in humans ultimately flows from the original ancestors. Even the oldest and most experienced ceremonial leaders will acknowledge that nature itself—the foundational physical medium into which the original ancestors encoded their grand design for all things in creation—is the ultimate teacher that can always yield new insights to help us understand our place in an ever-changing universe.

The most respected of all ceremonial leaders are usually those who never stop learning and continue making new connections with other groups and peoples near and far, to understand different ways of knowing throughout their lives. Today, this reverence for lifelong learning extends to all kinds of educational pursuits, including contemporary academic and vocational qualifications, which themselves are now increasingly celebrated with the traditional ceremonial performances. This correlation is evident in the Yolŋu term *mim'pu*, which often refers to a prominent keloid 'scar' that is traditionally earned when completing an important ceremony but is now also used to denote newer kinds of qualifications like graduating from school and a university degree.[32]

Durable Knowledge

The widespread tenet that ancestors are eternal and remain ever-present in the homelands of their living descendants often leads outsiders to misapprehend that ancestral knowledge must therefore be static and unchanging. Nothing could be further from the truth. The characteristics of the original ancestors themselves, which are often strongly identified with prominent species and weather patterns, are nonetheless largely understood by humans via their observable manifestations in nature, which we commonly know to be in a constant state of cyclical change. The one universal constant that ancestral knowledge therefore teaches us about life is that change is inevitably bound to natural cycles of growth and decay. The species and other natural forces that the original ancestors embody in the physical world today fundamentally hold no innate moral alignments. They are equally revered and feared for being raw forces of nature that possess immense

power to both give and take life. Snake ancestors, for example, commonly bring wet-season thunderstorms that cause destructive lightning strikes and deadly floods, yet also bring rains that are essential for nourishing new life and growth. It is not stasis that is the substance of the true knowing to be gleaned from ancestral knowledge, but rather attentiveness and adaptivity in response to constant change.

This is a lesson that seemingly served people well for the greater part of their inhabitation of Australia over the past 65 000 years.[33] After all, it is this kind of adaptability that enabled people in Australia to survive both the Last Glacial Maximum of the ice age around 20 000 years ago and the major sea-level rise that followed some 10 000 years ago.[34] Yolŋu people, for example, still perform ceremonial songs that record how, many millennia ago, fresh-water vents that are now on the sea floor were once above-ground springs, and how the inland lake at Gapuwiyak was once a ceremony ground.[35]

Evidence abounds that ancestral knowledge and its ceremonial expressions remain durable resources upon which leaders can draw to mediate new attitudes and approaches to negotiating change, as occurred in response to the consecutive waves of radical societal upheaval across different regions of Australia following British colonisation in 1788. Well before this disruptive new presence had spread across the continent, various Indigenous peoples, stretching from the Kimberley to the Arnhem Land coastlines of northern Australia, had developed extensive trading and intercultural relationships with merchant fleets from the port city of Makassar on the Indonesian island of Sulawesi, as well as with other seafaring foreigners from the north.

What is known about the antiquity of the earliest of these contacts comes from the archaeological record, with one small pottery shard of Asian origin having been intriguingly radiocarbon-dated to between 1026 and 1264 CE.[36] It is well documented, however, that by 1750, large commercial fleets of Makassan boats were making annual voyages to northern Australia to fill their hulls with valuable commodities, including trepang, pearl shell, beeswax, turtle shell and ironwood, for onward sale into China. In return for those commodities, they traded a variety of imported goods with Indigenous groups in northern Australia, including rice, tamarind, tobacco, alcohol, cloth, axes, knives and jewels. This trade began to ebb after the eruption of Krakatoa in 1883, which greatly disrupted international

shipping, and ceased entirely under pressure from unaffordable South Australian Government taxes and charges after 1907.[37]

These exchanges were nonetheless so profound that, today, Yolŋu languages in Northeast Arnhem Land retain hundreds of loan words from the Makassar, Bugis and classical Malay languages. A *reŋgitj* alliance formed by several Yirritja groups regulated all Yolŋu trade with Makassan visitors and owned prescribed places where vessels and crews were allowed to go. It is specific ceremonies of groups in this alliance that hold the most detailed accounts of Yolŋu dealings with Makassan visitors, including agreed standards of conduct and fair trade, and consequences for trespassing and other violations.[38] Places where Makassan visitors were allowed to go were generally marked with prominent flags made from imported Makassan cloth in an array of different colours adopted by alliance groups, as shown in Table 2.1. At the time of his passing, Gumbula-Garawirrtja was the most senior elder of the Birrkili branch of the Gupapuyŋu group, which holds the blue flag listed in the table, and owns the beachside port of Yalakun within their homeland, L̲uŋgutja.

Group	**Flag**	**Port**
Warramiri	Black	Dholtji Manunu
Dhal̲waŋu	Red	Gurrumurudjiki
Gumatj	Yellow	Gamburriŋgadjiki
Wangurri	Green	Minydharrŋura Wilirrŋura
Munyuku	White	Yarrinyyawuyŋu
Mad̲arrpa and Maŋgalili	White over blue	Baniyala Nikuniku Yilpara
Gupapuyŋu Birrkili	Blue	Yalakun Djulkayalŋgi Bäpadjambaŋ
Bäpayili (Sama whale hunters)	White over black	Motatj

Table 2.1: The Yolŋu maritime flag system.[39]

So iconic are these flags in Yolŋu culture today that their colours often influence the costumes worn by groups for ceremonies and other formal events. Also noteworthy is that this system retains a distinct horizontal bicolour flag of white over black for an entirely foreign group of whale-hunting seafarers from long ago, who are still remembered by Yolŋu people as the Bäpayili and were likely of Sama origin.[40] Overall, the deft ability of Yolŋu leaders to engage beneficially in these historic foreign exchanges, while successfully asserting the autonomy and integrity of their ancestral law, would prefigure the many ways in which they would later seek to advocate and negotiate for their pre-existing ownership of their homelands. Once Australian governments had begun exerting administrative conditions over their lives and homelands in the 1920s, their path was set towards unsuccessfully seeking legal remedy over local mining access in the 1960s and calling on the Commonwealth of Australia to formalise a treaty with Indigenous peoples in 1988.[41]

A more recent example of how ceremonial leaders draw on ancestral law as a durable resource to negotiate the most difficult of times can be found in Pawu's long-standing role as Creative Director of the Milpirri Festival in his Tanami Desert hometown, Lajamanu. Founded in partnership with the Tracks Dance Company of Darwin in 2005, this festival was created as an interventive response to the immense shock of Lajamanu's first youth suicide. While Pawu had himself been raised in Lajamanu with full opportunity to participate in Warlpiri ceremonies, by the advent of the twenty-first century their frequency had gravely waned, leaving an entire generation of youths unfamiliar with their own ancestral traditions and, to Pawu's mind, directionless.[42]

The Milpirri Festival envisions a new future for Warlpiri society that enables traditional knowledge and practices to continue existing in the contemporary world and potentially hold meaning for everyone. At the festival's core lies an ingenious pedagogical approach that is based on the appearance of the Southern Cross, the five cruciform stars that comprise the headdress of the dark and elusive Flying Emu constellation. Onto the five stars of the Southern Cross, Pawu has mapped the five pillars of knowledge that he considers to be essential for sustaining the Warlpiri way of life. They are *jaru* (language), *warlalja* (kinship), *kuruwarru* (law), *manyuwana* (ceremony) and *walya* (land), and together they form

a pedagogical framework that Pawu calls *ngurra-kurlu*, which can be translated into English as 'about home', 'with home' and carrying 'home within'.[43]

The aim of this *ngurra-kurlu* pedagogy is to instil, particularly in young people, an unquenchable thirst for the pursuit of knowledge as a lifelong *yitaki-mani* (hunt), so the young can be built up into self-sufficient learners who know precisely who they are as Warlpiri people, but who are also equipped to engage with the world beyond without feeling lost within it. Pawu often says that this way of learning how to carry home within is the birthright of everyone born in Australia. Without it, he says, people can lose their purpose and risk becoming homeless in their own land.[44]

The Highest Learning

Gumbula-Garawirrtja's October 2023 obituary opened with the following statement: 'The world's first Yolŋu professor passes away in Arnhem Land, aged 60.'[45] This was no ambit claim. It had taken until 2022 for a university in Australia, or anywhere, to appoint one of Northeast Arnhem Land's most highly qualified and experienced ceremonial leaders, who exhibited all the knowledge and personal qualities of what that should mean traditionally, as an academic employee at the rank of full professor. His two cohorts in this inaugural round of Indigenous Knowledge Institute Fellowship appointments at the University of Melbourne—the Warlpiri ceremonial leader Wanta Jampijinpa Pawu, and the Wurundjeri Woiwurrung ceremonial leader Diane Kerr—were similarly positioned as the first people from their Indigenous groups to be appointed as academics at the rank of full professor. All three of those inaugural Indigenous Knowledge Institute fellows had been research-active and enthusiastic collaborators with academic employees of universities for decades. Indeed, in 2012 Pawu had become the first Warlpiri investigator to ever lead a grant project funded by the Australian Research Council, while Gumbula-Garawirrtja's *wäwa*, Joe Neparrŋa Gumbula, had been the first Yolŋu investigator to do so in 2007. Even as early as the 1980s, the Centre for Aboriginal Studies in Music at the University of Adelaide recognised the need to create two academic senior lectureship appointments for A<u>n</u>angu ceremonial leaders who had been integral to founding and delivering their teaching and research programs since the 1970s.

These innovative Indigenous academics had two things in common. Firstly, they all came from backgrounds of entrenched disadvantage that commonly prey upon Indigenous communities and prevent many of their young from even finishing high school, never mind enrolling in university or earning a doctoral degree. Secondly, they had all spent decades of their lives and careers, at great personal cost, sustaining human intellectual traditions and ceremonial expressions found nowhere outside Australia, yet which today remain gravely threatened by the enduring consequences of colonisation and the newer demands of contemporary life. Their constant search to find resources to undertake this important work was usually what led them into partnerships with academics, which then opened up the possibility for them to become research-active. Yet it is still rare in Australia and elsewhere for universities to actively seek to better enfranchise such Indigenous knowledge-holders into research higher degrees and academic roles that chiefly recognise their consummate training as leading experts in the rare and highly specialised intellectual traditions that they alone often carry at the highest level. For such intellectual traditions to survive beyond the twenty-first century, this exclusionism will need to change among universities all over the world. This is why the Indigenous Knowledge Institute Fellowship scheme, as well as the Doctor of Philosophy—Indigenous Knowledge degree course at the University of Melbourne, now present us with such timely and compelling models for moving forward.

Gumbula-Garawirrtja was appointed as an inaugural Indigenous Knowledge Institute fellow in May 2022 after a long and rigorous competitive selection and approval process. He outlined his vision for this role in a way that succinctly captured both the enormity of university responsibilities to Indigenous peoples and the mutual benefits of fulfilling them to high standards with integrity, particularly where our shared ideals of human excellence align with respect to the lifelong pursuit of knowledge. Though he is sadly absent from our lives now, it is therefore fitting that the final words of this chapter should be his:

> I was surprised when I learnt the University wanted to make me a Professor ... I think of universities as places of the highest learning. So, it's important that the highest standards of learning in Yolŋu

knowledge are recognised in this way also. It gives me strength and the opportunity to share my knowledge with other Indigenous people around the world. Yolŋu people have been sharing our knowledge with universities for about a century now. I look forward to this new partnership with the University and the benefits for people that will come from it.

Brian Djan̲girrawuy Gumbula-Garawirrtja[46]

CHAPTER 3

Deep Water Knowledge

Indigenous Recollections of Rising Ocean Levels

Nicholas Reid, Patrick D. Nunn, Bianca McNeair, Lena Djabíbba, Roselyn Kumar, Ingrid Ward, Jockey Bundubundu, Tyson Nguliya and Kepten Wadity

THE AIR IN Peppimenarti was still and sultry, the heat of the build-up not yet relieved by rain. Huge, fluffy clouds curled in the November sky. Thunder cracked and rumbled constantly in the distance. The sea, 40 kilometres away beyond the low-lying Muyil swamp, brought no discernible breeze. Kepten Wadity sat under the old bloodwood near the shade-house, telling stories to a group of young men. His tongue shifted effortlessly between the Murrinh-Patha, Marringarr, Ngan'gi and Kriol languages. This posed no great challenge to his listeners: they were familiar with multilanguage storytelling. The young men's respect for Kepten ran deep. As *kirrman*, the ritual organiser, Kepten not only mediated all the local ceremonies, but he'd personally cut nearly all of the men, back when they were frightened twelve-year olds, ushered into the shade-house by their dads while their mums and sisters wailed outside.

One of Kepten's stories told of that time when the sea was much further away from Peppimenarti than it is today, way beyond the present coast at Kuy and Wadeye, places now covered by the sea. As his audience listened closely, Kepten explained how one day, a fisherman moved the white rock that was the Osprey Dreaming site. The sea knew in an instant what had happened and rose up until it reached the fisherman's camp. Then it rose

even further, changing fresh water to salt, turning the Muyil River into swamp, and altering forever the landscape west of the Daly River.

Similar stories are heard in numerous Indigenous Australian communities today and among coastal peoples throughout the world, yet far less commonly than was once the case.[1] For with the advent of mass literacy, especially over the last hundred years, preferred ways of communicating knowledge have changed. 'Storytelling' has become entertaining, a means of enthralling and sparking young minds, rather than the serious, pragmatic means by which every generation in preliterate, oral societies educated their young to optimise their chances of survival in often harsh, unpredictable environments.[2]

People first arrived on the shores of what we now call Australia around 70 000 years ago,[3] and within a few tens of millennia they had spread throughout a land that was quite different from any their ancestors had occupied.[4] Compared with the islands of South-East Asia, Australia was drier and water was more difficult to find in many parts. Its climate was overprinted by the effects of what we now call the El Niño–Southern Oscillation, so the seasons were unpredictable. Food resources were generally sparse, albeit rejuvenated after bushfires and prolonged rainfall. All of this led to sustainable practices being developed in every part of the *country*, including firestick farming and circumscribed nomadism, that were complemented by knowledge carefully acquired, collated and organised, and effectively communicated across hundreds of generations.

Like Indigenous peoples in many other parts of the world, Indigenous Australians did not compartmentalise knowledge in the ways that are common in Western societies. Indigenous knowledge is generally anchored in place and defined by people's remembered associations with particular places through story. It is time-deep rather than time-organised, reflecting its emphasis on understanding or wisdom, rather than history as a sequential iteration of events.

The purpose of this chapter is to profile a subset of Indigenous Australian stories that relate an understanding of history as it remains relevant today. We have selected stories about land submergence, a topic that is a central focus of the authors' research. These are not flood stories, which are common in many cultures, but stories about when the ocean surface—sea level—once rose around the Australian coast, and for often

thousands of years steadily encroached upon the land, reducing its extent and displacing coastal peoples in ways that evidently caused them great distress.[5] The trauma of land loss lodged itself in the oral traditions of Indigenous Australian groups around many parts of the coast, as it did in other parts of the world.[6] It is a measure of the profundity of this trauma that such memories and narratives endured for thousands of years, long after sea level stabilised at its present level about 7000 years ago.

Deep Water Knowledge

For twenty-nine places around the coast of Australia (see Figure 3.1), there exist Indigenous stories that recall a time when sea level was lower than today. These stories relate to a time when the coastline was much

Figure 3.1. Stories recalling sustained coastal submergence have been documented for twenty-nine places along the Australian coastline. The five original case studies discussed in this chapter are indicated in bold on the map. Details of most other stories can be found in *The Edge of Memory: Ancient Stories, Oral Tradition and the Post-Glacial World*, Peter Nunn, 2018.
Map by Patrick Nunn

farther out to sea, and the topography and possibilities for land use were quite different to what they are today. We hear of offshore islands that were once contiguous with the mainland, and the activities of people who moved across the land, naming and developing associations with places that are today underwater.

Context

The world is warmer today than it was 20 000 years ago when it was gripped by an ice age. Ice covered many landmasses, often in sheets kilometres thick. This ice formed from water evaporated from the ocean, which as a result dropped by some 120 metres. Subsequently, starting around 15 000 years ago, world temperatures started rising, causing these land-based ice sheets to melt, the water pouring into the ocean and raising its surface. Sea level rose around Australia by that same 120 metres between about 15 000 and 7000 years ago—an average rate of 15 millimetres per year. As a result, the landmass of Australia shrank by about 23 per cent when compared to its ice-age extent; in some places, thousands of kilometres were shaved off shorelines.

The effects were unmissable. At certain times in some parts of northern Australia, 'the sea inundated five kilometres of land annually';[7] along the coastline of the Nullarbor Plain, the sea is calculated to have moved inland by 1 metre each week.[8] The anxiety this would have engendered is reflected in some surviving Indigenous stories. For example, it is difficult to mistake the urgency in this Pitjantjatjara story about when 'water spread across the land, forming what is now the sea' along the southern Australian coast:

> Only the prompt action of the birds stopped it from inundating the country completely. Some of them set to work to make a barrier of *kurrajong* roots, while others came rushing from the north with fresh supplies ... the rocky coastline and cliffs are the metamorphosed *kurrajong* roots, piled on top of one another to stop the oncoming waters.[9]

In a similar vein, many Indigenous groups from north-eastern Australia 'have stories recounting how the shore-line was once some miles further out where the barrier reef now stands'.[10] Told by Gungganyji man Dick Moses

in August 1973 at Yarrabah, one story explains how a man named Gunya caught a forbidden fish, an act for which the ocean punished him by rising over the land and driving its inhabitants inland. Along with two women, Gunya climbed to the top of a nearby hill.

> 'You two make a big fire! Put *kapamari* stones to heat in the fire, big stones! Heat as many stones as you can in the fire!' Gunya ordered the women. … Soon they bombarded the rising sea water with hot stones … The water moved away … The water started to subside and now lay there peacefully.[11]

Both these stories talk about how people's interventions (mitigation) succeeded in halting the rise in sea level. This suggests these particular stories date from late in the period of postglacial sea-level rise, shortly before it reached its present level and stopped rising—around 7000 years ago.

Origins

There are many older submergence stories, but they tend to be descriptive ('This piece of land was once connected to this one') and do not report details of what people felt or how the peoples of the land responded to submergence.

From the database of these stories, it seems likely that most originated with the submergence of a key piece of land, typically one connecting what became separate landmasses.[12] A well-documented example is the former land connection between the Fleurieu Peninsula (South Australia) and Kangaroo Island (Karta) that once allowed people to walk between the two. Perhaps some 10 000 years ago, this practice was ended by the submergence of what is today Backstairs Passage, an occurrence remembered by several Indigenous groups through the story of Ngurunduri, who pursued his two wives along this route and then summoned the sea to rise and drown them. According to David Unaipon, Ngurunduri cried,

> '*Pinkell lowar mia yound, Tee wee warr, La rund, Tolkamia a tren who cun, Tinkalla!*' (Fall down from above, oh thou mighty Wind; swiftly run and display thy fleetness! Come thou down from the Northern sky, oh water of the deep! Come up in a mighty swell!)[13]

A similar mythical explanation for what must also have been a transformative event comes from the Wellesley Islands (Queensland). Lardil man Goobalathaldin (Dick Roughsey) explains that,

> in the beginning, our home islands were not islands at all, but part of a peninsula running out from the mainland. Geologists … thought that the peninsula might have been divided into islands by a big flood which took place about 12 000 years ago. But our people say that the channels were caused by Garnguur, a sea-gull woman who dragged a big walpa or raft, back and forth across the peninsula.[14]

It was the occurrence of these landscape-transforming events and their associated impacts on the ways people lived in particular parts of Australia that ensured they became a conspicuous element of remembered history.

Journeys

Memorability was key to the sustainability of particular stories and, as in cultural contexts across the world, many stories in Australia came to include fabulous beings who could—at least retrospectively—be considered actors capable of accomplishing the landscape transformations described. A good example comes from Spencer Gulf (South Australia), which was all dry land during the last ice age and became flooded only after rising sea level overtopped its lip—which is now 50 metres below sea level—more than 9300 years ago.[15] Many extant stories of this event attribute the initial incursion of the ocean into Spencer Gulf to a giant kangaroo who pushed or dragged a magic bone to create a channel along the gulf's axis, along which 'the sea came tumbling and rolling along',[16] as explained in a story from David Unaipon.

We know that in pre-contact Australia, knowledge was communicated orally from one generation to the next in ways that ensured, as much as possible, that every younger member of a group would acquire and understand all the knowledge of their elders—a process 'examined' across patrilines to optimise its effectiveness.[17] The proof of this effectiveness is that Indigenous Australian stories—more so than those of any other longstanding culture—have demonstrably endured for thousands of years, with information about memorable events such as meteorite falls, volcanic

eruptions and multigenerational land loss from sea-level rise intelligible today in details that rival those of retrodictive science.[18]

How to demonstrate the longevity of these stories and the memories they encode is a question of considerable interest, given the scepticism that many scientists have expressed about this in the past.[19] Yet, just as the ages of meteorite impacts and volcanic eruptions can be determined using radiometric dating, so submergence stories can be assigned minimum ages based on knowledge of how sea level changed around Australia in postglacial times.[20] For example, for people to have been able to walk from (what is today) mainland Australia to Mornington Island (Wellesley Islands) in the Gulf of Carpentaria, the ocean surface would have to have been 5–10 metres lower than today, a condition last seen 7450–9140 years ago.[21] Literate people often exhibit a kneejerk scepticism about the ability of preliterate societies to retain information for so long, but the evidence base is now considerable and growing.

Minimum ages for Indigenous Australian submergence stories are shown in Figure 3.2. Most stories have endured since at least 7000 years ago, when sea level reached its present level and effectively stopped rising around Australia.[22] The range of submergence story ages is 7250–13 310 years ago.

Case Studies

This section showcases five original case studies from around Australia in which Indigenous stories plausibly recall the effects of land submergence attributable to postglacial sea-level rise.

Bass Strait

Tasmania is the largest island off the Australian mainland, from which it is separated by the Bass Strait, which is some 200 kilometres wide and studded with islands large and small. During the last ice age, Tasmania was connected to the mainland by a broad land bridge across which people moved freely.[23] Yet, as sea level rose, this land bridge narrowed until, around 12 000 years ago, its last remnant was submerged and the route became impassable. Stories about this transformative event are fragmented and challengeable, no doubt in part due both to how much time has elapsed since it occurred and also to the postcolonial decimation of Indigenous Tasmanians.[24]

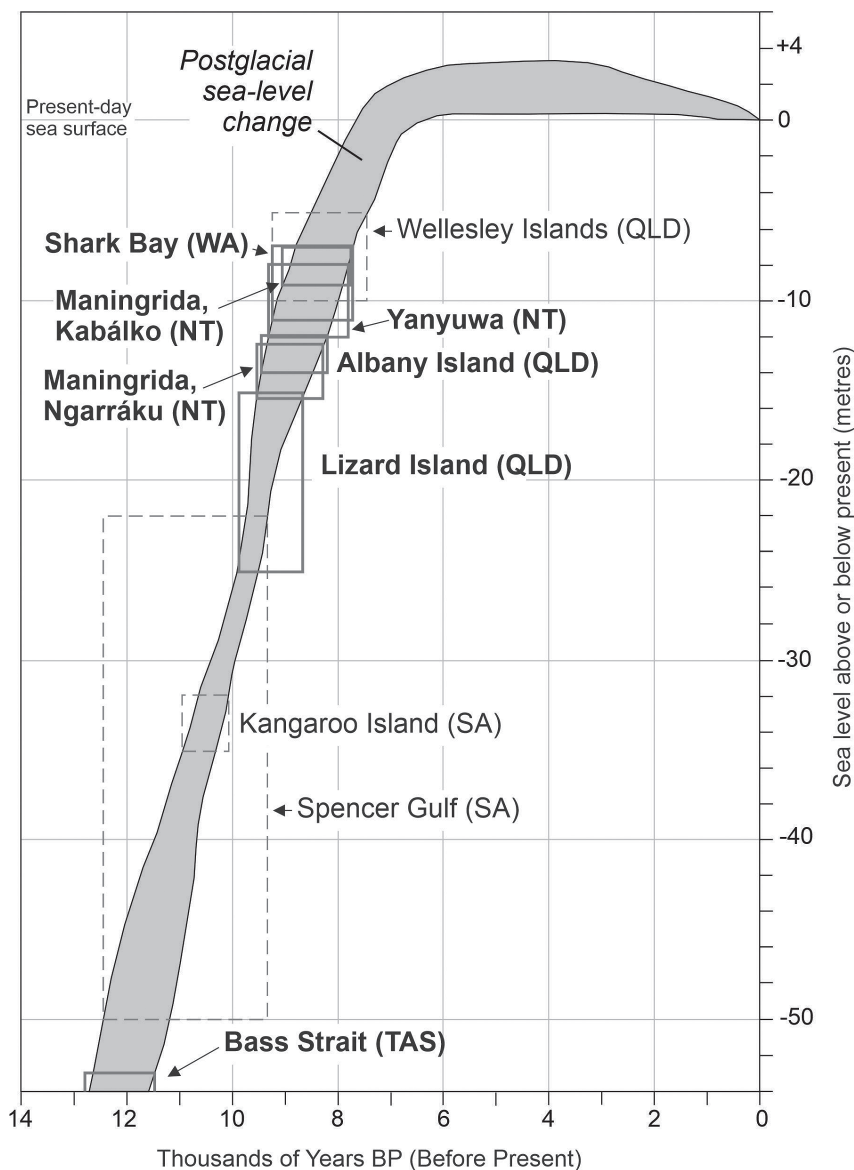

Figure 3.2. Postglacial sea-level rise around Australia (shaded envelope) showing the depth-age ranges for all stories mentioned in this chapter. Stories discussed as case studies in this chapter are labelled in bold.
Figure by Patrick Nunn

Perhaps the oldest extant tradition is that collected directly from Indigenous Tasmanian informants in July 1831, which states that they 'have a tradition that this Island was settled by emigrants from a far country, that they came here on land, that the sea was subsequently formed'.[25] In addition, Hambly alludes to 'a legend concerning the formation of Bass Strait', but few other details are known to have survived.[26]

Islands off Cape York

Stories about a time when it was possible to walk between (what are now) mainlands and (what are now) islands are found across the world.[27] Well-documented examples from Australia include the Wellesley Islands in the Gulf of Carpentaria and Kangaroo Island in South Australia. Lying off Cape York Peninsula in northernmost Queensland are Albany Island (Pabaju) and Lizard Island (Dyiigurra/Jiigurru), for which published stories also exist.

For Albany Island, a well-known story is that of a boy who, infuriated at finding his mother was keeping all the best yams for herself, 'dug up a big water vine, hollowed it out with fire and climbing inside, he tunnelled down into the earth',[28] eventually emerging to create the passage between Albany Island and the mainland. This is possibly a memory of the effects of postglacial sea-level rise and the separation of these two landmasses—not least because the boy continued southwards causing similar effects, but also because it may be linked to the breaking of access protocols associated with the 'east coast strip' in this area.[29]

The shortest crossings from the mainland to Albany Island are currently 12–14 metres in depth, a place last dry 8200–9500 years ago. Given the comparative shallowness of Torres Strait, the impacts of sea-level rise across the strait, in the southernmost part of which Albany Island lies, would have been dramatic, especially noticeable, and plausibly traumatic enough to elicit what may be spiritually informed responses from its inhabitants that may be indicated by the stone arrangements on the island and in comparable locations throughout Australia and beyond.[30]

Similar effects would likely have resulted from the inundation of the Great Barrier Reef, within which Lizard Island lies. The Djabugay (Djabuganydji) people tell a story about the time when, a little to the south, 'the coral reef was all scrubland [and a blue-tongue lizard] travelled

up to the edge of the deep dark waters and caused the sea to bubble up until it covered the reef and arrived at its present position'.[31] Dingaal man Gordon Charlie stated 'that his direct ancestors once walked to the island from Cape Flattery. When the sea levels rose and the Aboriginal people could no longer walk there, they paddled their canoes from island to island to reach it.'[32]

The most recent time at which it would have been possible to walk from Cape Flattery to Lizard Island would have been 8600–9900 years ago, when sea level was 15–25 metres lower than today. This range therefore represents a minimum age for the observations on which this story is based.

Yanyuwa Country

Yanyuwa country today lies along the southern coast of the Gulf of Carpentaria. Until about 11 700 years ago, this was freshwater Lake Carpentaria, and the ancestral Yanyuwa likely lived further north along the lake's shore. As sea level rose, Lake Carpentaria became inundated and the Yanyuwa were forced to retreat southwards. Memories of this are enshrined in Yanyuwa worldviews. For example, Yanyuwa may allude to themselves as *Li-Anthawirriyarra*, or 'those people whose spiritual and cultural heritage comes from the sea'.[33]

Postglacial sea-level rise caused shoreline retreat of sometimes multiple kilometres per year—suitably memorable material for encoding in oral tradition. Yanyuwa man Tyson Nguliya provided this account to John Bradley in 1982:

> *Wabarrangu ambuliyanynguwarra bibibi ngaliwa ka-ngundayaninya kari-nguthunda bibibi barra kumba-mayama wayathantharra alhibi ka-arrinjaninya wurluburlu kulu yurrngumantha ankaya ankaya yurrngumantha kari-nguthunda ka-wingkayaninya nya-mangaji alhibi kurdardi wabudawu alhibi ka-ngundayaninya wiji awara ka-arri wurra ka-yinu wayathantharra kurda wankala wuka, jina barra awara bijal rdiyangu nyuwu-mangaji ki-awarawu ki-wanakalawu wurra jiwini ka-yinu. Bawuji barra.* (A long time ago, in the most ancient of times, day and night the sea kept rising, from the north, day and night the saltwater all came together and it was at a really high level, continually it rose upwards, from the

> north it came that saltwater, it was not freshwater, it was saltwater, it kept rising and the country was underwater, it was drowned utterly and completely this is a story from long ago. This country is a little bit new that country for the times long past is now deep underwater, it is drowned, that's all.)

The existence here of extant stories about postglacial sea-level rise, which ceased around 7000 years ago, testifies to both the psychological impact of this process and the determination and ability of the Yanyuwa to sustain their memory of it. For analytical completeness, we assume that Yanyuwa stories recall when (now offshore) North Island was joined to the mainland, which would have required sea level to be 8–12 metres lower, something that most recently occurred 7850–9350 years ago.

Maningrida

The formation of the country around Maningrida is explained in the Djawándja story of the Kunibídji people of central Arnhem Land (NT), which specifically recounts the inundation of land around what is now the mouth of the Liverpool River. The version below was recounted in the Ndjébbana language during the late 1970s by Kunibídji man Jockey Bundubundu and was recorded by linguist Graham MacKay. It is retold here with permission from Lena Djabíbba, Mr Bundubundu's daughter, as the *djúngkayi* (manager) of his knowledge legacy.

An area of land named Manakúkun, today submerged, once connected what is now the mainland to one or both of Kabálko (Entrance Island) and Ngarráku (Haul Around Island). Living there were three creation ancestors—Djawándja (Osprey), Djambalówa (Brahminy Kite) and Kángkalangarda (White-breasted Sea Eagle). One day, when Djawándja came to visit his friends, they stole his canoe, which so enraged him that he built another and chased after them directly across Manakúkun, 'digging up the earth with every stroke of the paddle'.

> Osprey destroyed Manakúkun as he moved along. Where he dug up the earth with his paddle, the sea came up behind him. He came all the way up Karddjerráma Creek. There in the Makórrdja area he went under and finished up. At the place where he went under

> there is a freshwater spring that comes up under the seawater. He left the canoe in the water; it sank separately.[34]

Although now submerged, the Manakúkun area is still owned by Kunibídji clans, significantly not as part of a 'sea claim' but because this story demonstrates that they lived there when it was dry land.

The story can be interpreted as recalling a connection between the modern mainland and Kabálko and/or Ngarráku. In the former case, this would require sea level to be 7–9 metres lower, a condition last met 7800–9000 years ago. In the latter case, sea level would have been 12–15 metres lower, which last occurred 8250–9600 years ago.

Shark Bay

Shark Bay (Gatharaguda) is a deep inlet on the western coast of Australia that has evidence of a human presence extending back to at least 25 000 years ago, a time when most of the bay itself would have been dry land. As sea level rose, people were forced landwards—a process that can be calibrated by the locations and ages of shell middens and fish traps—and memories of earlier times passed on through story.

Such stories were rationalised at Shark Bay by supposing the people who crossed these ocean gaps must have been giants. Support for this explanation is found in the presence here of birridas, known locally as *thalganjangu*, which are gypsum claypans, interpreted for narrative purposes as the footprints of the giants who crossed these ocean gaps. As Malgana woman and chapter co-author Bianca McNeair explains: 'In the dreaming time in Gatharaguda, the tides were much further out than they are today. There are many freshwater camps that are now underwater. Our old people were giant, tall people. They would walk long distances through the low tides. Our old people walked over from Wirruwana [Dirk Hartog Island] all the way to where the town of Denham is today. If you look at Gatharaguda from an aerial view, then you will see our birridas. These are the footprints of our old people coming in from the *wirriya* (deep-water/ocean).'

Memories of times when it was possible to walk between now-separate landmasses also come from stories about how particular creatures were transformed as a result of sea-level rise. One story is about the *buyungurra* (turtle), which walked on land until one day, having consumed excessive

quantities of berries, it became stuck in mud and had to grow flippers to extricate itself. Like narratives of postglacial environmental and ecosystem changes preserved in rock art at Murujuga, 600 kilometres north of Shark Bay, such traditions not only give insights into people's understanding of landscape change and its causes, but also their ability to sustain this knowledge through diverse means for hundreds of generations.[35]

The 37-kilometre crossing between Denham on the mainland and offshore Dirk Hartog Island (Wirruwana) in Shark Bay reaches depths of 7–10 metres below present mean sea level, yielding minimum ages of 7700–9200 years ago for the associated stories.

Reflection

It can be demonstrated in numerous instances that Indigenous Australian stories about memorable landscape-changing events have been preserved in largely preliterate contexts for thousands of years. In this chapter, we have focused on stories about the progressive submergence of Australia's coastal fringe, a process attributable to postglacial sea-level rise more than 7000 years ago.

This raises innumerable questions about the methods of preserving knowledge in preliterate contexts, the choices about what was most important to preserve, and what we can glean about our ancestors' worldviews from trying to answer such questions. Yet, what is beyond question is the ability of preliterate Indigenous Australians to codify and effectively communicate their observations of memorable events over thousands of years—perhaps more than 10 000 years in the case of some submergence stories. This is a wake-up call for all who are interested in knowing more about the deep history of humankind.

It is also something that everyone who is concerned about the future of humanity, particularly the growing challenges of climate change and sea-level rise, should be interested in. For just as we must grapple, both today and into the future, with the associated coastal land loss and its societal and economic and security implications, we can gain some hope that our ancestors experienced and ultimately overcame uncannily similar challenges. Our ancestors committed their experiences of postglacial sea-level rise to stories, some of which have reached us today and are available for us to learn from. As no doubt our ancestors intended.

Acknowledgements

Except where stated, all Indigenous Australian narratives cited or quoted in this study are from published sources. We believe they derive from the following peoples whose wisdom and tenacity we acknowledge with respect: Albany Island—Gudang; Bass Strait—Palawa; Kangaroo Island—Jarildekald/Ngarrindjeri; Lizard Island—Dingaal, Djabugay; Nullarbor—Pitjantjatjara; Spencer Gulf—Narungga; Wellesley Islands—Lardil; Yarrabah—Gungganyji. In addition, we thank John Bradley (Monash University) and Carolyn Coleman and Mason Scholes (Maningrida College) for bringing to our attention Yanyuwa and Kunibídji stories, respectively. We also thank Samuel Curkpatrick for improving the first draft of this chapter.

CHAPTER 4

Research Frameworks in Indigenous Astronomy

Duane Hamacher and Martin Nakata

UNDERSTANDING THE SIGNIFICANCE of the complexity of the universe and our place in the cosmos merits research from both scientific and cultural perspectives. We must look for ways to integrate scientific studies about the physical structure and evolution of the universe with cultural systems of knowledge about the stars. This task might be approached by examining the 'cultural interface' between Western astronomy and Indigenous knowledge, to find ways in which these different forms of knowledge can inform one another.[1]

The term 'Indigenous astronomy' conveys a dual meaning. It refers to systems of knowledge about the stars locally developed by Indigenous peoples. It also refers to the '*original*' astronomy that existed before the development of what we think of today as '*Western astronomy*', which originated in ancient Mesopotamia and Egypt, was refined by the Greeks, developed through the Middle Ages into scientific revolution, and continued to develop throughout the modern era.

