

# How Indigenous Languages hold the Key to Maintaining Cultural and Biological Diversity

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## Keynote address

*Minya Birran: What now for Indigenous languages?*

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## INTRODUCTION

I am a Gimuy Walubara Yidinji woman. My language name is Bukal Bukal. It was given to me by one of my grand-fathers. My name connects me with the lawyer vine which grows in the rainforest in the Cairns suburb of Woree, a traditional camp site of my people. As a child growing up in Yarrabah, I learned some basic Yidiny from my father and uncles. Speaking language was largely discouraged on the mission. However, the Yidinji are one of the fortunate groups as our language was recorded and intensively studied in the 1950s and 60s. The American linguist Kenneth Hale recorded my grand-father Teddy Fourmile in the 1950s. Professor Robert Dixon worked with some of the last fluent Yidiny speakers and wrote a book on Yidiny grammar<sup>2</sup>, and recorded many of our traditional stories in *Words of Our Country*<sup>3</sup>.

My inspiration to learn and teach my language came while I was studying to become a teacher at university in Adelaide in the early 1980s. The university taught courses in the Pitjantjatjara language, but other languages were being studied and revived, like the local Kurna language of the Adelaide plains. It was also while studying in Adelaide that I discovered my grandfather Teddy's tapes by chance, along with some other Yidiny language recordings, on a visit to the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) in 1985. I was also fortunate to correspond with Professor Hale at the Massachusetts Institute of Technology, and he sent me his language notes that accompanied his recordings of my grand-father. I therefore had access to a rich array of

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<sup>2</sup> Dixon, R.M.W. (1977). *A Grammar of Yidiny*. Cambridge University Press, Cambridge, Melbourne.

<sup>3</sup> Dixon, R.M.W. (comp. and edit) (1991). *Words of Our Country: Stories, place names and vocabulary in Yidiny, the Aboriginal language of the Cairns-Yarrabah region*. University of Queensland Press, St Lucia.

resources and assistance to put together some basic teaching materials to teach and maintain my language. This gave me the knowledge and inspiration to take the work of the linguists, and prepare teaching materials so that our own Yidinji children could learn their own language. Our language, using my grandfather Teddy's tapes and Dixon's grammar, is still being taught today. One of my cousins conducts regular weekend Yidiny language classes and we now have a number of young people who are becoming fluent Yidiny speakers, and who take pride in their language and culture. We Yidinji are one of the few fortunate First Nations people in Australia who still have the language speakers and resources to ensure that our language thrives well into the future.

In this presentation I want to outline the current status and trends around the world regarding the maintenance of Indigenous languages but also highlight the particular value they have in maintaining the world's cultural and biological diversity and the flow-on economic implications for global society.<sup>4</sup>

Indigenous peoples make up less than 6% of the global population, yet they speak more than 4,000 of the world's almost 7,000 languages. There are dire predictions that up to 95% of the world's languages may become extinct [within the next 100 years]. It is estimated that one language goes extinct every 3-and-a-half months. Seriously endangered Indigenous languages constitute the majority of these<sup>5</sup>. At least 150 of the 250 Aboriginal languages in Australia have been lost since European colonization in 1788, and today, only about 60 of them are still considered healthy<sup>6</sup>. The persistence of Indigenous languages is clear proof of Indigenous peoples' assertion of their distinct identities and self-determination. However, the reality is that when Indigenous languages are threatened, so is the cultural survival of the speakers<sup>7</sup>.

**Languages** are the vehicle through which traditional knowledge is encoded, expressed and transmitted. Safeguarding linguistic diversity is fundamental to the protection of traditional knowledge. People who no longer speak in their mother tongue have limited access to traditional knowledge and are likely to be excluded from vital information about subsistence, health and sustainable use and maintenance of the natural resources upon which their livelihoods depend.

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<sup>4</sup> See also Marrie, H.L. (2019). Emerging trends in the generation, transmission and protection of Traditional Knowledge. Presented at the 18<sup>th</sup> Session of the UN Permanent Forum on Indigenous Issues. New York. Available at: <https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2019/04/TK-Emerging-trends-in-the-generation-transmission-and-protection-of-TK-final-paper.pdf>

<sup>5</sup> Ethnologue (n.d.). <https://www.ethnologue.com/indigenous-languages>

<sup>6</sup> <https://aiatsis.gov.au/explore/articles/indigenous-australian-languages>

<sup>7</sup> Pawanka. (n.d.). *When Indigenous Languages are threatened, so are Indigenous Peoples: Pawanka Thematic Report on Indigenous Languages*. (P. 2). At: <https://www.pawankafund.org>

Therefore, linguistic diversity also plays a central role in linking cultural and biological diversity. Areas with high biological diversity are home to about 70% of the world's languages. Biodiversity hotspots – regions with an exceptionally high number of species unique to that location - comprise only about 2% of the Earth's surface, but they hold half the world's plants and vertebrate species, as well as half of the world's languages. High biodiversity wilderness areas cover 6% of the Earth's surface, but also hold 17% of the world's plants and 6% of the world's vertebrates, and these areas are home to another quarter of the world's languages, again spoken mostly by Indigenous peoples<sup>8</sup>.

