Compare: A Journal of Comparative and International Education

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/ccom20

Hidden, scattered and reconstructed: indigenous lifeways, knowledges and intergenerational learning

Sheila Aikman

To cite this article: Sheila Aikman (2025) Hidden, scattered and reconstructed: indigenous lifeways, knowledges and intergenerational learning, Compare: A Journal of Comparative and International Education, 55:1, 11-28, DOI: 10.1080/03057925.2023.2234276

To link to this article: https://doi.org/10.1080/03057925.2023.2234276

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 14 Aug 2023.

Submit your article to this journal

Article views: 1109

View related articles

View Crossmark data

Citing articles: 2 View citing articles

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=ccom20

COMPARE, 2025
VOL. 55, NO. 1, 11–28
https://doi.org/10.1080/03057925.2023.2234276

Hidden, scattered and reconstructed: indigenous lifeways, knowledges and intergenerational learning

Sheila Aikman

School of International Development, University of East Anglia, Norwich, UK

ABSTRACT

This article is concerned with diverse ways in which indigenous people learn, engage with and construct knowledge in their every-day lives and livelihoods. Drawing on the concepts of lifeways it explores the nature of the shared values, meaningful social interactions and multiple forms of communication – including interactions with human, non-human entities and the spirit world – of indigenous peoples of the Southeast Peruvian Amazon. Indigenous Arakbut knowledges and ways of knowing are the basis of their 'education system' and emerge from their history and vision of the world. However, their lifeways and education system have become fragmented, scattered and go unrecognised in the context environmental destruction from gold mining and lack of territorial control. The article draws on indigenous perspectives and ethnographic research to demonstrate the importance of indigenous education systems for the maintenance and continuing transformation of vigorous place-based lifeways attuned to 21st century visions for the future.

ARTICLE HISTORY
Received 8 April 2022
Accepted 3 July 2023

KEYWORDS
Indigenous; lifeways; knowledge; cosmology; Arakbut; gold mining

> 'The most fascinating aspects of Arakmbut life are the realities we cannot understand. Arakmbut self-controlled dreaming, the reality of the spirit world, and the direct experience of communicating with an animal all seem impossible. I have seen strange things that can be rationalised away but to no avail. My aim is not to encapsulate and destroy the mystery of Arakmbut life but to respect it' (Gray 1997b, xxi)

Introduction

This article takes as its starting point an understanding of knowledge and learning as processes embedded in and emerging from shared values, meaningful social relationships and multiple forms of communication. In line with the focus of this Special Issue it understands these to be, furthermore, 'intergenerational, contextualised and diverse' (Acharya, Mjaya and Robinson-Pant, this volume; Veber and Virtanen 2017). It draws on these premises to enquire into the knowledges and learning of the Arakbut Indigenous peoples of the South East Peruvian Amazon, asking not about

CONTACT Sheila Aikman Sheila.aikman@uea.ac.uk School of International Development, University of East Anglia, Norwich Research Park, Norwich NR4 7TJ

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Indigenous knowledge and learning in general or taking 'indigenous' as an essentialist category but investigating their contextualised, place-based lives. To do this it draws on long term ethnographic research with the Arakbut peoples and draws on published ethnographic literature. It is concerned with diverse ways in which different generations of Arakbut people learn, engage with and construct knowledge in their everyday lives and livelihoods and their shared values, meaningful social relationships and forms of communication. My focus, here, is to investigate the multiple lived experiences of the Arakbut people and their vibrant relationships and community as they live through a context of dramatic change.

Through an investigation of the nature and complexity of an Arakbut 'education system' and drawing on Indigenous-inspired definitions of education, learning and ways of life, the article demonstrates how Indigenous education defies categorisation in terms of formality or informality of structure. It requires an approach that distinguishes it from mainstream conceptualisations of 'adult education', 'family literacy' and, indeed diverse forms of Indigenous schooling. It is diverse, fluid and responsive to the processes of transformation in everyday lives. Rather than engaging with dichotomies of formal and informal education, or pitting Indigenous ways or traditions against modern ways of life, my aim is to contribute to discussions of alternative approaches to family literacy and learning (see this SI) and support a reconceptualising of Indigenous education in a way that recognises and respects ontological and epistemological diversity and the complexities of fast changing social, economic and environmental contexts.