The study of Indigenous astronomy is an increasingly popular topic globally, particularly in Australia. How this knowledge is applied and practised in a cultural context, and passed down to successive generations, is reflected in people's astronomical traditions. This can include story,

song, dance and ceremony. One of the driving forces behind this research is the need to confront and correct ongoing colonial practices that degrade traditional Indigenous ways of knowing by dismissing them as 'myth and legend'. Some critics, like Richard Dawkins, equate Indigenous astronomical traditions with dogmatic evangelical creationism, to dismiss them as pseudoscience, without recognising the layers of scientific knowledge these astronomical traditions encapsulate.[2] Other prominent voices in science communication dismiss suggestions that these systems of knowledge could be considered scientific in any context.[3]

Over the past two decades, a substantial body of published, peer-reviewed scholarship has challenged such dismissive ideas, showing how layers of scientific information are embedded within these systems of knowledge, which are based on detailed observation, deduction and record-keeping, and have a predictive purpose. Within the context of Indigenous astronomical knowledge, scientific information includes observing the daily, seasonal and annual movements of the Sun, Moon and stars, as well as the Moon and its relationship to tides; mapping movements of the planets; and understanding the relative movements of the Sun and Moon to predict eclipses, the connection between the positions of particular stars and their relationship to seasonal change, the behaviours of plants and animals, the variability of stars, the brief appearance of cataclysmic stars, and the link between meteors, meteorites and impact craters.[4]

This growing body of scholarship challenges ideas about the history and philosophy of science, the nature and longevity of oral traditions,[5] and how these knowledges can guide and inform modern Western science,[6] leading astronomers to new discoveries based on ancient observations of the cosmos. This scholarship also examines how Indigenous astronomy can be incorporated into educational curricula and art collaborations, and safeguarded as cultural heritage through dark-sky initiatives aimed at reducing light pollution.[7]

Researching Astronomy in a Cultural Context

Research in Indigenous astronomy is typically based within the interdisciplinary field of cultural astronomy, which utilises tools from the natural and social sciences to 'study the mechanisms by which people come to

understand astronomical phenomena, analyse their systems of conceptualization and representation, and correlate social connections, social processes and ideas about social life'.[8]

Cultural astronomy is an emerging science that asks social questions.[9] It employs both qualitative and quantitative methods and is generally divided between two sub-disciplines: *archaeoastronomy*, the study of the astronomical traditions of past cultures, which relies heavily on material culture and the archaeological record; and *ethnoastronomy*, the study of the astronomical traditions of contemporary cultures, which relies heavily on ethnographic data. These sub-disciplines complement each other. Used collaboratively, they help us to understand the role of astronomy in culture by investigating the rhythms and cycles of seasons, environmental patterns, and Indigenous calendars that correspond to movements in the stars. Further areas of study include monuments, landscapes, oral traditions, artefacts, iconography, inscriptions, historical documentation, 'in short, every conceivable form of data that might provide insights into thoughts and practices relating to astronomy in the past'.[10]

Using the tools, methods and theoretical frameworks of cultural astronomy in studying Indigenous astronomy means incorporating new technologies and techniques—such as geographic information systems (GIS), the Stellarium software, and artificial intelligence—while developing and improving qualitative methodologies for conducting collaborative fieldwork using culturally specific frameworks.[11]

Similarly, synergies between cultural astronomy and modern astrophysics are helping us to understand the development, use and evolution of Indigenous astronomy and how these two systems of knowledge can benefit one another. For example, theoretical and observational studies of supernovae remnants enable us to estimate when these brilliant events were visible and where in the sky they could be seen. Increasing precision in the measurement of astronomical bodies, in terms of astrometry, helps us to determine the positions and motions of celestial bodies over time. This allows us to estimate what ancient skies would have looked like with a high degree of accuracy. Traditional knowledge describing physical conditions can aid Western scientists to understand these phenomena in detail.

An example of this is related to the sonic traces of aurora. Traditional descriptions of aurorae from numerous cultures—including the Inuit and

Northern Dene people of North America, the Sami people of northern Europe, and the Aboriginal people of southern Australia—all describe a strange hissing and cracking sound related to bright auroral displays, variably compared to things like rustling leaves and snapping fingers.[12] The descriptions reveal a correlation between the intensity and frequency of that sound and the intensity of the aurorae. In 2019, Finnish scientists conducted an experiment, guided by Sami traditions, proving that the light phenomenon can produce sound.[13] The authors explained that they had heard about these cultural traditions but did not take them seriously until they experienced the phenomenon for themselves. Before this, scientists had believed these sounds to be a figment of the observer's imagination, with no basis in physical reality.

Similarly, oral traditions recorded from Aboriginal cultures in South Australia demonstrated that they had observed changes in the brightness of the bright-red stars Betelgeuse and Antares before their variability was known to Western science (see Figure 4.1 in the picture section).[14] Re-analysis of oral traditions of Aboriginal people of the Great Victoria Desert, recorded in the early twentieth century, revealed that the people had long been aware of the variability of the red supergiant star Betelgeuse and had incorporated it into their oral traditions. Despite initial scepticism of this claim by some, Betelgeuse went through a period of substantial dimming between late 2019 and early 2020, demonstrating its variability for the world to see.

Cultural astronomy research seeks to chart organisational systems that have constituted and informed the production of Indigenous astronomical knowledge over millennia. Gaining a comprehensive understanding of traditional astronomy helps to break down perceived barriers between Western science and Indigenous knowledge, which exist because of vastly differing worldviews. Western worldviews tend to be materialistic, reductionist, rational, decontextualised and individual, while Indigenous worldviews tend to be spiritual, holistic, intuitive, contextualised and communal.[15] Overcoming these barriers by looking positively at both perspectives can lead to new synergies and generate new and mutually beneficial worldviews and practices.

Outcomes from this approach have already been incorporated into environmental practices, government policy and heritage management.

Research in this field contributes to the discourse regarding Indigenous knowledge practices across the globe, resulting in a 'greater appreciation of the benefits of Indigenous knowledge that leads, in turn, to greater efforts to further the interests of those who possess such knowledge'.[16]

Scholarship in Indigenous Astronomy

Aboriginal and Torres Strait Islander people continue to speak about the importance of astronomy in their lives, traditions and identities today. Despite work by early social scientists, the greater body of scholarly knowledge on Indigenous astronomy is fragmented and incomplete. Comprehensive studies on the influences of Indigenous astronomy on traditional systems of thought are finally gaining ground, but much work remains to be done.

The earliest documentation of Aboriginal Australian star knowledge can be found in the journals of Lieutenant William Dawes, an astronomer on the First Fleet who learned about language and traditions from a young Aboriginal woman named Patyegarang between 1788 and 1791.[17] The first research publication to focus on Aboriginal star knowledge was published in 1857 by William Stanbridge, regarding the astronomy of the Boorong people near Lake Tyrell in north-western Victoria.[18] The first academic doctoral thesis focusing on Australian Indigenous astronomy was completed by Alfred Kotz at the University of Leipzig in Germany in 1911.[19] The next postgraduate thesis on the topic would not be completed until 1996 by John Morieson at the University of Melbourne. Master's theses dedicated to the topic were also completed by Serena Fredrick, Robert Fuller and Carla Guedes, and doctoral theses were completed by Duane Hamacher, John Goldsmith and Robert Fuller, with several more students enrolled in various graduate research programs across Australia and internationally. These projects involved methodological and theoretical approaches from ethnohistory, archaeology, ethnography, Indigenous studies, anthropology, cultural competence, sociology, history and photography, with astronomy as a central focus.

After colonisation, star knowledge was only sparsely documented and often recorded in error, without permission and almost always vastly incomplete. During the Cambridge Expedition to the Torres Strait in 1898 under the leadership of Alfred C. Haddon, English ethnologist

William Rivers documented some of the islanders' astronomical knowledge, but wrote that 'only a very fragmentary account of the astronomy of the people was obtained'.[20] He did not have the experience necessary to properly conduct this research and regretted missed opportunities to engage with the community, particularly in the early mornings when regions of the sky were visible that had not been evident the previous evening. Missed opportunities to document a more comprehensive body of astronomical knowledge present an all-too-common theme in Indigenous astronomy scholarship. In some scholarly publications, star knowledge was only collected at a certain time of the year, meaning the other half of the sky not visible that evening was ignored. Additionally, this information was only published if all accounts recorded from different elders completely agreed with each other. Given that knowledge about the stars is encoded in narratives that can vary from community to community, family to family and even person to person, a significant amount of important knowledge was discarded as it did not follow a prescribed Western methodological assumption that any given narratives must be universally consistent and held among all members of that community.

Over the past fifteen years, research on the astronomy and star knowledges of Aboriginal and Torres Strait Islander cultures has exploded, with the publication of more than seventy refereed papers, proceedings and chapters, as well as several books, including *The First Astronomers*[21] and *Astronomy: Sky Country*.[22] Additional research-informed outputs include tour programs, commemorative coins, films and documentaries, art exhibitions, theatre productions, educational curricula, and a range of radio, television, online and print media. Various Indigenous Australian star and asteroid names have also been recognised by the International Astronomical Union, including Epsilon Crucis in the Southern Cross, which now bears the Wardaman name, Ginan.[23]

This research has largely focused on transient phenomena in Aboriginal traditions, such as comets, eclipses, meteors and supernovae, as well as the astronomy of specific Aboriginal nations (especially Wardaman, Kamilaroi and Euahlayi) and cultural competence for astronomers. Current projects are continuing this work and also expanding to address issues concerning the application of this knowledge to global questions in astronomy, such as why constellations are seen in similar ways by cultures across the globe,

and how astronomical heritage might be safeguarded through dark-sky initiatives and decolonised through emerging scholarship and practices.

Theoretical Frameworks

To Aboriginal and Torres Strait Islanders, cultural ways of being and knowing are closely linked to the stars. This relationship encompasses a sense of identity (people's understanding of themselves and their cultures) and belonging (to the natural world). This sense of belonging links the past, present and future into a holistic system of knowledge that has developed over tens of thousands of years. This knowledge informs cultural traditions: the laws, customs and practices that are recorded and handed down in the form of story, song, dance, ceremony, art forms and material culture. Indigenous astronomical knowledge also contains practical information about the natural world that, for Torres Strait Islanders, encompasses how the environment is perceived and understood. This is essential for survival, spirituality, identity and cultural continuity, and is integral to the everyday lives of First Peoples.

Torres Strait Islander understandings of identity are linked to Tagai, an ancestor being who is represented by a constellation of stars that spans the sky from the Western constellations of Corvus to Crux and Scorpius. The story of Tagai encompasses four themes governing the islander way of life. The first links the stars of Tagai as custodians of knowledge and spirituality for future generations of islanders. The second is that islanders are a seafaring people who share a common way of life. The third relates to the order of the world (the laws and customs) that are instructed by Tagai. The fourth discusses the cycle of life as a period of renewal, based on the rising and setting of particular stars. Thus, the night sky is recruited, structured and weaved into oral traditions that inform elements of the people's morals and values.[24]

The framework of Indigenous astronomy examines the existence of, and changes to, oral and material culture of astronomical significance. This is based on the hypothesis that a binary configuration exists between Indigenous people and the stars within their astronomical knowledge systems. This configuration informs the significance of and the ways in which stars are recruited to the local situation, sets parameters for the forms of representations that can be made in everyday life, and establishes

a framework for broader communication about the stars in the meaning-making system.

By charting the paired relationship between Indigenous people and the stars to identify the diverse ways in which the stars are used over time, researchers can investigate where ruptures and/or changes in the paired relationship have occurred. We can then synchronically examine these events and historical periods to rediscover how and what influences these changes. This approach focuses on the history of systems of thought following Foucault's *Archaeology of the Human Sciences*.[25] It allows us to focus on how engagements of everyday life—for example, ruptures within closely held beliefs, anxieties, fears, desires, hopes, imperatives, new knowledge and so on—come to inform and limit knowledge production over time. This theoretical perspective looks more to the discursive elements and conditions that contribute to the development of star knowledge, and it is particularly interested in the constitutive characteristics of Indigenous astronomy.

Methodological Approaches

Scholarship in Indigenous astronomy begins with the view that all types and forms of data represent evidence of 'the mechanisms by which people come to understand astronomical phenomena'.[26] Researchers set out to investigate these datasets precisely to understand 'systems of conceptualization and representation ... [which] correlates social connections, social processes and sets of ideas about social life'.[27] This is based on the understanding that what is created by human beings is at once the object and subject of human 'dwelling or living in the world',[28] or as Heidegger puts it, the result of a mutually subjective relationship between humans with the world around them.[29] Understanding how astronomical knowledge is generated and how it is encoded within oral traditions and social practices will help us to develop a deeper and more complete understanding of Indigenous ways of knowing.

One of the challenging aspects of Indigenous astronomy is found in the assertion commonly made by Indigenous elders: that everything on the land is reflected in the sky and everything on the sky is reflected in the land; as above, so below. This means that the sky relates to everything on the land in terms of culture, law, society, ecology, science, art, music, economics, behaviour—virtually every aspect of life. This makes the study of

Indigenous astronomy one of the most widely cross-disciplinary research areas in academia. There is almost no area of scholarship that does not relate to the study of Indigenous astronomy, or which might usefully apply its findings in some way.

Three major approaches to researching Indigenous astronomy are used to obtain a more complete and more comprehensive picture, enabling researchers to identify the scientific information encoded within these traditions and assist in the reconstruction of knowledge fragmented by the effects of colonisation. These approaches focus on deriving knowledge and related information that is both tangible and intangible through historical and ethno-historical records, archaeology and material culture, and ethnography and community collaboration.

History and Ethno-history

The many thousands of literary sources on Indigenous history, culture, language and environment in Australia,[30] along with unpublished archival material held in museums, galleries and libraries across the world, contain important elements of information about Indigenous astronomy that have been collected since the colonisation of Australia. It is from these records that we can draw information about past cultural practices. This is a sub-discipline of the field termed *historical astronomy*.

Many of these documents also contain various errors, conflations and misidentifications.[31] This requires researchers with a working knowledge of astronomy to correct any issues and unpack the deeper levels of astronomical information contained within them. These records may also contain information that is regarded as restricted and secret/sacred. A number of archival records contain information that did not recognise, respect or adhere to these restrictions, meaning information that is now 'public' is being reclaimed by those communities and subject to traditionally imposed restrictions. This requires researchers to also have knowledge of this area, ensuring collaboration with relevant elders and communities.

Archaeology and Material Culture

Research in cultural astronomy examines the material evidence that may exist on country. This approach focuses on tangible, material culture, deriving information from cultural objects, culturally significant

landscape features, examples of architectural and engineering design, ceremonial grounds, songlines and more. Within material culture, we can find applications and representations of astronomical knowledge through tradition and practice. This is a sub-discipline of the field termed *archaeoastronomy*. Examples include star maps reflected in the landscape as songlines and travel routes,[32] the orientations of ceremonial sites,[33] the alignments of stone arrangements,[34] and symbolic representation and iconography in rock art.[35] These hold clues about understandings of the Sun, Moon and stars in First Nations cultures.

Ethnography and Community Collaboration

The elders and knowledge-holders alive today maintain deep knowledge of the stars and their applications. Learning from elders requires collaborating directly with them as stakeholders and beneficiaries of research design, practice and outputs. The ethnographic research involves working directly with Indigenous communities and elders. The focus of many ethnographers in the past dealt with cultural practices but placed little emphasis on the use or importance of astronomy. Ethnographers often provide tantalising clues regarding Indigenous astronomy but are unable to investigate it in greater detail, be it a consequence of time, effort or a lack in their knowledge of astronomy. Research in cultural astronomy ensures that researchers collaborate directly with elders and communities to gain a solid foundation in astronomy, so as not to make mistakes, conflate ideas, or contribute to the history of insufficient and/or poor scholarship in this particular area.

This is a sub-discipline of the field termed *ethnoastronomy*. These approaches may draw on more 'traditional' qualitative ethnographic methods, such as structured and unstructured interviews, participant observation and non-participant observation.[36] Before any of this can be accomplished, a solid and respectful trust and rapport must be built with the community. Researchers must set out a pathway of understanding regarding participation, withdrawal, intellectual property, mutually agreed upon financial and intellectual benefits, recognition and co-authorship, and community guided and driven outcomes. Unlike most ethnographic research in the past, emerging approaches involve First Nations peoples as researchers in their own right, with their own forms of

academic discourse and training, as well as elders and knowledge-holders serving as collaborators, not research subjects.

New technologies are being utilised in tandem with traditional ethnographic methodologies. State-of-the-art astronomical and planetarium software, such as Stellarium, allows the user to simulate the night sky from any place, and at any time, with extreme accuracy and precision. Astronomy apps such as Star Walk enable the user to point their device at any part of the sky to obtain the name and characteristics of each object in view. Technologies that can identify rock types, GIS software that can assist in mapping the landscape, and drones that can be used to study aerial views of sites—all are being implemented in cultural astronomy research. Techniques used by other areas of science, such as genetics, are being adapted by cultural astronomers to understand how narratives in oral traditions evolve as people move to new regions.[37]

The misidentification of celestial objects is a serious concern when conducting astronomically related ethnographic fieldwork, and the literature is riddled with examples of this. This leads to inaccurate conclusions and an incomplete understanding of Indigenous astronomy. Planetarium software allows users to simulate the positions of celestial objects in the sky from any point on Earth, at any time of the day, either in the present or thousands of years into the past. This enables researchers to 'ground-truth' these records, correct mistakes, and understand the practical uses of Indigenous astronomy with greater accuracy and detail within a controlled environment. Analysis of data, for instance, involves identifying and recording the technical aspects of Indigenous astronomy using techniques and methodologies of positional astronomy, correlating material and oral culture related to astronomy, investigating how this knowledge relates to different communities, and conducting historical and archival research to ascertain if, how and why this knowledge may have changed since colonisation.

Next Steps

The goal of research in Indigenous astronomy is not to 'validate' Indigenous knowledge in terms of Western science, although many crossovers exist. Rather, the goal is to capture systems of thought across diverse communities to obtain a broad understanding of Indigenous astronomical

knowledge and traditions. This enables researchers to understand how Indigenous peoples translate astronomical knowledge into their everyday life, social practices, spirituality and cosmology, which concerns their origins and place in the world.

Providing a comprehensive study of Indigenous astronomical knowledges across Australia would be of value to Indigenous communities. A well-researched and documented library of astronomical knowledge would benefit communities by enabling them to continue longstanding traditions of developing knowledge about their place in the world. Converting this scholarship into resources that are easily transferable into educational contexts for engagement with younger generations is of high importance, as noted by numerous Indigenous communities.

Work in Indigenous astronomy also benefits the wider Australian community by contributing to the growing appreciation of knowledges and practices. This is accomplished by shifting the narrative from one of negative and false stereotypes, to showcasing the richness and complexity of Indigenous cultural heritage, science and history. It can then be implemented into public education programs and school curricula to teach the value of Indigenous knowledges and cultures.

An increasing understanding of Indigenous astronomy is helping to break down perceived barriers between Western science and Indigenous knowledge, and is useful for educating the general public about the scientific accomplishments of Indigenous Australians. This serves as motivation for Indigenous students to foster interest and pursue academic qualifications in STEM (science, technology, engineering and mathematics), especially in astronomy and the space sciences. This will enable Indigenous graduates to drive this work into the future, continuing a longstanding history of traditional scientific and astronomical practices.

PART II

Knowledge Expression

CHAPTER 5

Language and Knowledge

Clint Bracknell and Rachel Nordlinger

FOR ABORIGINAL AND Torres Strait Islander people in Australia, language and knowledge are inextricably linked. Language carries cultural knowledge—songs, ceremonies, stories, histories—as well as detailed and sophisticated ecological knowledge about the seasons and climate, the land and how to live with it, identity, kin and ancestors. As distinguished senior Akarre woman Margaret Kemarre Turner explains:

> Not only you speak that language, but generation upon generation upon generation of your families have also spoken it. And so language is really, really important. Your own language. And that language really *recognises* you, gives you identity, and who you are and what is you and how you're connected to that Land, and how you hold the Land.[1]

This perspective, which sees language as fundamentally connected to identity, culture and place, is echoed in a statement by the National Congress of Australia's First Peoples:

> Language is central to Aboriginal and Torres Strait Islander cultures. The two are intertwined. Language describes cultural attachment to place, cultural heritage items, and puts meaning within the many cultural activities that people do. Furthermore, language plays a fundamental part in binding communities together as a culture, and individuals to each other in a society.[2]

Language is intricately and inextricably connected with Indigenous knowledge. In this chapter, we approach this connection between language and knowledge from two main perspectives. First, we discuss knowledge *about* language, including Aboriginal and Torres Strait Islander perspectives on linguistic diversity across the continent, and the relationship between language, place and identity. Second, we discuss how other knowledges—of landscapes, ecology, kinship, seasons and culture—are reflected *through* Aboriginal and Torres Strait Islander languages.

Knowledge about Language

Language Diversity across Australia

The land now known as Australia is a place of enormous linguistic diversity, home to more than 800 different language varieties, each of which is associated with a unique body of land and community of speakers.[3] These language varieties can be grouped into more than 330 distinct languages that, although related to varying degrees, are generally not mutually comprehensible. All of these languages, however, show complex and interesting grammatical structures that make them important for our understanding of language and human cognition.

As argued by linguist Marianne Mithun, languages represent 'the distillation of the thoughts and communication of a people over their entire history', and thus the languages of Australia reflect the accumulated knowledge of the millennia that their speakers have thrived on the Australian continent.[4] These languages are inherently local, bound inextricably to the land with which they are associated. In contrast, the colonial language of England 'could not speak adequately about' Australia's unique and diverse landscapes, highlighting the importance of Aboriginal and Torres Strait Islander languages for understanding traditional Indigenous knowledges.[5]

Much of Australia's extraordinary linguistic diversity is now critically endangered: only 'around 120' languages are still spoken, and 'about 13 can be considered strong', with fluent speakers across every generation.[6] Although not measuring proficiency in language use, the Australian Bureau of Statistics reported that over 150 Indigenous language variety names were identified as spoken in Australian homes in 2021.[7] The Aboriginal and Torres Strait Islander languages with the largest numbers of speakers are shown in Table 5.1.

Australian Bureau of Statistics Language Label	**Number of Speakers**	**Locations with the Highest Number of Speakers**
Yumplatok (Torres Strait Creole)	7596	Bamaga and surrounds; Thursday Island (Qld)
Kriol	7403	Ngukurr; Minyerri; Wugular (Beswick) (NT)
Djambarrpuyŋu	3839	Galiwin'ku; Ramingiṉiŋ (Ramingining); Miliŋimbi (Milingimbi) (NT)
Pitjantjatjara	3399	Pukatja (Ernabella); Amata – Tjurma Homelands; Kaltjiti (Fregon); Irintata Homelands (SA)
Warlpiri	2592	Yuendumu and outstations; Lajamanu; Nyirripi (NT)
Murrinhpatha	2063	Wadeye; Nganmarriyanga (Palumpa) (NT)
Tiwi	2053	Wurrumiyanga (Nguiu); Milikapiti; Pirlangimpi (NT)

Table 5.1: Most widely spoken Aboriginal and Torres Strait Islander languages Australian Bureau of Statistics (2022) 'Language Statistics for Aboriginal and Torres Strait Islander Peoples' (webpage; reference period: 2021).

Kriol and Yumplatok are Indigenous languages that have developed post-colonisation through contact between traditional Aboriginal and Torres Strait Islander languages and English. They are distinct languages,

different from both the traditional languages and from English, and are now the most widely spoken Indigenous languages in Australia. Despite their different histories, these languages are uniquely indigenous and reflect the cultural perspectives and knowledge of their speakers just as other Aboriginal and Torres Strait Islander languages do.

The devastating impact of colonisation on Aboriginal and Torres Strait Islander languages and their use has led to another type of diversity across Australia—diversity in language ecologies, the interaction and coexistence of languages in community contexts. While traditional languages are still acquired by children and used daily in some communities, in many others, local languages may no longer be spoken at all—or they are only partially remembered, with only a few words or phrases in active use. Many individuals and communities are working hard to relearn and revitalise their languages, but this can be a difficult path. Jagera and Dulingbara linguist Jeanie Bell explains that many Aboriginal people in Australia feel 'sadness, regret and sometimes anger that we did not have a chance to speak the languages of the land, our heritage languages'.[8] Trauma associated with the loss of languages can inhibit language-revitalisation programs in Australia, and communities can be understandably wary of sharing their languages, or their journeys to reclaim them, with non-Indigenous people.

The Relationship between Language, Place, Culture and Identity

In the oral traditions of Northeast Arnhem Land, the first person to enter the Australian continent was a woman, Warramurrungunji, who came out of the sea on the Cobourg Peninsula and then moved inland, placing people onto particular parts of the landscape and decreeing the languages that they should speak. In this way, the different languages were instilled directly into the land, creating an unbreakable connection between language and place.[9]

'Country' and 'Land' are often capitalised in Aboriginal contexts to signify 'nourishing terrain', landscapes that are alive and intertwined with culture and knowledge systems.[10] Although details differ across the continent, most Aboriginal nations have a story similar in spirit to this one, by which languages are inextricably associated with country in an everlasting relationship: 'For the Ngaanyatjarra, language was given to them from the *tjukurrpa* [Dreaming], creating an inextricable link between language,

land and social identity.'[11] Margaret Kemarre Turner describes the link in this way: 'We come from the Land and the language comes from the Land. And everything that grows from the Land, it really relates to our language as well.'[12]

This relationship between language and place is central to the important role that language plays in framing culture and identity. According to distinguished Yiman academic Marcia Langton:

> In many parts of the Aboriginal world, languages are sacred as they are given to us by the ancestors. Indeed, languages are owned by those people who can claim a sacred genealogical link to an ancestral speaker of that language. Place, identity and the laws that apply among the people who live on the same area of land are bound together by their language.[13]

Language connects people to their country, ancestors and histories, but also to each other; such linguistic diversity is important and intentional. The existence of hundreds of different languages across Australia reflects the languages of the ancestors—each language identifies a part of the land and the people who inherit it; use of a particular language therefore implies knowledge of, and connectedness to, a certain set of people and a certain part of the country. Senior Ngunnawal woman Caroline Hughes explains: 'Our Ngunnawal language links family and community to our homelands. Our language is the key to all our relationships and how we interact with each other.'[14]

The centrality of language to identity, heritage and culture is reflected in the enormous effort many communities have made to relearn and revitalise what are widely known as 'sleeping languages'. Gubbi Gubbi and Gungulu linguist Eve Fesl explains:

> The many decades of linguistic persecution, which persisted until the present time, only adds to the desire of the Indigenous Australian individuals and community to regain and claim whatever they are able. In the case of language this may be only a few words or sentences, but these are cherished far beyond what most non-Indigenous Australians are able to comprehend.[15]

Wakka Wakka teacher Anita Dodd likewise describes her passion for reviving her language:

> I want to keep teaching it for future generations, especially my grandchildren. 'Cause I go out on Wakka Wakka Country to the sacred places, and in our way we acknowledge our Creators, our Ancestor spirits that are back in the hills and the trees and the rocks and that helped create Wakka Wakka Country and put laws for our people to abide by. So now I can go back and teach my grandchildren to speak in Wakka Wakka tongue to the ancestors and spirit.[16]

A groundbreaking advocate for holistic language revitalisation, Fesl is critical of language programs that simply focus on collecting and disseminating wordlists, arguing that worthwhile initiatives need to consider the complexity of Aboriginal languages in terms of their context, aesthetics and functions, and as potential tools for empowerment, given the strong association between language and cultural identity.[17] Ngunnawal man Tyronne Bell explains: 'You can have the stories and knowledge passed down from the elders but without language your whole cultural identity is incomplete.'[18]

Multilingualism

The high value placed on linguistic diversity across Australia, along with the close association between language, place, community and identity, gives rise to interesting sociolinguistic practices, such as widespread, stable multilingualism. Speakers of Aboriginal languages are traditionally, and often still today, highly multilingual, with individuals often able to speak many languages from the surrounding area. Such multilingualism is maintained by communicative practices such as receptive multilingualism, by which people utilise multiple languages within a single conversation, each participant speaking in their own language while understanding the languages spoken by others. Thus, unlike in standard Australian English conversational culture, there is no expectation that all conversational participants should use the same language, meaning that multiple languages can be supported and maintained even in small speech communities.[19]

The natural presence of multiple languages in speech communities is nicely illustrated in a conversation about emus published by Murray Garde, held between three senior Bininj Kunwok speakers. Although the conversation is largely focused on ecological and cultural knowledge about emus, and the ways in which people have interacted with them over time, it begins with a discussion of the different words for *emu* in various Bininj Kunwok dialects, as well as surrounding languages such as Jawoyn, Dalabon and Rembarrnga. This part of the conversation proceeds as follows:[20]

Jimmy Kalarriya	*Dabbarrabbolk barri-ngeybuni ngurrurdu.* 'The name the old people used for emu was ngurrurdu.'
Don Nakadilinj Namunjdja	*Yo ngurrurdu*. 'Yes, ngurrurdu.'
Jimmy Kalarriya	*Yika alwanjdjuk Djawonj kunu. Yika durrk*. 'Some Jawoyn people, they say *alawanjd-juk*. Some say *durrk*.'
Don Nakadilinj Namunjdja	*Djawonj*. 'Jawoyn.'
Peter Biless Nabarlambarl	Yo, us mob we say *alwanjdjuk*. 'Yes, we say *alwanjdjuk*.'
Jimmy Kalarriya	*Ngad kunu. Dja Kundjeyhmi, anekke rerri*. 'Yes, us here [on the Arnhem Land plateau]. And in Kundjeyhmi it's the same.' [Five turns expressing agreement deleted for reasons of space.]
Peter Biless Nabarlambarl	*Ngurrurdu Dangbon mob, um wurrbbarn* that Rembarrnga I think. 'In Dalabon the word is *ngurrurdu* and in Rembarrnga I think the word is *wurrbbarn*.'
Don Nakadilinj Namunjdja	*Yo, ngurrurdu karri-djarrkngeybun rowk*. 'Yes we both say *ngurrurdu* [in Bininj Kunwok and in Dalabon].'

Jimmy Kalarriya	*Kurih Kunbarlanja kabirri-yime kurdukadji.* 'There at Kunbarlanja (in Kunwinjku) they use the word *kurdukadji*.'

Such multilingual practices are also reflected in the music of the Ripple Effect Band, a contemporary all-female Aboriginal rock band from Maningrida in the Northern Territory (see Figure 5.1 in the picture section). Maningrida is 'one of the most multilingual communities in the world', with thirteen different languages currently spoken, in addition to English and Kriol.[21] The Ripple Effect Band incorporates this multilingualism in their music, performing in six different languages: Ndjébbana, Na-Kara, Burarra, Kune, Kunwinjku and English. The members all sing in each other's languages and perform to 'celebrate the multilingual nature of the contemporary Maningrida community and strengthen our different languages'.[22]

Knowledge through Language

Language is also an important vehicle for the expression of other types of knowledge. Reflected in the words and structures of Aboriginal and Torres Strait Islander languages is detailed and complex knowledge of landscapes, environmental ecology, kinship, seasons, culture, ceremony and much more. This is one of the many reasons why language is so important both for individual communities and for our understanding of what it means to be human: tied up in language is detailed knowledge built up over millennia, all of which is at risk when languages are no longer learnt and spoken. Margaret Kemarre Turner explains it in this way:

> My own language is Akarre, which I have from my father's father's Land ... my knowledge comes through Akarre and that is the way ... That's how I got taught these things, how I've learned throughout my life, how I've always seen the world, how I understand it, and how and what in all those ways life has always been. All through my own Sacred Language.[23]

Australian languages can convey intricate and complex cultural concepts in a single word, the meaning of which may require many sentences

to translate into English. One place where this is commonly found is in the domain of kinship. Kinship systems in Aboriginal societies have a complex structure that conceptualises relationships very differently to English and other European cultures; this complexity is reflected in the kinship vocabulary of different languages. In Nyangumarta, a language from the Pilbara region of Western Australia, for example, the word for 'father' is *japartu*, but in fact this is also the term used for your father's brothers, your mother's sister's husband, and your wife's mother's brothers. This one word in Nyangumarta, *japartu*, therefore groups together kin relations that are referred to by the English terms 'father', 'uncle' and perhaps even 'uncle-in-law'.[24] This arises in a systematic way through a kinship structure that divides society into four sections: your own section is determined by those of your parents and governs how you are related to everyone else, as well as which section your marriage partner must belong to. Understanding the full semantic range of even a simple kin term such as *japartu* requires an understanding of the kinship system, which itself reflects knowledge of complex cultural concepts.

Other kin terms require an even deeper understanding of cultural behaviours and perspectives. The Nyangumarta word *jaluwal* is translated into English as 'a person of the section from which one's husband or wife is selected, but who is neither an actual or potential partner, or the sibling of an actual or potential partner'.[25] Using this word appropriately requires an understanding of complex cultural protocols that might make someone an 'actual' or 'potential' partner, or the sibling of one, and demonstrates how much cultural understanding can be tied up in the meaning of a single kinship term.

Another example of the complexity of cultural understanding reflected in a single word involves the concept regularly translated into English as 'Dreaming'. Yawuru politician Patrick Dodson explains:

> The English word 'dreaming' can be misleading because the concepts which it translates are exceedingly complex and largely unrelated to the English meaning of the word. These concepts are often alternatively described as 'The Law'. They are a coherent and all-encapsulating body of truths which govern the whole of life.[26]

'Dreaming' is an overly simple English term used to refer to a complex Aboriginal concept with multiple connotations. This concept involves manifestations of ancestral beings as the physical landscape, as the social and ecological order that the ancestors created, and as animals, plants and natural features, such as wind and fire.[27] Different Aboriginal languages use a range of complex and often polysemic vocabulary to describe and assist in sustaining what is reductively termed 'dreaming' in English. Tuck and Yang explain that 'To codify is to manage, to arrange in an order that is meaningful to the coder', and it follows that the English word 'dreaming' categorises a distinctly Aboriginal concept as something fanciful or imagined.[28] Aboriginal words for the concept are far more grounded in local values and understandings.

The *Warlpiri–English Encyclopaedic Dictionary* entry for *jukurrpa*, often translated as 'Dreaming', reads:

> The term *jukurrpa* may be applied to individual ancestral beings, or to any manifestation of their power and nature, i.e., knowledge of their travels and activities, rituals, designs, songs, places, ceremonies. This provides the model for human and non-human activity, social behavior, natural development. *Jukurrpa* is not conceived as being located in an historical past but as an eternal process which involves the maintenance of these life-forces, symbolized as men and as other natural species.[29]

Other evocative terms frequently reduced to 'Dreaming' in English include *maḏayin*, referring to 'the sacred beauty' of creation among the Yolŋu of Northeast Arnhem Land; *thingkaa*, which can also mean 'meat' in the Ngiyampaa language of western New South Wales; and polysemic words in the Noongar language of Western Australia's south-west, such as *birt,* which can mean 'track, path, sinew, or energy', or *maat*, a 'path, leg, or kinship affiliation'.[30]

Aboriginal and Torres Strait Islander languages also convey an intricate and detailed understanding of the environmental ecology in which their speakers live. In Gundjeihmi, from western Arnhem Land, the word *alyurr* has multiple meanings, denoting the Leichhardt's grasshopper (*Petaside ephipigera*), the two herb species that it eats (*Pityrodia jamesii*

and *Cleome viscosa*)—which indicates where those grasshoppers are readily found—and a particular spirit that starts to manifest itself during the first monsoonal storms, at the same time as the herbs become ready for these grasshoppers to eat.[31] In this one polysemous word, *alyurr*, is encapsulated ecological knowledge about this grasshopper species, the plants it eats and the seasonal weather cycle that determines when it appears, reflecting the inherent relationship between these different parts of the ecosystem.

Similar ecological knowledge is also found reflected in the naming of edible insect larvae in Kaytetye, from central Australia. Myfany Turpin and Aung Si identify twenty-nine different ethnospecies of edible larvae, the most familiar being the *atnyemayte* (witchetty grub), and show that most of these insects bear a morphologically complex name that combines the name of the plant on which the larvae are found with the suffix *-ayte*, meaning 'edible insect larvae'. For example, *atnyemayte* is a compound of *atnyeme* ('witchetty bush', *Acacia kempeana*) and the suffix –*ayte*, thus translatable literally as 'edible larva from the witchetty bush'. Likewise, *aylpelayte* ('Red River Gum grub') is a compound of *aylpele* (Red River Gum, *Eucalyptus camaldulensis*) and the suffix –*ayte*.[32] In this way, knowledge of the relationship between the particular grub species and its host plant is linguistically encoded, and the host-based naming system also provides crucial information as to where these foods, once a significant part of Kaytetye people's diet, can be found.

Dictionaries of Aboriginal and Torres Strait Islander languages are full of fascinating linguistic examples of this type, and there is still much work to be done to properly acknowledge ecological and cultural knowledge as reflected through the languages of Australia. For a particularly excellent example of such collaborative work, and its potential to bring to light both the richness of knowledge and the intricacies of language, the reader is referred to the discussion by Murray Garde and co-authors of the language of ecological knowledge relating to fire, seasons and landscape burning on the Arnhem Plateau.[33]

Conclusion

Language is important to Aboriginal and Torres Strait Islander people in innumerable ways. Language was instilled into the land by the ancestors, creating an inherent relationship between language, place and

people that goes back to time immemorial. It also plays a significant role in individual and community identity, cultural practice and ceremony. Further, Aboriginal and Torres Strait Islander languages contain and express detailed knowledge of the environment, seasons, landscapes, and the ways in which these are connected—knowledge acquired over tens of thousands of years of living and thriving on the Australian continent. It is crucial that Aboriginal and Torres Strait Islander people are holistically empowered to revitalise and sustain their languages in order to maintain the deep knowledge contained within them. These languages are a window into diverse local ways of knowing the world, perspectives that could be crucial to humanity as we face present issues of environmental crisis and a future filled with unknown challenges. Aboriginal and Torres Strait Islander languages enrich global understandings of language and human cognition, and for many hundreds of communities across Australia, they are a vital element of identity, heritage and strength.

Warlpiri translator Theresa Napurrula Ross explains:

> *Kaji yimi ngalipa nyangu pirrjirdi karri, ngulaju ngalipaju kapurlipa wankaru nyina Warlpiri patu yapa. Ngalipa nyangu yimingki ka ngalpa pirrjirdi mardani. Kuja juku ka ngalpa pirrjirdi warrarda mardani.*
>
> If our language survives, we survive as Warlpiri people. Our language is keeping us strong. It's always kept us strong.[34]

At a technical and functional level, linguistic diversity allows for locally distinct, place-based autonomies of knowing and being, while also informing how we might better understand our relationships with place, collectively, within the land now known as Australia. However, before posing questions of how the knowledge sustained though language diversity can enrich academia and science, it is necessary to first consider the ecological diversity of Aboriginal and Torres Strait Islander languages and the complex challenges associated with revitalising and sustaining them. Given the precarious current state of most of these languages and the persistent systemic inequity Indigenous peoples still face, the first question institutions need to address is how to value Aboriginal and Torres Strait Islander lives and languages on their own terms.