The conservation and protection of these habitats depends greatly on the maintenance of the languages and cultural survival of their Indigenous inhabitants, while the survival of the people living in these regions depends on the conservation of the environments which sustain them. The extinction of their languages would mean the loss of detailed information about rare and fragile ecosystems, as the people living in hot spots and high biodiversity wilderness areas hold deep knowledge of the ecosystems and habitats of the many species of plants and animals around them and the traditional knowledge and know-how on how to best use and maintain these resources for their own use.

**Traditional knowledge** is a unique cumulative body of knowledge and practices related to the natural environment of a specific geographic area developed by a people over generations. It represents a history of experiences, careful observations and experimentation. It is embedded in culture, spirituality and world views and expressed in the languages that give rise to the ceremonies, stories, songs, proverbs, and customary laws. It is shared and passed down through the generations orally and through cultural practices and ritual.

These sets of understandings, interpretations and meanings are attached to language naming and classification systems, and resource use know-how. The languages of the colonisers simply did not have the extensive and nuanced vocabularies to adequately describe the new environments they came to inhabit. To give but one example from a multitude of possible examples around the world, the Saami reindeer herders, have over 200 analytical expressions for snow and snow change in their language, and over 400 for reindeer<sup>9</sup>. These represent an integral part of their traditional knowledge and are used by the herders in their everyday lives.

Indigenous Peoples' complex traditional knowledge systems have been critical to the preservation of biological diversity, the sustainable use of natural resources and the protection of the integrity of

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<sup>8</sup> [https://www.thegef.org/sites/default/files/publications/indigenous-community-biodiversity\\_0.pdf](https://www.thegef.org/sites/default/files/publications/indigenous-community-biodiversity_0.pdf)

<sup>9</sup> <http://reindeerherding.org/wp-content/uploads/2013/06/EALAT-Final-Report.pdf>

ecosystems. Indigenous peoples' rights to their lands, territories, resources and self-determined development underpin the survival and generation of that traditional knowledge. Thanks to Indigenous Peoples' knowledge and sustainable practices, the lands and waters they continue to manage contain over 80 per cent of the Earth's biodiversity<sup>10</sup>.

In providing examples of the application of traditional knowledge to promote and sustain biological diversity, I should start with an example of what's happening here in Australia.

The **International Savanna Fire Management Initiative (ISFMI)**, which had its origins in Arnhem Land, provides an example of a collaboration that harnesses traditional practices with modern science, and a methodology that can be replicated in other regions. Across the globe, wildfires pose a major threat to human lives, health, biodiversity and economies, and none more so than here in Australia as the catastrophic consequences of this summer's wildfires attest. Wildfires are also a major driver of forest degradation, desertification and species loss. The history of wildfire is similar across the world. In Australia, originally fire regimes were intricately managed by Indigenous people who lit low intensity fires for multiple purposes: creating fire breaks and preventing the build-up of fuel loads, increasing the productivity of the landscape and protecting cultural sites. With colonization, these traditional ways of fire management have been suppressed across landscapes leading to increased late dry season hot fires or destructive wildfires, and vast areas of land being poorly managed and degraded. This situation has led to exploring new ways of combating wild fires and rediscovering the efficacy of traditional methods.

Indigenous communities in Australia have developed a solution to this threat and Indigenous people across northern Australia have been leading the way. Combining their traditional knowledge with modern science and technology, they burn early, keep fuel loads down and reduce destructive wildfires. This leads to a decrease in greenhouse gas emissions, which in turn provides carbon market opportunities. Currently, there are 74 registered savanna carbon projects covering 25% of northern Australia that have generated an industry worth more than \$100 million. The twenty Indigenous-led carbon projects create more than 400 seasonal jobs within poor and remote communities, while at the same time reinvigorating traditional culture and improving biodiversity. The International Savanna Fire Management Initiative has explored the feasibility of exporting its savanna burning methodology to Asia, Africa and Latin America and has found widespread interest<sup>11</sup>.

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<sup>10</sup> Op. cit. note 7.

<sup>11</sup> <http://isfmi.org>

In the practice of traditional medicine, language is integral to the communication of medicinal knowledge. It is needed for both the diagnosis of illness, and to understand and communicate the use of traditional remedies in treatment, the location of medicinal plants, the proper times for collection, the most useful parts, and the methods for preparation, application and storage of the medicines. The **Foundation for Revitalization of Local Health Traditions** (FRLHT) in Bangalore, India provides an example of how traditional medicine is being recognized, studied and used on a scale that can have societal impact. The Foundation is a scientific and research centre for medicinal plants and the uses of local, tribal and ancient *ayurvedic* knowledge. The foundation makes full use of India's rich and diverse medical knowledge to serve health care needs in rural and urban India. The Foundation demonstrates the contemporary relevance of India's medical heritage<sup>12</sup>.