Taking two periods in the lives of the Arakbut,[1] I consider these from the perspective of my experiences in an Arakbut community located on the lower River Karene. The first period is concerned with the decade of the 1980s and the second the early decades of the 21st century. These allow me to contrast between Arakbut knowledge and learning in the context of a way of life predominantly based around subsistence hunting and agriculture and a lifeway strongly dependent on artisan gold mining. Choosing these two periods in time is not to emphasise a before or after, or a 'traditional' and 'modern', but rather two 'moments' in the continuing movement and motion of Arakbut lived experiences. I draw on personal ethnographic research over a period of 40 years (Aikman 1999, 2009, 2017, 2021) and published ethnographic, anthropological and educational research for both these 'moments' and emphasise that these descriptions and the analysis reflect my positionality as a non-indigenous, European, female researcher. Paraphrasing Gray (1996, xxiii), my hope in writing this article is that it will raise awareness of the rich diversity of lifeways, knowledges and learning of Indigenous peoples. Today the Arakbut are increasingly writing about themselves so I hope that the imposition of my analysis and structure on their knowledge and learning is justified in so much as it can promote mutual understanding and respect as well as raising awareness of the many different ways in which Indigenous peoples' vibrant relationships are under threat.

The Arakbut and indigenous peoples of the Peruvian Amazon

The Arakbut number some 2000 people and comprise the largest sub-group of the seven Harakbut-speaking people who have lived in the area of the Madre de Dios watershed, South Eastern Peru since time immemorial. This is an area of tropical lowland forest where they have hunted forest animals and birds, used the rich resources of insects, fungi,

fruits and plants, fished and cultivated a wide range of crops. Since the 1970s they have also carried out some artisanal gold panning.

Today there are eight Arakbut communities which have legal title to the areas surrounding their settlements, all located in a much more extensive ancestral territory of over nearly three million hectares. In 2006 an area of 402,335 hectares of this wider ancestral territory was formally recognised as a communal reserve (*Reserva Comunal Amarakaeri*, Amarakaeri Communal Reserve www.amarakaeri.org). Their language, Harakbut, is an oral language unrelated to neighbouring Indigenous languages. There have been initiatives to establish a written form of Harakbut firstly by the Summer Institute of Linguistics, an evangelical Christian organisation, for their purpose of bible translation and bilingual schooling in the 1970s and more recently the Indigenous organisation has led a process of revision to produce a dictionary and materials for use in intercultural schools (Aikman 2017).

Moore (2021, 313; Gray 1997b) notes how Harakbut ethnicity is strongly tied to indigenous ancestral territory, their '*wadari*', comprising the forest, rivers and sky. Some features of the landscape have mythological origins and some have human origins. For example, riverbanks are formed by the *isula* ant and dragonfly, while fire was brought to the Harakbut by the woodpecker. Knowledge of some features, such as salt licks are highly prized because they attract animals such as peccary, tapir, blue and red macaws, capybara. Arakbut learn the features of the landscape through myths, direct experience and shared activities such as hunting, gathering and rituals. For example, they know where in the lowland wet areas the *aguaje* palm, an important source of nutrition, grows and where in the forest ancient gardens are located. These features are part of their landscape and reflect human and animal behaviour, mythology and the history of their settlements.

The Harakbut term *wadari* binds together ideas of political control, resources, spirituality and landscape. It also encompasses the relationship Arakbut have with their environment, which is social rather than economic or reproductive.

> Sociability forms the reference framework for relationships with the environment in such a way that, far more than a mere area of land for subsistence and social reproduction limited to a local group that exercises control over the space, territory belongs to the social space. (Garcia Hierro and Surralles 2005, 15)