CHAPTER 6

Singing and Knowing

Clint Bracknell and Sally Treloyn

THE ABILITY OF music to communicate, sustain knowledge and support feelings of affiliation is widely acknowledged. Its ubiquity and diversity worldwide demonstrate its potential to help humanity adapt and thrive in different times and places. Nowhere is this more evident than in Australia, home to the most longstanding, landscape-based performance traditions in the world. Aboriginal songs connect people, language, knowledge and country—that 'nourishing terrain' that is alive and intertwined with Aboriginal identities and knowledge systems.[1]

In an effort to distil the importance of song and interconnected practices, the *Garma Statement on Indigenous Music and Performance* states:

> Songs, dances and ceremonial performances form the core of Yolŋu and other Indigenous cultures in Australia. It is through song, dance and associated ceremony that Indigenous people sustain their cultures and maintain the law and a sense of self within the world.[2]

This chapter will discuss the ways in which songs are uniquely placed in Aboriginal contexts as rich texts simultaneously holding, sustaining and signifying knowledge, facilitating not just the comprehension of

information but visceral experiences of 'knowing'. It will describe examples of Aboriginal people's innovative creativity in response to dramatic social changes, demonstrating how musical change is a marker of cultural continuity and resilience.

Knowing Song

Given the considerable diversity of Aboriginal culture, languages and music across mainland Australia and the Torres Strait Islands, it is difficult to make broad generalisations about the aesthetics and function of song traditions. Continual innovation of musical form and expression, along with practices of trade and hybridisation, further cement diversity as a primary characteristic of Aboriginal song.[3] The term 'Aboriginal music' can also describe any music created by Aboriginal people, including popular music, Western art music and jazz. This chapter focuses on Aboriginal song genres performed in Aboriginal languages and linked by their shared status as traditions in some present form of endangerment. Importantly, such genres are themselves diverse in sound and production, as well as origin. In the Kimberley region of Western Australia, for example, ethnomusicologist Ray Keogh observed that Aboriginal songs are usually drawn from one of three sources:

1. Topical songs are composed by people.
2. Ancestral songs are handed down through generations.
3. New songs are revealed to people by ancestral spirits in dreams.[4]

In practice, songs and song repertories usually involve two or more of these modes and sources of creation. For example, topical songs often contain subjects, words and musical references with an ancestral origin that the song composer has been permitted to reference, according to generational lineages. Similarly, song repertories that have an ancestral origin may incorporate new songs that have recently been revealed to people in dreams by ancestral spirits.

The attribution of songs to ancestors and dreams, and not just to individuals, occurs in many Aboriginal communities across Australia. Accordingly, the principles that guide song custodianship and performance rights are intersectional, crisscrossing individual creativity, ancestral source, customary and hereditary lineages, trade, and the individual,

group and place. This complexity informs, and is informed by, the content of songs, which are not isolated aural artefacts but can perhaps best be understood as 'packages' of meaning conveyed by musical and visual performance elements, locations and responsibilities.[5]

Song, Dance and Language

The Pitjantjatjara language of central Australia, like many other Indigenous languages, has no separate word for 'music'; instead, the term *inma* encompasses all phenomena marking performance, including dance, music, storytelling and visual design.[6] Some song traditions, such as *thabi* from the Pilbara in Western Australia, are not usually accompanied by dance.[7] Nevertheless, all Aboriginal music is primarily vocal and based in language, so indelibly tied to the diversity of Aboriginal languages. It is therefore disquieting that just thirteen of more than 200 Indigenous languages in Australia are maintained with fluent speakers across all generations.[8] There is an inherent connection between language and song that is more complex than setting words to a tune. As music and performance context can function with semantic intent, understanding a song often requires more than a literal understanding of the words being sung.

In *The Guruma Story*, the late Gordon Lockyer from the Pilbara explains:

> With English songs, if you understand English, you should know what he's singing about, but with Aboriginal songs it's not quite the same. The meaning is there, but you can't say what every little word means—the sound gives you the meaning of it all. They sometimes change the words a bit to make them fit in.[9]

To the north of the Pilbara in the Kimberley, Scotty Nyalgodi Martin, the late Ngarinyin and Wunambal master composer of the Junba dance-song genre, explained how aesthetic considerations can determine how language changes to suit a song.[10] Martin described altering spoken language via alliteration, elision and phoneme substitution to create song texts, as singing words 'half way'. Martin deployed these poetic techniques to honour the spirits that gifted the songs, and followed the rhythmic and poetic conventions established by previous master composers. Across the

continent, the poetic design of songs and the polysemous nature of song texts allow for diverse and multilayered reinterpretation by individuals and groups across time and place.[11]

Deriving meaning from Aboriginal songs is not as dependent on a literal understanding as most English-language songs. A song can be meaningful in its local context long after its lyrics have fallen out of everyday use within spoken languages.[12] Indeed, it is not uncommon for songs to feature lyrics incomprehensible to local audiences. Song words may include esoteric or poetic forms of a local language, terms from another Aboriginal language from far away, or obscure language forms such as the 'ghost-language' of Belyuen in the Northern Territory.[13] Without even considering the language sung, where, when and why a song is performed and experienced can be meaningful in itself.

The word 'corroboree', originally from a language of Sydney, has long been used in English to describe Aboriginal song, accompanying dance, and the social gathering at which they take place.[14] In Aboriginal English, 'corroboree' is often used to describe 'secular or "everyday" camp music',[15] as opposed to 'ceremony' or 'business', which describes 'more serious' genres. Under certain conditions, some 'serious' songs can bring about an effect on landscapes or people—including birth, love, increase, healing, dispute resolution, lullaby, rain-making and rain-stopping.[16] Accordingly, learning and singing—and more rarely, listening to—certain song genres may be restricted in accordance with gender, seniority or kinship affiliation.[17] Many genres of Aboriginal song are also considered fun, topical, entertaining and widely shared.[18] While relatively open, several local factors may guide the transmission and custodianship of songs within these genres, including customary or hereditary lineages, systems of trade, and associations between people, song and place. Widespread 'travelling songs', such as the *wanji wanji*, have long been shared extensively across linguistic and geographical boundaries, connecting people across landscapes through shared understanding and participation.[19]

Learning Songs

In a 2008 interview, music researcher Allan Marett estimated that 98 per cent of Aboriginal performance traditions might be considered 'lost', in the sense that they are not currently being performed in their Aboriginal

communities of origin and are too sparsely recorded and remembered to support full-scale revival.[20] Although these traditions are endangered, most Aboriginal peoples consider them distinctively important. Since linguists and anthropologists began undertaking fieldwork in Aboriginal communities, Aboriginal people have asked them to record songs as a way to safeguard them for future generations with limited opportunity to learn in the old ways.[21] In the past, learning songs and their accompanying dances and visual designs had mostly occurred in performances themselves, 'through constant repetition and (initially) imitation'.[22] The maintenance of complex and lengthy song series across many generations, and across distinctive geographic and linguistic regions, is also partly attributable to the construction of the song texts in some repertories around a relatively small set of patterns.[23] Recognisable patterns and formulaic systems also support the reiteration of oral epic forms found elsewhere in the world.[24]

Senior Ngarinyin and Wunambal singer and dancer Matthew Dembal Martin has explained how processes of learning songs in the 1960s and 1970s was intertwined with learning and remembering stories of places, through participating in dance:

> We got it from the story [that goes] to the dancing part of it. [The reason is] you got to be told first the story and when it comes to the show time, you can see it clear—dancing and music playing and when they are singing. That's like the real thing in the dancing and you think back to the story, so you can easily pick it up from there. Especially the young people. Good for the imagination. Just like when you read a book and see it later on.[25]

Across Australia today, songs are not performed nearly as frequently as they were in the nineteenth or twentieth centuries. Each of the modes of song learning referenced above have been interrupted by colonisation to varying degrees across the continent. In some places, people were prevented from performing ceremony and corroboree, as a strategy to eliminate Aboriginal law and culture and thereby contribute to the settler-colonial project.[26] Learning through exposure now often requires the purposeful creation of an immersion context, which can involve significant logistical hurdles, extensive travel, and time away from work for participants.

Since at least the 1970s, Aboriginal people have circulated audio recordings of songs to assist in the continuation of song traditions and inspire the creation of new songs.[27] Matthew Dembal Martin describes listening to old recordings of songs as being akin to receiving a song in a dream, a common phenomenon in many Aboriginal traditions.[28]

The return of archival recordings to Aboriginal communities usually involves extensive consideration of how each song connects into the web of local ways of being, doing and knowing. Gathering as a community to listen to, learn and sing old songs in regions where they have not been heard in decades can support a 'a sense of recovery, resilience and connection to the past, present and future', and strengthen connection to country.[29]

Country Songs

One of the authors of this chapter recently visited an important river system in Esperance, Western Australia, with his uncle, a senior Nyungar artist. This uncle had not been to that significant place before and revealed that he felt a little uneasy about going there. On arrival, after the group got out of the car, the author and his aunty, a local traditional owner, sang a special Nyungar song belonging to that place. At that moment, the uncle knew it was okay for him to be there.

Describing an 'Indigenous way of knowing', Aaniiih-Gros Ventre scholar Joseph P. Gone states, 'You have questions, you want answers, you go through a process to figure out how to get an answer to that question.'[30] While some people may consult the Bureau of Meteorology or pay close attention to warning signs for poisonous snakes and plants, for many Aboriginal people, one's safety in a place can be gauged through song. This understanding is not just based on the words and tune of the song itself, but the web of meaning conferred by the singer's relationship with the place and observation of how the natural world—the place itself—reacts to the singing. The sceptic might dismiss this kind of knowledge as intuition or faith, but it has persisted for many generations and has proved to be infallible enough for Aboriginal people to rely on. As the Yindjibarndi and Ngarluma cultural history from the Pilbara attests, 'Know the song, know the Country.'[31] Aboriginal logic suggests that if a person knows and shares the songs of a place, those songs will hold them safely in that place.

Acceptance of this 'way of knowing' is widespread across Australia. In Aboriginal contexts, knowledge of an area's songs can be equivalent to a title deed for the land, and in recent decades, Australian courts have considered songs as evidence in native title cases.[32] Referring to the *kujika* song cycles from the Gulf of Carpentaria, senior Yanyuwa man Dinny McDinny explains,

> Whitefella got that piece of paper—might be lease or something like that—but Yanyuwa and Garrwa mob they got to have *kujika*. When whitefella ask them kids how you know this country belongs to you, they can say we got the *kujika*. *Kujika*, you know, like that piece of paper.[33]

More than just communicating concepts of ownership, landscape-based song genres like *kujika* have deep and rich histories in country.

Created by ancestor beings as they traversed the land, *kujika* are often restricted in accordance with Yanyuwa law. Mussolini Harvey, a senior Yanyuwa man, explains:

> This Law is our ceremonies, our songs, our stories; all of these things come from the Dreaming ... The Law was made by the Dreamings many, many years ago and given to our ancestors and they gave it to us ... The Dreamings were the first to dance our ceremonies and sing our songs. Some of these songs are dangerous, they are secret and sacred, women and children are not allowed to see them. Others are not secret, everyone can look at them, but they are still sacred ... The Dreamings named all of the country and the sea as they travelled, they named everything that they saw. The Dreamings gave us our songs. These songs are sacred and we call them *kujika*. These songs tell the story of the Dreaming as they travelled over the country, everything the Dreaming did is in the songs ... These songs are like maps, they tell us about the country, they are maps which we carry in our heads.[34]

As Harvey explains, songs sustain centuries-old knowledge of landscapes. Bruce Chatwin's fiction-inflected 1987 publication widely

popularised the oft-cited term 'songlines', which he refers to as a 'labyrinth of invisible pathways' storied, sung and traversed across Australia.[35] So-called songlines may be considered landscape-based songs, performances or ceremonies that can journey from one geographical point to another, or circle around to meet or focus on a single landmark.[36] More than an aural map, landscape-based songs celebrate the unique features of relevant country. They educate people about sites, natural phenomena, histories of place and Aboriginal law more generally. As Nyikina, Warrwa and Wangkumara Barkindji woman Marlikka Perdrisa stated at the 2021 AIATSIS Summit, 'We care for country by keeping country company—we sing to it.' Songs are sung as part of one's responsibility to help nurture country.

Dramatic social changes in Aboriginal communities that began with Australia's colonisation have resulted in ever fewer opportunities for the performance of landscape-based Aboriginal songs, and have consequently limited the ability for each new generation to learn those songs.[37] Senior Tiwi woman Lenie Tipiloura shares her concern that 'if all the old songs are lost, then we don't remember who we are'.[38] Asked about differences between past and present song performances at Yuendumu in central Australia, senior Warlpiri man Rex Japanangka Granites stated that 'country doesn't change', confirming his understanding that even if lost from the minds of contemporary people, the stories, performance practices and knowledge will always be held in the country.[39] Professor Irene Watson's poignant statement that 'the natural world is still singing even though the greater part of humanity has disconnected itself from song' conveys a similar optimism that country itself holds understandings.[40] In response to immense pressure to move away from homelands and conform to settler-colonial expectations, Aboriginal people have innovated new genres, songs and ceremonies, mobilising song to nurture connection and sustain knowledge of country.[41]

Change and Innovation

As a result of displacement associated with settler colonialism through the twentieth century, people from many different traditional areas in the Kimberley often live in centralised communities like Mowanjum, situated on Nyikina Mangala country approximately 10 kilometres from the town of Derby. Since the 1960s, the Junba dance-song genre has been a means for the community of practice of Wanjina-Wunggur peoples in Mowanjum

to 'negotiate their displacement from traditional country from further north and inland through the twentieth century to the present'.[42] As a genre practised by many language groups, Junba is created and shared to 'teach young people, honour and carry the legacy of deceased family members, maintain and reinvigorate connections with ancestral creative beings and, intertwined with each of these, maintain connections with land and demonstrate cultural practice to outsiders'.[43] As is the case with much Aboriginal performance, Junba features song, dance and visual design. Most strikingly, a subgenre of Junba known as Jerregorl, Galinda or Balga involves dancers carrying elaborately designed dance boards. These boards are often painted to represent landmarks and country far from the dance-ground, evoking and maintaining relationships with those places.[44] Although Aboriginal songs are often landscape-based, they can be mobilised to connect people and spirits back to their homelands. In so doing, custodians and practitioners of dance-song genres such as Junba continue these ancestral practices while innovating them to support social adaptation to new geographic, cultural, linguistic and political environments.

The need to engage young people and sustain traditions in these new environments can instigate innovation in performance. As younger people stopped speaking the 'old' Tiwi language, Tiwi people of the Bathurst and Melville islands in Australia's Northern Territory began composing songs in the 'modern' Tiwi language, 'in order to keep the practice of singing alive and to preserve the historical and cultural knowledge that, in the past, was held in song'.[45] Senior performers from the northern Australian community of Wadeye decided to simplify a complex music and dance practice in order to enhance the articulation of a collective identity in ceremonial performance.[46] At the Milpirri cultural festival at Lajamanu in the Northern Territory, performers wear coloured T-shirts to represent Warlpiri kinship groups and combine older styles with hip-hop dance.[47] The Mowanjum community supports the role of children and youth not only as recipients of knowledge from elders, but as active drivers of intergenerational knowledge transmission in the context of the annual Mowanjum Festival.[48]

Historically, change in the cultural practices of Aboriginal people has been presented within broader Australian society and law as evidence of diminishment of cultural authority and rights to country. However, Aboriginal people instigate changes within song traditions with

considered foresight because they know it will ensure sustainability amid constantly shifting sociocultural circumstances.[49] Adaptability has always been key to the transmission of even the most immutable Aboriginal song traditions.[50] In this context, song is more productively understood as an activity rather than as a static artefact.

Conclusion

Aboriginal songs are rich, multimodal texts, fundamental to the fabric of life in Australia from time immemorial and which continue to manifest powerfully today. Aboriginal songs create and sustain knowledge not just through the use of lyrical and musical conventions, but in cultivating contextual, experiential and visceral understandings of country. Song and dance 'appeal to intangible values conveyed by tangible, corporeal sensations'.[51] These expressive forms are ephemeral, leaving little material trace, but with each iteration they create and regenerate knowledge in the present, honouring the legacies of practice, reinvigorating relationships with ancestors and nourishing bonds with country. In the present era of environmental crisis, as institutions and individuals increasingly seek to 'decolonise' thought and practice, it may be useful to consider the dynamic and reciprocal relationship between song and country.

Ecomusicologist Aaron Allen explains that 'environmental problems are not based entirely in scientific and technological understanding; rather, they have both scientific and cultural roots and solutions'.[52] Despite the 2002 *Garma Statement on Indigenous Music and Performance* urging that Indigenous songs should 'be a deeply valued part of the Australian cultural heritage', as they represent 'the great classical music of this land', two decades later, tertiary music institutions in Australia still prioritise the preservation of European art music practices.[53] Environmental crises may not just be the fault of flawed science and economics, but also a disconnection between culture and nature that is exacerbated when the music supported and nourished in a landscape does not promote and reinforce values conducive to local environmental health. A resurgence in Aboriginal expressive culture may not necessarily halt environmental degradation, but it could certainly increase the diversity of perspectives on how to exist within, appreciate and interact with our fragile landscapes.

CHAPTER 7

Metaphor, Reciprocity and the Ethics of Indigenous Knowing

Samuel Curkpatrick

MOST AUSTRALIANS ENCOUNTER Australian Indigenous knowledge traditions *metaphorically*. That is, what is widely known about these traditions largely comes through representations that *stand for them*—just as Uluṟu, for many Australians, has come to stand for an ancient and spiritual sovereignty at the heart of this land. Concepts drawn from ancestral songs, stories and ceremonies are used to convey the significance of Indigenous cultures and laws to non-Indigenous Australians. For instance, the *dhari* (headdress) and five-pointed star represented on the Torres Strait Islander flag stand for the unique cultural and political identities of this region and its rich, seafaring history. These symbols are widely recognised. However, few could claim a deeper understanding of complex patterns of trade, language, family relations and the custodianship of land and sea that they represent, knowledge that is more properly learnt through dances, stories and songs.

The name of the iconic Yolŋu band Yothu Yindi provides another example of how complex knowledge traditions come to be represented within Australian society more broadly. While the term *yothu* translates as 'child, small' and *yindi* as 'mother, big', taken together, *yothu–yindi* is an important social and legal concept that incorporates all living things within

a network of complementary identities and responsibilities. *Yothu–yindi* also expresses a duty to nurture new generations through ancestral knowledge, and for a child to care for their mother's clan through obligations in resource management, ceremonial performance and decision-making.[1]

Non-Indigenous audiences celebrate Yothu Yindi and their music as a symbol of Yolŋu identity and culture, and the ways in which Indigenous cultures might enrich cultural life in Australia more broadly. In this way, the music and messages of Yothu Yindi have become emblematic of reconciliation. Yet, while audiences can gain an appreciative glimpse of the complex traditions enfolded into the name of the band, this engagement remains mostly a symbolic function: audiences largely lack the opportunity or relationships necessary to gain intimate, first-hand knowledge of Yolŋu life, in the way that a mother nurtures her child.

Traditional cultural and legal concepts are sometimes offered by Aboriginal and Torres Strait Islander communities to educational institutions to promote understanding among a student body, shape pedagogy, or to provide a framework for governance and consultation. For instance, with campuses on Wiradjuri homelands, Charles Sturt University has adopted the Wiradjuri ethos *yindyamarra winhanganha*, which means 'the wisdom of respectfully knowing how to live well in a world worth living in'.[2] Bestowed by Wiradjuri elder Uncle Stan Grant (Snr), *yindyamarra winhanganha* 'represents who we are' and 'the mission of a university—to develop and spread wisdom to make the world a better place'.[3] The Vice-Chancellor's Chair of Australian–Indigenous Belonging at Charles Sturt University, Stan Grant (Jnr), affirms, 'Our mission is to bring Yindyamarra—a gift from the Wiradjuri people—to bear on the challenges facing nation-building and democracy in Australia and around the world.'[4]

In a similar way, Onemda: Aboriginal and Torres Strait Islander Health and Wellbeing, at the University of Melbourne, incorporates three units within the Melbourne School of Population and Global Health. *Onemda*, which means 'love' or 'the regard that we have for each other that holds us together as a community' in the Woiwurrung language, was bestowed by patron Aunty Di Kerr, expressing a hope that these units might work purposefully together as an extended family.[5] Similarly, the University of Melbourne's *Indigenous Strategy 2023–2027* is titled *Murmuk Djerring*, a Woiwurrung word meaning 'working together' that 'depicts the layers of

the land, and the generations of peoples who have lived on this land, and the rich cultures and history that lie under their feet'.[6]

More than merely naming a research group or strategy document, terms like *onemda* and *murmuk djerring* are bestowed as gift, with the potential to shape relations and a sense of togetherness. Just as calling someone a friend can sustain and even engender friendship, language holds great potential to shape our relations and social imaginations. Yet, this generative potential is readily lost when words and images are treated as *mere* representations of Indigenous knowledge or culture, used to furnish a glossy brochure with a sense of social and cultural awareness or as tokenistic acknowledgement.[7]

The term *Indigenous knowledge* readily encapsulates the sorts of concepts and metaphors described above, communicating the value of Indigenous traditions through ideas and concepts drawn from those traditions. Yet, an inherent challenge arises for those seeking greater engagement with Aboriginal and Torres Strait Islander communities: beyond a surface-level appreciation of concepts and images taken as representative of those cultures, how might activities such as music performance, education and governance themselves come to be shaped by those forms of knowledge?

In what follows, I address this question by introducing various metaphors from songs, stories and ceremonial traditions found across Australia. These have been used in public contexts to affirm the importance of learning, thinking and working together, as diverse, interconnected communities. These metaphors challenge us to move beyond surface-level representations of Indigenous knowledge. They invite us instead to attend to differences of history and culture that enable sharing and mutual growth. As senior Warlpiri elder and scholar Wanta Jampijinpa Pawu explains, the distinct *kuruwarri* (designs, marks) inherited by Warlpiri clan groups are a 'gift' that can help us 'find our place among all others', and learn about the stories and responsibilities of our unique ancestral *kuruwarri* that is integral to living as healthy, flourishing communities.[8]

Metaphors of Indigenous Knowing

In her doctoral dissertation on emotion and morality in North-east Arnhem Land, anthropologist Bree Blakeman considers Yolŋu understandings of the self as 'necessarily interdependent rather than

intrinsically autonomous'.[9] Her exploration of the concept of *bala-räli'yunmirri*, translated as 'dynamic reciprocity', illustrates this idea well. Reflecting on a childhood spent at Galiwin'ku on Elcho Island, Blakeman's Yolŋu interlocutors spoke of the 'reciprocal cultural exchange' between Yolŋu and the mission staff who 'went out of their way' to learn local languages, kinship relations and ceremonial performances: '*Bala-räli'yunmirri,* as one would say in Yolŋu-matha—they were ongoing relationships characterised by dynamic reciprocity and mutual interdependence.'[10] Blakeman further details the semantic construction of this term, which incorporates a sense of movement towards and away from the speaker, and might be translated literally as '(moving or doing something) backwards and forwards in an alternating fashion to each to the other'.[11]

Blakeman's interpretation of 'dynamic reciprocity' resonates with intellectual traditions across Indigenous Australia. Many of these traditions emphasise qualities of difference and distinction, as between related kin and homelands, and entail cognate characteristics of listening and respect, described by Wägilak ceremonial leader Daniel Wilfred as *raypirri'* and by community educator Dianne Biritjalawuy Go<u>nd</u>arra as *dharaŋanawuy* or 'deep mutual respect and understanding'.[12] Go<u>nd</u>arra, from the Yolŋu Golumala clan, considers what is causing Yolŋu to shy away from Western forms of education, diminishing their capacity to live engaged and active lives *both ways*, through Yolŋu traditions and within mainstream Australia:

> You are introducing this surface knowledge to us without depth of context. We weren't raised with a Western worldview. Maybe this is where we are misunderstanding each other, because we Yolŋu have our own context and worldview … *dharaŋanawuy* will give us both the strength to engage with this life together, Balanda [non-Indigenous people] and Yolŋu.[13]

Go<u>nd</u>arra describes *dharaŋanawuy* in a short film that shows a Balanda woman *painting up* for ceremony, with *gapa<u>n</u>* (white clay) on her forehead as a mark of *raypirri'*—discipline and respect. This symbolises participation in Yolŋu forms of life, including responsibilities to look after kin and country.[14] Two pairs of feet, white and black, are shown dancing in the sand. Through appropriate behaviour and respectful living, ancestral

knowledge is here shown to shape healthy and vibrant communities of difference, as well as feelings of happiness and strength.

For Pawu, respect for others and a desire to learn from them is also necessary for individuals to become part of a vibrant, interconnected *palka* (body). This is illustrated by the hunter correctly apportioning fresh game in accordance with ancestral laws, sustaining community through sharing and kinship responsibilities, around a common campfire where stories are told and extended kin welcomed.

Across Indigenous Australia, activities such as dancing and eating together are about more than just entertainment and comfort: performing songs and dances, caring for kin and spending time on country are considered integral to the ethical formation of individuals and communities. Kombumerri and Wakka Wakka philosopher Mary Graham remarks that, while there is no direct equivalent in Aboriginal languages for the concept of *ethics*, 'this is because proper action comes from the external order internalised through collective empirical observation over tens of thousands of years, rather than abstract individualist thinking'.[15] Aboriginal ethics emerge from 'long term strategic thinking' that shapes stewardship of the land and actions that promote the 'well-being' of the individual or collective.[16]

For Graham, the 'reflective motive' is integral to ethical formation. Considered observation and experiential learning on country and among kin shapes a view of law as 'right action'. Processes of ethical discernment and formation emerge from, and are sustained within, living interactions that constitute community and the 'continual enactment of protocols, ritual and ceremony'.[17]

Morgan Brigg and Mary Graham have explored similar dynamics through the term 'autonomous regard', asserting that 'the most consistent feature of Aboriginal political ordering and philosophy is thoroughgoing attentiveness to *relations*, and thus to the patterns, ethical obligations and contingencies that arise with those relations'.[18] This is more than the appreciation of difference: through narratives that are uniquely embedded in country, we understand what makes us distinct while allowing shared identities to emerge through responsibilities towards those who are different. For Graham, 'each identity belongs wholly to itself', while at the same time there is in Aboriginal ontology a 'continuous adherence to balanced social and political systems that enhance this distinctiveness'.[19]

Dynamics of mutuality and reciprocity are clearly on display in ceremonial performances—the traditional place of educative formation in ancestral law and social responsibility. Across the continent, distinct identities of people and place are sustained through performances that celebrate ancestral narratives and homelands as 'an ornate patchwork of myriad different countries', sustaining associated peoples, stories and histories.[20] These identities are not separate from one another but, as in a common saying found across central and northern Australia, are 'the same but different', held together by converging and diverging tracks of story and song. While performances express hereditary rights to ancestral homelands, they also observe complex relational, political, economic and ecological interdependencies between different people and environments, brought into being by the travels of original ancestors through the land and sea.

Given the traditional role of ceremony within Aboriginal and Torres Strait Islander societies, it should come as no surprise that singing, dancing, storytelling and painting have been integral modes of communication, used by Aboriginal Australians to advocate for cultural and political autonomy, while simultaneously inviting all Australians to learn about and celebrate those traditions. For instance, ancestral designs have been used in paintings and petitions that represent Yolŋu interests to the Australian Parliament and courts.[21] Similarly, in relation to commercial art production, Howard Morphy and Frances Morphy have used the term 'relative autonomy' to convey how Yolŋu artistic practices create 'new institutions that face in two directions—inwards to their [Yolŋu] "world" of difference and outwards from it'.[22]

While terms such as 'dynamic reciprocity', 'autonomous regard' and 'relative autonomy' are useful, they can seem like abstract, technical formulations when compared with the richly poetic metaphors of song and story. Where such terms emphasise the structure of relations between cultures, then songs and stories convey the generative potential of those relations, such as *ga<u>n</u>ma*, known to Yolŋu as the intermingling of salt water and fresh water (akin to the nurturing difference of mother and child). Detailing the ownership of the sea and waterways around Blue Mud Bay, Morphy and Morphy consider places where the waters mix, called *dhä-weka'nhamirri'* or 'giving taste to each other'.[23] During the dry season, salt water ingresses

up the freshwater streams from the cost. At the onset of the wet, heavy rains push that salt water back out to sea. While there is a dynamic push-and-pull between these saltwater and freshwater systems—and seepage from one to the other—the greater bodies of sea water and flood water remain conceptually separate. Morphy and Morphy write:

> The apparent dualism imposed by the contrast 'salt' versus 'fresh' fails to capture the complexity of the environmental, ecological and mythological relationship between the two. There is a mediating state in the dynamic interrelationship between salt and freshwater—brackish water. This is a potent source of metaphor in Yolŋu thought.[24]

Similar metaphors are found in Warlpiri thought and performance, such as *milpirri*, the convergence of hot and cold pressure systems to produce thunderclouds and rain. These patterns of movement bring life to conceptual paradigms like *ngurra-kurlu* (home-having), a pattern from Warlpiri tradition governing social relations and responsibilities in ceremonial performance and education. Sitting in a Melbourne café in late 2022, Wanta Jampijinpa Pawu and I considered how distinct identities within *ngura-kurlu* can create disturbance or conflict, even as those differences can enhance one another.

Pawu had just added honey to his tea, and I suggested that the flavour of one complemented the other; however, it wouldn't work so well if he mixed his tea with orange juice. The point, he responded, is not to mix everything together in one tepid brew. Rather, it is the discerned differential between separate drinks that is enjoyed, the sweet, tannin flavour of the tea alternating with the citrus zing of the juice. In this way, Pawu suggests that differences help us understand what is unique and allow our separate identities to 'shine out' before others. He explains how *ngurra-kurlu* is the way

> you give yourself to others; they give back to you. In a way, trying to honour you and respect you. You might be orange juice, you might be a cup of tea. You might be the sky, you might be the ground. It

> doesn't matter. Try not to mix them cause we like it separate and [in that way] we will always continue to feed off each other.[25]

Interpreting Indigenous Knowledge in Australia

How do metaphors of interactivity and interdependence relate to the concept of Indigenous knowledge within the humanities and sciences? Disciplines concerned with Indigenous knowledge look to different ways of being and knowing that can challenge mainstream approaches to research and education. Across a range of disciplines, a focus on Indigenous knowledge generates valuable discourse on tacit epistemological assumptions—what we consider to be knowledge, its sources and how we engage with it.

In what follows, I hope to show a basic conceptual tension in the way academics interpret Indigenous knowledge traditions in Australia. As explored above, many of these knowledge traditions are concerned with strengthening values of respect and reciprocity within variegated communities. In profiling Indigenous knowledge as epistemologically *other*—as largely inaccessible to non-Indigenous academics—something of this dynamic reciprocity is lost, in the ways we think and relate across cultural and epistemic differences.

The emergence of Indigenous knowledge as an academic focus in the mid-twentieth century was energised by a global push to discover, describe and conserve traditional and marginalised forms of knowledge. Indigenous knowledge was identified as a form of knowledge endemic to specific places, where generation upon generation had adapted to distinct environments. Ghanaian-born academic George J. Sefa Dei defines Indigenous knowledge as

> a 'way of knowing' developed by local/Indigenous peoples over generations. This development is a result of sustained occupation of, or attachment to, a place, location, or space with the result that such occupancy allows peoples/communities to develop a perfect understanding of the relationship of their communities to their surrounding natural and social environments.[26]

Such practices represented an untapped resource that might drive development within broader problems of agriculture, pharmacology, ecological

sustainability or other scientific initiatives.[27] Echoing these origins, contemporary Australian writers like Bruce Pascoe consider the cultivation of native Australian rice and other grains as a way of addressing issues of food security and economic development across the Asia-Pacific region.[28]

While early concerns for Indigenous knowledge prioritised the preservation (archiving, documentation) and utility (application, adaptation) of traditional knowledge, leading to a decoupling of that knowledge from localised contexts, contemporary discourse has emphasised the embedded nature of knowledge within living relations of people and culture.[29] Over recent decades, disciplines engaged with Indigenous knowledge have shifted away from scientific and ethnographic documentation to reflect decolonial methodologies, prioritising the autonomy of Indigenous peoples in interpreting their own cultural and intellectual practices. Exemplifying this shift, Torres Strait Islander academic Martin Nakata asserts: 'We cannot just "do" Indigenous knowledge in the curriculum ... the way we come to know and understand, discuss, critique and analyse in university programmes is not the way Indigenous people come to know in local contexts.'[30]

Nakata and many others raise important concerns over the simplistic incorporation of Indigenous knowledge traditions into mainstream teaching and research. Yet, for many academics, the desire to engage meaningfully with Indigenous knowledge traditions beyond surface-level representations of Indigenous knowledge seems fraught with ethical barriers, compounding a sense of epistemic and cultural distance. This is where the relational dynamics of Indigenous *knowing* suggest a way forward. Research and teaching can facilitate involvement with Indigenous communities, cultural practitioners and knowledge expressions in ways that nourish interdependent communities and strengthen common values. For example, embedding activities within ethnomusicological research that involve multiple generations in the performance of ancestral songs, can enhance understanding of metaphors such as *yothu–yindi* or *milpirri*, in real and practical ways. Ethnomusicologists Reuben Brown and Sally Treloyn suggest that the challenge is really one of stimulating 'new connections between people or materials to be worked up into songs'.[31] In what follows, I consider how teaching university students about Yolŋu culture by participating in *manikay* (public ceremonial song) can achieve something along these lines.

'Different Together on the Sand': Ancestral Connection and Growth

Across Australia, traditions of ceremonial performance shape purposeful communities through formal, educative processes in ancestral law. However, more than encoding abstract moral codes in creative forms like song, dance and design, performance generates attentiveness to the living connections of people and place. Exemplifying the formative potential of song to shape diverse communities, Yolŋu *manikay* holds distinct ancestral identities together. By performing together on the ceremony ground, differences of family, country and culture are affirmed, even as those differences give impetus to new activities and relationships.

Some sixty-plus Yolŋu clans are custodians of distinct repertories of song, dance and story that are passed through the generations, representing the custodianship of ancestral homelands and sustaining connections between different kinship groups. *Manikay* performances relate the journeys of the original ancestors who bestowed responsibilities for land management and ceremonial performance, and whose travels connect many different Yolŋu homelands.

Performances of *manikay* utilise common rhythmic forms, played by the *bil̲ma* (clapsticks), that are shared between closely related family groups.[32] These patterns carry a performance through a series of narrative scenes, such as the travels of the Wägilak ancestor Djuwalpad̲a, running through the land and searching for a home. *Manikay* narratives are expressed through poetic images and elaborated by improvising voices, whose multiple lines combine in a thick, heterophonic texture. Song texts comprised long strings of words that express connections between different ancestors, clans and places. For example, a performance of the Wägilalk song 'Djuwalpad̲a dhawalwal duy'yun' ('Djuwalpad̲a searching for his home') might unfold as follows: '*Djuwalpad̲a ŋupana, dhawalwal d̲uy'yun, Butjul̲ubay, Ganydjalala, Wakurra, Gurrumirri, Butjul̲ubay*' ('Djuwalpad̲a was chasing/searching, through the country, going home to Butjul̲ubay, to Ganydjalala; he ran through Wakurra to Butjul̲ubay').[33]

In *manikay*, individuals sing different names for the original ancestors and country being described, and are custodians of variegated scenes within a greater constellation of story. Through an abundance of narrative

convergences and divergences, *manikay* performances shape a common sense of belonging and purpose, through composite relations. Daniel Wilfred explains:

> That's what *manikay* is. Sharing your life, sharing your story. Everyone with different *manikay*, different song—like different sounds and different language. But they are sharing with the language. Different clan groups coming to the sand ground to perform, but they got different voices and different languages. But on that sand, they are all a big family. They all meet up and they all share their story and their song, and their country and their dreaming. They're all sharing on the ground. That's what they meet up together [for].[34]

While Wilfred is here describing *manikay* performance in the Aboriginal communities of Ngukurr and Numbulwar, he has utilised the image of the *bambula* (ceremony ground) as a place of gathering in difference, to underpin his extensive performance and teaching with non-Indigenous musicians (see Figure 7.1 in the picture section). This teaching often begins with an explanation of the traditional theme *raki'* (string). *Raki'* is a song that describes the weaving of string by twining together the fibrous strands of the pandanus plant.[35] As a metaphor, *raki'* also indicates the entwining of voices in song and the ways in which contemporary performances incorporate new voices and instruments into *manikay*.[36] As Wilfred says:

> *Raki'* pulls everyone together, to hold them together. It's a bush string, to pull everyone from everywhere, working together and making things. That's what *raki'* means, making one big family together. It's a songline—we have to keep it. Songs we keep and share with the next generation, sharing knowledge and what we learn in the songline ... Many voices coming together in the one song. There might be three, or five—but they have different voices because the *raki'* pulls them together, to share.
>
> When we sing the *manikay*, you can see everyone together—family, community, the *raki'* is pulling everyone together. It's still the same when I come on stage with the Australian Art Orchestra.[37]

For Wilfred, the ancestral *raki'* continues to be woven—extended through the generations—by collaborative and creative engagements, such as his work on the projects *Crossing Roper Bar* and *Hand to Earth*. This metaphor does more than simply describe patterns of Yolŋu thought to those he performs with. Rather, it is an invitation to become woven into those traditions through respectful participation, and it expresses a desire for Yolŋu and Balanda to become more responsive to one another, through our present activities. Wilfred explains, 'We are not trying to build a bridge between cultures but, in the way we sit together with *raypirri'* (respect, attentive listening), we are becoming who we might be together.'[38]

By participating within patterns of Yolŋu narrative and performance, musicians who work with Wilfred are challenged to view Indigenous knowledge as more than the representation of cultural practices that remain epistemologically *other*. Instead, they come to understand various responsibilities of ancestral law through the cultivation of healthy relationships in song. This process *is* the *raki'*, which is continually woven through performance and extended through the generations. By learning to respond to Indigenous songs and stories as an invitation to draw closer together and know one another in respect and mutual reciprocity, academic work might also be braided into the rich, relational entanglements of ancestral tradition as a vibrant, expansive community.