In **Canada**, native languages are making a comeback as Indigenous youth are pushing culture and language to the forefront of their activism. 45 per cent of on-reserve Indigenous youth consider learning a native language a priority and over half of them can speak or understand one. There is a wave of young people who want to learn or retain their native language. A report from the British Columbia Language Initiative, which seeks to revitalize the first nation languages stated that the majority, or 70%, of First Nations youth who reported having "excellent" First Nations language skills also reported high levels of life balance (a composite of physical, mental, emotional, and spiritual well-being).<sup>13</sup>

In the **Pacific**, traditional knowledge of climate, weather and environment, as well as traditional methods and indicators for forecasting weather are abundant. The Indigenous Peoples of the Pacific developed a vast body of knowledge about the ocean and seafaring. They navigated the ocean over huge distances guided by stars, winds, wave patterns and the behaviour of birds, fish and whales. But this knowledge was couched in languages with sophisticated vocabularies way beyond those of the European explorers. Indigenous navigation in the Pacific, or wayfinding, is an ancient craft, which has come very close to being lost forever in parts of the Pacific. UNESCO's Local and Indigenous Knowledge Systems LINKS Programme developed *The Canoe Is the People: Indigenous Navigation in the Pacific* programme to contribute to the preservation and development of traditional knowledge of non-instrument navigation, canoe building and open-ocean voyaging in the

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<sup>12</sup> <http://www.friht.org/>

<sup>13</sup> <https://www.150.statcan.gc.ca/n1/pub/89-656-x/89-656-x2015001-eng.htm>;  
<http://www.fpcc.ca/language/Programs/BCLI.aspx>; and <http://www.fpcc.ca/language/Legislation/>

Pacific. The program contributes to one of the main goals of the LINKS Programme, which is to bring Indigenous knowledge into the formal education system.<sup>14</sup>

In Latin America, the concept a good life or good living based on Indigenous values offers a paradigm shift from Western values centred on the individual and capitalism. It is rooted in the cosmovision or worldview of Indigenous Peoples, focused on community and harmony between people and nature. Captured by the Spanish phrase, *Buen Vivir*, the concept acknowledges the importance of preserving, protecting, and respecting the natural world and the rights of nature. Indigenous knowledge systems guide its practices where human beings are no longer the only ones who have values and rights. In 2008 and 2009 respectively, Ecuador and Bolivia legally recognized the rights of nature by including the concept of *Buen Vivir* in their national constitutions.<sup>15</sup>

### **Protection of Indigenous languages**

I want to now turn to global initiatives that have been taken to foster the recognition and protection of Indigenous languages.

Article 13 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) states that “Indigenous peoples have the right to revitalize, use, develop, and transmit to future generations their languages, oral traditions, writing systems and literatures”. Further it provides that “States shall take effective measures to protect this right, including through interpretation in political, legal and administrative proceedings.” Articles 14 and 16 state Indigenous peoples’ rights to “establish their educational systems and media in their own languages and to have access to an education in their own language”.<sup>16</sup>

The implementation of Article 8(j) on Traditional Knowledge, Innovations and Practices in the **Convention on Biological Diversity** has also been key in advancing recognition, protection and transmission of traditional languages and the knowledge systems they support.<sup>17</sup> Under the programme of work of the Ad Hoc Working Group on Article 8(j) and Related Provisions, three indicators to monitor the status and trends in traditional knowledge were adopted. The first of these concerned the status and trends of linguistic diversity and numbers of speakers of Indigenous languages.

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<sup>14</sup> <https://en.unesco.org/links-transmission/canoe>

<sup>15</sup> <https://therightsofnature.org/ecuador-rights/>

<sup>16</sup> Pawanka, Op. cit. note 7. P. 2.

<sup>17</sup> <https://www.cbd.int/abs/infokit/revised/web/factsheet-tk-en.pdf>; and <https://www.cbd.int/cop/cop-13/media/cop13-press-brief-tk.pdf>

The UNESCO *Convention for the Safeguarding of the Intangible Cultural Heritage* (2003) recognises the role that Indigenous communities in particular play in the production, safeguarding, maintenance and re-creation of intangible cultural heritage. Article 2(2) recognises language as a vehicle of intangible cultural heritage, which includes oral traditions, the arts, social practices, and traditional ecological knowledge. In Article 3, with regard to safeguarding, measures to ensure viability of languages and other components of intangible heritage include: identification, documentation, research, protection, promotion and revitalization.<sup>18</sup>

## **CONCLUSION**

The protection of Indigenous languages and the transmission of traditional knowledge of the natural world on which it depends requires efforts on multiple fronts: not only attention to the languages themselves, but also non-linguistic modes of transmission, innovative schooling and curricula, national and international policy frameworks, and network building among groups to encourage vertical and horizontal transmission of traditional practices among communities, for example in the cultivation of native foods and fire management.

For Indigenous peoples, our languages are not merely tools for communication. Our languages embody the very core of our individual and collective identity, our Indigenous knowledge, the distinctiveness of our cultures, and the complexities of our wisdom and worldviews. These inter-related essentials are mutually sustaining through the languages that define them and give them meaning, significance and relevance.<sup>19</sup>

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<sup>18</sup> <https://ich.unesco.org/en/convention>

<sup>19</sup> Pawanka, Op. cit. note 7. P. 3