Amazon peoples do not put nature and people in opposition to each other, rather they believe that most animals and plants form part of the community of persons. Their world is inhabited by different sorts of subjects or person – human and non-human – which 'apprehend reality from distinct points of view' (Viveiros de Castro 2004, 36; see also De la Cadena 2008; Rosengren 2006). Gray (1996, 282) analyses the relationship between the invisible spirit world and the visible world of the Arkabut as the dynamism of their existence: 'The Arakbut cosmos consists of a fundamental distinction between the visible world of form and an invisible world of animating soul or spirit'. The larger animals are also animated by spirits such as deer and wild pigs. Relationships with animals provide Arakbut knowledge, some from visions of the shamans (*wayorokeri*), others from myths and others from dreaming and contacting particular animals by hunters. When a hunter kills an animal, the spirit must go in search of another body to inhabit and takes its physical form. At this point, the animal spirit can attack the hunter and his family and

make them ill. So, the hunter must take precautions, not eat the meat himself and his wife must cook it in a particular way that renders it harmless. As Moore states (2003, 79), 'maintaining order in the Arakbut cosmos requires the maintenance of order in the natural environment'. An Arakbut will not kill animals, gather turtle eggs or cut down the forest more than is necessary for sustaining life because of the importance of maintaining good relations with the spirits of their *wadari*.

Indigenous Amazonian people talked to Garcia Hierro about what they considered important knowledge to inherit from their ancestors to ensure the good governance of their territories. Among other things they identified the importance of territorial knowledge effectively passed down and built on, generation after generation. They also highlighted their own education systems based on promoting the particular values of their specific Indigenous group (Garcia Hierro 2021). Sharing valued and meaningful knowledge across generations continues to be at the core of their hopes and desires for their futures.

Indigenous peoples: education systems, rights and research

The Declaration of Barbados, now over 50 years old, shone a spotlight on the dispossession and plunder of Indigenous territories in South America and denounced the continuing situation whereby the 'lands inhabited by the Indians are judged to be free and unoccupied territory open to conquest and colonisation' (World Council of Churches 1971, 1). The Special Rapporteur in the field of cultural rights emphasises that it is not only tangible and natural heritage that is at risk of destruction and disappearance in many parts of the globe but also with the shrinkage and transformation of place-based lives, the practice and transmission of a wide range of intangible cultural heritage and practices (Bennoune 2019). For the Arakbut, these range from the use of their language in their daily social interactions and communications with the spirit world, to rituals, storytelling events, craftsmanship such as making string bags (*wenpu*), and their vast knowledge of the forest and rivers. For 'myopic' (Gray 1997a) miners, traders, government representatives, teachers and policy makers the invisibility of Arakbut cosmovision further undermines their lifeways. Arakbut spirituality is an invisible or 'hidden' dimension of their struggle to regain and retain control of their lands.

It follows that Indigenous knowledge systems, practices and diverse lifeways are not well understood, or rather they are mis-understood, stemming from divergent worldviews and dominant epistemological and ontological positionings. They also continue to be mired with dominant discourses that equate them with superficial notions of 'tradition'. This equates Indigenous knowledge with folklore, antiquity or ancient knowledge that is static and unchanging rather than new and evolving Indigenous knowledges (IWGIA 2021, 881, ff.1). The term 'traditional' is, however, important to Indigenous peoples when used to mean knowledge and practices that tie them to their territory and identity historically. In this sense the traditional is also contemporary and part of people's lives today.

As McKinley and Smith (2019, 1) note, 'Indigenous communities have always maintained and developed complex education systems' but these systems are, for the main part, little understood or recognised and even less valued more widely. They continue: 'Colonial invasion and exploitation have shattered Indigenous knowledges and ways of

knowing, and as a result, the pieces have become scattered – destroyed, hidden, and other parts just waiting to be reconstructed' (McKinley and Smith 2019, 1). The Arakbut have always had relationships with other Indigenous groups but their recent history is one of violent contact and colonisation with waves of migrant gold miners entering their territory. This has led to profound changes in terms of language shift and loss of knowledge and ways of being and doing that have hitherto passed from generation to generation. They face large-scale deforestation and devastating pollution of their waterways from intense and mainly unregulated artisan gold mining. Corisepa Neri (2021, 2), an Arakbut commited to efforts to sustain the integrity of Arakbut territory and identity, writes that these struggles have had 'fatal physical, psychological and spiritual consequences.' Arakbut have increasingly hidden their knowledges and ways of knowing from outside view but they have also become fragmentated and fragile through the weakening of shared values and community-based social relationships. Responses to these changes in Arakbut ways of life are diverse as are efforts at the reconstruction and of piecing together areas of scattered knowledge and educating new generations.