CHAPTER 8

Healing and Wellbeing

Powers of the Ngangkaṟi

Angela Lynch, Marcia Langton and Jacqueline Healy

THIS CHAPTER EXAMINES the importance of the practices of Aboriginal Australian traditional healers. While we focus on methods of healing as shared through the voices of the healers from central Australia known as *ngangkaṟi*, similar practices are nevertheless found throughout Australia. Both public and professional interest in these practices is growing.

The work of the *ngangkaṟi* from the Western Desert has been pivotal in changing the perspectives of Western medical practitioners through advocacy and education. The Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council (NPYWC) has supported *ngangkaṟi* to work productively alongside practitioners of Western medicine and participated in a variety of exhibitions and publications that have allowed the voices of *ngangkaṟi* to be heard from Melbourne to London. This chapter incorporates a number of voices and themes explored in the exhibition *The Art of Healing: Australian Indigenous Bush Medicine*. Hearing these voices and the perspectives on wellbeing they offer is integral to addressing seemingly entrenched disparities in health outcomes for many Aboriginal Australians.

The Art of Healing: Australian Indigenous Bush Medicine considered Aboriginal and Torres Strait Islander healing practices and bush medicine through contemporary artworks (see Figure 8.1 in the picture section). It was held at the University of Melbourne in 2018, and in 2019 it was toured to major university museums in London and Berlin. The exhibition was part of a strategy by the University of Melbourne to share more broadly the significance of Australian First Nations' healing practices and their potential to impact on approaches to health and wellbeing more broadly.

The *ngangkaṟi* from the NPYWC were key to presenting various educative and academic programs associated with the exhibition—speaking in their traditional languages, they shared their experiences of healing at major forums in Melbourne and London. The affirmation they received revealed a great interest in, and potential for, these healing traditions to be celebrated and utilised alongside other healing traditions.

Ngangkaṟi have continually expressed their desire for increased understanding and collaboration between traditional healing practices and Western medicine, to improve health outcomes for all. They desire that their traditional practices be recognised and their efforts to work alongside practitioners of Western medicine be acknowledged.

Judith Pungkarta Inkamala, from Hermannsburg, says:

> Bush medicine has always been with Aboriginal people. It was before, and we will always be making bush medicine. There are all kinds of bush medicine and they grow all over. You'll find they're different in each place, and we have these ones that I've painted. There are many more than what you see here on this pot [see Figure 8.1 in the picture section], but these ones, we use a lot.
>
> People are using these ones a lot these days. You can see there is one large black tree with a woman who is cutting the bark from this tree. This tree is called *Ntjwia*. *Ntjwia errkngalha katjia ekarrakarta parnama* (Take the bark from Ntjwia and make into powder to put on the baby's mouth). This tree is a special bush medicine tree, used to help many different sicknesses.
>
> First, I will tell you how this bush medicine is prepared. You go out and find that tree and cut the bark from the tree with a small axe. Then you burn this bark, making ashes. These ashes, once

they have cooled, are rubbed with a stone to a fine powder. When ground to a powder these are mixed with some butter, fat or oil, then applied to a rash, cut or something swollen. You can also put it on dry, as a powder.

Healing Traditions across Australia

While hosting the 2018 Dean's Lecture at the University of Melbourne, Marcia Langton said:

> Wouldn't it be wonderful if the medical profession of Australia and all the health professionals knew about these great traditions, and they were taught in our universities and our young doctors go away with an understanding that there is another universe out there where ancient medical traditions are practised, and that people can work together to make Aboriginal patients feel that they're welcome in hospitals, that they're understood, and that their health is the number one concern of *ngangkaṟi*, as well as the medical profession.[1]

The most pressing social problem in Australia today is the health disparity between Indigenous and non-Indigenous people. Closing such wide gaps in mortality, morbidity and life span in this rich, first-world nation requires greater efforts by health workers and policymakers. Those not directly involved also have a role to play by becoming more knowledgeable about the history of Australia, the diversity and depth of our Indigenous cultures, and by being more accommodating of continuing Indigenous traditions. By allowing traditional healers their rightful place in our nation, we might more quickly overcome the life-threatening disadvantages faced by Indigenous Australians.[2]

There is so much that we have to learn from traditional healers and their families. Dignity for all involved must be a part of our approach; also, respect for cultural and religious values—having regard for other people's belief systems, and allowing people entering a clinic or hospital to feel that their cultural heritage need not be hidden out of fear of discrimination or contempt. By placing the dignity of the person at the centre of our work, we can create healing spaces and healing cultures. This is the great contribution

that traditional healers bring to the Western institutions of health care introduced into rural and remote Australia, some as recently as fifty years ago.

These extraordinary healers are known by many names across the continent: *marrŋgitj* in Yolŋu-matha; *maparn* in Kukatja; *ngangkaṟi* in a variety of Western Desert languages, including Pitjantjatjara, Ngaanyatjarra, Yankunytjatjara, Warlpiri and Pintupi; and *clevermen* in Aboriginal English. Invited by health professionals into clinics and hospitals when Aboriginal patients are afraid or resistant to health care, healers bring ancient Aboriginal values to the task. The importance of collaboration between healers, medical professionals and scientists is well known among Indigenous scholars but deserves to be more widely understood. Healers understand that Western medical treatments should be used by Aboriginal patients, and often explain to them that they should go to a clinic or stay in hospital, and not fear the doctors and nurses. Healers can be blunt about this—they have been known to say, 'I can't help you. Go to the hospital.'

Where there is no hospital, traditional cures for fever, some infections and wounds, diarrhoea, and other common ailments such as mental distress, are the province of the healers. Healers are also reported to have helped patients overcome by a belief that they will die, bringing them back to a state of engagement with life. In many areas of Australia, Aboriginal men and women turn with great confidence to traditional healers to maintain their wellbeing, and parents take their children to visit healers too. While scientists have dismissed their efficacy, few Aboriginal people doubt the need to maintain these traditions. Given the immense time span of Aboriginal life on this continent—the latest evidence suggests 65 000 years—it is unsurprising that in the traditional Aboriginal world, the aetiology of disease is understood in the terms of ancient cultural precepts that have served thousands of generations well.

Father Brian McCoy, who has worked closely with the *maparn* in the community of Balgo (Wirrimanu), Western Australia, for nearly four decades, has commented that:

> Unfortunately, only rarely are attempts made to explore a common ground of health and wellbeing—one that recognises the health beliefs and benefits of the other. Because Western medicine largely

> separates—both physically and socially—its own provision of health care from that found in the daily experience of life in most communities, it risks reducing the context of health to the biomedical and a medicalisation response to illness. As attention is given to serious illnesses such as cancer, diabetes and heart disease, the possibility that *maparn/ngangkaṟi* might contribute to the care of such patients is rarely entertained, nor is thought given to the wider relational values that might serve to improve a person's experience of living well.[3]

Aboriginal medical traditions and pharmacopoeia are supported by encyclopaedic bodies of knowledge developed in an intimate relationship with the local environment, vegetation, climate and geography (see Figure 8.2 in the picture section). Thus, we can understand how observations of the cause and effect of particular substances, and the transformation of plant material by applying fire, water, smoke or other treatments, has accumulated into an accepted corpus of medicinal knowledge. As Lloyd Jones and Nicholas Sadgrove have pointed out: 'Despite the unfortunate post-colonial fragmentation of Indigenous knowledge, the complex 40–60-thousand-year-old oral tradition of Aboriginal people includes a *materia medica* [collected knowledge of medicinal materials] that has continued to guide ethnobotany to this day.'[4] They go on to say that the potential is widely recognised: 'Ethnopharmacology in Australia and Oceania has identified a range of natural products suitable for comprehensive clinical testing.'[5] The study of Indigenous pharmacopoeia is a rich field.

The artists responsible for the work in Figure 8.2 in the picture section supplied the following description:

> In the centre of the painting are two trees; on the left is the *Wirrimangulu* or Bloodwood tree. The sap from the tree is a powerful medicine, boiled in water until melted, and drunk for any serious ailment, including cancer tumours. *Tinjirl* or Mulan Tree (River Gum) grows by the riverside. It has powerful cultural significance and forms part of the seven sisters *Tjukurpa* for the region. It is used for law and for smoking ceremony to cleanse bad spirits. It can also be inhaled for respiratory problems.

> The central trees are surrounded by a variety of plants, leaves, fruits, barks, roots and other bush medicines. The pink flowers on the top left of the painting represent the *Karnpirr-Karnpirr* plant. The shiny, fat leaves are crushed and mixed with animal fat to make a Vicks-type rub to treat children's colds. To the right are the *Pampilyi* (Bush Kiwi). The seeds are used to make tea for kidney cleanse.
>
> Top centre is the *Marnukitji* (Conkerberry). The berries are high in antioxidant and vitamin C and the roots are ground and used to make a rub for pain relief—and have a very good smell. Centre right is the *Tjipari* (Eucalyptus) leaf for smoking ceremonies for newborn babies. In the right-hand corner is the *Warrakatji* (Bush Vine) that is wrapped around the forehead for relief of migraine.
>
> Down the right side of the painting is the *Tjukurru* (Bush Passionfruit), which are boiled along with the leaf of the plant and drunk as a medicinal tea for stomach ailment. To the left of these fruits is the *Piriwa* (Grevillea) for sweet water. The bark is ground and applied to the skin for treating ringworm and sunburn. Underneath the two central trees is the *Ngapurlu-Ngapurlu*. Milk from this grass is used for sores, but can also be used for permanent hair removal.
>
> To the left of the grasses is *piltji* (red ochre), used for spiritual healing and ceremony. Above the ochre are the roots and *parntapi* (bark), which are ground, boiled and drunk for stomach pain. Bark can also be applied to hair to promote hair growth.

More mysterious and difficult to comprehend are Aboriginal ways of understanding human physiology and psychology. The cultural precepts and ontological basis of these traditions are complex and sometimes elusive. They involve ideas of consubstantiation of people and land, and of the perceived world and spirit world—a panoply of ancestral spirits who directly influence the world.

The Healing Power of the Ngangkaṟi

In Ngaanyatjarra, Pitjantjatjara, Yankunytjatjara and several other languages of central Australia, *ngangkaṟi* means 'healer'. *Ngangkaṟi* comes from the languages of the Aṉangu people, who belong to the vast desert

country around the borders of the Northern Territory, South Australia and Western Australia. Elsewhere in Australia, other Aboriginal languages have their own words and terms for healers and healing practices.

Ngangkaṟi are deeply rooted in the language, the country, the culture, the *Tjukurpa* of Aṉangu in the centre of Australia. *Ngangkaṟi* have always been responsible for the health and wellbeing of Aṉangu. Toby Minyintiri Baker is a senior Aṉangu man and *ngangkaṟi*, and he explains that *ngangkaṟi* are Aṉangu men and women who receive special tools and training from their grandparents. An extremely important aspect of these healing powers, which have been passed on through generations, is spiritual. Toby Minyintiri Baker comments:

> Our ability to heal people comes from our grandparents and they got it from their grandparents. That tradition has been passed down over a really long period of time. The powers that we have, the things that are given to us to do our healing, are the same—they are the same powers given to us through those lines.
>
> The reasons we use them change all the time though; the reasons people are suffering grief, the things that have actually happened, and all the new circumstances change. However, our ability to look after people and our powers have remained the same.
>
> Those powers that are given to us are called *mapaṉpa*—they can't change. They are the force that allows us to do our work. They are things that allow us to find someone's spirit and place it back within them. The reasons why they have lost their spirit change all the time. But that power to find it and place it back comes from the *mapaṉpa*—they are given things. We can't change those.[6]

Aṉangu culture holds its own view of causation and recovery from physical and mental illness, and attributes many illnesses and emotional states to harmful elements in the Aṉangu spiritual world. *Ngangkaṟi* are highly valued for their unique ability to protect individuals and communities from this harm, and to heal them—no less so today than in the past. *Ngangkaṟi* have many tools, techniques and skills they can draw on to heal. Toby Minyintiri Baker explains the importance of touch in stimulating a person's spiritual healing:

> *Ngangkaṟi* are gifted with healing hands. *Maṟa aḻa*—healing hands. These hands work with the spirit. Inside these hands are *mapaṉpa*. The hands touch the sick person … We work with our special perceptions, our eyes and our hands. We see everything and we are always ready to help. We see *mamu*. *Ngangkaṟi* know everything, proper *ngangkaṟi*.[7]

Ngangkaṟi Ilawanti Ungkutjuru Ken further outlines a technique used in massaging the body, known as *wiṟulymankupai*:

> *Wiṟulymankupai*—that's with the hands—when you touch the body, you are massaging it. This is *wiṟulymankupai*, or 'making smooth'. It is a kind of physio work, using oil and using *irmangka-irmangka* [eremophila alternifolia]. We use *irmangka-irmangka* when we are utilising our blowing technique, or *puuṉi*. When *ngangkaṟi* use the *puuṉi* that means we are blowing air onto the head.[8]

These practices are combined with the extensive knowledge that *ngangkaṟi* have of bush medicine. Ilawanti describes how *ngangkaṟi* prepare and incorporate plant-based medicines into their practices:

> We make bush medicines and we use the bush medicines such as *irmangka-irmangka*. A lot of people use that *irmangka-irmangka* medicine, because it is so good for skin infections. *Tiwilpa* is a word meaning stiff, so if someone is *tiwilarinyi* and tired in the muscle, that's when we rub the muscles to make them flexible again. When we make the muscles soft, we refer to that as *tjulaṉi*, or to 'make soft'.[9]

Connection and Collaboration

Key to the healing approaches of the *ngangkaṟi* is collaboration. This includes consulting other *ngangkaṟi*, and it extends to seeking dialogue and working in mutually cooperative ways with practitioners of Western medicine. *Ngangkaṟi* utilise processes that are familiar to many Western-trained doctors, as Toby Minyintiri Baker explains:

> In essence all *ngangkaṟi* have the same abilities and they are to work with the spirit; to remove things, to stop blockages and a whole lot of other things to do with bush medicines and so on. But one *ngangkaṟi* might decide a person needs to see another, so they will call in other help; they will call in another *ngangkaṟi*. They will have a consultation about what needs to be done to the person or they will send that person to another *ngangkaṟi*. Equally they might send the person to the hospital and to doctors saying, 'Look, you really need to go there.' They can work on a whole lot of different levels. *Ngangkaṟi* should be able to work across the range of illnesses but with different levels of experience and specialities.
>
> If we are unsuccessful in treating someone, we will continue to give those treatments and we will go further and further. People won't say, 'Oh go away, you didn't do a good job!' They will say, 'Come again please and help.' If I feel, or we feel, that it's beyond our ability, then we will advise that they see another *ngangkaṟi* who can help them in that situation. We would call them in to work together.
>
> If a junior *ngangkaṟi*, someone who is just learning the work, is treating someone, they will have those same powers, but they are just learning how to use them properly and they will call in some senior person to come and help them in a situation.[10]

Also crucial to the *ngangkaṟi* healing process is attention to the spiritual connections between people and places. For *ngangkaṟi*, concern for a person's spirit is perhaps the most important aspect of addressing their overall health and wellbeing. Rupert Langkatjukur Peter describes how *ngangkaṟi* work with spirits:

> Everyone has a spirit. Sometimes they can lose that spirit, become dispirited and they can become really sick. You can see the signs of it in people vomiting and other forms of sickness or weakness. When people are sick, their spirit gets displaced and they can become unbalanced because of that sickness too. We *ngangkaṟi* have the ability to recognise that situation, to assess it, to see where their spirit's gone—often it will actually leave them or be out of place.

> We find that spirit and place it back within people in the right place, so they are balanced again and centred. We do that with kids and also with older people too. Everyone has their spirit. It is the most important thing. Without your spirit it is really hard to get better.[11]

Many *ngangkaṟi* travel on 'spirit journeys' at night, healing Aṉangu and protecting them from harm while they sleep. Several *ngangkaṟi* have described the nature of these encounters. Andy Tjilari has shared:

> *Ngangkaṟi* have the ability to travel as spirit beings. Only *ngangkaṟi* have this knowledge of how to travel as spirit beings. I learnt how to do this. The knowledge of how to do this, for my spirit to be able to travel—not my body but my spirit—was passed down to me by all those old *ngangkaṟi* in the old days. As a child my spirit travelled, I was taught how to do it by that older generation of men. So my spirit travelled and travelled in those old days with those old men. As an older man, I myself now can do many good things with this. We are doing many good things.[12]

Pantjiti Unkari McKenzie elaborates on these *marali* 'journeys', which are of great benefit to the ill person:

> I go on *marali* journeys, absolutely! I go often. If someone near me is very ill, I can't help it—as soon as I fall asleep, my thoughts go out to them and I begin my *marali* journey. While on that journey I heal the sick person and I remove whatever thing is inside them, causing the sickness. Even dangerous illnesses I can heal. Even something rattling around in the body, like a loose bone, I can retrieve and remove as necessary.[13]

Similarly, Maringka Burton has explained the significance and value of this longstanding practice:

> The *ngangkaṟi* tradition is a really long tradition and it continues today in a very strong way. In the modern world, people ring me from Port Augusta, from Coober Pedy, from many other different

> places, and I'll respond. If I can't get there physically, I will send my spirit body. The main thing is that we always look after our people, and when people ask, we will help. That responsiveness is something that continues today, but with the use of phones. Any way that people ask me, I'll help them, either by *marali*—by my spirit travelling—or I will go and see them myself.[14]

Ngangkaṟi Betty Muffler expressed her experience of spirit travel through painting, illustrating aspects of her practice in a work titled *Ngangkaṟi Ngura* ('Healing Country'; see Figure 8.3 in the picture section). This appeared in a major exhibition, *Tarnanthi 2020: Open Hands*, at the Art Gallery of South Australia.

Today, *ngangkaṟi* are passionate educators of non-Indigenous health practitioners and students across Australia, taking every opportunity to talk about their work, its wider significance and its place in Aṉangu culture. *Ngangkaṟi* recognise the importance of ensuring that people outside their world understand and acknowledge the value of their traditions, so that they can work together more effectively.

'All of Us Respond': Working alongside Western Medicine

In 2018, Maringka Burton, Betty Muffler and Tinpulya Mervyn, three highly regarded *ngangkaṟi*, were invited to give the Dean's Lecture at the University of Melbourne. The lecture series was titled 'The Power of the Ngangkaṟi' and it was hosted by professors Marcia Langton and Shitij Kapur. The lecture coincided with the exhibition *The Art of Healing: Australian Indigenous Bush Medicine*, held at the University's Medical History Museum from 23 April 2018 to 2 March 2019. Shaped by understandings of *Tjukurpa*—which has many meanings, and refers to the creation period and foundation of Aṉangu life and society—the exhibition explored traditional Indigenous healing practices as simultaneously past, present and future.

Through contemporary art and objects, the exhibition presented examples of healing practices and bush medicine from many distinct and varied Indigenous communities across Australia. There were over fifty artworks, including a major work by *ngangkaṟi* Ilawanti Ungkutjuru Ken. Highlights of the exhibition were toured to Bush House, King's College

London from 15 May to 7 July 2019, and to the Berlin Museum of Medical History (Berliner Medizinhistorisches Museum der Charité) of the Charité—Universitätsmedizin Berlin from 24 October 2019 to 2 February 2020. The exhibition tour provided a strategic opportunity to develop academic networks and relationships that facilitated a stronger understanding of Indigenous cultures and knowledges through these major universities.[15]

Each university was also gifted an Indigenous artwork for their collections, ensuring an ongoing connection once these exhibitions had ended. The gift to King's College London was a work by Ilawanti Ungkutjuru Ken called *Tjulpu Wiltja: Bird Nest Basket* (see Figure 8.4 in the picture section).[16] The nest-shaped basket was made from *tjanpi* (wild, harvested grass), wool, raffia and emu feathers, conveying the power of family.

As Ilawanti stated:

> I used to see a nest in a big cave. In the cave the nest was in a warm spot. The nest was circular and the birds kept themselves warm by hugging each other. That nest is similar to a basket. These little birds have Tjukurpa stories of their own.
>
> Many moons ago, when there was lots of food, there were many sources of wild growing food. When it's a good season, the rain comes down. The bird knows the seasons of the moon. When the cold weather is coming, they already prepare and make a very strong and warm nest for the cold weather for his family and kids. He looks after and takes care of his family.
>
> The goanna on top of the tree is trying to eat the birds. The bird, he listens, he knows and alerts his family by whistling, 'Chhirrr, chhirrr,' sitting near the tree. The goanna is hungry. There's a nest high up on top of the tree with the bird's mother, eggs, siblings and all the babies.
>
> My basket is like a nest. In our community, that's how it should be. Many Aboriginal people take care of their kids in a good way. Altogether the community stays strong, healthy and happily looking after their family.[17]

As part of the Dean's Lecture in Melbourne, Maringka, Betty and Tinpulya, *ngangkaṟi* for the NPYWC Ngangkaṟi Program, spoke at

length about their work as *ngangkaṟi* in the contemporary world, and of their experience as a team of practitioners working within an Aboriginal organisation (see Figure 8.5 in the picture section). Tinpulya Mervyn explained:

> Years ago, I began working with NPY Women's Council in their Ngangkaṟi team, with my three brothers, and all the women. It's a really strong program that respects those traditional skills and their use today.
>
> You can see here the T-shirt that I'm wearing. It's a NPY Women's Council T-shirt and the symbol, the logo on it, represents that long tradition [see Figure 8.5 in the picture section]. It's our mothers' and our grandmothers' law that is represented here. You can see the woman has a digging stick in one hand for digging out rabbits and food and meat. Here is the firestick, because we didn't have matches in the past, and so the men would make fire. But we'd carry a firestick, and the dish on top of her head here—for carrying all the meat and food and lizards and also, at times, to carry water back from a waterhole.
>
> It represents women's law and traditions, and that's why we are proud to wear these today. It's an organisation the women are really proud of. It's an advocacy service and it's providing many services for people in the bush. We're really happy to talk strongly about our work and to represent our work in meetings and places like this, and to wear the T-shirt to show where we come from and the tradition that our healing comes from.[18]

The support of the NPYWC team and the backing of Aboriginal health organisations enables the *ngangkaṟi* to confidently collaborate with Western-trained medical practitioners in hospitals and clinics in central Australia. *Ngangkaṟi* want to ensure that Aṉangu receive the benefits of both health systems, in order to achieve the best outcomes. Andy Tjilari outlines this strong working relationship:

> Often, we work alongside Western practitioners and share the responsibilities for looking after people. For us, our ability to see

> the spirit and to recognise what has happened comes from within our minds, within our heads—we can see things that they can't see. Our work as *ngangkaṟi* takes us not only to communities within our world but also to cities where we see people as well. In our work in the hospitals we have formed a really good bond with doctors and we work together as one. It's a really strong relationship where we work as one. That working together involves different techniques with the same purpose in mind. Whereas doctors might use operations and provide medicines and things like that, we look at the effect of that illness on the spirit. We see when someone's lost their spirit. We can find the lost spirit and place it where it should be. And that is part of healing and looking after people properly, *ngangkaṟi* way.[19]

Today, in central Australia, *ngangkaṟi* work alongside Western-trained doctors and nurses, treating Aṉangu in clinics in remote communities, in regional hospitals, psychiatric units and jails, hostels and aged-care homes and, as always, in the bush. At NPYWC, the team of *ngangkaṟi* decided that they needed to educate those from a Western medical background about the values and importance of *ngangkaṟi*. Their hope was that with increased understanding would come respect and acknowledgement of *ngangkaṟi* and more opportunities for meaningful work for young Aṉangu.

Tinpulya Mervyn elaborates on the primary care and complementary roles with Western medical practitioners that *ngangkaṟi* have played for some time:

> When I was younger, I worked in our community clinic, with two other *ngangkaṟi*. The three of us were employed by the clinic and, at times, we would look after the patients that came in, and other times the doctor would. We worked in a complementary way with each other. Sometimes people were really anxious and scared about what was happening to them, and we helped them calm down and concentrate on what needed to be done,
>
> At other times, they would be waiting to be evacuated by the Flying Doctor and we'd wait and care for them and help them with

their fear and anxiety about what was happening. Yes, the three of us worked with the doctor together and it was a really good experience.

Common issues that we deal with are when someone's very unsettled or lost their sense of self, we look, as you've heard the ladies say, to see how their spirit is and if it's centred and within them. Sometimes with either trauma or a shock, or illness, the spirit gets shaken up and is moved sideways or displaced from where it belongs, moved around the body somewhere, and you push it back into place and centre people. That's one of the things I do. I also use my breath and breathing to help people with headaches and pain and issues like that. So there are other techniques that we use as well.

As *ngangkaṟi*, you have to have confidence in your abilities, and you shouldn't be scared to deal with things. You can see that people are really sick, but like the Western-trained doctors, you've got to go in there and do your job properly, and with confidence in your capacity. We're not afraid to take on the health issues within our community. All of us respond.[20]

Since the establishment of Alice Springs Hospital, *ngangkaṟi* have always visited and treated A<u>n</u>angu family members there, though perhaps not always as openly as they do today. The attitudes of some health practitioners, combined with poor cross-cultural communication and misunderstandings, were some of the reasons for a lack of openness towards the work of the *ngangkaṟi* in the past. This has been the situation in relation to many of their cultural practices. The acceptance of *ngangkaṟi* in hospitals has improved significantly in the last twenty years due to the tireless work of *ngangkaṟi* in educating health staff, and to the publication of the book *Traditional Healers of Central Australia: Ngangkaṟi* (2013).

Maringka Burton explains:

I often work alongside a male *ngangkaṟi*. The two of us work in the Alice Springs Hospital and we work very closely with the doctors there.

We help people in a whole range of ways, but primarily we're looking after their spiritual wellbeing, and their spirit, and that can

> be helping someone to get back a sense of their self, as they might be anxious or worried about being in hospital and dealing with their sickness. We can really help them in that way.
>
> Another way of working with the spirit is if people pass away in the hospital, the hospital might ask us to find that spirit and to take it and place it where it belongs, and cleanse the hospital in that way, especially if it makes patients worried about being in there.
>
> So, there are many ways that we use our capacity to recognise the spirit and spiritual wellbeing. Peter and I work in the hospital in Alice Springs regularly and they recognise our skill there and call on us a lot.[21]

Greater acknowledgement of *ngangkaṟi* work has emerged over the years. Andy Tjilari states:

> Our work is not hidden. It's important that I work in a transparent way—people can see what I do. It is important work, we are proud of our work, we are not embarrassed about what we do and we are confident in working alongside Western practitioners. We think it is really important that we work together openly in that spirit.[22]

In 2009, the effectiveness of the work of the NPYWC *ngangkaṟi* in Indigenous mental health was acknowledged by prestigious awards—the Mark Sheldon Award from the Royal Australian and New Zealand College of Psychiatrists, and the Dr Margaret Tobin Award for excellence in mental health service delivery. In 2011, the *ngangkaṟi* were co-recipients of the World Council for Psychotherapy Sigmund Freud Award for contributions to psychotherapy, bestowed by the City of Vienna.[23]

The work of the NPYWC is breaking down silos of medical knowledge and bringing together traditional practices and Western medicine. The *ngangkaṟi* firmly believe that the best health outcomes for patients come from access to the best of both health systems, with practitioners who collaborate with respect and understanding. Rupert Langkatjukur Peter reminds us of the significance of these traditional healing practices:

> You've got to remember that this is the tradition, this is the knowledge and Law. It's something that has been held onto which came from the days before there were hospitals and other forms of doctors. We were responsible for looking after all the people. We have held onto that knowledge.[24]

It is up to those in the Western medical world to open their minds and approaches to better incorporate the rich heritage of Aboriginal and Torres Strait Islander healing practices.

PART III

Knowledge in Country

CHAPTER 9

Ngurrampaa, Dhiirrbalthii

Country, My Teacher

Paul Gordon and Jesse Hodgetts

IN THIS CHAPTER, we discuss our knowledge system and education through our stories as Mayi (Ngiyampaa People). Our old people lived in the bush, in *country* for thousands and thousands of years. This is because they had kinship with country and were *in it*. When we are in country and we have a relationship and kinship with country, then country can teach us. Come with us as we share our old stories and our new stories, from our time learning from country.

How Thikarrbila Come to Be

We stand on the baby Thikarrbila hills, on Garulkiyalu country, rock country. The rocks are hard and sharp, so we walk slowly, carefully and respectfully. We are in the highest part of the country and can see all the great land formations in the distance: they are our old ancestors. We are here to share our knowledge system for Mayi. Our knowledge comes from country and from our ancestors. Lots of our knowledges are held in stories, like our story of how Thikarrbila (Echidna) came to be. Standing there on the Thikarrbila hills (see Figure 9.1 in the picture section), Dhamuu shares this story with me.

Marrathalba, long time ago, Thikarrbila had no quills on his back. There was this old man who loved to eat the Thikarrbila. One day, he got his two grandsons and he said, 'Paakalay Dhamuu, we are going hunting for Thikarrbila.' And the two boys said, 'But Dhamuu, when we get Thikarrbila you are supposed to share it with us, but everywhere we go you are too greedy and eat it on your own.' And he said, 'Well I will share this time. Come with me.'

And so, they went looking for Thikarrbila and the old man got tired because he was fat and got tired easily. And so, he sat down on the ground and said, 'You two boys you go and look for Thikarrbila.'

And the boys went out and found a Thikarrbila and they brought it back to their Dhamuu. He said, 'Leave that Thikarrbila here with me and you go and get some wood.' They went and got some wood and brought it back to their Dhamuu and he said, 'That's not enough wood, go and get some more.' So, the boys went away to get more wood and while they were away that old man lit up the fire, cooked up Thikarrbila and he ate it.

When the boys came back, they asked, 'Where is that Thikarrbila?' The old man said, 'Well, you took too long. I got too hungry.' The boys asked, 'Where's ours?' and the old man said, 'You'll have to go and get another one.' The boys went out and found another one and while they were away the old man hid the wood that they had brought back the second time, behind his back. And when they came back, they put the Thikarrbila down and he said, 'Oh there is no wood left. I had to burn it all because you took too long. Leave that Thikarrbila with me and go get some more wood.'

The boys put the Thikarrbila down and went off to get more wood and while they were gone, the old man took the wood out from behind his back and he cooked that Thikarrbila up and ate it. This went on and on and that old man got fatter and fatter. And the two boys started to get really hungry because the old man wouldn't share with them.

Back in Marrathalbuna, at the beginning of time, Balaabalaa (caper white butterflies) were magic. And they flew by, and they saw that what the old man was doing was wrong and they said,

'That old man is breaking the law. He's not sharing; he isn't looking after those boys as he should. They are looking after him but he's not looking after them.' They said, 'Let's go back to our tree.'

There was a tree the Balaabalaa belonged to, called Warriyarr (warrior bush). On the Warriyarr were lots of sharp sticks. The Balaabalaa went back to the Warriyarr and got all those little sharp sticks. By this time, the old man had eaten so many Thikarrbila he was starting to look like one. The Balaabalaa came back to that old man and because he had broken the law and because he was starting to look like a Thikarrbila, the butterflies decided they were going to turn him into one. And so, they turned him into a Thikarrbila. And then they speared him with all their spears for not fulfilling his obligation to the boys. And that's how the Thikarrbila got its quills.

When the boys came back, the Balaabalaa said, 'Boys, look at what your Dhamuu has become. He is a Thikarrbila. He has been speared and he's got quills all over his back because he has broken the law. And that is what happens to people who break the law: they get speared.'

'But don't you worry, you two boys. You are allowed to go back to our tree. Our tree where we sleep and live. On that tree there is fruit. And that fruit is there for you kids. Only you kids are allowed to go and get that fruit.'

While this story tells us how Thikarrbila came to be, there are many lessons we can learn from it. The old man had the responsibility to teach and share with his Paakalay Dhamuu and the two boys had the responsibility to do what their Dhamuu told them. The boys followed the *murru* (law, way, rules), but the old man didn't. The old man abused his power and didn't follow his obligations. The story also tells us that Balaabalaa are Warriyarrgelu—those who belong to the Warriyarr. The Balaabalaa have responsibility to the Warriyarr and the Warriyarr have responsibility to *burraay* (children).

On the way up the mountain, Uncle Paul shows us some bush food and medicine. There is lots of quinine growing in this country. We are with another old man from Larrakia country and a young Gomeroi-Dhanggati

man. They are here to learn how their ancestors relate to us. The old Larrakia man is walking slowly up the mountain, stopping at intervals. Jesse, assuming that the old man is struggling to walk up the steep hill, asks him, 'You OK, old fulla?' 'Yeah, I'm stopping to let the spirits of the country know me.' We're reminded to go slowly. We arrive at the top of the mountain and Uncle Paul says, 'See all these long sharp rocks? They are the quills of Thikarrbila. That's why we are Garulkiyalu, Stone People.'

We remember the story of how Thikarrbila came to be. On the way to Thikarrbila hills, we pass Warriyarr, noticing the short, spiky sticks on the tree. The Thikarrbila, the sharp stones and the Warriyarr are all related and they are teaching us. Country is teaching us our knowledge.

Winangali, Ngaagirri, Ngamali, Ngali Mangilanha, Ngali Dhirrbangilanhala: To Listen, to See, to Feel; Then We Can Do, Then We Know

To learn country, we must listen, see and feel country. Our knowledges are sung into us from the very start of our lives, in our mothers' wombs. When we are born, the old people nurse us and sing to us, rubbing our bodies as they're singing. They tell us, 'We're rubbing that story into you,' as though the knowledge is being absorbed through our bodies; even before we reach an age of understanding, they are already teaching us. They continue rubbing that knowledge into us as we grow, not just through our listening but through our watching, smelling, touching and feeling—knowledge is absorbed through our entire body. Before we walk, our mothers and grandmothers carry us in a *gulay* bag on their backs as they go out through country, gathering, dancing and telling stories amongst themselves.

Feeling country teach us is no different to feeling our kin rub knowledge into us: our kin and our country are the same. From our *gulay* bag, we are hearing, seeing and feeling knowledge being passed around between our country and kin. So, when we start to walk with them, every day is a lesson and country is our classroom. Every day we walk with them and our feet feel the dirt, our body feels the bush, we watch what they do and listen to what they say. Then when we're ready, we try to experience that knowledge for ourselves. Can we teach it now? No—got to sit with that knowledge first. That is our responsibility in our relationship to country, our kinship with country.

Dhiirrbali Bantanhaarra: To Learn through Kinship Connection

We're now driving to the *malka* (mulga) country looking for a pair of *balkaa* (boomerang) for Jesse to use when he sings for corroboree. We come down into the lower country where it's scrubby and shady and begin walking among the *malka* bushes, looking for a good bend in the branches. The *malka* branches are hard and sharp on our skin as we move through it. Jesse sees a branch that might be right to make a *balkaa*. 'This one, Dhamuu?' 'Nah, that's too small.' The old fulla keeps walking. Jesse is reminded of his responsibility to listen and watch country, to listen and watch Dhamuu. Uncle Paul finds a good branch to make a *balkaa*, so he cuts it and takes it back to his *ngurra* (camp). At *ngurra*, Uncle Paul shapes the branch with his drop saw first and then Jesse shapes the rest of the *balkaa* with a chisel and rasp. Jesse is learning how to make *balkaa* himself, but he's not ready to teach other people yet.

Teaching and learning of knowledge happens through relationship with country, through experience with country and through kinship. Uncle Paul is Dhamuu to Jesse and Jesse is Paakalay Dhamuu to Uncle Paul. Like the old man and the two boys in the Thikarrbila story, Uncle Paul has responsibility as Dhamuu to share knowledge and story with Jesse; Jesse, as Paakalay Dhamuu, has responsibility to learn and uphold the *murri* of those stories. Kinship teaches us who we are and who we have obligation to, who our mothers and fathers are, who our grandmothers and grandfathers are. Kinship teaches us about how we connect to country, whose ancestors walked through here and created this place and how we should live here. Without kinship, we cannot learn—we don't exist. We rely on kinship to survive. All our kin give to us. All our kin need us to learn because they know that if we all learn, we can all live together. But learning must happen through kinship and we need to know our kinship to learn.

Ngali Bathangilanha Ngurrampaadhi, Ngali Ngurrampaa Gara: We Come from Country, We Are Country

On the red dirt, Uncle Paul, with a stick in his hand, draws a circle with a line through it and four sections and explains the blood and skin system. The two bloods come from *waakan* (crow) and *maliyan* (eagle). There are four skin sections, each with a male and female name. Jesse has spent

time researching this system from sound recordings of Mayi knowledge-holders and anthropological writings about them and he has learnt the language words for skin names and kin terms. But the circles, lines and diamond symbols, our symbols, in the red dirt, on our country, shared from Dhamuu to Paakalay Dhamuu, make the knowledge real. The drawing in the dirt shows us where we sit together as Dhamuu-galaydjaa.

Uncle Paul's mother is Paakantyi and his father is Wangaaypuwan and Muruwari. Jesse's mother is Wiradjuri and Wangaaypuwan and his father is a non-Indigenous Australian. Jesse's next Indigenous paternal father (his mother's mother's father) was Wangaaypuwan. We are made from our mothers and our fathers; they are in us. If our mother comes from another country to our father, they are both just as important as one another. We have responsibility in our father's country, the same as we have responsibility in our mother's country. Our parents have responsibility to their mother's country and father's country and we hold that responsibility for them too, through our kinship with our parents and grandparents. And it keeps going like this: kinship ripples out over everything and all mobs. Our kinship system operates across the language groups of our ancestors, who are in our blood, embodied now by us sitting here in the dirt together, teaching and learning by *doing* our kinship with each other and with country.

Wirringan Mayi, Our Scholars and Professors

We are on Uncle Paul's grandmother's country and Jesse's birth country. We are surrounded by tall gum trees above us and sandy soil beneath us. The country is greener here. We walk through the bush, stopping to look at geebung, eating fibrous fruit and learning about the medicine in the dark-red bark. We come up to a large rock platform where Uncle Paul sings out to the spirits of that *ngurra*, respectfully letting them know that we're coming in to look, listen and learn the stories of that place. The yellow bloodwood leaves are big and fat, embracing us, and the sandstone is soft and warm under our feet. We feel welcomed at this *ngurra*. After looking at the ancestors on the rock, Uncle Paul stops at a big one. We're looking at a big fat man. He is big because he has lots of knowledge. He has a belt and a headdress because of the ceremony he has done. He has big eyes on his head and lots of little eyes all over his body because he is clever. He has feather shoes on his feet because he can walk everywhere. He is a Wirringan.

Wirringan Mayi are our clever people drawn on country, represented physically as big men and women. They are big because they have travelled a lot of country, doing many ceremonies, and as a result they have lots of kin and lots of responsibility. A difference we notice with the whitefulla knowledge system is that, within the Western academy, you can reference knowledge and data that has been researched and recorded by someone else who you don't know, talking about an experience that you weren't present for. You can speak this knowledge and use this knowledge instantly, without any kinship or responsibility to the knowledge-holders. In our Mayi knowledge system, our Wirringan Mayi are our scholars and professors through experience, ceremony and kinship. In our way, Wirringan know ceremony because they do it. They don't read about ceremonies and reference them, or gather them together to write opinion on. They travelled country and experienced it and took on the responsibility to hold that knowledge. For us, an opinion is not knowledge. Knowledge is a knowing from experience of country, through kinship and embodied responsibility.

Ngarrkambuu, the Origin and Creation of Our Knowledge

In the middle of the dry, red dirt country, on Garulgiyalu country, we stop at a large rock platform. It's hot, we're sweating and we haven't seen water for some distance, until now. We see a great waterhole with other smaller waterholes around it. We walk on the rock platform, feeling the hard granite under our feet. We're welcome here, but the spirits and ancestors feel harder and harsher, like the hard rocks, short trees and hot sun. It feels old here. This place is called Wakarrbakarrniya (Wuggarbuggarnea) (see Figure 9.2 in the picture section). This is the place where Muuka stopped. We can see where He walked, where He sat and where He put his tools. This is the place where our great ancestors started their journey: the beginning of life for Ngiyampaa Mayi. These are our ancestors that gave us our kinship, gave us our blood, gave us our skin names. This is how we know who we are. From here, we learn where Muuka went next, where the ancestral animals went and where the water went. This is the beginning.

Back on the east coast at the Wollotuka Institute, we sit among the paperbark trees, tea-trees and lomandra. Small birds fly in and out of the bushes, little messengers taking part in our yarn. We're talking about the origin of our knowledge. Uncle Paul wonders out loud, 'Well, when did we

first learn this knowledge?' The answer is obvious—'When country first gave it to us.' The *miidhuungka* (noisy miners) and *kuulithithi* (magpie lark) sing out loudly in response. As at Wakarrbakarrniya, when our first ancestors walked with country, country taught them. Our knowledge didn't come from philosophers or researchers: it began with country and lives in country. That's why country teaches us, because she is the keeper of all our knowledge and has a responsibility to nurture us through that same kinship we have with each other. Our knowledge is as old as country.

Ngiya Mamali: To Hold Story—How We Keep Knowledge and How We Share Knowledge

Back at Uncle Paul's Ngurra, we are sitting around the *wii* (fire) at the end of the day with a hot cup of tea. The *wii* is where we sit, reflect on our stories and yarn. We are yarning about how we keep and share knowledge. Jesse is a *Guthingan* (Songman), and has been working on reawakening our old song knowledges. Uncle Paul sings an old song that he was given about mobs coming together for corroboree.

> *Waatu waatu barka marni*
> *Waatu waatu barka marni.*

The song tells us that the dancers come together as one and jump into the *gumbu* (corroboree ground) shaking their legs. Our ancestors, dancing together as one, doing this 'shake-a-leg', are painted on our cave walls at our special places, like Gunderbooka and Mount Grenfell. Today, when we do corroboree, we invite lots of mobs to come together and we all jump into the *gumbu* and shake our legs like our ancestors have always done, like the Waatu song tells us to do. When we are all together, we are many different mobs but we join together as one. We learnt to do this through *ngiya* (talk), *ngurra* (place), *yapa* (art, patterns and tracks), *guthi* (song) and *wagagirri* (dance).

Our knowledge is often described as an 'oral history', but it's not just an oral history. It's an ancient knowledge system that keeps our knowledge true by holding it in many different places. We sing that knowledge. We dance that knowledge. We share that knowledge through story connected to place. We write that knowledge on rock, in rock carvings and ochre

on cave walls, like the men dancing at Gunderbooka. Some knowledge we put on travelling boards, so they travel across the country with us—they're the travelling stories. Some of them are on little rocks, carved in the rock. And then we have owners, keepers and tellers of the story. If a woman inherited her father's story because there were no sons born, and it's a man's story, she can't tell it. That's not her responsibility. She still owns it, so she's the owner of that story, but then she has to have a teller and a keeper, who would be a man. And vice versa. If a son inherits his mother's story because there's no girls to inherit it and it's a women's story, he can't tell it. But he is still the owner of it, and the teller and keeper of the story would be women. So, there's owners, tellers and keepers. The keepers and the tellers will tell the story together and the owners will listen. The story doesn't just belong to one person; it might belong to a number of people, and together we tell the story, collectively. And then the ceremony will happen. It's not just storytelling, it's not just oral history—they are real stories with owners, keepers and tellers who have kinship with one another and with country.

The story of Thikarrbila and the Thikarrbila hills; the story of our beginning at Wakarrbakarrniya; the way knowledge is sung into us from our kin in the womb; the way we listen, watch and feel country from our mothers' *gulay* bags; the knowledge of making *balkaa* from the *malka* tree, our kinship system and identity drawn in the dirt by our kin; the way we sing and dance shake-a-leg, shown to us by kin and painted on our cave walls—this all comes from country, my teacher.

CHAPTER 10

Building on Country

Co-creating the Olkola Cultural Knowledge Centre as a Bridge between Knowledge Systems

Mike Ross and Hannah Robertson with Olkola Traditional Owners and project partners, the Centre for Appropriate Technology, Arup and our volunteer design team

BUILDING ON COUNTRY necessitates engagement with, and the inclusion of, Indigenous Traditional Owner (TO) communities throughout the design process, to ensure built outcomes incorporate community needs, aspirations and knowledges. Where this has not occurred, the outcome has been a lack of appropriate design and mismatch with use requirements, poor construction and ongoing maintenance—and a limited sense of ownership.[1] While much has been written by architects and academics, including Indigenous practitioners, about how to conduct community-engaged design and the projects that eventuate from these collaborations, the voices of TOs often remain absent in publications.[2] For a project to be truly co-created at every stage of the design process, the voices of TOs also need to be included; the same is true of publications that reflect on these projects. Through co-authorship, we can continue the collaborative design process by weaving together our respective knowledge systems, which are in turn reflected physically in the buildings we co-create on country and by the ways in which we understand and experience those buildings.

In this chapter, we discuss an ongoing partnership to collaboratively design and build the Olkola Cultural Knowledge Centre (CKC) at Sandy Creek Bore on Olkola country in Cape York, Queensland. We focus on

the psychospiritual meaning of the building from an Olkola TO perspective. We then identify design features, systems and processes within this project and show how they adhere to this vision. 'Psychospiritual' is a term typically used in psychology studies that philosopher Ann Gleig describes as a 'loose designation for the integration of the psychological and spiritual'.[3] A psychospiritual lens allows us to analyse psychological perceptions of the physical world, such as how a building shapes a sense of belonging and place, in relation to Indigenous cultural and spiritual traditions and connections to country.

Throughout this chapter, we include numerous reflections from Uncle Mike Ross, Olkola elder and the Chairman of the Olkola Aboriginal Corporation (OAC). These show how the intention of the CKC is to act as a bridge between 'old world' Indigenous and 'new world' scientific knowledge systems; a psychospiritual lens allows us to examine both knowledge worlds and identify where and how they integrate. In particular, we explore how the design and construction of the CKC on country is the foundation of this bridge—as Uncle Mike explains, 'You can't live and learn on country if you don't have a base.'[4] Uncle Mike's reflections also show that, through adhering to this vision, we have developed an innovative design partnership and building that optimises local resources and experience, to provide a distinctly Olkola place on country.

Our Partnership

Our partnership brings together the OAC, who are the TO representative organisation and custodians of Olkola country in Cape York, the University of Melbourne, the Centre for Appropriate Technology (CfAT), Arup, and a team of dedicated graduate architect volunteers.[5] Since returning to their lands in 2014, Olkola people have been trailblazers in Indigenous land-management practices that combine the best of traditional knowledge and contemporary science, including fire management (carbon abatement), habitat protection, cultural mapping of story places and cultural tourism.[6]

At present, Olkola people have four homeland sites with basic infrastructure, mostly old cattle station housing and ancillary sheds. Olkola have identified the need and aspiration for a dedicated space or place on country to keep and promote cultural artefacts and knowledge, conduct

Figure 10.1. The design of the Olkola Cultural Knowledge Centre, circa 2020
Image by Kirsten Spriridis

cultural tourism, and extend land-management practices, thereby creating culturally and environmentally sustainable livelihoods that support Olkola people to return to living on country. This project aims to research, document and reflect on the process of enacting this vision by constructing a purpose-built CKC on country (see Figure 10.1). The CKC will respond to Olkola people's need for more diverse infrastructure and support their sustainable livelihood aspirations. As elder Uncle Mike states:

> [We want to] use the centre for all projects, recording knowledge and collecting information of the country and our culture. [We want to] use all the knowledge we can get of our landscape to manage country. Putting together scientific information and cultural knowledge. We can do a lot in a centre based on country, [because] you're not talking about your country—you're on country.[7]

Our partnership began in 2018 with the collaborative design of the CKC. The process from master plan to detailed engineering design and construction drawings ran over three consecutive teaching semesters and involved over 350 architecture and engineering students; it included two student visits to Olkola country and two Olkola visits to the University of Melbourne to conduct participatory design workshops. The subsequent design involves two buildings of sustainable and local rammed earth and timber that enact two significant functions: a cultural centre to display cultural archives, conduct scientific and traditional land-management

research and cooking, and provide ablutions facilities for cultural tour visitors; and a ranger base with a permanent caretaker and temporary ranger, and researcher accommodation. Both buildings are to be constructed at Sandy Creek Bore on Olkola country.

In 2021, the scheme was awarded construction funds through the Queensland Government's Growing Indigenous Tourism Queensland Grant to build the CKC prototype. The prototype is effectively half of the CKC building and comprises the cultural tourism facilities, including a covered deck, commercial kitchen, toilets and showers. The prototype also includes the building's footings, standalone solar for power access and a dual bore and tank system for water access. In 2022, we began construction. The Olkola Rangers completed the site preparation works, including trenching, power and water, fencing and site clearing, and building works were undertaken by Indigenous builder Zeph Walker of Walker Homes and Construction. By the end of that year, we had established power and water services, and put a roof on the prototype structure (see Figure 10.2 in the picture section). In 2023, construction began on the cultural centre, and at the time of writing, this, along with the ranger base, was well on track to be completed by late 2024.

Our Approach

The foundation and methodology of this project derives from a community engaged, two-way knowledge 'by-design' research process between the OAC and project partners, which ensures the research is TO-led and co-authored. A 'by-design' or 'design projection' approach is used to combine quantitative and qualitative methods to propose an alternative strategy for remote building on homelands.[8] This approach is common to building and architectural studies, as it provides the opportunity to generate outcomes recursively and reflexively as information is gathered and disseminated, with an emphasis on process over outcome. The aim is the pursuit of a 'whole' knowledge that combines the 'true' or scientifically provable, with the 'real' or experiential.[9] True knowledge relates to the use of secondary sources such as policy documents, construction systems and labour training analysis. These sources are used to refine the construction system and approach. Real knowledge develops from fieldwork on Olkola country, and collaborating with TOs to observe and collect primary data

through participatory design and building workshops that involve yarning, drawing, model-making and construction.

In translating the outcomes of the project so far, we can also combine 'true' and 'real' knowledge from the perspective of Uncle Mike. Real knowledge enables Uncle Mike to use a yarning method to convey the psychospiritual meaning of the CKC. Yarning as a research method has emerged in published academic discourse as a culturally appropriate, 'conversational process that involves the sharing of stories and the development of knowledge. It prioritizes Indigenous ways of communicating, in that it is culturally prescribed, cooperative and respectful.'[10] By bringing these two forms of knowledge together, we can identify a set of principles that support Indigenous-led design, and which can be tailored and adapted to suit the needs and aspirations of other TO groups.

Real Knowledge: Yarning and Psychospiritual Meaning

Through yarning with Uncle Mike about the process of designing the Olkola CKC and its meaning to the Olkola people, we can gain an understanding of the real knowledge that underpins the need and aspiration to build the CKC and identify the functions it is seeking to perform. In establishing the aspiration to build the CKC, Uncle Mike emphasises its role as a bridge between 'old world' traditional Indigenous knowledge and 'new world' contemporary science and systems. He likens the process of designing and building the CKC to 'a new creation story', as a way of highlighting the continuation and evolution of Olkola culture and practices, while acknowledging that in contemporary times this includes external influences. As Uncle Mike articulates:

> We are in the process of writing a new creation story that we want to share with you. It's not a dreamtime story—they were creation stories from the old world that established the world as we know it—but a creation story that is written in today's modern world. It is a story about how we can connect back to the knowledge of the old world to bring it into the new world.

Situating the project's meaning as a story allows multiple lenses to be combined, including the physical reality of the processes and designs, the

psychological meaning behind the need for the project, and the spiritual significance of the project on both a personal and communal cultural level. Through Uncle Mike's description of how 'old world' traditional Indigenous knowledges were disrupted by European colonisation of the 'new world,' we can better understand Olkola aspirations for the CKC:

> To understand this story, we first need to go back to a time before European colonisation. During this deep time which extended over 40 000 years, the Olkola people lived on country in symbiosis with its systems. They knew where to find food and water, sacred places, burial grounds, and they knew the different types of country and its plants and animals. They knew where and for how long they could set up camp to avoid taking too much and ensuring there was always enough not to disturb or deplete the natural system. They knew their responsibilities to the country and how to look after it.
>
> One day about 200 years ago, this world system was disrupted. European people arrived. In waves, they forced the Olkola people to leave their country. Some Olkola people were taken to the missions and some were stolen from their parents. They were not allowed to speak their language and they couldn't practise and pass down their knowledge because they were not able to walk on country. Only the Olkola people who worked for the cattle station pastoralists on Olkola country continued to speak their language and practise their knowledge of country. A friction between the old world and the new world was created and this created a gap in the knowledge system.

Within this context, Uncle Mike articulates the need for the CKC and how it will act as a bridge supporting a two-way cycle of exchange (see Figure 10.3) between the new world and the old world:

> Now, we find ourselves living and operating in the new world. There are knowledges and tools found in the new world that are valuable and that we would like to keep to help in the old world, but there is also a missing link in connecting with knowledge from the old world. At the same time, the knowledge of the old world is still there—the totems, animals, trees, grasses—because all the ingredients are on

> country. There is evidence of the different ways in which country was lived in: there are scar trees, creation story places and burial grounds. We can read country to understand that old world and knowledge. The challenge is: how do we get from the new world back to the old world? What we need is a bridge across that gap. For the Olkola people, that bridge is our Cultural Knowledge Centre.

With the need for the CKC established, Uncle Mike is then able to define the specific building functions that will support connecting the old world to the new world, and vice versa:

> The [CKC] provides the base and the place for being able to go out on country to collect old world knowledge, bring it back and share it using the best parts of the new world—the science and technology. Over time, the [CKC] will support Olkola people to continue to connect to the old world knowledge, which will strengthen the bridge between the new and the old world so that it becomes stronger, so that all Olkola people can walk back and know their role as custodians of their country. The [CKC] is not just for Olkola people, it's for anyone who wants to learn about the country and its place, to gain a better understanding of their place in the world and their responsibilities to country. In this way, the [CKC] on its own is not the end of the story of bridging this gap. It's the beginning.

As Uncle Mike states, the goal is to use the best parts of the new world, such as technology and science, to assist in connecting old world traditional knowledge, including fire and biodiversity management, to uphold responsibilities to country. This creates a new cycle of knowledge generation that overcomes the disruption caused by European colonisation, and which supports the generation of sustainable and thriving livelihoods, through cultural tourism, land management and research, that support Olkola people to live back on country.

True Knowledge: Practical Design Principles

Uncle Mike's 'real knowledge' about the need and aspiration for the CKC to act as a bridge between the old world and the new world—utilising the

best aspects of both—has been critical in establishing the project vision to unite multiple partners and participants behind a collective mission.[11] To ensure the design is developed in accordance with this vision and that Olkola people continue to own each stage of the project, 'true knowledge' action-oriented practical design principles are needed. In the case of the CKC project, a set of eight design principles have been used:

1 listening first and identifying needs: to ensure the process is Indigenous-led
2 being on country: to understand context and make key decisions together
3 starting small: to build trust and ensure the commitment is achievable
4 changing and adapting flexibly: to continually reflect upon and refine the process and outcome
5 communicating regularly with feedback loops: to ensure continual Indigenous ownership of the process
6 including the community in full: in all decision-making processes

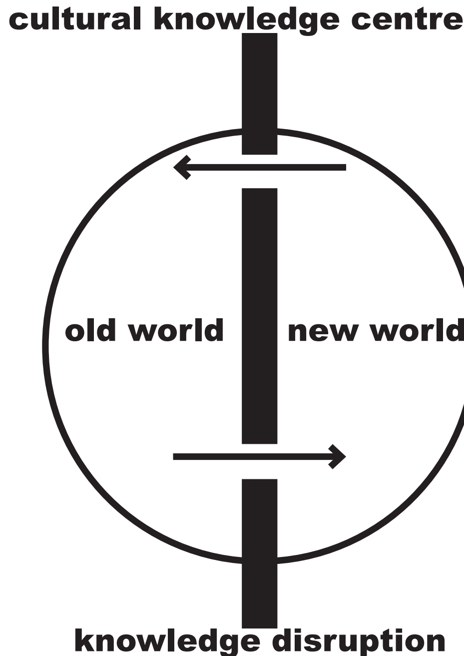

Figure 10.3. A diagrammatic interpretation of Uncle Mike's design concept
Image by Hannah Robertson

7 allowing time: for relationships to develop and for delays in procurement and decision-making
8 celebrating small wins: by breaking the project into stages.

The deployment of these design principles does not happen sequentially but rather through a series of feedback loops that help to calibrate the project in response to unexpected system complexity arising from a range of factors, such as environmental conditions (for instance, prolonged inaccessibility caused by wet seasons), changes in human resources (periods of leave), and external forces (pandemic delays and unprecedented inflation). To better understand how these design principles support the inclusion of Indigenous knowledge, we will explain how they have been used in our collaboration.

Listening First and Identifying Needs

The starting place is to listen. The need and aspiration for an Indigenous-led design project needs to come from the TOs and elders themselves and cannot be externally imposed. In the case of the CKC, the vision had long been a dream of Uncle Mike's. It was first articulated by the OAC in a design brief in 2018 when Uncle Mike wrote:

> Some good and some rocky roads have been travelled. I am creating a footprint for young people and for the public. Showing our journey how to get there and where our journey [has] gone now. Where will our journey take us 10 years down the track? And how are we going to get people to be interested to come on country? This centre is an important little place, just like your home, it's where you live. I am the only one left now, no other leaders have the knowledge that was passed down. The only one left. No other leader but me. I was appointed by the elders, that's what I have to do, pass down my knowledge and record it. It has to be learnt out on country. Big ask (for a ratbag like me!).[12]

Being on Country

To ensure the project remained Olkola-led, one of the first steps was for TOs—including Uncle Mike, OAC CEO Debbie Symonds and senior

rangers, along with chapter co-author Hannah Robertson—to meet on country to share the vision for the CKC at the proposed site of Sandy Creek Bore. There, it was possible to situate the project in context on country in a way that was not possible in any other location because, in the words of Uncle Mike:

> We got to do that based on country, not in town. Get a feeling that you're right on it, in home country. It makes you feel better when you're talking about it. That's what makes Olkola country tick—we're in the heart of it.[13]

This enabled project partners to understand the physical appropriateness of the proposed Sandy Creek site, such as its cultural neutrality (not located on any culturally significant sites) and its location within fifteen minutes of the Peninsula Development Road (soon to be sealed to allow greater access to Cape York). This visit also allowed the spiritual factors of the site to emerge. The central lagoon is ephemeral. but as Uncle Mike yarned about his vision for the centre, he painted a picture of it permanently covered in lilies to support abundant bird life (see Figure 10.4). Similarly, we sat under a knowledge tree looking across the lake and understood its significance as an important site feature, providing a place for shady respite, for people to gather and share ideas in the sand.

Starting Small

The yarn under the knowledge tree at Sandy Creek that day also clarified how the first project stage was to start small with master plans of the whole CKC scheme. To make the master plans accessible to all Olkola members distributed across northern Australia, as well as to potential funders, Uncle Mike articulated the need for them to be films—to explain the design schemes as stories. This differed from the standard architectural schematic practice of making a drawing set and feasibility report; however, it was appropriate to Olkola people and ensured they retained direction of the process.

The practice of starting small has continued throughout the project, with each project stage tackled step by step, together, bringing further

technical advice on board to help as required by the project. For instance, the construction process continues to be designed in small stages. As described earlier, the first stage involved building a prototype to test the construction material systems of local rammed earth and timber.

While the prototype is effectively half of the CKC building, its smaller scale allows the chance to reflect on how well the construction systems work, how easy it is to build, and how much it can include Olkola people in the process. This then allows an opportunity to reflect and learn from the process, to embed learnings in the next project stage in a way that promotes continual improvement and better alignment with Olkola people's needs and aspirations.

Changing and Adapting Flexibly

The opportunity to learn from an incremental and staged approach is only possible if there is the flexibility to change and adapt as learnings, challenges and new insights emerge. As outlined above with the prototype stage, building part of the building allows the physical design and construction system to remain open so that design and construction learnings can be implemented at each successive stage. For instance, during prototype construction in 2022, rock was unexpectedly encountered below ground because the site cut-and-fill had removed some foundation material. This meant that the footings could not achieve an adequate bearing depth to transfer structural loads to the foundations, so a redesign was needed that increased the diameter of the concrete footings and extended the pad above the ground in a few locations. With the Stage 2 Ranger Base design still developing, this has presented the opportunity to design a flexible footing system that minimises further cut-and-fill to the site and instead absorbs the changes in level with a flexible steel stirrup length to maximise bearing depth for the pad footings.

Communicating Regularly and with Feedback Loops

Regular communication is also critical to maintaining project partner engagement and ensuring the project remains Indigenous-led. A system of weekly Monday project management meetings with Olkola and CfAT, and Tuesday morning design and engineering meetings with Arup and the volunteer design team (before work hours, to enable volunteer engagement), has become embedded in the project. At regular intervals, Olkola

Figure 10.4. Drawing by Uncle Mike Ross (2021) showing how the Cultural Knowledge Centre will act as a bridge between the old and the new world, overcoming the disruption caused by colonisation and displacement. Drawing by Uncle Mike Ross

TOs attend the design and engineering meetings, to provide feedback and team communication. In addition to collaborative design meetings in person in Cairns and on country, OAC staff also provide updates and seek design feedback from other TOs at board meetings.

The connection with Olkola and a values alignment with the CKC vision motivates members of the design and engineering team to continue volunteering on the project. Georgia Richards, who began on the project as an architecture student in 2019, explains:

> I am extremely proud to be a small part of the team that has helped plan, develop and deliver this project—from uni student, to assistant project manager, to volunteer.[14]

Team members emphasise the emotional connection they have to the project as 'heart-warming' and 'meaningful', as they develop 'close relationships' and 'friendships' with the OAC. Hamish Banks, a structural team leader at Arup who led the structural design of the CKC, reflects on his experience:

> Sometimes you get an opportunity to work on a project that just ticks all the boxes. My heart jumped two weeks ago, as I saw the first photos come through of the Olkola [CKC] that is currently under construction. Rammed earth walls, constructed with soil excavated a mere 10km from the project site. This building was born from [OAC's] aspiration to build on country, of country. A culmination of two years (well, to be precise, some of the team were working on it even two years before that!) work by a multidisciplinary team of graduate architects, engineers and project managers, the project has been a heart-warming process of learning, designing, coordinating, re-designing and polishing 'til the final docs were printed as construction began.[15]

Including the Community in Full

To meaningfully include Indigenous knowledge in a design process, it is critical to include the community in full. To do this in a culturally appropriate way, the project direction first needs to come from elders

as cultural knowledge-holders, and from TO leaders. Next, engagement with the representative organisation for the TO group (such as the OAC) is needed. The next critical step is to ensure that all TO members have opportunities for input. In this project, this has been provided through two in-depth collaborative design trips on Olkola country during the master planning and detailed design stages, and further collaborative design workshops in Cairns at each project stage. Inclusion has been ensured through presentation to the OAC Board, which comprises TOs members across Olkola's six clan groups. Finally, the physical building site required cultural clearing and approval from the Olkola TO clan responsible for that place. This was achieved by actively involving the responsible TO elders, Uncle Jack Lowdown and Aunty Betty Griffin, throughout the design process.

Allowing Time

We have been working together on this project since 2018. Allowing time to build relationships and genuinely include Indigenous TO voices in the project design is a critical foundation of the project partnership. Although commercial design and building projects have immense time pressure constraints, allowing genuine Indigenous-led design processes, such as building relationships, collective decision-making and the inclusion of volunteer labour, takes time—there is no substitute for this key ingredient. As Uncle Mike articulates, the CKC project is not just about the physical construction of a building, but more its broader facilitation aspirations:

> This is a long process and as we said this story is still being written, but where we hope it will go in the next 20, 50 (or more) years, is that it supports a thriving culture of Olkola people living on country with new enterprises that are sustainable for country.[16]

Building relationships involves establishing an alignment of values, building trust and sharing capacity. It is achieved through communication followed by action, and it is strengthened with each yarning cycle that is passed through. It also takes time for the collective decision-making processes needed to ensure TOs are included in the process. For instance, each

major CKC design development stage has required OAC Board approval (such as selecting the master planning scheme, and finalising the detailed rammed earth design and engineering design). This requires board meeting preparation and waiting until a decision is made. Time is also needed for internal cultural decision-making processes, as these conversations need to ensure the right people are involved, their views considered and feedback provided. This was particularly important with the siting of the CKC and ranger base buildings to ensure they do not encroach on any cultural overlays.

Finally, volunteer labour also takes time. In this project, we rely on a volunteer architectural design team whose paid work often takes priority. Similarly, the Olkola Rangers have been involved in construction wherever possible, including site clearing and levelling, fencing, sourcing rammed earth, and milling. Like the volunteers, the Olkola Rangers have responsibilities to undertake land management work, so there have been many times when site progress has been delayed because of urgent fire management work. Although this might be viewed as a delay to non-Indigenous people, allowing for such contingencies in the project means that respectful relationships and trust are supported and allowed to grow. Despite the need to keep requesting funding extensions during the prototyping stage, the project is on track and the building contract is not time bound, thus allowing necessary flexibility.

Celebrating Small Wins

The final Indigenous-led design principle is celebrating the small wins along the way. This is attained by staging the project in achievable subcomponents that allow regular opportunities for the project team and community partners to come together, celebrate progress, acknowledge how far we have come and value everybody's input. There have been many celebratory stages in our collaboration to date. The first celebration came in March 2019 when five Olkola Rangers travelled to Monash University for Melbourne Design Week to publicly screen the master planning films and to reflect on design feedback with the student architectural designers. In November 2019, Olkola people again visited Monash University to hear and see design schemes, and to provide feedback to engineering and architecture students.

Uncle Mike reflects on the progress made in establishing services on the site:

> Our progress is amazing. We've got the bores in. We've got the solar panels. The plan is to use all the water, rainwater and everything, to keep the lagoon full all the time, so we can then start to grow lilies and native trees around there. There will be places where people can sit and talk to the rangers and elders who are left and get to know Olkola as the Central Cape York TOs.[17]

A particularly momentous celebration for the whole team was the construction of the symbolic rammed earth walls that represent building on country with country. Debbie Symonds shared her delight in this achievement:

> We are extremely happy with the progress of the [CKC] and it was amazing to see the great big mud wall in the middle of Cape York standing tall. It feels like it represents us, the Olkola clan, as we find our feet, stand tall and make our way forward.[18]

Conclusion

This chapter has highlighted the importance of including and acknowledging Indigenous knowledge and authorship in the design process of building on country. As Uncle Mike's real knowledge reflections on the Olkola CKC meaning show, these voices contribute a unique psycho-spiritual lens that transcends professional socio-technical understandings of the design process. Through yarning and drawing, we can capture the essence of this knowledge. In the case of the Olkola CKC, the design process is about achieving something far greater than a physical building. It's about building a bridge between the knowledge systems of old-world traditional Indigenous knowledge and new-world contemporary sciences.

Harnessing a set of design principles that promote listening first, being on country, starting small, adapting flexibly, communicating regularly with feedback loops, including the community in full, allowing time and celebrating small wins, supports an Indigenous-led design approach. To truly recognise the value of Indigenous knowledge in the design process,

further work is needed to translate Indigenous knowledge contributions to design through academic publications and co-authorship recognition of design outcomes. As this chapter shows, this knowledge enriches not only the design process but also the outcomes, and ensures they remain truly Indigenous owned.

CHAPTER 11

Customary Water Tenures of Australia's Tropical Savannas and Their Indigenous Fishing Cultures

Sue Jackson, Lisa Palmer, Joe Morrison, David Cooper, Mona Liddy and Liz Sullivan

OVER THE COURSE of its settler-colonial history, Australia has seen significant change in the ways in which rights to water, and responsibilities for its management, have been conceived and applied. In common law, water has long been considered a 'resource' belonging to no-one, but also accessible to those in possession of riparian land. More recently under neoliberal governance regimes, private or individualised property relations have been privileged to enable market exchanges of water. The separation of land and water titles further divides and isolates as well as abstracts water from place, people and other animals.[1]

An Indigenous discourse around water rights has emerged in response to these monumental shifts in Australian water governance of the past twenty years and the attendant 'modern' water talk. For instance, intimations of an alternative Indigenous perspective have become popular through terms like 'cultural water' and 'cultural flows', as articulated in response to the scientific practice and policy formulation of 'environmental flows'.[2] Environmental flows and other changes to water rights by state management institutions rely on conceptualisations of water formed within hydrological and similar scientific fields that treat water as a resource disconnected from place and its constitutive social and ecological

relations. The rise of market logics that privilege private property relations have reinforced the tendency of a technocratic settler-colonial culture to abstract, compartmentalise and separate fresh water from salt water, nature, land and people.

Indigenous water rights advocates have articulated powerful critiques of dominant settler ways of knowing and relating to water to advance their own models for reform of management and governance.[3] Organisations such as the Murray Darling Rivers Indigenous Nations, the North Australian Indigenous Land and Sea Management Alliance, and the Martuwarra (Fitzroy River) Council, seek to challenge current ways of governing water and change societal relations with waterways.[4] Nonetheless, the discourse of water use and management that has infused policies and programs largely fails for the most part to engage the lived reality of Indigenous social arrangements and cultural practices relating to water. By this, we mean the customary ways of being that exist within the broader cultural and social organisation, processes and practices of Indigenous people of many parts of Australia.[5]

In Australian Indigenous societies, water is a sacred and elemental source of life,[6] and the life it sustains is part of a wider system of interconnected socio-physical relationships and identity. Waterscapes are conceived not only as physical features or domains, but also as spiritual, social and jural spaces, according to the same fundamental principles that determine affiliations to other places of country.[7] Rights and responsibilities arise from wider mytho-geographical bodies of knowledge that reflect a localised identification with, and use of, water sources. These attachments are now formally recognised in a tokenistic fashion in native title law, national water policy, and in efforts to address the 'cultural values' of water in regional natural resource-management strategies.[8]

Yet, the uncritical imposition of settler cultures of water (managerial, regulatory, scientific) fails to recognise founding ontological relationships between Indigenous peoples and water. They continue to misconstrue and delimit Indigenous ways of knowing and relating to water as mere beliefs about water, or as an exotic cultural perspective on otherwise naturalised and abstractable waters. In denying the history and authority of Indigenous customary systems of water governance as viable alternative modes of resource governance,[9] management institutions inhibit

expressions of Indigenous norms, values and knowledge relating to water. This renders ontological differences as mere cultural perspectives, to be assessed, quantified or mapped for inclusion as 'cultural values' in technocratic water-management frameworks, such as water allocation planning—deeper ontological politics of water are rarely recognised or admitted in these processes.[10]

It is conceivable that the divisions that shape water governance will become more compartmentalised and polarised, and that further dissolution will exacerbate the harm inflicted on Indigenous communities. Where there is now a hard distinction between land and water in environmental governance, lines between ground water and surface water—as well as saltwater and freshwater domains—are enacted through categorisations and management of landscapes (or more accurately, waterscapes). These divisions are incommensurate with Indigenous conceptualisations of country. For instance, the customary territory of coastal Aboriginal peoples in Australia is made up of a combination of land and sea,[11] and marine and freshwater areas; aquatic species contained within them are treated by Aboriginal peoples as integral to their customary estates and identities.[12] The periodic coming together and mixing of salt and fresh waters is one of northern Australia's most generative metaphors. In contrast, it is simplified, reified and compartmentalised categories of water use and management that have a powerful hold over scientific efforts to know and define the value of those waters, to the detriment of Indigenous knowledge traditions and cultural practices.

In the following section, we describe social arrangements and cultural practices relating to fresh and salt waters in the Aboriginal waterscapes of the Top End. We illuminate the importance of water in Aboriginal cosmological systems, as well as the depth of hydrological knowledge in this area. We focus on the socio-cultural connections of Aboriginal people to the Katherine and South Alligator river catchments, west and south of the Arnhem Land escarpment.

Water Cultures of the Savannas

Before Australia became a British colony, Indigenous people had exercised group or joint property rights over water for tens of thousands of years. Access to territory was regulated through social convention, and rules

for its use and management differed across the continent. These rules and norms were adapted specifically to the local abundance and reliability of water, plants and animals.[13] Availability of water shaped the movement of territorial groups, and rich, complex cultural landscapes were constructed around spiritually powerful water bodies, such as rock holes and billabongs, created by ancestral beings. Successful hunting and foraging strategies relied on oral instruction and the stylised mapping of traditional knowledge regarding the type and location of water supplies, as well as the means of capturing and storing water.[14] In most parts of Australia, the pre-colonial hunter-gatherer economy did not rely heavily upon agriculture and therefore had little need for irrigation systems. However, in some parts of southern Australia, aquaculture was practised and surface water systems were controlled to maintain the productivity of fisheries.[15]

Indigenous hydrological knowledge and relationships to water are understood within the context of overarching cosmologies relating to the origin and ongoing maintenance of land and waterscapes, and the distinct more-than-human cultures and social groups that reside in them. This is commonly referred to in English as 'the Dreaming', derived from translations of its equivalents in Indigenous languages, usually derivations of the words for 'dream'.[16] Water features strongly in Indigenous cosmologies, according to which water sources and rivers were derived from the powerful actions of mythic beings during the Dreaming, when the world attained its present shape and the socio-cultural institutions governing present water use were formed.[17] These world-creating events are given detailed local-level expression, manifested in a vast system of land- and water-based cultural sites, connections and networks underpinned by the cultural knowledge encoded in songlines, some of which run for thousands of kilometres and connect the countries of many different cultural groups. The corporate organisation that was, and is, required to maintain such expansive, shared cultural traditions is both extensive and highly sophisticated. It necessitates large regional gatherings of many different cultural groups to perform rituals and, at the same time, to mediate and negotiate shared cultural, social and economic interests in land and water.

An affiliation with a dominant environmental feature, such as a river, may play a key role in the formation of group identity.[18] One such group is the Ngan'gikurunggurr' from the Northern Territory, whose country lies

between the Fish and Moyle rivers, which flow to the west of the Daly River (see Figure 11.1). Ngan'gikurunggurr' means 'deep water sounds' and is described as the language of the swamp people who live in the lower reaches of the Moyle River.[19] Miriam-Rose Ungunmerr Baumann, a traditional owner of this area, describes the cultural topography of a place called Malfiyin, which begins from a spring in the Wingate Ranges:

> As the Moyle makes its way down the mountain and runs into the floodplain below, there are many special places. We call them Creation places. It is where things begin or where they come from.

Figure 11.1. Map of the tropical savanna region of the Northern Territory showing the Katherine–Daly and South Alligator river catchments.
Map by First Class Communications

> Our Dreamings have special places on the River. We believe that there is a place where an animal or a bird has a Creation place. They are responsible for creating that particular area … The animals and plants that have formed at Malfiyin are part of the landscape and we belong to them. We believe we are the Pelican, Water, King Brown, Magpie Geese and others. They are our Dreamings. Other birds and animals live there. We only claim the ones that come from Malfiyin.[20]

The extent of Indigenous hydrological knowledge in this wider savanna region is evidenced by the richness of terms and concepts within local Aboriginal languages. Every aspect of water as a physical and spiritual resource is relationally expressed in the languages of Aboriginal cultures. This includes water as a phenomenon and hydro-morphological features: mist, clouds, rain, hail, seasonal patterns of precipitation, floods and floodwater, river flows, rivers, creeks, waterholes, billabongs, springs, soaks, ground water and aquifers, and the oceans (salt water).