Nevertheless, there are processes of challenge and change. Through the 1990s at the international level, the drafting of the Declaration of the Rights of Indigenous peoples at the United Nations provided an influential forum for Indigenous peoples and their organisations to document and denounce abuses, a process in which Arakbut representatives participated in Geneva. Within the field of education, in 2017 a meeting hosted by the Latin American branch of UNESCO identified a need for recognition and legitimation of Indigenous knowledge, culture and practices in educational debates and policy (UNESCO/OREALC 2017). It labelled the marginalisation of Indigenous peoples' knowledges as epistemic injustice. And in 2021 at the World Intellectual Property Organisation, Intergovernmental Committee, the Indigenous Caucus reminded Member States of their obligation to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions' (Noe 2021, 811, ff.4).

Educational research on, with and by Indigenous peoples has burgeoned in the past decades with the Education for All movement and the recognition of Indigenous rights, including education rights, moving up the development agendas for national governments and international organisations. Indigenous education has been addressed from the perspectives of quality and inclusion and overcoming Indigenous peoples' educational marginalisation (Dyer and Aikman 2012 Compare Special Issue; Bellier and Hays 2016) as well as investigations into Indigenous knowledges in relation to improving relevance, performance and educational outcomes (King and Aikman 2012, Compare Special Issue). The majority of these studies focus on the nature of the inclusion and relationships Indigenous students and peoples have with formal education, from primary schooling to university education and adult literacy. Examples abound from around the globe, varying in approach according to historical and socio-cultural contexts and the political sensitivities associated with the term 'Indigenous'. In Latin America theories, policies and practices of intercultural education and bi/multilingual education focused on the Indigenous population have evolved over decades and contributed to wider debates about the coloniality of education, Indigenous self-determination and intra/interculturalism and plurilingualism (see Aikman 1999; Ames 2012; Trapnell 2011).

There is a long standing and rich body of research within the field of education and development that draws on ethnographic and anthropological foundations. My approach is one of engaged critical ethnography, concerned with Indigenous political struggle to overcome inequalities, racism and injustice. It takes inspiration from research developing out of the New Literacy Studies (see, e.g. Kalman and Street 2013), educational linguistics and Indigenous language/minority education (see e.g. Hornberger 1996; McCarty 2011; Wyman 2012). It is concerned with language, learning and education as situated social practices to be researched through 'interacting with, by engaging, and documenting the multiple lived experiences of the people with whom one works and studies' (Moll 2013, pxi).

Indigenous knowledges, learning and lifeways

Indigenous researchers, practitioners and organisations have themselves been calling out the coloniality of educational practice and the dominance of top-down decision-making in research and policy for many decades. Across the globe they have detailed their experiences in formal education while also continuing to foster and nurture learning and the transmission of valued knowledges across generations based on their own diverse ways of knowing and being in the world. Researchers working within a critical tradition together with Indigenous scholars have articulated concepts of 'education' and 'Indigenous knowledge' that aim to respect and reflect the nature of the processes of learning and knowledge transmission in their diverse lives and communities (e.g. Hill and May 2011; McKinley and Smith 2019).

Tom, Huaman, and McCarty (2019) discuss ways in which Indigenous systems of community-based learning operate within and across generations, and how learning takes place through everyday intergenerational language practices and social and economic practices and activities. Thaman (2000) talks of learning though observation, listening, watching and imitating respected others who have the knowledge, skills and attitudes that equip them for their particular society. In this way, learning is embedded in and emerges from shared values, meaningful social relationships and communication that is often primarily oral and transmitted through performance, problem solving, modelling and through the structures of Indigenous languages (Aikman 1999; Battiste 2008). In other terms, learning is lifelong; it is a learning for life and for sustaining the integrity of a particular way of life as that shared way of life is transferred and transformed across generations. This foregrounds notions of context and continuity and how Indigenous learning is 'designed to accomplish a fundamental task of surviving over time through the production of healthy, functional, caring individuals committed to a shared way of life' (Tom, Huaman, and McCarty 2019, 5–6). For Cajete, an Indigenous scholar from New Mexico, education is 'at its essence, learning about life through participation and relationship in community, including not only people, but plants, animals, and the whole of Nature' (2008, 206).