The Jawoyn, Dagoman and Wardaman languages have several distinct terms for describing the different states and origins of their natural waters, which often seep in and out of rock formations.[21] For example, the Jawoyn language has a term for water that is carbonated or high in lime and is regarded as 'light water'—*maminga*. Wardaman have a parallel term, *yigargin*. Other kinds of 'light water' are derived from sandstone (*igilarrang*) and from rock puddles (*yikalal*). In contrast, water from igneous rocks, such as basalt, *yiman wiyan*, is regarded as 'heavy'. Other types of water include *yingol wiyan*, which gets its sweet taste from being filtered through the dense root systems of paperbark trees, and water from trees (*karrikbal*), which is highly regarded for its medicinal uses. Dagoman know a popular crossing on the Katherine River as *Gawutjwutjma*, the place where bubbles aerate the water.

Observational and experiential knowledge of water, its uses and hydrological phenomena, are informed and shaped by customary relationships and cultural knowledge. This includes ritual knowledge associated with the creation activities of ancestral beings who created or carried with them the water and water sources that are present today. Some of this knowledge relates to information about underground waters or springs and their relationship with river flows. For example, local Dagoman and Wardaman

people know that water levels in the Katherine River are maintained during the dry season because of the inflow of groundwater from springs. Furthermore, these perennial flows are due to the presence of Gorrondolmi, the Rainbow Serpent, as Balany Narwurrpbambulu recounts:

> The spring him fill up with water from the ground, so now him dry [dry season] … that river still runnin' from that spring. Him bin that spring all the time. Important because that Rainbow Serpent they sit down there longa spring every time … When him dry you know that the spring gotta have him water because that Rainbol there.[22]

Rainbow Serpents, or *Rainbol*, widely recognised in the cultural traditions of Aboriginal groups throughout Australia, are revered for their powers and special relationship to water.[23] Rainbow Serpents are present in permanent, deep green pools, at springs and at locations underground, particularly those associated with underground water. Rainbow Serpents are also the drivers of the hydrological cycle and bring the wet season monsoon floods. The Wardaman language has a term, *barlba,* for this process of creation beings travelling or going underground.[24] *Guwjutbi*, the hot springs of Katherine that were created by Gorrondolmi, are avoided by Dagoman and other custodians. It has become a place of trauma following intrusion by settlers and tourists who are not known to Gorrondolmi.

Cultural practices relating to water are informed by an understanding of, and communication with, the continuing spiritual presence in the landscape of creation beings, as well as more recent remembered and unremembered ancestors, or 'old people', returned to their countries as spirits. The animating spirits that become children are also believed to enter their mothers from water. This means that Aboriginal people consider the landscape as a living entity responsive to their actions and behaviours, and as integral to their own being and wellbeing. Creation beings are also spiritually active in country and present at the many sacred areas they inhabit. The spirits of old people and creator beings not only watch over country but respond to human happenings: they can cause misfortune when people have not behaved correctly, or bring fortune to those that do—for instance, in successful hunting or fishing. Just as with the land,

the living waters of this region are to be respected and cared for—they are alive and responsive, created by ancestral beings.

Traditional Owners and custodians have a responsibility to look after significant cultural sites and to ensure that customary maintenance and management activities are carried out. A regular human presence is therefore important in maintaining the ongoing viability of country, especially the presence of those who know the stories—who are known by that place—and who have been schooled in how to behave properly. A rich body of literature details cultural practices relating to water from this region and others across northern Australia,[25] including talking to country, 'watering' strangers and others, restrictions on behaviour and activities, protecting others from harm, and the management and protection of important sites.

Fishing and Hunting as a Cultural Practice and Incident of Water Rights[26]

Fishing is another customary practice that is intertwined in the 'everydayness and sociality of life',[27] both in this region and others of northern Australia. As with non-Aboriginal fishers, Aboriginal people throughout this region like going fishing to relax and enjoy themselves. However, for traditional owners and other Aboriginal residents in places like Kakadu National Park, fish and fishing constitute more than a recreational activity. As well as being food, fish, as discussed above, are also imbued with totemic essences.

For Aboriginal people, fishing and hunting aquatic animals is a complex and highly sophisticated practice. Fishing is a 'critical right', a cultural practice that traditional owners have a 'duty to practice and obligation to defend'.[28] Sandy Toussaint observes that Aboriginal people 'value fishing and the catching, cooking and consumption of a range of fish and other freshwater species ... as an immeasurable constancy in their lives'.[29] Customary fishing activities contribute substantially to Indigenous household income and diet, alongside hunting and harvesting;[30] catching, sharing and consuming fish are central to the past and present reproduction of cultural life and kinship.[31] When fishing, traditional owners regularly call out to and communicate with spirits, announcing their presence and affirming their relationship with country; fishing provides a means to connect physically and spiritually to country and other beings on country. Very

often, fishing is an activity that people with different rights and interests in freshwater or saltwater country can share, one that allows 'time with family and a break from community life',[32] and which affords opportunities to pass on knowledge across generations.[33] Families draw on different forms of local subsistence knowledge and lived experience of elders, and going fishing enables this knowledge to be shared across generations.[34]

The discourse on fishing within Indigenous communities reveals similar kinds of ontological differences to that of water. In the savanna region, there is a strong belief in the communal ownership of both fish stocks and waterways.[35] While Western science conceives of fish as a resource to be sustainably managed, traditional owners from this region and many others view fish and their harvest not only as a significant source of food, but also as part of a wider system of interconnected socio-physical relationships and identities.

Creation stories from this region include explanations of the origins of fish traits such as the shiny scales of barramundi, the poisonous spines of the catfish and the distribution patterns of turtle species across the freshwater-saltwater interface.[36] These characteristics were determined by the behaviour of ancestral creator beings during a time prior to the division of human and non-human beings, and their characteristics and traits: fish and other animals danced, walked, fought with each other, and carried out ceremonies and rituals. The following dialogue between Wardaman traditional owner Bill Harney and ecologist Brad Pusey illustrates these ancient kinship connections:

> Brad: Bill, why are the white tail [fish] (strawman or black mask) in the same family?
>
> Bill (Indigenous elder): Well, they got a relation there, cousins, auntie and uncles.
>
> Brad: From the dreamtime?
>
> Bill: Yeah, from the dreamtime; they're all family.[37]

Similarly, Bill Neidjie, in discussing his concerns about recreational fishing along the East Alligator River, explained that '[a]ll along river all this Dreamtime, this water running down sea, Dreamtime story'.[38] Ronald

Berndt and Catherine Berndt write that it is the Barramundi fish heading to the sea that in some local clan narratives is responsible for the creation of the East Alligator River, and whose actions stipulate taboos and prohibitions for the use of that river.[39]

Paul Tacon also examines the various creation stories connected to the East Alligator River.[40] He finds that the creator beings are referred to in different versions as the Ancestral Barramundi fish, the Rainbow Serpent, and a mythical woman parting her legs and releasing a rush of water. Tacon notes that these stories, rather than being contradictory, are complementary of the same metaphysical ideas, in which

> there is a correspondence between the rainbow, Rainbow snakes, women and fish, especially the barramundi. All are symbols of powerful creation … Rainbow serpents are related to fish, including the barramundi through the colours of their skins … The three are interchangeable in this context as fertility-creation symbols.[41]

Baldwin Spencer wrote that, for the people of the Kakadu tribe, there are extremely elaborate restrictions regarding food that are related to totemic beliefs involved in 'increase ceremonies', used to prompt an increase in a particular natural resource such as a food source or rain.[42] Such restrictions also applied to fish, as Bill Neidjie explained to Lisa Palmer. In the past, there were also restrictions on who could eat fish:

> Fish they used to get him and cook, when I was younger. They never get many because they follow law. I said that woman, young woman, if she eating fish big trouble. Not happen nowadays. Me I last one. They cook that fish. I never touch anything. I was sitting down and they tell me that fish you can't have him fish, you young yet. I might be 17 or 16 they gave me fish.[43]

Spencer linked fish with beliefs about the spiritual conception of children. In many cases it is a fish imbued with the child's spiritual essence that will be caught by the father of the future child—that fish will become the child's totem.[44] While the elaborate food restrictions referred to by Spencer and Neidjie may no longer be fully operative, fish continue to

be viewed culturally, as well as economically, as an important resource by Aboriginal people in the region.

In 1998 a young Aboriginal man explained to Palmer his belief and ideas on what constitutes proper fishing practice:

> We eat it there, cook on the coals or take it back home. Fish or turtle for our family. We eat whole fish—bone and skin throw back in the fire. We burn bone, skin, shell so that next time we can catch fish. If we go there and have bad luck it is because we are not doing the right thing. Bininj cook it all up—burn to keep away ginga [crocodile] too. For fishing you need a quiet place. Sometimes I don't catch fish in another country only if I'm luck. Got to speak to the old people, talk, they might say 'we'll take you out'. They tell you not to waste it, show respect, share it around, not just there for a good time. Might be sacred site, Rainbow there, might never come back. Got to tell other local people. If I go to Arnhem Land or salt water I don't know that country. Speak to the locals, share fish, if old people they might invite you go back.
>
> Fish they are our totems. If we see them go for waste make me bad feeling. That's my Dreaming. Look can't touch fish in spring water, it's a Dreaming place. If you eat them you get sick … Sometimes injured fish in the water, swimming sideways, sick. Hard one, but maybe released by fishermen. Poor fish keep going back biting at those lures. But they learn to keep away from lures … Balanda [non-indigenous people] say 'you got your law, okay we got ours. You can't stop us going on there. There are two laws on fishing.' I think you shouldn't waste fish or catch too many fish. Fish a species just like us, sad to see them dying or getting a hard time. Got to keep it under control. We all like fishing.[45]

For many Aboriginal people in Kakadu National Park, fishing is part of a lifestyle of hunting. They generally fish from the bank with a handline, and the preferred species for many people is not barramundi but catfish, saratoga, black bream and turtle. A senior traditional owner explained: 'We fish to catch food. Also, goanna and turtle. We look at the whole food chain, the whole experience. Don't waste any part. Look after

country and it will look after you. Don't kill everything. Get enough for the table.'

Local Aboriginal ethics and protocols in relation to fisheries management are based on ideal principles of appropriate behaviour. Like any principles, these are not immutable but change over time and according to different situations. Moreover, as Robert Johannes writes about Indigenous marine conservation systems, 'environmentally destructive practices coexisted, as in most societies, with efforts to conserve natural resources. But the existence of the former does not diminish the significance of the latter.'[46] Johannes also points out that in Indigenous coastal societies in Oceania, customary principles have suffered under the breakdown of the completeness of these traditional conservation systems caused by the introduction of money economies, the eroding of traditional authority, and the imposition of new laws and practices by colonial powers.[47]

In the late 1990s, Jacob Nayinggul, a senior traditional owner for the land, including part of the East Alligator River, explained his views on the management of recreational fishing in the area:

> You can't stop it. People don't like it when you stop them doing something they have been doing a long time. Some Bininj are the same. Just last week an old man passed away. We had his funeral on Sunday. That man used to walk all this country from here to the Border Store, fishing, hunting, everywhere. I asked people here not to fish that country until after the funeral, after smoking, after dirt has been thrown in the water to cleanse things, until it is all completed. The old people used to tell me to wait one full wet season for the rain to clean the area off, his footprints, camp ashes. Even to rub red ochre around all the tree trunks to mark respect through that area. But people here don't listen. They were out fishing, shooting geese before the funeral even. I go around and growl [at] people but they don't seem to care any more. Now that is a better reason to stop fishing for a while than a complete stop. Balanda too. We got cultural rules for using that river all right. Strong ones. But sure we used to have real strong law on using that river back when there was no Balanda. Sure there were a few buffalo hunters but they were

> too busy to beat the wet [season] to fish. But now full of Balanda sports fishing for barra over the top of Bininj law. It a big story this fishing one. People have to talk about it, Traditional Owners, Parks, researchers. I don't think we can stop recreational fishing, it has been going on too long. Bininj law will be finished. We all need to look at this, Traditional Owners and Parks. I mean the words are there to protect Bininj way of doing things but not the action. Big story.[48]

These Indigenous concerns about the management of recreational fishing in northern Australian waterscapes, and efforts to reinvigorate customary fishing practices, point more generally to questions about how and whether water rights and water resources are integrated with the concept of country. Listening to, reflecting on and respecting the Indigenous intersubjective, social realities connected to water requires, at a minimum, the de facto recognition of Indigenous governance jurisdictions, not merely compartmentalised and severely limited water rights.[49] Currently, the legal framework for native title and water provides only limited opportunity for native title holders to make decisions about the water allocations that could have a major impact on their rights and interests.[50]

Progressive reform will also require that environmental managers from state agencies and scientists break with a colonial pattern of giving primacy to non-Indigenous fishers and fisheries management.[51] Aquatic ecologists have recently come to recognise that the strong connections that Indigenous peoples maintain with aquatic environments, and therefore their knowledge of those systems, is not well understood or appreciated by their discipline or its practitioners. There are now calls for more inclusive approaches and a deeper level of engagement.[52] Clearly, the entangled nature of Indigenous connections to, and decision-making around, the use and management of ancestral waters require the development of an integrated policy discourse that foregrounds connections between people, lands and fish as well as water, and affords equal recognition to vital cultural practices.

Conclusion

Deep changes to water law and policy over the past twenty years have provided little environmental security to Indigenous groups who seek

to sustain customary governance of country in the face of re-regulation and redefinition by institutions far from their homelands. Efforts by traditional owners to reclaim water rights, protect savanna rivers and maintain relations with aquatic resources through management, continue throughout the region and across the continent. Further research is needed to link water rights with the protection of Aboriginal fisheries, and to investigate processes that have constrained proper relations with fish and reduced the productivity of Aboriginal fisheries. This includes the need for research into disruptions to practices of increase and care, as well as destruction of fish infrastructure, including river flows. The loss or attenuation of knowledge is another factor that deserves policy attention and research support. As the future health and biodiversity of these cultural lands and waterscapes is contingent on continued Indigenous occupancy, use and stewardship,[53] far more support needs to flow to the practitioners whose ancestors have carefully managed country for centuries.

Many Indigenous people in the Top End may no longer spend most of the year living alongside rivers, pursuing a lifestyle heavily dependent on fish and other aquatic species. Most are acutely aware that knowledge has been lost over recent generations and that it continues to erode with wider social changes. Yet, the connection between fish, water, land, people and the ancestral realm continues to sustain Indigenous notions of health and intergenerational wellbeing across the continent. Fish are considered tangible actors in the intangible assemblages through which Indigenous peoples understand and practise their relations with their waters, lands and each other.

CHAPTER 12

Celebrating Galtha Rom Workshops, a Yolŋu-led Knowledge Production Methodology in Land and Sea Management

Margaret Ayre, Djalinda Yunupiŋu, Jonathan Wearne, Rrawun Maymuru, Mandaka Marika and Gathapura Munuŋgurr

INDIGENOUS PEOPLES WORLDWIDE manage custodial lands and seas through a range of contemporary mechanisms and approaches. In Australia today, over 150 Indigenous land and sea management organisations contribute to Indigenous community and government goals for conservation and social-ecological sustainability, as well as to improved employment, economic and cultural outcomes. Scholars and Indigenous knowledge authorities alike have argued for the need to better articulate and represent the value and contribution—or 'co-benefits'[1]—of Indigenous-led land and sea management to broader societal goals of environmental management, as well as to Indigenous peoples' own goals.[2] In what follows, we explore the mobilisation and performance of Yolŋu knowledge practices through expressions of 'journeying', 'naming' and 'tracing', as these expressions are integral patterns of Yolŋu ontology that shape collaborative learning and co-benefits with non-Indigenous Australians through land and sea management.

Despite significant recent scholarship and interest in Indigenous approaches to land and sea management, there remains a gap in knowledge concerning the kinds of methods that can effectively combine and account for Indigenous and non-Indigenous knowledge in addressing

complex problems of sustainability. We suggest that a key part of the challenge of recognising and representing the contributions of Indigenous land and sea management to broader societal goals of conservation and sustainability, along with Indigenous peoples' own goals, is to better understand the role and value of Indigenous knowledge practices as foundational to this contribution.[3] We therefore present a case study of a Yolŋu-led knowledge production methodology that explicitly aims to reshape relations between Indigenous (Yolŋu) and non-Indigenous knowledge in the context of collaborative, Indigenous-led land and sea management, education and training.

In this chapter, we describe the evolution of a unique, Yolŋu-led, cross-cultural knowledge production methodology known as Galtha Rom workshops, which has shaped contemporary forms of Yolŋu land and sea management, through the agency and impact of the Dhimurru Aboriginal Corporation (or Dhimurru)—the organisation that manages the Dhimurru Indigenous Protected Area (IPA) in Northeast Arnhem Land (see Figure 12.1).[4] This methodology celebrates and manages the creative tensions between Yolŋu knowledge and other knowledge traditions such as Western science. We describe how the ongoing innovation of this methodology by members of Dhimurru, the Yirrkala School and the L̲aynhapuy Homelands School empowers Dhimurru to constructively contest and decolonise land and sea management structures and forms of operation, such as 'ranger training programs', 'plans of management' and the organisational priorities shaping those operations. First, we provide a brief history of the Galtha Rom workshop methodology and then trace its evolution in the work of Dhimurru in two key phases, involving firstly a unique training program for Yolŋu rangers, and secondly a program called Learning on Country that brings together Yolŋu secondary students, elders, rangers and others to address key issues in land and sea management, education and practice.

A Short History of the Yolŋu Galtha Rom Workshop Methodology

The Galtha Rom workshop methodology first emerged in the 1980s as part of a major educational reform process led by Yolŋu educators and knowledge authorities in Northeast Arnhem Land through the Yirrkala School and homelands education communities.[5] A key part of this reform

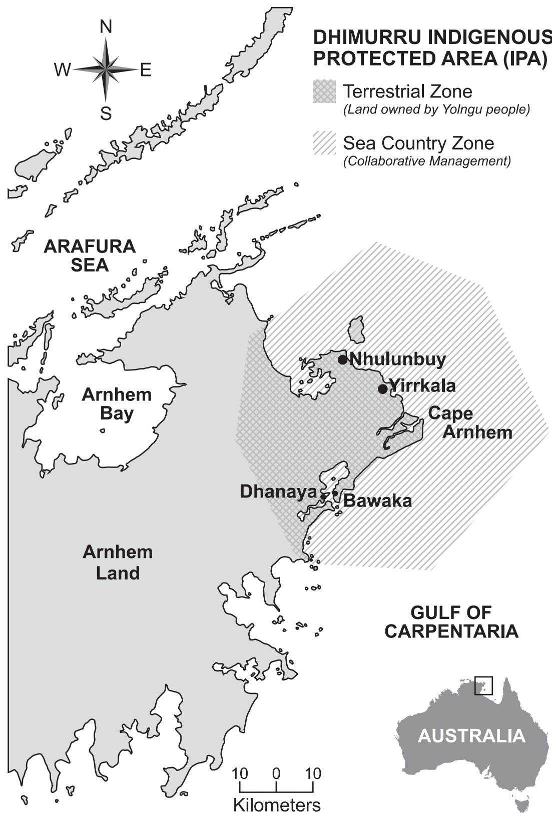

Figure 12.1. Map of Northeast Arnhem Land showing the Dhimurru Indigenous Protected Area.
Map by Liz Tait, 2020

process was a curriculum project called Garma, which began in 1986 and explicitly acknowledged and applied Yolŋu principles for an appropriate 'both-ways' education for Yolŋu primary and secondary school students.[6] As Yolŋu educators involved in the project explained: 'It is our belief that a Garma curriculum can be negotiated and that it will maintain a balance between the Yolŋu and Ŋapaki (non-Indigenous) knowledge traditions.' A Garma curriculum will find ways to integrate these two traditions and the diverse ways of knowing within each tradition.

Central to the Garma curriculum project was the explicit use of Yolŋu epistemology and metaphors for knowledge production that guided the negotiation of learning activities and outcomes, as senior Yolŋu elder, scholar and educator Dr Raymattja Marika-Munuŋguritj explained:

> These [Yolŋu] metaphors were given to us by Yirrkala community elders during discussions about curriculum. The [Yirrkala] school council is using [Yolŋu] community elders as consultants in developing a Yolŋu curriculum, which teaches the children Yolŋu knowledge and Yolŋu ways of knowing.[7]

The Yolŋu knowledge production metaphor of *garma* refers to a site of negotiation that is both a place (for example, where Yolŋu *buŋgul* (ceremony) is performed) and a forum where Yolŋu people gather to address issues of Yolŋu community life and plan a course of action together. In the context of the Garma curriculum reform project, another key Yolŋu knowledge production metaphor used was *galtha.* Dr Raymattja Marika-Munuŋguritj and Professor Michael Christie explain that Galtha is a 'connecting spot … where people make solid contact with the earth, when they have been brought together from different places and now they are having a discussion together to agree on a plan of action'.[8] The metaphor *galtha* was chosen by Yolŋu elders to describe and guide a process of negotiation about both-ways knowledge production that brings together Yolŋu and Ŋapaki knowledge. It is the foundational metaphor that Yolŋu elders chose for the unique, Yolŋu-led methodology for knowledge-making called Galtha Rom, as explained in a Yirrkala School report:

> When the [Yolŋu] community elders met for the first time to discuss Yolŋu curriculum, they told us that the workshops would be called Galtha Rom. The name they chose made it immediately clear to all Yolŋu that the community members were insisting that they be consulted in the development of any Yolŋu curriculum. In Yolŋu *matha* [language], Galtha represents the initiation of any sort of ceremonial activity that has been thoroughly negotiated, with all the relevant contributors.[9]

The Yolŋu term *rom* (law) signifies that a deep corpus of high-level, and sometimes restricted, Yolŋu knowledge is being drawn upon to address a particular topic.

The Galtha Rom workshop methodology guides how Yolŋu and Ŋapaki knowledge traditions might responsibly and effectively work

together. It involves a workshop-style set of activities conducted over 2–4 days on Yolŋu land and sea (or 'Yolŋu country') and is characterised by key principles and structural elements. These principles include Yolŋu practices of consultation and negotiation, and recognition of Yolŋu country as the foundation of learning/teaching. For Yolŋu people, knowledge emerges through *gurruṯu* (kinship system and relations) and *rom* that relates Yolŋu people to their *wäŋa*. In English, *wäŋa* may be described as places in the land and water on Yolŋu traditional estates. These places are constituted as a complex human-non-human entity, generated through ongoing Yolŋu practices of land and sea management and collective life. In this way, Yolŋu *wäŋa* are central to the Galtha Rom methodology and might be better expressed in English as 'people-places',[10] as there is no material difference or separation between Yolŋu people, land and sea in Yolŋu ontology.

The structural elements of the Galtha Rom workshop methodology include an agreed workshop theme, focus and location/s; input and instruction from key Yolŋu knowledge authorities, elders and leaders; explicit links to training and school curricula; *wäŋa* on Yolŋu country, where the workshop is conducted; collective activities such as listening to instructors, and travelling to important *wäŋa* on Yolŋu country to hunt, gather, cook and eat, and to share and learn Yolŋu and non-Yolŋu knowledge of land and sea; and materials and techniques that record and narrate the Galtha Rom methodology and support reflection and action by participants (for example, practices of journalling, videoing, taking photos, drawing, collating, and presenting information and reading maps).[11] The way in which Yolŋu places and people are connected through Yolŋu *gurruṯu* and *rom* provide boundaries and guidance for the Yolŋu elders and their collaborators, who co-design each unique Galtha Rom workshop. In recent times, the Galtha Rom workshop methodology has been adapted to different contexts and themes to cover workshop topics including *gapu* (water), wellbeing (see below), and *merri* (sacred string) in 2016 and climate change in 2019.[12]

The Foundations of Dhimurru and Yolŋu Ranger Work

From the early 1990s, Yolŋu landowners established their own land and sea management organisation, the Dhimurru Aboriginal Corporation

(known as Dhimurru), to care for Yolŋu estates on the Gove Peninsula in the Northern Territory.[13] Finding ways to bring together Yolŋu and Ŋapaki in a both-ways form of contemporary Yolŋu-led land and sea management was a core aim of the Yolŋu landowners and leaders who established Dhimurru. While they asserted the critical role of Yolŋu knowledge in the care and management of their country, these Yolŋu landowners and leaders also recognised the importance of applying and practising Western scientific knowledge in pursuing the Dhimurru vision for sustainable land and sea management.[14] The Dhimurru knowledge community drew inspiration from the innovative knowledge work of the community of Yolŋu and Ŋapaki educators at Yirrkala and in the L̲aynhapuy homelands, to 'develop Yolŋu knowledge traditions in new ways suited to contemporary conditions of Yolŋu land and sea ownership, and to appropriate Western scientific knowledge in ways that can work with Yolŋu knowledge traditions'.[15]

Another key focus of Yolŋu land and sea management through Dhimurru since its inception has been the work and professional development of its team of Yolŋu rangers. Rangers at Dhimurru are required to undertake some form of accredited training as part of their role, and from 1994 to 1999 this involved participating in a workplace and community-based version of the Associate Diploma of Applied Science (Natural and Cultural Resource Management, or NCRM) through Batchelor Institute. Yolŋu elders and members of Dhimurru's governing body, the Dhimurru Board, considered formal, nationally recognised training for Yolŋu rangers to be an important aspect of the professional development of individuals, as well as the organisation itself.[16] They directed the Yolŋu rangers to gain practical skills in Western-style ranger work—such as the use of firearms and chainsaws, and the application of first aid—along with knowledge of Western scientific plant and animal identification, recreation site design and maintenance, pest and weed management, and so on. Simultaneously, they identified the need to continue to build and practise Yolŋu skills and knowledge in Yolŋu systems of land and sea management as foundational to the creation and growth of Dhimurru's Yolŋu ranger workforce and organisation.[17] This included ongoing exploration of the possibilities and processes for bringing Yolŋu and Western scientific knowledge together in productive and appropriate ways. Key to meeting this challenge was a partnership between Dhimurru, the Garma Cultural Studies Institute

(GCSI) and the University of Melbourne in 1995, to conduct three Galtha Rom workshops on themes of *worrk* (fire management)[18] and *miyapunu* (marine turtles).

The following is an account of a Galtha Rom workshop held in 1995 on the traditional estates of the Yolŋu Wangurri clan at the Dhälinybuy homeland community. Through this story, we illustrate how the novel Galtha Rom methodology was applied to the Yolŋu land management priority of sustaining and practising *worrk djäma* (burning the land). In recounting this story, we utilise three interlinked teaching and learning methods, which in English we have termed 'journeying', 'naming' and 'tracing'. The key participants in this Galtha Rom workshop were Yolŋu elders with expert knowledge of *worrk djäma*, Dhimurru staff including Yolŋu rangers and trainee Yolŋu rangers, members of the GCSI, teachers and students of the Yolŋu schools' communities, staff and students of the University of Melbourne, and members of the Dhälinybuy homeland community.

Yolŋu Knowledge Practices: Journeying–Naming–Tracing

The *worrk djäma* Galtha Rom workshop participants arrived at Dhälinybuy and set up camp around the Yolŋu Wangurri homeland's community school. We were then instructed by Yolŋu elders on the relations between different Yolŋu clans and their estates, and particular Yolŋu *wäŋa*. Yolŋu elders with specific responsibilities for the land area to be burnt the following day shared Yolŋu names and Yolŋu *dhäwu* (stories) bestowed by Yolŋu *waŋarr* (ancestral figures) through their world-creating activities (*djalkiri*). This storytelling and referencing of links between Yolŋu people, the land and sea performs Yolŋu clan identity and their *wäŋa* as inextricably connected. The participants in the workshop, including the Dhimurru trainee rangers, were being taught and inducted into ways of knowing, telling and teaching about the land and sea, a knowledge practice we term 'naming'.

The following morning, after breakfast, participants spent time reflecting on the knowledge shared at the previous day's workshop and each person wrote a journal entry about what they had learnt. After the journalling session, workshop participants set out in four groups from the Dhälinybuy homeland community on foot to the area to be burnt. This was a place known as Djurrpunbuy, a large floodplain bounded by a river and tropical woodland. Yolŋu elders in each group lit several fires at strategic sites near

and on the floodplain, and participants watched as the flames flickered and smoke billowed around them. Once the fires had died down, the groups then visited particular sites in the large area that had been burnt. Under the instruction and tutelage of Yolŋu elders, we moved through Yolŋu country and hunted for animals that had been injured or whose burrows had been exposed by the fire, including turtle, echidna, goanna and snake. These activities of the *worrk djäma* workshop—burning, hunting and coming to know *wäŋa*—comprise a knowledge practice we term 'journeying'.

On the third day, workshop participants were again instructed by the Yolŋu elders and workshop facilitators to reflect upon and document their experiences through journalling. The Dhimurru trainee rangers were also asked to record the previous day's *worrk djäma*, including identifying the locations visited, activities performed and the pattern of lighting the fires on a map. This map was a form of topographic representation, depicting the trajectories of the four groups of people on the second day of the workshop, including what they hunted, any other activities undertaken along the way, and the names of *wäŋa* they visited. The trainee rangers explained the map they had created and retold their experiences in a video recording. Through this documentation, and by narrating the previous day's activities, the trainee rangers were being taught to perform *wäŋa*, a knowledge practice we term 'tracing'.

Through the development of Galtha Rom workshops such as the *worrk djäma* workshop described here, Dhimurru and its institutional partners identified new possibilities for Yolŋu ranger training curricula that appropriately celebrate and value Yolŋu-led both-ways methodologies for knowledge-making. For example, the participation in, and contribution to, the *worrk djäma* Galtha Rom workshop by the Dhimurru trainee rangers was accredited within the national course, the Associate Diploma of Applied Science (NCRM) course in which they were all enrolled through Batchelor Institute. This included all the learning they demonstrated to Yolŋu elders under the auspices of Dhimurru and the GCSI through their writing, recording, narrating, map reading and creation, journeying and hunting activities.

Using Galtha Rom workshops, the Dhimurru trainee rangers were being trained in how to make and remake the relations between the Yolŋu clan collectives and the lands and waters that they own and to which

they belong—their *wäŋa*. For example, Yolŋu elders taught the names and locations of Yolŋu *wäŋa*, bestowed by the *waŋarr* through *gurruṯu* and *rom*,[19] to guide participants in their *worrk djäma* activities on the second day—participants followed the same trajectories in the landscape and undertook the same stewardship activities to celebrate and sustain the lands and waters that the *waŋarr* had undertaken when they first created life. The trainees were also taught aspects of Western scientific (non-Indigenous) ranger work, such as Cartesian-style mapping, project management, report writing and presentation skills. This combination of knowledge practices represented an emergent capacity for undertaking Yolŋu ranger work at Dhimurru that resisted a normative ranger role, as might be found in a government park or reserve. It did so by celebrating and mobilising the creative differences arising from a Yolŋu community–sanctioned and led methodology for bringing together Yolŋu and Western scientific knowledge.

Evolution of the Galtha Rom Methodology for Learning on Country

During the 2000s, Dhimurru turned to addressing its responsibility for managing the Northern Territory's first Indigenous Protected Area, the Dhimurru IPA, which involved a stronger focus on pragmatic land and sea management actions compared to specific, Yolŋu-led knowledge production activities. However, from 2013, Dhimurru re-engaged with the Galtha Rom workshop methodology as part of an education and training initiative called the Learning on Country (LoC) program, involving the Yirrkala School and Dhimurru. The LoC program aims to 'increase education, training and employment through increased school attendance and secondary school achievements for Indigenous students, as well as increase inter-generational transmission of Indigenous knowledge and customary practice'.[20] For Dhimurru, a renewed commitment to the Galtha Rom methodology was a recognition of the need for continual investment in the professional development of the Dhimurru rangers and workforce. For the Yirrkala School, the program provides a pathway towards jobs for secondary school students as well as a critical both-ways component to their schooling. Dhimurru rangers and some Yirrkala School secondary students participating in the LoC program were enrolled in the nationally

accredited Certificate in Conservation and Land Management through Batchelor Institute. For the Yolŋu community, the LoC program is a vehicle for ongoing development of Yolŋu leadership and participation in both-ways knowledge-making.

In the Yirrkala School and Dhimurru LoC partnership,[21] Galtha Rom workshops form the basis of the LoC program, whereby Yolŋu secondary students, Yolŋu rangers,[22] Yolŋu elders, and Yolŋu and Ŋapaki teachers (and other experts) learn from each other under the authority of Yolŋu elders. The LoC program applied the knowledge practices of the original Galtha Rom methodology with some notable adaptations. A Galtha Rom workshop held in 2016 at the Yolŋu homelands of D̲aliwuy and Gul̲kul̲a, on the topic of *gapu* (water), illustrates some of these adaptations.

'Journeying' practices were performed by participants in this Galtha Rom workshop through visits to *wäŋa* around the area that Ŋapaki call D̲aliwuy Bay. Yolŋu elders and workshop facilitators shared the *dhäwu* (ancestral stories) for these *wäŋa*; for example, the 'sacred tree' at the boat ramp. Participants were also taught the names of *wäŋa* as they walked together up the inlet of the bay along the beach and next to the woodland that merged into a tall mangrove forest. As a senior Yolŋu workshop facilitator, Djalinda Yunupiŋu (see Figure 12.2 in the picture section), explained: 'Everywhere on Yolŋu country there is history being taught. Our [Yolŋu] history, it is not written; it's told and spoken.' She added: 'These are names that we [Yolŋu people] don't say every day.'

'Naming' practices were also performed at the Galtha Rom workshop; for example, through the *manikay* (songs) in a *buŋgul* that honoured the lives of Yolŋu landowners of the D̲aliwuy *wäŋa* who have passed away. This *buŋgul* was also part of the contemporary responsibilities of Yolŋu and their organisation, Dhimurru, to manage D̲aliwuy as both a Yolŋu *wäŋa* and as a public recreation area. The D̲aliwuy Bay Recreation Area is made available by Yolŋu landowners to tourists and Ŋapaki visitors to use for camping, boating and fishing under the permit system to access the Dhimurru IPA. It had been closed to visitors for some time prior to this workshop, due to the death of senior Yolŋu landowners, but following the *buŋgul*, the workshop was chosen as an appropriate occasion to reopen it. Djalinda described the feeling of completing the *buŋgul* as 'being tired

but happy because the country is so beautiful and the sound of the ladies crying is so beautiful' (see Figure 12.3 in the picture section).

'Tracing' practices of the *gapu* and wellbeing Galtha Rom workshop took several forms. A workbook prompted participants to complete written exercises and reflect upon the workshop activities in both English and Yolŋu *matha*. This workbook contained representations and vocabulary of different human emotions (in pictograms of facial expressions) and also depicted different states of *gapu* as an analogy for different states of emotional wellbeing. Participants were asked to consider a series of pictograms of the different types and states of Yolŋu *gapu* and how to use these to self-assess and graphically represent their own emotional states throughout this stage of the workshop. Other tracing practices at the Galtha Rom workshop were the creation of a large, collective map on butcher's paper of the names and stories told and learnt at the workshop campsite, Gul̲kul̲a. This session on the third day involved senior Yolŋu elders and teachers facilitating a conversation with all workshop participants about what had been learnt at the workshop and encouraging the students in particular to demonstrate this to the larger group.

The *gapu* and wellbeing workshop explicitly addressed the connection between Yolŋu knowledge of *gapu* and its meaning and role in Yolŋu life, as well as the non-Indigenous concept of 'emotional wellbeing'.[23] Different forms of *gapu* were used as a metaphor for different emotional states (described in both English and Yolŋu *matha*) and symbols for these were presented in a workbook for students to consider. For example, forms of Yirritja (Yolŋu moiety) water include *gul̲arri*, which is 'stormy floodwater', and *dhal̲atj*, which refers to the 'calm after a flood'. Students were asked to consider their emotions during the day and reflect these in drawings using the symbols provided in the workbook for the different types of Yirritja and Dhuwa *gapu* (see Figure 12.4). In addition, the concepts of and connections between the *gapu* metaphor and emotional wellbeing emerged through the both-ways methodology in the strategic choice of location for the workshop. For example, participants observed the different states of water in the strait between D̲aliwuy and Wanuwuy (known in English as Cape Arnhem) from where we gathered at D̲aliwuy, as a material expression of 'emotional wellbeing' in Yolŋu country.

Figure 12.4. Dhimurru senior ranger Wakuratjpi Gondarra using the language of *gapu* (water) to explain his various emotions over the course of the workshop. A graphical form of the 'tracing' exercise, which was completed in small groups, is visible on the whiteboard. Similar presentations were made by eight adults and several students to an assembled audience of over fifty elders, teachers, rangers and students.
Photo courtesy of Dhimurru Aboriginal Corporation

Evidence of Success and Outcomes

The Galtha Rom workshop methodology enables Yolŋu and their collaborators to reimagine, innovate and practise contemporary 'both-ways' Yolŋu-led initiatives in education and land and sea management, in ways that achieve important outcomes for Yolŋu people and their institutions, as well as for governments.[24] It has had transformative impacts on Yolŋu people and their organisations through the historical continuity of participants and the responsiveness of the methodology to contemporary issues of concern and importance to Yolŋu.

Several generations of Yolŋu students—who are now Yolŋu rangers, teachers, leaders and elders in the Yolŋu community—have experience

and expertise in Galtha Rom workshops. At Dhimurru, it has become a critical part of career development for its Yolŋu ranger workforce. Wiṯiyana Marika, a Yolŋu elder, senior Galtha Rom workshop facilitator and ceremonial leader, explains:

> The [Dhimurru] rangers are the people who care for the country, looking after the [Dhimurru] IPA. It's very important that they know; because they would know the story of their half of the other galthas [Galtha Rom workshops] that were held before. It's not only Dhuwa, but Yirritja and Dhuwa Galtha Rom workshops [that we have] to go through.

The Galtha Rom workshops have had transformative outcomes for Dhimurru as a Yolŋu organisation.[25] As illustrated above, the approach is a vehicle for negotiating, resolving and implementing land and sea management decisions—such as access to, and caring for, Yolŋu country in rightful and effective ways. For example, a Galtha Rom workshop held in 2018 at Yalaŋbara was instrumental in establishing a Yolŋu cultural mapping program for the Port Bradshaw region that documents the names and significance of this important area, and which can be used to prioritise and identify management actions implemented by Dhimurru. Dhimurru have also included the Galtha Rom workshop methodology as part of the development of the new plan of management for the Dhimurru IPA since 2022–2023.

There are also outcomes from the Galtha Rom workshop methodology for individuals and the Yolŋu community more broadly. Co-authors of this chapter, Mandaka Marika and Rrawun Maymuru, participated as a Dhimurru ranger and Dhimurru trainee ranger respectively in the first three Galtha Rom workshops hosted by Dhimurru in the 1990s. Mandaka recently retired as the longstanding managing director of Dhimurru. He has provided high-level vision, management and guidance to the Galtha Rom program since 2013. Rrawun is now the Senior Cultural Advisor at Dhimurru. Since 2019, Rrawun has been the lead negotiator and facilitator of each new Galtha Rom workshop involving Dhimurru. Other former students of Galtha Rom workshops in the Yirrkala and L̲aynhapuy Homelands Schools' programs in the 1980s and 1990s are now Yolŋu knowledge

experts and have responsibilities for designing and running Galtha Rom workshops. Gathupura Munuŋgurr, a student of Yirrkala School Galtha Rom programs in the 2000s, was also a lead ranger at Dhimurru and a Galtha Rom workshop facilitator over a period of eight years. Gathupura is now a teacher in training at Laynhapuy Homelands School. Other recent evidence of the impact of the LoC program and Galtha Rom workshop methodology is a number of the 2020 Yirrkala School cohort students who participated in the LoC program and other critical learning and wellbeing initiatives, completing their Northern Territory Certificate of Education and Training and achieving university admissions.

Conclusion

Yolŋu people are historically adept at integrating new ways of seeing, knowing and living into their society. The Galtha Rom workshop methodology is an approach to bringing together Yolŋu and Ŋapaki knowledge practices in this tradition. It explicitly manages and celebrates differences in these two knowledge systems under the leadership of Yolŋu knowledge experts and in collaboration with non-Indigenous people and organisations. We have shown here that the knowledge practices that constitute this methodology can be understood as journeying, naming and tracing. It is this unique set of both-ways knowledge practices that enables Yolŋu people and their organisations to achieve improved outcomes in land and sea management and education for Yolŋu country and people, as well as for governments. Such outcomes include a reshaping of the power relations between Yolŋu and non-Indigenous knowledge in the context of education and training curricula for secondary school students, Yolŋu ranger workforce development and governance of Yolŋu community life.

The co-authors' experience is that properly constituted Galtha Rom workshops, with the right people on the right Yolŋu country at the right time, precipitate and support critical discussion and negotiation about Yolŋu knowledge, concerns and aspirations, in ways that can inspire other cross-cultural knowledge communities.

PART IV

Hearing Our Voices

CHAPTER 13

Minymaku Ara̱

Women Speak Out on Law and Land

Diana James, Nganyinytja Ilyatjari and Mantatjara Wilson

Ngayuku ngura nyangatja. Manta nyangatja milmilpatjara!
Ngayuku kamiki tjamuku ngura iritinguru.
This is my country. This land is sacred!
This is my grandmother's and grandfather's country from a long time ago.
We have no books; our history was not written by people with pen and paper.
It is in the land, the footprints of our Creation Ancestors are on the rocks.
They created the hills and creek beds.
We learned from our grandmothers and grandfathers,
as they showed us these sacred sites,
told us the stories, sang and danced with us the Tjukurpa.
We remember it all, in our minds, our bodies and feet,
as we dance the stories, we continually recreate the Tjukurpa.
Nganyinytja, 1988

NGANYINYTJA, A PITJANTJATJARA law-woman, speaks with the authority of *minymaku ara̱*, the voice of senior desert women who stand strong in the law of their country and walk tall as proud matriarchs. She speaks of the connectivity to kin and country that has sustained her people through the impacts of European invasion and colonisation.

This chapter tracks the voices of *minyma pulka*, senior Anangu law-women of the deserts of central Australia, who have advocated for the importance of women's law to the health and wellbeing of their communities since the 1940s.[1] Nganyinytja was among the first to speak out and challenge the imposed colonial system that ignored Anangu women's authority. Her philosophy and action has inspired other women of the Western Desert to speak up in community councils and to government officials. Together, in 1980, they formed the Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara Women's Council (NPYWC), a strong tri-state organisation that includes Anangu women from Western Australia, the Northern Territory and South Australia. *Minymaku ara* is the voice of Anangu women who know their law and country; their voices are now heard in governance at local, state and federal levels.

Nganyinytja grew up on the lands of her ancestors before European settlement spread across the desert rangelands of central Australia. She learnt to read the country through Tjukurpa,[2] the law and cultural knowledge of her people, lands and spirit. Tjukurpa is the sacred ontology of the creation of people, animals, plants, earth and sky, of the Ngaanyatjarra Pitjantjatjara Yankunytjatjara (NPY) Anangu peoples of the Western Desert of Australia. The songlines of the Tjukurpa continually sing and dance the living connectivity of people and country.[3]

Nganyinytja was *nguraritja*, a traditional owner of Angatja, her father's country in the north-western ranges of South Australia. Born in the bush in the late 1920s, she grew up walking country, skilled in traditional knowledge (see Figure 13.1 in the picture section). She was a *kungkawara*, a tall teenaged girl, when her family decided to move to Ernabella Mission in 1940. Nganyinytja quickly learnt whitefella ways as well as progressing through stages of Anangu women's ceremonial initiation into higher levels of her law and culture. Nganyinytja regularly travelled with family back west to their country, hunting, dingo scalping, joining large ceremonies and performing ritual at sacred sites. In maturity, she became a 'boss' of women's sacred objects and ritual for her grandmother's totemic sites in Western Australia.

Nganyinytja learnt the balance of male and female law: 'The way I have been taught this knowledge of country is some Tjukurpa are for men, women and children to all dance and all sing and be happy together and

share that knowledge. Other Tjukurpa are just for men to know for themselves and some are just for women.'

Tjukurpa, An̲angu law and culture, is learnt through the performance of songlines, the *inma* 'songs and dances' of the ancestral heroes and heroines. This ancient religious tradition instructs An̲angu in the complex cooperation and balancing of male and female roles in both secular and sacred life. Women and men are both custodians of the sacred rites of their totemic ancestors, performing together in large public ceremonies and separately in secret sacred ceremonies. Aboriginal women's ritual is essentially about the same social and religious concerns observed by men—revivifying the life-giving principles, providing the reproductive essence of animals and humans, teaching social compliance from young to old, and resolving conflict.

On Being Woman

Nganan̲a ngurаritja tjut̲a, nganan̲a it̲i nagarinyi ngura nyangangka! We were born on this land, we birthed on this land; our blood and the blood of our mothers and grandmothers is in this land. We are in this land and the land is in us. We will fight to keep this land for our grandchildren to grow up in!
Mantatjara Wilson, speaking at the first NPY Women's Meeting at Kanpi, 1980

Mantatjara Wilson spoke of the generative life force in women's law, the nurturing and fiercely protective roles of women looking after their people and country. All people are born of woman; birthing blood flows into the land and spirit flows back, creating kinship to place and Tjukurpa. *Kungka*, young girls' initiation, is marked by the flow of blood, and they join the other *kungkawar̲a* (young women) beginning instruction in women's law. Traditionally, young women and young men lived in separate camps while being instructed in their distinct social and religious adult roles.

Women work together providing food, shelter and healing for their children and elders. They independently sustain families during the long absences of men on hunting or ceremonial journeys. Traditionally, women were prime breadwinners, collecting and producing the bulk of a family's daily food.[4] Expert hunters of small game, they also harvested edible grain

and milled it to make bread, they gathered fruits, honey and medicinal plants. Women rose before dawn to collect water from rock holes, in dry times digging soaks or collecting the night dew from plants. They built strong *wiltja* shelters of wooden beams thatched with spinifex, and carved hardwood tools—the *wana* 'digging stick', *piti* 'harvesting bowl', *kaṉilpa* 'winnowing bowl' and *tjuṯinypa* 'fighting sticks', used to defend themselves and their families. Women were breadwinners, hunters, builders, craftswomen, fighters, healers, dancers and singers, and performers of sacred law, caring for people and country.

Young women learn the epic song cycles of their totemic ancestors from childhood. They are taught *tjitjiku inma*, children's versions of the story, until they become women. *Minymaku aṟa*, senior women's law and ritual, is only open to mature mothers of teenaged children. *Minyma puḻka* are senior women who have progressed in sacred and healing knowledge, becoming 'bosses' for ritual, sacred objects and women's law.

Wana Law: Independent Women's Law

Lizzie Marakilyi Ellis, a distinguished Ngaatjatjarra linguist, speaks passionately of the independence and interdependence of men's and women's law and cultural knowledge: 'English and the language of missionaries took away the power of our law, our Tjukurpa. The law of *kulata* (spear) and *wana* (digging stick) needs to be taken back by our people.'[5]

The complex cooperation and balancing of male and female roles, responsibilities and authority in different areas of Aboriginal secular and sacred life were too subtle for most early European newcomers to see or understand. Aboriginal women's religion, law and culture were largely invisible to early male anthropologists of the eighteenth and nineteenth centuries. The social-scientific perspective of European patriarchal culture and religion positioned women as the inferior 'second-sex', the property and helpmate of men.

Anthropological accounts of Western Desert culture and religion have reflected this male bias since Spencer and Gillen in 1875. They were only invited to witness male ritual and ceremony, concluding erroneously that women had no religious knowledge and ceremony. In the 1920s, Norman Tindale likewise focused on men and declared Pitjantjatjara women's adult lives tediously hard and mundane.[6] The terms 'sacred' and 'secret'

were often conflated, and women were considered by anthropologists to be excluded from both.[7] It was not until the 1930s and 1940s that female anthropologists challenged this view.

Phyllis Kaberry's approach in *Aboriginal Woman Sacred and Profane* in 1939 was groundbreaking. She recorded the complexity of women's roles and responsibilities,

> an attempt to portray aboriginal woman as she really is—a complex social personality, having her own prerogatives, duties, problems, beliefs, rituals and point of view … they possess totems, have spiritual affiliations with the sacred past, and perform their own sacred rites from which the men are excluded … we have no grounds for assuming on the data now available, that the men represent the sacred element in the community and the women the profane element.[8]

Women's ritual authority was confirmed in the work of Catherine Berndt at Ooldea in 1941,[9] and subsequently by others including Isobel White and Annette Hamilton during the 1960s and 1970s.[10] However, it took the publication of *Daughters of the Dreaming* in 1983 to challenge the persistent view of women as chattels of men. Diane Bell's feminist anthropological approach made headlines by controversially positioning women as 'central' rather than 'marginal' in the design and structure of desert society.[11] Bell's perspective was from inside the separate senior women's camp. Earlier anthropologists had been excluded by either their gender or age from sitting in the senior women's law circle, which was exclusive to matured mothers of independent children. Bell witnessed Warlpiri law-women as 'autonomous, independent ritual actors who actively participate in the creation, transmission and maintenance of the values of their society'.[12]

Colonial Disempowerment of Women

Unfortunately, the legacy of earlier male-centric anthropology and colonial governments continued to disempower Aboriginal women religiously, socially and economically well into the 1970s and 1980s. Western government-imposed community political and social welfare structures denied An̲angu women their traditional authority and independence. Assimilation policies applied at Amata during the 1960s required An̲angu

to permanently reside and work on the settlement; traditional trips to country were not supported as they were at Ernabella. Anangu men and women were distressed and disempowered through the loss of traditional roles and economic independence. The *wana* law of women of Nganyinytja's generation was not valued under the new hybrid economy created by the welfare system. Women were confined to Western domestic roles, while a literate few were employed as teaching assistants and health workers. While women were proud of their ability to adapt and succeed in this new work, they were not respected for their traditional authority and therefore not consulted in community governance.

The 1972 election of Gough Whitlam brought sweeping changes to federal government policy, supporting the recognition of Aboriginal land rights and self-determination. Mainstream society was being challenged by the newly formed Women's Electoral Lobby, which advocated equality of opportunity, respect and pay for women. However, this lobby did not include the voices of traditional Aboriginal women living in isolated settlements, who lacked the power to influence local, state or national government policies and practices. Aboriginal citizenship in Australia—their own country—had finally been acknowledged after the 1967 referendum. Yet this did not ensure equality of opportunities, respect or pay to Aboriginal workers in remote desert communities. While in 1966, Gurindji stockmen and domestic workers walked out on strike, demanding proper wages at Wave Hill Station, these actions were distant echoes for people on Anangu Pitjantjatjara Yankunytjatjara (APY) Lands, with only one community radio, no phones and no television at the time. Isolation from the outside world, low literacy in the English written language of government power, and loss of economic independence and both physical and spiritual authority over their lives, kept Anangu corralled in welfare ghettos.

Nganyinytja was taught to read and write in Pitjantjatjara when she went to the Ernabella Mission bilingual school in the 1940s. Literate in both Pitjantjatjara and English, she was highly aware of her people's disempowerment and poverty under the welfare state. Employed by the Department of Community Welfare at Amata during the 1960s and early 1970s, she daily assisted women to get food and provide for their children. Nganyinytja related her epxeriences during this time:

After this, others began to get sit-down money. If they had no work, they got sit-down money. Then I would take them to fill in forms for sit-down money. Money for what? Money for children, widows' money, pensioners' money. If another woman came into that office I would ask, 'Why have you come?' And she would say, 'I'm hungry, I want to buy food.' Then I would go to the boss, Mr James, and say, 'She wants food. She wants to get food through a form.' So, he would write out a form and give it to her. She would take the form and get food. That was how we lived, like that.

In the morning, those who were hungry would come. I'd write down their names and send them off, and they'd be given food. Like this, like this I worked.

Strong Women Speak Up

The new political era of Aboriginal self-determination was tightly constrained by government policy and welfare funding to ensure the continuance of mainstream Western patriarchal power. During the 1970s and 1980s, government officials and community advisers were predominantly white men. There was no parity in cultural governance: no senior white law women came out to consult with Aboriginal law women. An̲angu women were not listened to at the community, state or federal levels.

During the mid-1970s Aboriginal local councils were established in remote communities. However, these were exclusively male, mirroring the imposed white male governance system. Strong women like Yuminiya Mildred Lyons and Nganyinytja were criticised for speaking up. In late 1975, Yuminiya expressed her frustration after being ignored yet again at an Amata community meeting:

Wiya! Whitefella tjut̲a kura mulapa! Watiku kulilpai, minymaku wiya. Nya, tjana pina pati? Nya tjana kulini minyma tjut̲aku? Ngana<u>n</u>a papa wiya!

No! All these whitefellas are no good! They only listen to the men; they don't hear the women. What? Are they deaf? What do they understand about us women? We are not dogs!

> *Nganaṉa papa wiya!*
> We are not dogs![13]

Women across the NPY lands were angry at the dismissive treatment of government officials. During the 1970s, women in mainstream society and on Aboriginal lands were challenging the structural dominance of male power and privilege in the Australian political and social system.

Women's Land Rights

> *Ngayulu nguraritja—I am the traditional custodian of this place.*
> *Ngayulu ngura wiṟuṟa kanyini—I look after this country properly.*
> *Ngayulu Tjukurpa kuṉpu kanyini—I maintain the strong law of the land.*
> Nganyinytja[14]

As a *minyma puḻka*, a woman of high regard in traditional law and culture, Nganyinytja became a dynamic leader of her people's fight for land rights and self-governance through the new Western laws imposed on her lands and people. Nganyinytja fearlessly advocated for women's rights and authority to speak on land, law, religion, culture and economic governance. She was one of a few women bold enough to speak up at male-dominated early meetings of the Pitjantjatjara Council, a tri-state alliance of NPY people formed in 1976 to represent Aṉangu land rights (see Figure 13.2 in the picture section). She argued that land rights are everyone's business:

> *Meeting nyangatja nganampa, uwankaraku, minymaku uwankaraku.*
> This meeting is for everybody, including all the women.
>
> *Ka nganaṉa kuliningi: ay, nganaṉa meeting nyanga palula wangkanytjikitjala mukuringanyi, nganaṉala tjitji tjuṯa tjara manta kanyintjikitja, tjitji tjuṯa kanyilpai nganaṉa manta nyangangka, munula nganana wangkantjikitja mukuringanyi mantangka Governmangka tjungu DAAngka uwankarangka wangkantjikitjala mukuringanyi, tjungungka tjakultjikitjangku tjukaṟurungku.*
>
> This is what we are thinking: we want to speak at these meetings, we mothers of many children are looking after country, we care for many children on this land, and we want to speak for this land with

> the Government together with DAA [Department of Aboriginal Affairs]; we want to speak with everyone, so that together we can tell the message straight.[15]

The Department of Aboriginal Affairs was slow to acknowledge the importance of A̱nangu women's roles in community governance. In January 1980, I became the first female field officer employed by DAA to work with women across the tri-state Pitjantjatjara Council region. A̱nangu women responded immediately, organising meetings to address women's community concerns. In February 1980, Nganyinytja invited me to an extraordinary land rights meeting of senior law-women in Amata. The women declared their right and intention to join their men at Pitjantjatjara land rights meetings planned for Adelaide in March 1980. Nganyinytja instructed me to write a report to DAA and the Pitjantjatjara Council stating the women's traditional land ownership rights and to ask for a bus to transport them to Adelaide.

Women's Land Rights Meeting, Amata, 5 February 1980

Nganyinytja spontaneously called the women's meeting after the meeting of the Executive of the Pitjantjatjara Council on 4/2/1980. That meeting had discussed a trip to Adelaide 10/2/1980 to 15/2/1980 to protest the S.A. Government's proposed changes to the scope of the new Land Rights Act. The people are very concerned that [former SA premier David] Tonkin is wanting to allow mining on their land and is going to withdraw their right to veto mining in the area.

The women were very angry that they had not been included in these discussions of the Pitjantjatjara Council Executive about the land rights meeting. They complained that at previous full Pitjantjatjara Council meetings, they had been told to be quiet and [were] not allowed to participate fully in discussions about land rights.

Report by Diana James[16]

This brief report sent shock waves through the male-dominated DAA office in Alice Springs. Some claimed it was biased by 'white feminism', but it was the strong, true *minymaku aṟa*, the voice of A̱nangu law-women. Puntju Thompson, then chairman of the Pitjantjatjara Council, recognised the

senior Aṉangu women's authority and rights to speak for land and law, immediately supporting their requests. Nganyinytja successfully used whitefella power structures and forms of written language, such as reports, to ensure Aṉangu women's voices were heard in this new social and political environment.

Women and Men Walk Together

Aṉangu women got seats on the buses to the 1980 Pitjantjatjara land rights March in Adelaide. Nganyinytja declared:

> We women want to march with our men for our land rights. Walking next to them, not in front, not behind, but side by side. We own the land, care for country and keep Tjukurpa alive together, for our sons and daughters, grandsons and granddaughters to walk forth on strongly.[17]

Nganyinytja led many women to march alongside their men and joined in meetings with the South Australian Government ministers in the Adelaide parklands. Most women sat in the outer circle and listened, but as Nura Nungalka Ward remembers, Nganyinytja fearlessly spoke to the white government men, who listened with respect:

> Nganyinytja went straight to the centre of the meeting. She had so much confidence … So in she went, all alone, while the rest of us stayed in our group. The government representatives were impressed with her, they said 'This woman has strong ideas!' We were all there, absolutely everybody, men, women and children. Because we all wanted to make the point that we all wanted our land. It was really important for us to be down there.[18]

We Are Bosses Ourselves: ANZAAS Aboriginal Women's Conference, 1980

The fight for land rights galvanised women's political voice across the NPY lands. In response to their requests for greater knowledge of whitefella law, I developed women's courses in politics and community governance at the Institute for Aboriginal Development (IAD) in Alice

Springs. In April 1980, an invitation came for two women to attend the first ANZAAS (Australian and New Zealand Association for the Advancement of Science) conference of Aboriginal women in Adelaide. The women insisted the funding be stretched to enable fourteen women leaders to attend from across the tri-state NPY region.[19]

The ANZAAS conference opened with formal academic papers by female anthropologists and Indigenous Australian academics. Nganyinytja, after listening intently to anthropologist Catherine Berndt, nudged me and whispered, '*Ngayulu wangkantjikitja mukuringanyi!*' ('Tell them, I want to speak!').[20] The organisers interrupted proceedings for Nganyinytja to speak. She confidently mounted the lectern and drew on the whiteboard a map of circles covering the whole of Australia, then said:

> *Kulilaya, nganampa manta tjukurpatjara; nganan̲a Tjukurpa tjunkunytja iriti, ngura nganampa winki Australiala winki Tjukurpa tjunkunytja—kulilaya!*
> Listen, our land is sacred all over Australia; we laid down the Dreaming of this land a long time ago; all over Australia in our many countries, Tjukurpa Dreaming was laid down—listen![21]

Nganyinytja spoke of Aboriginal women's knowledge of sacred totemic sites and Tjukurpa songlines that link places and people across the Australian continent. Explaining the separate authority of men's and women's law both traditionally and today, she spoke passionately of the need for land rights, for her people and others to look after country properly. Nganyinytja eloquently bridged the language and cultural divides of all the women present, Indigenous and non-Indigenous, bush and city, calling for recognition and protection of Aboriginal women's law and sites across Australia.

Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara Women's Council

Nganyinytja's leadership in land rights and at the ANZAAS conference inspired NPY women to form the regional women's council in December 1980. Mantatjara Wilson, inspired by Nganyinytja, invited women from across the lands to gather for a regional women's meeting. Her invitation

was recorded on cassette tape, copied at the IAD and mailed out to all community women's centres. Mantatjara spoke of the reasons why women needed to meet separately:

> We women always attend Pitjantjatjara Council meetings to ask for assistance, but we sit and sit and sit and sit, and wait and wait—yet we can never speak. And yet we take so many problems and issues with us there. We sit there and wait, and then we leave.
>
> Women are very concerned about their big problems, yet they are unable to tell the chairman. 'Stop, don't raise them here,' we are told, when we try to take our turn to speak, and so we keep failing to bring them to the attention of the DAA, because DAA only listens to the men.[22]

The first women's meeting was subsequently held on 6–7 December 1980 at Kanpi, in the middle of the NYP lands (see Figure 13.3). Senior law-man Andy Tjilari welcomed the women to his homeland: 'Women always met separately in the olden days, it's appropriate that they meet like this today.'[23] The women travelled hundreds of kilometres west from

Figure 13.3. Mantatjara Wilson and Diana James at the first Women's Council meeting, Kanpi, December 1980
Photo by Suzanne Bryce; image supplied by Ara Irititja (AI-0036655-001)

Indulkana and east from Backstone. They begged, borrowed and cajoled funds and vehicles to get there—a difficult job as women's vehicles were few and drivers scarce. Formal meetings were held over two days. *Minymaku ar̲a*, the women elders, spoke in support of the younger middle-aged women who chaired the meeting and articulated concerns about health and social welfare, education, youth offenders, domestic violence, policing, housing, employment and the importance of women's centres in all communities. Mantatjara Wilson wrote the key issues on a whiteboard, while I recorded minutes and translated the resolutions. After hours of animated talking, the women danced, honouring traditional law and Tjukurpa by performing *inma—singing up* women's power.

Mantatjara Wilson suggested an An̲angu women executive be elected to work *mal̲par̲ara* (together as friends) alongside white women, as An̲angu men did with the anthropologists and lawyers of the Pitjantjatjara Council:

> We'll be selecting two strong women to work with and speak up at DAA and Pitjantjatjara Council meetings. They'll be putting all the women's problems on the agenda. We are also considering sending one white woman along with the two An̲angu women ... The women's council chairperson will work towards helping the women with their problems. There will also be a white woman and two An̲angu women. Everybody will work together.[24]

The women nominated a Women's Council Executive of five, including one representative from each state, Myra Watson as the first chairwoman, and Mantatjara and myself as co-worker secretaries. I wrote the reports to lobby the Pitjantjatjara Council and DAA to support the Women's Council's aims and objectives. A small initial budget was approved in 1981 by DAA, which grew in 1982 to enable a full-time Women's Council coordinator to work in the Pitjantjatjara Council offices in Alice Springs. Women finally had a seat in the central circle of power.

Women's Sacred Sites

The NPYWC was very active fighting for the *Pitjantjatjara Yankunytjatjara Land Rights Act*, which was granted in 1981. Then they prioritised the

protection of sacred women's sites at Uluṟu, which were being desecrated by tourism. The NPYWC pressured the Pitjantjatjara Council to employ a female anthropologist. Susan Woenne-Green, appointed in December 1981, worked with women traditional owners of Uluṟu to protect Pulari and Tjukatjapa as registered sacred sites. She recalls:

> All this happened in 1982 before Aṉangu owned the land of Uluṟu National Park and before Aṉangu had a strong voice in management, so the women had to really push hard to get these two places protected. Also, it all happened during the days when most *piṟanpa* 'whitefellas' thought there was no such thing as sacred sites for Aṉangu women. That made the work even harder, and it made it necessary to go to the Sacred Sites Authority for help.[25]

New Millennium NPY Women's Council

The NPYWC has since grown from strength to strength, changing the way in which government and community business is done across three states of the vast Western Desert Aboriginal lands. Today, traditional women's authority is asserted within the government agencies of housing, health, family services, education, economy, governance, arts and employment. The NPYWC employs over 100 professional staff under six broad service areas: *ngangkaṟi* (traditional healers), Tjanpi Desert Weavers, child and family wellbeing services, youth services, Tjungu aged and disability services, and domestic and family violence services. Indigenous and non-Indigenous *maḻpaṟara*, 'women working together', remains a core structural strength of the NPYWC. Traditional women's *inma* practice is supported at women's-only law and culture meetings. The breadth and depth of the NPYWC work over the last forty years and its leadership in gaining government support for women and community issues continues to grow.

Looking Backwards to Go Forwards

In Amata on 5 February 1980, Nganyinytja, with twenty senior law-women, held the first women's land rights meeting, proclaiming their equal authority in regional land management and governance. Women established a strong voice through NPYWC, but it took almost forty years for them to

attain equal representation on APY. In 2017, under the South Australian gender equity laws, five Aṉangu women were elected to the Executive Board of APY. Sally Scales, the youngest daughter of Josephine Mick, one of the strong women leaders of 1980, was elected as deputy chairwoman. She shared her enthusiasm with a reporter from the *Sunday Mail*:

> I think that we've got men and women on the board but also as our leadership means you've got that yin and yang in both of us … We've got the young and the old, you've got the male and the female who are working together and it's always here for the betterment of Aṉangu.[26]

By achieving recognition of the shared authority and responsibility of Aṉangu men and women in traditional and modern law and community governance, women of the NPY lands honour their elders while forging a new way forward. Young Aṉangu women of today can look back with great pride to the strong women who established the NPYWC. This generation of women proudly thanked their mothers and grandmothers by posting online Mantatjara Wilson's painting for the formation of the Women's Council, celebrating the NAIDOC 2018 theme, 'Because of her, we can!'[27]

Today, the NPYWC is renowned nationally for its governance model enabling decision-making that affects the lives of thousands of women

Figure 13.4. Mantatjara leading NPY women in an anti-grog march, Alice Springs, 1988
Unknown photographer; image supplied by Ara Irititja (AI-0126607-001)

across three states. In July 2018, NPYWC CEO Andrea Masson addressed the National Press Club in Canberra on the power of the senior women working from a position of strength rather than deficit, and addressing the continuing trauma and toxic stress of remote disadvantaged community living: 'We now clearly articulate that we work from a holistic and relational standpoint which is strongly aligned with An̲angu values and the agency of our women.'[28] (See Figure 13.4.)

The trailblazing women who built the NPYWC stood strong in *minymaku ar̲a*, the women's law of their grandmothers. They envisioned a path forward for their daughters and granddaughters into leadership roles at the community, regional and national levels of governance—like those of visionary women leaders like Nganyinytja and Mantatjara Wilson, who voiced the concerns of all women for the continued health and wellbeing of kin, community and country.

> *Ngayulu kutjungku wangkantja wiya, ngayulun̲a tjut̲a mirangka wangkanyi.*
>
> I am not speaking alone; I am giving voice to the strong concerns of all women.[29]

CHAPTER 14

The Work of the First Peoples' Assembly of Victoria

Cultural Authority, Representation and the Treaty Process

Geraldine Atkinson and Marcus Stewart

This chapter was written at the time the authors were co-chairs of the First Peoples' Assembly of Victoria during its inaugural term from 2019 to 2023. The chapter provides valuable insight into the initial implementation of the treaty and truth-telling processes, and the representative structure of the assembly. Readers are encouraged to visit the websites of the First Peoples' Assembly of Victoria, the Treaty Authority and Yoorrook Justice Commission for information on their current work and structure.

There is something that Australia's First Peoples have that no state or federal government ever will, and that is cultural authority. Cultural authority is recognised as an inherent body of rights that comes from thousands of years of living culture. These are rights that are not bestowed upon peoples by a government or a court, but which come from the land itself and are passed down through generations. In Victoria, our peoples will enter into treaty negotiations backed by the innate power and inalienable rights of cultural authority.

This authority has rarely been recognised in negotiations between governments and First Peoples in Australia. The treaty process in Victoria is an unprecedented opportunity to do this and to enshrine First Peoples' knowledge in political structures. The First Peoples' Assembly of Victoria is seeking to achieve these aims by embedding cultural authority, which is a component of Aboriginal law and lore, in all aspects of our work and in the outcomes we are seeking to negotiate with the Victorian Government. The assembly is the independent and democratically elected body that represents Traditional Owners of country and Aboriginal and Torres Strait Islander peoples in the journey towards treaties in Victoria. It is the only body—and voice—of its kind in Australia.

Embedding First Peoples' knowledge into social and political structures requires the establishment of new institutions and processes that recognise, respect and give effect to cultural authority. These new institutions and processes must be designed by our communities, reflecting and representing the principle of self-determination. With these new structures in place, we will make our own decisions, implement our own solutions, operate by our lore and laws, and care for country.

This chapter explores key ways in which the assembly is seeking to deliver lasting change through the treaty process. It will start by explaining the design and the representative structure of the assembly, as the 'voice' for Aboriginal and Torres Strait Islander peoples in Victoria, the only jurisdiction progressing 'truth' and 'treaties'. It will outline how the cultural role and the wisdom of elders is required to enrich the assembly's decision-making. It goes on to explain that our communities could not see a future with treaties without first committing to a genuine and widescale truth-telling process, which we have cemented in the Yoorrook Justice Commission. Critically, this chapter will also provide insight into current policy positions on three key elements required for our success: the Treaty Negotiation Framework, the Treaty Authority and the self-determination fund. This process is our way to put First Nations on an equal footing with various levels of government within Victoria. And more importantly, this process is about securing structural change to ensure that we have the freedom and the power to make decisions about our lives, so that our future generations can thrive on their own lands. The chapter concludes with a section on Aboriginal self-determination as situated in human rights law.

Through genuine representation and self-determination, respect of and deference to our elders, and engagement with our communities, the First Peoples' Assembly of Victoria will deliver on the three major treaty elements. These elements are the architecture that shape agreement-making between First Peoples and the Victorian Government, and aspirations for Aboriginal self-governance in Victoria.

The Representative Structure of the First Peoples' Assembly of Victoria: Self-determination in Action

The Victorian treaty process is attempting to reverse more than 200 years of unhealthy—often lethal—structures, customs and interactions between First Peoples and the Victorian Government by building a method through which they may come to negotiate on equal terms.

As the Co-Chairs of the First Peoples' Assembly of Victoria, we lead the elected body representing Aboriginal and Torres Strait Islander peoples living across Victoria, through the current phase of the treaty process. All thirty-one members of the assembly, ourselves included, are Traditional Owners of country in Victoria.[1] The assembly is a representative political organisation: twenty-one members were elected from five geographical regions by First Peoples living in Victoria, in historic elections held in 2019; another ten members represent Traditional Owner groups who are recognised by Victorian Government legal recognition frameworks. This gives our communities their collective voice. Our membership structure is designed to change and adapt as more Traditional Owner groups across the state are recognised through Victorian Government legal recognition frameworks, nation-building processes and the assembly's own reserved seat application process. As neither cultures nor languages are static, our politics should not be either.

The assembly is responsible for laying important foundations for the treaty process and listening to our communities' priorities, aspirations and feedback. The elected assembly members are the builders, but our community members are the architects. Members of the assembly agree to abide by a charter that sits under our assembly constitution, requiring members to regularly engage with their communities in their regions. Through listening to our communities, the assembly used its first chamber meeting in December 2019 to call upon the Victorian Government

to establish a Stolen Generations Redress Scheme. Such a scheme is long overdue in Victoria, and the justice it would bring about cannot be left to the treaty process, as our old people are passing away too quickly. Through the assembly's advocacy, the Victorian Government committed to financial payments and healing support packages, provided in recognition of the harm caused to our people by forced removal.

In addition to meeting with members of the assembly, one of the best ways for communities across Victoria to engage with the treaty process is to enrol in the uniquely designed Aboriginal Electoral Roll. Eligibility requirements are tailored to the needs of Traditional Owners of country in Victoria, and Aboriginal and Torres Strait Islander peoples living in the state. The roll was designed through extensive engagement with Aboriginal communities to ensure that the eligibility criteria meet the characteristics of our population. It was initiated and built by the Victorian Treaty Advancement Commissioner, Jill Gallagher, who was appointed to design and establish an Aboriginal representative body in Victoria through direct consultation and discussions with Aboriginal communities. Jill led the commission in crisscrossing Victoria with roadshows, yarning circles, elders' engagements, statewide gatherings, one-on-one meetings and visits to every prison in the state. This work reached out to thousands of mob to understand how our people wanted to be represented in the treaty process going forward. The Aboriginal Electoral Roll is completely separate from the Australian and Victorian electoral rolls, and is not associated in any way with the federal or state electoral commissions. The Aboriginal Electoral Roll exists for our people and is managed solely by the assembly.

The assembly is working hard to talk about treaties with all members of our communities because we know that together, we are stronger. The Aboriginal population in Victoria is a young population, and so we have invited sixteen-year-olds to enrol and vote. Given the high imprisonment rates among our communities, First Peoples who are incarcerated can also cast ballots. Both of these policy settings in regards to the Aboriginal Electoral Roll illustrate the critical importance of being informed by up-to-date population data. Especially during the challenging times of COVID-19, assembly members needed to reach young people and members of the prison population, to receive new enrolments and to

encourage their input into the design of the treaty elements. Importantly, to ensure the assembly reflects the communities it represents, there are gender balance requirements within our elections for general seats and for key positions, such as the co-chairs. This gender quota will operate in each of the assembly's elections, but it is worth noting that the quota was not activated in the assembly's inaugural elections due to the number of successful female candidates, elected by communities in their own right.

These policies and approaches show how we are leading federal and state governments in Australia by ensuring our assembly reflects the diversity of the communities we represent. We are driven by our culture; nobody is left behind. As an Aboriginal political entity, the assembly is self-determination in action. Our representative and governance structures mean that when the assembly sits down with the Victorian Government to discuss the rules governing treaty negotiations, we have comprehensively canvassed the views of our communities and, therefore, we are the only representative body with the authority of thousands of years of knowledge, cultural rights, and Aboriginal lore and law.

Respecting the Cultural Role and Wisdom of Our Elders

The role of elders is irreplaceable in our cultures. The assembly requires the wisdom and cultural authority of elders to guide it through the treaty negotiation process. Our community members have indicated time and time again that an Elders' Voice will form a critical part of the assembly's governance structure. The Elders' Voice we are establishing will provide cultural guidance to the assembly chamber as it makes decisions, to ensure that both our work processes and the outcomes we reach are consistent with our cultural values.

It is simply because of the wisdom and resilience of our elders across countless generations that we find ourselves with the political opportunity we have today. We are standing on the shoulders of giants who walked before us, our ancestors: the leaders who never ceded sovereignty; the protestors who marched and shouted in the streets before they were counted in the census; and our elders who suffered for their efforts to pass on our culture and language to successive generations. It is knowledge-holders such as these who provide continuity, valuable lessons from the past and oversight of our work.

The Elders' Voice will ensure our elders will be heard and their views respected. It will consist of a permanent group made up of elders from around Victoria who will ensure the assembly's work is grounded in cultural integrity, decision-making and traditional knowledge systems. The assembly is continuing to work on the formation of an Elders' Voice, which will:

- provide cultural and ethical advice, wisdom and oversight to the assembly chamber
- uphold the four cultural pillars of the Elders' Voice: respect, connectedness, knowledge base and lore of the land
- assist in the decision-making and direction of the assembly
- provide meaningful guidance to the assembly
- support the work of the assembly, including participating in negotiations where appropriate.[2]

To fully respect the collective self-determination of elders, it is proposed that the Elders' Voice itself decides how to conduct its business, including but not limited to how it arranges its meetings. The structure, goals and membership of the Elders' Voice may change over time. Doing business *our way* is critical to keeping culture alive and maximising cultural safety and authority.

Establishment of the Yoorrook Justice Commission

In light of generations of activism and calls for truth-telling, it was clear to the assembly chamber from its establishment that there can be no treaties without truth. In June 2020, the assembly agreed, as a collective, on an historic motion that affirmed truth-telling as a fundamental element of the treaty process in Victoria. Through leadership and self-determination in action, the assembly pushed for the Victorian Government to establish a truth-telling commission to underpin the treaty process. The assembly's advocacy was instrumental in securing this commitment from the Victorian Government—the first formal truth-telling process in the nation.