With echoes of Cajete (2008 cited in Villegas, Neugebauer and Venegas 2008, 2) understand Indigenous knowledge as 'the expression of the vibrant relationship between the people, their ecosystems, and the other living beings and spirits that share their lands'. In Arakbut society as with many other indigenous peoples across the globe, access to knowledge is structured by age and clan

and gender (Aikman 1999, 2021). Knowledge and wisdom are outcomes rather than objective things – outcomes of intimate relationships with the spiritual and material environments (Rhea and Teasdale 2000). McGregor (2004, 79) emphasises, in relation to debates about traditional (Indigenous) environmental knowledge, that 'Aboriginal people view the people, the knowledge and the land as a single, integrated whole' and 'include spirituality, world-view and a way of life'. Indigenous knowledge defies Eurocentric categorisations into bodies of knowledge; moreover, there are multiple and plural Indigenous knowledges and world views.

The term lifeway and the definition used by Tom, Huaman, and McCarty (2019, 2, ff.7) offers a way of thinking about Indigenous learning, knowledge and 'education' that encompasses the 'intersecting elements that make life possible within local ecologies and with global implications', including the intersections of languages, environments, economies and cosmologies. A particular people's way of life or 'lifeway' emerges from their knowledge and learning as part of their vibrant relationships, their experiences of place, self and history. Lifeways and, as Blaser discusses, 'life projects' are 'unique to indigenous people's experiences of place and self and are premised on densely and uniquely woven "threads" of landscapes, memories, expectations and desires' (Blaser, Feit, and McRae 2004, 26). Indigenous lifeways are embedded and sustained in local histories and visions of the world and the future distinct from those promoted by state and markets (Rivera Andia and Odegaard 2019, 37 ff). For the Arakbut their lifeways – with their unique intersecting elements or threads – are based upon stability, sufficiency and a relationship with the environment, their *wadari*, which encompasses all dimensions of indigenous knowing (Aikman 2009, 55).

In this way, Arakbut lifeways are placed-based, embedded in their *wadari*, with strong historical roots, but they comprise also many connections which extend spatially from the local to the global (Massey 1999). The Arakbut have never been 'isolated'; they have always lived lives interrelated with other peoples and influences, not least with neighbouring Indigenous peoples of the Madre de Dios region. They have also had sporadic contact going back centuries with explorers searching for natural resources including rubber, oil and gold (see Gray 1996; Moore 2021; Sueyo Yumbuyo 2003). Since the late 1970s Arakbut communities have had schools run by different missionary denominations, Catholic and Protestant (Aikman 1999).

Understanding Arakbut learning and knowledge, demands an investigation into their lifeways, the 'intersecting elements that make Arakbut life possible within the local and global ecologies' (Tom, Huaman, and McCarty 2019). It is an investigation not into disarticulated bodies of knowledge or forms of teaching and learning but into Arakbut life, constituted through 'participation and relationship to community, including not only people, but plants, animals, and the whole of Nature' (Cajete 2008, 206).

Arakbut lifeways – knowledges and learning in the 1980s

I was privileged to spend several years living with one Arakbut community between 1980 and 1991 and experienced Arakbut lifeways at that juncture in their history and society. I discuss here my experience of their knowledges and learning which emerged from their shared values, meaningful social relationships and multiple forms of communication

during this decade. In the afternoons the women of the village often sat in family groups feeding babies, chatting, making string bags (*wenpu*). By considering the stages involved in bag making, I identify some of the 'densely and uniquely woven threads' of their lifeways.

One morning early I set off with three sisters, Leyla, Elena and Lucia,[2] and their children, untying a dugout canoe from the shoreline and poling up river for several bends. At the mouth of a small stream Elena manoeuvred the canoe past thick stands of bamboo and overhanging lianas until she moored at a small inlet. From there we walked quietly through the forest, cutting a path with machetes as we weaved our way through the low-lying sandy terrain until the women stopped and looked around approvingly at a stand of tall thin trees. Elena and Lucia explored the area a little while Leyla hung her small sleeping baby in its *kusipe* (flat padded cradle) on a shaded branch. Then the women began to fell some of the trees and once on the ground expertly tugged hard at the bark ripping it up the trunk and off in long broad strips. They packed the strips into their large string bags and we began a leisurely journey back to the village meandering along a different path and down another stream. The women were relaxed, chatting quietly out of respect for the forest, curious and sometimes excited when they spotted a particularly interesting fungus and clambering up a tree to reach a ripe fruit. They pointed out tracks of a wild pig and warned me to be careful where I tread for fear of disturbing a snake. The children explored in the forest around, not straying far and then sat in the canoe listening to birds calls and echoing them.