The Yoorrook Justice Commission was established in May 2021. Its mandate and form was designed by the assembly through consultations with First Peoples across Victoria and negotiated with the Victorian Government. 'Yoorrook' means 'truth' in the Wemba Wemba/Wamba language, from the

north-western region of Victoria. The 'Letters Patent', intensively designed by the assembly chamber and negotiated with the Victorian Government, provides the terms of reference for the commission.[3]

The commission is independent of both government and the assembly, although it reports to the assembly and to the governor of Victoria. Five commissioners are appointed under Section 5 of the *Inquiries Act 2014* (Vic.) to ensure this independence. Importantly, the commission can best be conceptualised by dividing its work into three main arms: an inquiry arm, deriving from its powers of royal commission; a research function, to coordinate the relevant inquiries and processes, and identify where previous processes have failed to meet community needs; and truth-telling. The commission's *wurrek tyerrang* (public hearings) aim to correct the imbalance in the historical narrative of our lands since invasion and will explain the need for treaties. By documenting the testimony of individuals, the commission is facilitating First Peoples' right to be heard on their own terms. The *wurrek tyerrang* will demonstrate the clear links between the abuses of colonisation, systemic racism and discrimination, intergenerational trauma and contemporary experiences.

The commission's work will develop a shared understanding among all Victorians of the diversity, strength and resilience of First Peoples' cultures and knowledge. In these ways, the commission's official record and recommendations will double as a brief of evidence for treaty-making. So if the treaty process is the 'what', then the truth-telling process is the 'why'.

Listening to the collective and individual truths that will be told to the commission will be disturbing. We will all be asked as a society to bear witness to the brutal and deliberate methods of the colonisers, how these have irrevocably affected First Peoples' families, and how continuing colonial violence manifests in structures and in bureaucracy to the present day. Great care must be taken so that recounting stories does not create further trauma. Culture needs to be honoured throughout the *wurrek tyerrang*, as well as counselling and culturally appropriate support mechanisms. Piece by piece, the commission will determine the causes and consequences of human rights abuses and who is responsible. It is time for what is only known by few to be known by many. And this must lead to the redesign of our society. The findings of Yoorrook will reinforce the cultural authority of our people in negotiations with the Victorian

Government over the treaty elements, as well as that of Traditional Owner groups during the negotiation of treaties in the future.

The commission held a ceremonial *wurrek tyerrang* on 26 April 2022, marking its first public sitting. Representing the assembly, elected Co-Chair Marcus Stewart provided *pil'kneango mirnk* (evidence) and participated in *wurrek tyerrang* on 5 May. His words directly addressed the systemic and interconnected nature of the injustices that First Peoples in Victoria have faced since colonisation, as well as First Peoples' strength, resilience and aspirations for the future, including for the treaty process.

In his *pil'kneango mirnk*, Stewart reinforced that 'treaty will be the only effective, meaningful and comprehensive way to start to disentangle the legacy of colonisation in Victoria'.[4] He spoke about how targeted and issue-specific reform may cast discrete beams of light into the lives of First Peoples in Victoria, but asserted that 'only more profound structural change can remove the shadow of colonisation'.[5] His evidence went on to outline the importance of the state in taking responsibility for the past and the future, and outlined urgent justice-related reform priorities for Victoria that must not wait for treaty. These include:

- finalisation of a public health model to support the repeal of public drunkenness laws
- legislative amendments that are needed regarding the age of criminal responsibility
- implementation of independent oversight in the case of police, with particular regard to the police's interaction with First Peoples in Victoria.

The Vision and Structure for Treaties in Victoria: Three Key Elements

The Treaty Negotiation Framework: Facilitating Structural Change through Flexible Approaches

The assembly is in the process of discussing, designing and negotiating a Treaty Negotiation Framework in line with our community's aspirations. The framework is best conceptualised as 'the rules' for treaty-making. It will provide a set of rules that will govern the way treaties between First Peoples and the Victorian Government are developed and agreed upon. Through consultation and engagement with Traditional Owners and

Aboriginal communities, it is proposed that the framework will allow for both a statewide treaty and for localised Traditional Owner treaties. This hybrid model is important for delivering groundbreaking structural changes and decision-making abilities to First Peoples, but also flexibility for the diverse Traditional Owner groups who have rights as distinct political communities to set their own agenda.

Through a statewide treaty, we can bring about reforms that embed cultural authority into Victoria's laws, agencies and systems of government, so that First Peoples are empowered to make the decisions that impact our lives. The architecture of the statewide treaty may enable an Aboriginal representative body, like the assembly or a future iteration of it, to realise the following changes:

- to pass and administer laws on the issues that impact the lives of our communities
- to provide advice and input to the Victorian Parliament and public sector
- to hold reserved seats in the Victorian Parliament.

Separately, Traditional Owner treaties will allow individual Traditional Owner groups to focus on their own specific aspirations and needs, at their own pace. This is the avenue for overcoming the structural issues and shortcomings embedded in current legislation, such as the *Aboriginal Heritage Act 2006* (Vic.) and the *Traditional Owner Settlement Act 2010* (Vic.). These laws have only sought to address a fraction of the collective rights and responsibilities that Traditional Owners in Victoria possess.

Through localised Traditional Owner treaties, we can acknowledge that each Traditional Owner group in Victoria has its own inherent rights, attached to unique country, language, culture, stories and history. This localised structure of agreement-making will facilitate the building by Traditional Owner groups of their own decision-making processes, and allow to manage land and waters in ways that they want, for their future generations.

Traditional Owner treaties could also incorporate the transfer and buyback of country, supporting long-term sustainable economic development, reviving and strengthening local languages, and, through those languages, cultural practices. As Traditional Owners, we have profoundly

deep-seated cultural obligations to work towards these ends. The very recent processes in our long histories have prevented us from healing country through cultural practices like fire and land management. However, we know that by healing country, we will heal our communities. Wiser stewardship of the environment is also a great example of one area in which positive outcomes from treaty processes will benefit all Victorians.

The Treaty Authority: Designing Independent Process and Oversight

Another critical element of our work is designing and establishing a Treaty Authority. Every long-term, positive relationship requires a means of resolving disagreements, and that will be among the Treaty Authority's responsibilities. The Treaty Authority will function as an independent umpire in treaty negotiations between First Peoples and the Victorian Government. We have listened to communities and ensured that this institution is founded on cultural authority, Aboriginal lore and law.

The Treaty Authority has the functions provided in the *Advancing the Treaty Process with Aboriginal Victorians Act 2018* (Section 28), which include:

- facilitating and overseeing treaty negotiations, like an independent umpire
- administering the Treaty Negotiation Framework
- helping to resolve disputes between parties in treaty negotiations
- carrying out research to support treaty negotiations
- ensuring treaty negotiations are consistent with the Treaty Negotiation Framework.

Although the Treaty Authority is created by the assembly and the Victorian Government, it remains independent from them and sits outside government bureaucracy. The Treaty Authority will meet the standards and processes necessary to ensure that it remains impartial and performs its functions, so that its decisions are fair and culturally sound.

For the resolution of disputes to be fair and equitable, especially when the relationship between governments and Aboriginal people in Victoria has been unjust for so long, the Victorian Government must relinquish

some of its powers. This will be regularly tested as the assembly and the Victorian Government continue to negotiate the design of the Treaty Authority, as well as other treaty elements.

The Treaty Authority will be made up of First Peoples selected through a rigorous and transparent process, after candidates meet selection criteria that reflect the Treaty Authority's central tenets. The Treaty Authority members, as individuals, will be required to demonstrate the following attributes: impartiality; commitment to self-determination and empowerment; good character, courage and integrity; cultural knowledge, wisdom and humility; supporting positive relationships; and relevant technical competence and experience.

The Treaty Authority was agreed between the assembly and the Victorian Government on 10 June 2022, at a ceremonial signing in Lorne, on the Gadubanud country of the Eastern Maar people. This momentous occasion was marked in dance and song by Eastern Maar and Gunditjmara members of the assembly on the sands of Lorne beach. To recognise the successful negotiation of the design of the Treaty Authority, the state was represented by the then Victorian premier, Daniel Andrews, and Gabrielle Williams, the then minister for Aboriginal affairs.

The Treaty Authority and Other Treaty Elements Bill 2022, which recognises the establishment of the Treaty Authority under the agreement and facilitates its operations by giving legal force to its activities, passed the Lower House of the Victorian Parliament on 23 June 2022. The Bill received bipartisan support from the Legislative Assembly. The co-chairs, accompanied by members of the assembly, made an historic address in English, Taungurung, Bangerang and Wiradjuri languages to the Victorian Parliament on the importance of treaty, and set the tone for debate on the nation-leading Treaty Authority Bill.

In his address, Marcus Stewart remarked that:

> Without treaty, what is now called Victoria will remain, in our peoples' hearts, in their minds, and in reality, the Colony of Victoria. We are asking you to pass the Bill and breathe life into this agreement. Show the rest of Australia that Victoria is ready to right the wrongs of the past and create a better future, to welcome a united, not a divided, future for all Victorians.

Aunty Geraldine Atkinson spoke on the design of the Treaty Authority:

> We asked for the Treaty Authority to sit outside the usual government system … Its funding cycle will be insulated from the whims of the usual political cycles. And I understand that that is different, but it needs to be. Treaty needs to be done on our terms. Our people need to have faith in the path forward. Our lore and law have stood the test of time, and I am proud to see thousands of years of knowledge, wisdom and resilience of our people being embedded into the public institutions we are creating on the journey to treaty. Western court systems are combative by default, whereas the Treaty Authority will respect our culture. The starting point will always be dialogue.

The Treaty Authority and Other Treaty Elements Bill 2022 was passed by the Victorian Legislative Council on 16 August 2022. Once the Treaty Authority is established, it will be driven by First Peoples and accountable to Aboriginal communities, and will not be subject to ministerial control or direction.

The Self-determination Fund: Securing and Self-managing Wealth

The assembly is working to establish a self-determination fund to benefit all First Peoples in Victoria through the treaties process and beyond. The fund will be an independent, Aboriginal-controlled and administered financial resource that will build economic strength for First Peoples in Victoria. It will deliver multiple functions. Mandated in the *Advancing the Treaty Process with Aboriginal Victorians Act 2018* (Section 36(1)(a) and (b)), these will include:

- supporting Traditional Owners and Aboriginal peoples in Victoria to have equal standing with the state in treaty negotiations
- providing a financial resource, independent from the state, that empowers Traditional Owners and Aboriginal peoples in Victoria to build capacity, wealth and prosperity.

It is important to note that a self-determination fund is not being designed to finance service delivery via Aboriginal community-controlled

organisations, or reparations. Reparations for stolen land, human rights violations, stolen wages, and for people affected by the policies of the stolen generations, remain conversations that our communities need to have.

There is, however, the opportunity for additional functions or purposes for the self-determination fund to be attributed, by agreement between the assembly and the Victorian Government. It is also necessary to consider more broadly and holistically what 'treaty readiness' means and how groups can be properly supported to ensure their members are informed as they move through the stages to treaty. The assembly is exploring how the fund may assist in nation-building activities, future Aboriginal governance structures, and how it may give effect to ongoing processes of self-determination.

The Assembly's Reliance on the *United Nations Declaration on the Rights of Indigenous Peoples*

The *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) emphasises the rights of Indigenous peoples to live in dignity; to maintain and strengthen their own institutions, cultures and traditions; and to pursue self-determined development, in keeping with their own needs and aspirations.[6]

The assembly is guided by the principles of the UNDRIP in its work and its conceptualisation of self-determination. As an institution, the assembly relies on the UNDRIP because it is the most comprehensive international instrument on the rights of Indigenous peoples, and it articulates what Indigenous communities across the world have known and understood innately, since time immemorial. The UNDRIP preamble recognises the inherent rights of Indigenous peoples, which are inherent in nature because they are neither granted nor delegated by the state. The sources of these inherent rights are Indigenous peoples themselves and the country and waters that they come from.

Article 3 of the UNDRIP states that, through the right to self-determination, Indigenous peoples can freely determine their political status and pursue their own economic, social and cultural development. Article 5 of the UNDRIP affirms that Indigenous peoples have the 'right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions'.

The assembly is considering the ways in which the Treaty Negotiation Framework can fully realise the minimum human rights standards provided by the UNDRIP. If this is cemented through negotiations, it would mean that nothing would be able to be agreed through treaty negotiations that would fall below the minimum human rights standard set out in the UNDRIP; negotiations could only build upon it. As a collective, the assembly is striving to ensure that First Peoples communities are able to fully manifest their rights to self-determination in multiple ways, including through the right to self-governance. Our cultural authority enables us to be in charge of our own destinies.

Conclusion

As an assembly of First Peoples in Victoria, we are 'voice', and we are working to achieve and facilitate 'treaties' and 'truth'. We have committed to welcoming all members of our diverse community, respecting each other's views, being led by our elders, and constantly consulting with the communities which we represent. The assembly's fundamental position is that nothing is off the table in terms of treaty aspirations and treaty asks. We plan to be bold, brave and ambitious in our negotiations, which might be confronting at times, not only for governments but for our broader society.

That is why it is important for the assembly to bring the general public along with us on this journey. We truly believe that ongoing and positive reform benefiting First Peoples in Victoria will benefit all people in the state. When the true history of colonisation is laid bare through the Yoorrook Justice Commission's work, people will better understand why treaties, justice and reparations are long overdue in Victoria. A more fulsome and honest explanation of both our history and our present experience will help Victorians understand our cultural authority and the destructiveness of current state structures and policies. Together, we can chart an alternative future. It will put First Peoples in the driver's seat when it comes to decisions that affect our communities, our culture and our country.

Sovereignty over these lands was never ceded. With honest, genuine commitment from all sides that recognises our inalienable cultural authority, we can envision a day when First Peoples in Victoria are in control of decisions over their own lives and community, with self-governance,

recognition of past wrongs and violations, economic independence, and support from a wider population who is better educated in our histories, traditions, knowledge and languages. For agreement-making to be truly mutual, we must be satisfied that truth underpins treaty and that our cultural authority and sovereignty is acknowledged, so that we may best protect and live these out into our futures.

Endnotes

Editors' Note on Style and Spelling

1 Words in languages of Aṉangu and Yolŋu peoples specifically employ various diacritics to indicate sounds not found in standard English.

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Chapter 2 Being and Knowing

1 Readers are sadly advised that Gumbula-Garawirrtja passed away on 20 September 2023. He and his family have given permission for his full name and images to remain in use for all professional purposes. With respect to Yolŋu law, however, his Yolŋu given name, Djan̲girrawuy, should not be

spoken for one year following his death. For further details of his life and achievements, see Corn, A. (2023) 'The First, but Not the Last: Brian Djangirrawuy Gumbula-Garawirrtja.' *The Monthly*, 25 October.

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Chapter 13 Minymaku Aṟa

1 In this chapter, all transcriptions and translations from senior law-women are provided by Diana James, unless otherwise noted. Nganyinytja was recorded by Diana James at Angatja between 1980 and 1995.
2 *Tjukurpa* is the Pitjantjatjara spelling used in this chapter for the shared ontological concept of the holistic laws of creation from the Western Desert. It is spelt *Jukurrpa* in Martu and *Tjukurrpa* in Ngaanyatjarra, reflecting varied linguistic orthographic legacies.
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17 Nganyinytja, 'Nganyinytja's Story', 4.

18 Ward, N.N. (2018) *Ninu Grandmothers Law*, Broome: Magabala Books, 113.

19 Fay Gale convened the 1980 ANZAAS conference in Adelaide, which was titled 'The Status and Role of Aboriginal Women Today'. Senior law-women at the first Women's Land Rights Meeting, Amata, 1980 were Mary Kaiu Kaiu, Nganyinytja, Mantatjara Wilson, Milyika Paddy, Yuminiya Lyons, Panini Mick, Tjulyata, Elsa Laidlaw, Nura Ward, Sylvia Richards, Carol Holland, Nita Levers, Audrey Umula and Myra Watson.

20 Nganyinytja (1980) personal communication with Diana James at ANZAAS Aboriginal Women's Conference, Adelaide, 1980.

21 Nganyinytja, 'Women and Land Rights: The Pitjantjatjara Land Claims.' In F. Gale, ed., *We Are Bosses Ourselves: The Status and Role of Aboriginal Women Today*, Canberra: Australian Institute of Aboriginal Studies, 55–61.

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26 Andrew Dowdell (2017) 'Sally Scales Is New Deputy Chairwoman of Troubled APY Lands Executive Board.' *Sunday Mail*, South Australia, 13 May.

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Chapter 14 The Work of the First Peoples' Assembly of Victoria

1 Geraldine Atkinson is a Bangerang and Wiradjuri elder; Marcus Stewart is a Nira illim bulluk man of the Taungurung nation.

2 First Peoples' Assembly of Victoria (2021) *Elders' Voice: Interim Model Guiding Document*.

3 Yoorrook Justice Commission (2021) 'Letters Patent' (webpage).

4 Stewart, M. and B. Keetyarra (2022) 'Submission to Yoorrook Justice Commission', 29 April.

5 Ibid.

6 United Nations General Assembly (2007) *United Nations Declaration on the Rights of Indigenous Peoples*, 2 October (webpage).

Contributor Biographies

Aunty Geraldine Atkinson was Co-Chair of the First Peoples' Assembly of Victoria during its first term from 2019 to 2023. Geraldine is a proud Bangerang/Wiradjuri woman who, for over forty years, has been instrumental in driving government and policy reform in Aboriginal education. From starting in the field as an Aboriginal teacher's aide in 1976, Geraldine moved forward to become the President of the Victorian Aboriginal Education Association Inc., a role she has held since 1999. Geraldine received an Honorary Doctorate from Deakin University in 2020 for her leadership in Aboriginal education.

Margaret Ayre is an Associate Professor in the Faculty of Science at the University of Melbourne. She is an interdisciplinary social scientist who has worked for many years in collaboration with Yolŋu scholars and land and sea managers on research to support curricula for Indigenous rangers and sustainable Yolŋu-led land and sea management strategies.

Clint Bracknell is a Noongar song-maker, composer and Professor of Music at the University of Western Australia. He investigates connections between song, language and landscapes while working on projects to improve Indigenous community access to cultural heritage collections. Clint received the 2020 Barrett Award for Australian Studies and has co-translated world-first Indigenous language works in film and theatre. He serves as Deputy Chair of the Australian Institute of the Aboriginal and Torres Strait Islander Studies Council and maintains a significant creative research agenda, leading development of the Mayakeniny Noongar performance resource and releasing music under the name Maatakitj. He is a Fellow of the Australian Academy of the Humanities.

Jockey Bundubundu was a Kunibídji man who told his story about the drowning of Manakúkun country to Graham MacKay in the late 1970s.

David Cooper is a cross-cultural consultant and policy analyst with over three decades experience working in the Northern Territory. For almost twenty years, he was a policy officer with the Aboriginal Medical Services Alliance Northern Territory. He also served as an anthropologist at the Aboriginal Areas Protection Authority, where he worked closely with traditional owners of the Katherine and South Alligator regions. His doctoral thesis, completed at the Australian National University, was titled An Unequal Coexistence: From 'Station Blacks' to 'Aboriginal Custodians' in the Victoria River District of Northern Australia (2000).

Aaron Corn is a Professor and Inaugural Director of the Indigenous Knowledge Institute and Coordinator of the Doctor of Philosophy—Indigenous Knowledge degree course at the University of Melbourne. His research collaborations with Indigenous colleagues and communities in Australia began in the early 1990s and have fostered meaningful research and teaching partnerships that have promoted greater recognition for Indigenous knowledge-holders within universities and beyond. His bestselling book *Law: The Way of the Ancestors,* co-authored with Distinguished Professor Marcia Langton, was published by Thames and Hudson in 2023. He also co-hosts the podcast *The Deep End with Marcia Langton and Aaron Corn*.

Samuel Curkpatrick is a researcher specialising in Australian Indigenous music and philosophical issues of language, epistemology and religion. He has collaborated on music performance and teaching with Yolŋu and Warlpiri ceremonial leaders, exploring creativity and understanding across diverse knowledge traditions. Samuel is a Research Associate at the Indigenous Knowledge Institute and the Indigenous Studies Unit, Melbourne School of Population and Global Health, the University of Melbourne. He completed doctoral studies in ethnomusicology at the National Centre for Indigenous Studies, the Australian National University, and postdoctoral research in theology and philosophy at the University of Divinity.

Lena Djabíbba is a senior Kunibídji elder living in the Maningrida community in north-central Arnhem Land. Lena is the current *djúngkayi* (manager) of her patriline's knowledge legacy, especially as it relates to Manakúkun country.

Paul Gordon is a Karulkiyalu (Stone Country) Ngiyampaa man from north-western New South Wales. Despite growing up in an era of ceremonial disruption due to colonisation, he inherited knowledge of ceremonial law from his elders while camping and walking country with them. Paul has recorded the culture and heritage of many ancestral sites and has shared in ceremonial knowledge with various Indigenous groups across Australia. He is a highly respected ceremonial leader who has been at the forefront of researching and revitalising ceremonial law in New South Wales since the 1980s and is currently completing a PhD on this topic. His advice and expertise are highly sought after by academic, government and industry partners within Australia and internationally.

Brian Dja̲ngirrawuy Gumbula-Garawirrtja (1962–2023) was a Yolŋu elder and ceremonial leader of the Gupapuyŋu clan from Northeast Arnhem Land. He was fully trained in Yolŋu law and responsible for its transmission to future generations. He engaged in many research projects on Yolŋu law and culture over thirty years and was appointed as a Professorial Fellow of the Indigenous Knowledge Institute at the University of Melbourne in 2022. He was the first Yolŋu person to be appointed as a full professor. Before sadly passing away in 2023, he and his family gave full permission for his name and images to continue being used for professional purposes. In death, he endures eternally as the fierce Gupapuyŋu honeybee ancestor, N̲iwud̲a.

Duane Hamacher is Associate Professor of Cultural Astronomy in the ASTRO-3D Centre of Excellence and the School of Physics at the University of Melbourne. His work explores humanity's connections to the stars, focusing on Australian Aboriginal and Torres Strait Islander astronomy. He has appeared on TEDx, National Geographic's *The Story of God with Morgan Freeman* and Warwick Thornton's *We Don't Need a Map*, and published the book *The First Astronomers: How Indigenous Elders Read the Stars* (2022). Hamacher is President of the International

Society for Archaeoastronomy and Astronomy in Culture and serves as an expert consultant for UNESCO.

Jacqueline Healy is Director of Museums, Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne, including the Medical History Museum, Henry Forman Atkinson Dental Museum, and Harry Brookes Allen Museum of Anatomy and Pathology. In 2018, she was awarded a University of Melbourne Excellence Award for the transformation of the museums in the faculty. Previously, she was director of the Bundoora Homestead Art Centre, director of the Museum and Art Gallery of the Northern Territory, and director of Public Programs, National Gallery of Victoria. Jacqueline was awarded her PhD in 2006 on marketing art from remote area communities, focusing on Balgo and Warmun.

Jesse Hodgetts is a Wangaaypuwan Ngiyampaa and Wiradjuri man of western New South Wales. He is a lecturer in Aboriginal Studies at the Wollotuka Institute of the University of Newcastle. Jesse's experience as a songman and language practitioner supports Indigenous song-making and language revitalisation through his kinship ties and networks with other Indigenous cultural practitioners across the country. Jesse has recently completed a PhD in reawakening archived Ngiyampaa songs. His research focuses on First Nations cultural revitalisation and the continuation of Indigenous knowledge systems and ways of being, particularly through the practice of song, language and kinship.

Nganyinytja Ilyatjari (1928–2007), a Pitjantjatjara law and song woman of high regard, was born in her father's traditional country in the north-western A<u>n</u>angu Pitjantjatjara Yankunytjatjara Lands of South Australia. Nganyinytja was about eleven when her family moved to Ernabella, where she went to school and soon became literate in Pitjantjatjara and English. She was a teacher and later a cross-cultural educator for national and international students at her homeland of Angatja 'Bush University'. Her leadership in community education, health, welfare and land rights inspired the formation of the Ngaanyatjarra, Pitjantjatjara, Yankunytjatjara Women's Council in 1980. She was made a Member of the Order of Australia in 1993.

Sue Jackson is a Professor of Human Geography at Griffith University. She researches the interaction between Indigenous customary and state environmental governance and planning systems. For the past fifteen years, she has focused on the symbolic significance of water, its material value, and water governance throughout Australia. Sue has conducted collaborative research with Indigenous organisations in many regions of the country, including the Top End, the Pilbara and throughout the Murray–Darling Basin. She has analysed the historical and ongoing effects of changes in water governance and management on Indigenous communities, and she has formulated institutional responses in partnership with Indigenous leaders and organisations.

Diana James has worked as a bilingual Pitjantjatjara translator and oral historian with Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara (NPY) women since 1975. On request by Martu and NPY women, she recorded the *Kungkarangkalpa Inma*, the story, song and dance of the Seven Sisters, as senior researcher on the *Songlines of the Western Desert* project at the Australian National University. These recordings of songs, dance performances and oral histories contributed to the exhibition *Tracking the Seven Sisters Songline* with the National Museum of Australia in 2017, currently touring internationally. Diana is an Associate Research Fellow at the Australian National University and the University of Adelaide.

Roselyn Kumar has a longstanding interest in traditional knowledge and its culturally grounded uses, especially in the Pacific Islands (where she was born and bred), for coping with environmental adversity, including climate change. The author of fifty-eight peer-reviewed publications, Rosie's interests range from Lapita-era archaeology and ceramic mineralogy to tropical palaeoclimatology deduced from giant clam sclerochronology, the topic of her PhD.

Marcia Langton, Distinguished Redmond Barry Professor, is an anthropologist, geographer and academic from the Yiman and Bidjara nations of Queensland. Since 2000, she has held the position of Foundation Chair of Australian Indigenous Studies at the University of Melbourne, and also serves as Associate Provost. Marcia's advocacy journey began as the general secretary of the Federal Council for Advancement of Aboriginal

and Torres Strait Islander People in 1977. Her impactful contributions include work on the Royal Commission into Aboriginal Deaths in Custody, and the Aboriginal negotiating panel for the *Native Title Act*. A prolific author, her publications span Aboriginal land tenure, agreement-making, art and film. A Fellow of the Academy of the Social Sciences of Australia, Marcia continues to be an assertive and influential voice in the Australian community; in the industry, government and non-government sectors; and in the media.

Mona Liddy is a senior Wagiman elder, Traditional Owner for large areas of the Daly River catchment, and Chairperson of Tjuwaliyn Wagiman Aboriginal Corporation. She actively represents Aboriginal people in water planning and decision-making in the Daly River catchment and across northern Australia. With thirty years' involvement in water management, protection and research, Mona maintains spiritual and cultural connection to the Daly River and surrounding environs. She has a degree in Indigenous Community Management and Development and has played a leading role in collaborative research with the Tropical Research and Coastal Knowledge Research Hub, funded by the National Environmental Science Program.

Angela Lynch is manager of the Ngangkaṟi Program at the Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council, a service-delivery, advocacy and support organisation created by Aṉangu women from the twenty-eight remote communities in the tri-state border region of the Northern Territory, South Australia and Western Australia.

Mandaka Marika is a senior Rirratjiŋu clan leader who was managing director at Dhimurru Aboriginal Corporation from 2009 to 2020. He was selected by the Yolŋu people as one of the founding rangers of Dhimurru in 1992 and served as a ranger, then senior ranger, for over fifteen years. Mandaka dedicated his professional career to the sustainable management of Yolŋu lands and seas. In 2019, he was awarded the Lifetime Achievement Award by the Territory Natural Resources Management Council.

Rrawun Maymaru is a proud Maŋgalili man and has been the Senior Cultural Advisor at Dhimurru Aboriginal Corporation since 2019. He

is a champion and leader in Yolŋu-led Galtha 'both-ways' education for Yolŋu students and rangers in sustainable land and sea management. He is a world-renowned lead singer and songwriter with the band East Journey.

Bianca McNeair is a proud Malgana woman from Gutharagudu, otherwise known as Shark Bay. Bianca is an artist and communicator, and has also worked in ranger programs and in the co-design of restoration projects in Western Australia, linking scientists, traditional owners and local community. She is the Co-Chair of the steering committee for National First People's Gathering on Climate Change, and a political (Greens) candidate for her local electorate, demonstrating her leadership skills and her desire to make a difference in her community and represent the voices of Aboriginal people.

Joe Morrison is a Dagoman and Mualgal person with over thirty years' experience working with Indigenous peoples in northern Australia, as well as nationally and globally. He has extensive experience in public policy, governance, economic development, native title, and land and sea management. He is currently the Group CEO of the Indigenous Land and Sea Corporation. He was previously the CEO of the Northern Land Council and founding CEO of the North Australian Indigenous Land and Sea Management Alliance. He is also a director of numerous research centres and organisations, such as the Reef and Rainforest Research Centre, the International Savanna Fire Management Initiative, and the National Centre for Indigenous Excellence.

Gathapura Munuŋgurr graduated from Yirrkala School, which used the Galtha Rom methodology. Gathapura worked as a Dhimurru ranger from 2009 and then a senior ranger from 2015 to 2021. He is an expert in Indigenous and Yolŋu land and sea country knowledge and management, and made an outstanding contribution to the Learning on Country program while at Dhimurru Aboriginal Corporation. He now works as a teacher at the L̲aynhapuy Homeland Schools, where he continues to have a pivotal role in the Learning on Country program.

Martin Nakata is Deputy Vice-Chancellor, Indigenous Education & Strategy at James Cook University and a leading Indigenous academic in Australia. His research interest centres on the intersection of Indigenous

and non-Indigenous knowledge, disciplines and practice, and his articulation of this as a cultural interface across different contexts and topics has led to over seventy invited plenary and keynote addresses at professional conferences in almost twenty countries. He has published extensively on Australian Indigenous issues in national and international journals, anthologies and books. His latest book, *Supporting Indigenous Students to Succeed at University*, was published in 2022.

Tyson Nguliya was a Yanyuwa man who provided his account of the dislocation of Yanyuwa people to the south to John Bradley in 1982.

Rachel Nordlinger is Professor of Linguistics and Director of the Research Unit for Indigenous Language at the University of Melbourne. Her research focuses on the description and documentation of Australian Indigenous languages and their implications for our understanding of the complexities of human language more broadly. She has worked for many years with Indigenous communities across the Northern Territory, especially the Wambaya, Bilinarra and Murrinhpatha communities, to record and document their languages and support their educational and language-maintenance efforts.

Patrick D. Nunn is Professor of Geography at the University of the Sunshine Coast and the author of more than 360 peer-reviewed publications, many explaining how 'myths and legends' are likely to be authentic, culturally filtered memories of life-changing events witnessed long ago by our ancestors. His book *The Edge of Memory* (2018) makes the case for this and shows that some such stories recall events that happened more than 10 000 years ago. His latest book, *Worlds in Shadow* (2021), focuses on ancient 'stories' about submerged lands throughout the world and asks whether these stories have lessons for us today.

Lisa Palmer is a human geographer who teaches and researches on Indigenous environmental knowledge and practices at the University of Melbourne. She has published widely and is the author of an ethnography on people's complex relations with water in Timor-Leste titled *Water Politics and Spiritual Ecology: Custom, Environmental Governance and Development* (2015) and *Island Encounters: Timor-Leste from the Outside In* (2021). Her doctoral thesis, completed at the Northern Territory

University, was titled Kakadu as an Aboriginal Place: Tourism and the Construction of Kakadu National Park (2001).

Wanta Jampijinpa Pawu is a Warlpiri elder and Artistic Director of the Milpirri Festival, Lajamanu. He has led and collaborated on research projects, through the Australian Research Council, on Warlpiri song, education, the repatriation of archival records and youth engagement. Wanta has provided policy advice on Indigenous law, education and youth matters to multiple government and industry bodies, including the Australian Government's Indigenous Voice National Co-design Group, the Australian Institute of Aboriginal and Torres Strait Islander Studies, and the Northern Territory Department of Education. He is a Professorial Fellow at the Indigenous Knowledge Institute, University of Melbourne.

Nicholas Reid is a linguist who has spent forty-two years working in Aboriginal communities, with a focus on the languages of the Daly River region in the Northern Territory. His research interests have been split between the documentation of languages (grammars, dictionaries and film documentation of Ngan'gikurungurr and Ngen'giwumirri) and the exploration of what Australian languages tell us about the nature of language and human cognition. His linguistic career has been enriched by deep dives into Indigenous music genres, the evidence for deep historical relationships between Australian languages, and especially the possibility of using independent chronologies to date very old oral histories.

Ella Reweti is a Research Associate in the Indigenous Studies Unit at the University of Melbourne. She completed a Bachelor of Communications (Journalism and Public Relations) at Edith Cowan University in 2006 and a Bachelor of Arts (Anthropology) with Honours at La Trobe University in 2013. Her thesis, titled Pushing the Boundaries: Australian Mining and the Narrative Negotiation of Neoliberalism, is an exploration of the social reproduction of neoliberalism and the agency of neoliberal subjects, and is a reflection of her interest in the political economy of resource extraction. Ella's current research interests build on these themes.

Hannah Robertson is an Australian Research Council DECRA Research Fellow and Senior Lecturer in Construction Management at the University of Melbourne, and an Adjunct Research Fellow at the

Monash Sustainable Development Institute's Centre for Water Sensitive Cities. Her research interests include remote area building and participatory design through the facilitation of Traditional Owner–led research. She is currently working in partnership with the Olkola Aboriginal Corporation, the Centre for Appropriate Technology, Arup, Kerstin Thompson Architects and Six Degrees Architects to design a Cultural Knowledge Centre on their country in remote Cape York, Queensland.

Uncle Mike Ross is an Olkola man who, for three decades, has been at the vanguard of land rights for his people. A sincere spokesperson, gentleman and a distinguished bushman, Mike is a leader who goes about his business with an understated eloquence that commands respect from Canberra's corridors of parliament to the cattle yards of Cape York. A former director of the Cape York Land Council, he is Chairperson of the Olkola Aboriginal Corporation. Anointed as leader by his elders, Mike led a Traditional Owner team that, in 2014, resulted in one of the largest Aboriginal freehold land transfers in Australia. Mike has laid the foundations for Olkola people to reconnect with sustainable livelihoods on country.

Marcus Stewart is a Nira illim bulluk man of the Taungurung Nation and was co-chair of the First Peoples' Assembly of Victoria during its first term from 2019 to 2023. Prior to his election into the assembly, Marcus was CEO of the Federation of Victorian Traditional Owner Corporations, a state-based advocacy peak body for Traditional Owners. Through his leadership in this role, Marcus secured key initiatives and funding for Traditional Owner groups to support Aboriginal water, cultural fire and treaty readiness from the Victorian Government. Marcus began his career in the child protection system, where he worked in out-of-home care and as a child and family therapist.

Liz Sullivan is a senior Wagiman elder who has worked in the research sector and Indigenous natural resource management in the upper Daly region, across various roles, for over thirty years. Her interest is in supporting Wagiman Traditional Owner engagement in research on country and waters. Liz supports a culturally driven engagement process and two-way sharing, and a research that is methodology-based on accepting each other's views and creating tangible outcomes for Aboriginal people.

Sally Treloyn is an Associate Professor in Ethnomusicology and Intercultural Research in the Faculty of Fine Arts and Music, and Co-Director of the Research Unit for Indigenous Arts and Cultures, Wilin Centre for Indigenous Arts and Cultural Development. Sally is an active researcher in music sustainability, with a specialism in Indigenous performance practices of north-western Australia, and archives and access more broadly. They have led multiple Australian Research Council Linkage and Discovery Projects and were the recipient of a Future Fellowship between 2016 and 2021.

Kepten Wadity was a senior lawman of the Daly River region across the period 1990–2017. His primary patrilineal affiliation was Marringar, but as a ceremonial leader he was multilingual, widely travelled and enormously respected. Kepten passed away in 2017.

Ingrid Ward is a well-published geoarchaeologist on both terrestrial and marine archaeological landscapes, and has worked in regulatory, consultancy and academic roles both in the United Kingdom and Australia. She was part of the Australian Research Council–funded Barrow Island Archaeology Project: A Deep History of Sea Country, and recently completed an early-career fellowship focused on the Barrow and Montebello islands. Ingrid now holds a senior lectureship position at the University of Western Australia. At the heart of all her work is the aim to better understand the sedimentary landscapes and environmental context in which archaeological remains are preserved, and how this helps resolve past human–landscape dynamics.

Jonathan Wearne completed his doctorate in history and philosophy of science examining cross-cultural strategies for biodiversity conservation on Yolŋu estates. He has been an adviser to Dhimurru Aboriginal Corporation since 2006. In 2013, he was appointed as Dhimurru's first Learning on Country Coordinator and supported Yolŋu to position the Galtha Rom methodology at the centre of the program. He worked as a facilitator of land and sea management at Dhimurru from 2018 to 2020.

Mantatjara Wilson (1944–2009) was born in the bush near Pipalyatjara before moving to Ernabella. In 1977, she helped establish the Pitjantjatjara Homelands Health Service at Kalka. Inspired by Nganyinytja Ilyatjari's

leadership, she established the Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara Women's Council in late 1980. She served on the council executive for thirty years and developed the Domestic Violence Service. Mantatjara was a widely respected law-woman who took great pride in teaching the wider community about her law and culture.

Djalinda Yunupiŋu is a senior Gumatj clan leader who has worked as a teacher and as the Senior Cultural Advisor at Dhimurru Aboriginal Corporation from 2013 to 2019. She led the Learning on Country program for Dhimurru and the Yirrkala schools during this period, and the Yirrkala School Wellbeing Program. She now works as an expert consultant on Yolŋu education and collaborative research initiatives, including as a Senior Consultant to the Dhimurru and L̲aynhapuy Indigenous Protected Area Yolŋu Knowledge Framework and respective plans of management.

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