Over the course of the next few weeks in the late afternoon the women teased the fibres off the inside of the bark strips, washed them and left them to dry in small bundles. With their supply of fibres prepared they would use these in subsequent weeks and months to make different strengths of string for a variety of uses including for their husbands' bows. They shared the fibres with their daughters and watched over them as they mastered the technique of rolling them into fine string. Making *wenpu* took many weeks depending on the size of the bag required, using a bone or metal needle to loop stitches to a thread tied around their thighs, a process particular to the Arakbut. On completion a bag would be washed in barbasco (*kumo*) and hung up to dry before being used. *Wenpu* would be mended time and time again and the most worn and darned were used for carrying firewood back to village from the forest. Young girls made small bags and when they married would give one to their husbands for their hunting trips.

This is an example of intergenerational knowledge interchange and learning in action, embedded in Arakbut engagement with their landscape. There are many interconnected dimensions to this activity beyond their demonstration of knowledge of where the 'right' kind of trees grow for bag-making. Paddling through a stream or walking together on a winding forest path was an experience filled with meaning – in terms of memories of past trips, of recognising different trees and their physical properties, and where and species of trees for with different purposes grow. They noted where and how these trees were growing for sustainability of future supplies and understood how certain species of tree, insect, bird and animal were repopulating what had been gardens of previous generations and where today they could still harvest particular long-lived crops. They were drawing on knowledge passed down through generations and through an understanding of the landscape and their history. The three sisters-in-law were bound through meaningful social relationships: they were adult women of the same generation and

married into the same clan, the clan of their husbands. They shared meat from the hunt and helped each other to weed and plant their gardens.

The excursion was, moreover, informed and shaped by the invisible world of the spirits and the women's relationships with them. The women explained that the *kumo* with which they washed their bags originates from the forest and needs spiritual encouragement to grow. Leyla and Elena as younger adult women were learning to communicate with the spirit world by learning the chants which ensure the growth of the *kumo* roots by calling on help from large-rooted trees such as the *wakta* (Aikman 1999, 108). Without good relationships with the spirits the gardens would not flourish. Knowledge is cumulative and Lucia the oldest of the group had built up an extensive knowledge of her environment and knew the names of many species which, together with her practical experience of the forest, rivers and its inhabitants – both human and non-human – gave her the potential to communicate with the spirit world. Older women know and grow not only different varieties of crops (such as manioc, plantains, pine-apple, sweet potato) but they know what animals may come to their gardens to steal their crops and what chants to help them grow. The younger women learned from Lucia as they worked and interacted together.[3]

As Gray (1997b, 116) notes 'The spirit world provides life to the visible world which animates inanimate bodies, informs people in dreams and, if someone transgresses acceptable behaviour, responds with appropriate sanctions, usually in the form of sick-ness. The Arakbut communicate with the invisible world and the spirits in a range of ways including stories, dreams, rituals and chants and in this way the spirit world is itself a source of knowledge and learning. The three women, Leyla, Elena and Lucia were physically strong and combined this with a strength of 'soul', that is of knowledge of their social, spiritual and non-human world. And they used these strengths together to ensure health and wellbeing of their families and their community. Children, as their bodies grow in strength, slowly learn and accumulate knowledge. They are not presented with adult tasks or allowed into the forest alone until they have acquired strength both physically and spiritually. It is through their participation in the lifeways of the commu-nity that gives meaning to their learning and the understanding that can keep them safe.[4]

Women and men communicate with the animals, fish, birds and spirits in different ways and together contribute to the promotion of a healthy lifeway for themselves, their families and their community. Men, through their hunting, act as predators and use their spirit contacts to protect themselves and their households from potentially harm from spirits. Women convert the meat from the hunt and the produce they grow in their gardens into food safe for eating and for the growth of healthy strong children. Knowledge can be personal, in the sense of being identified with the individual who uses it. Knowledge about relationships with spirits can be used to protect the individual and society as a whole but it can also be used to bring sickness.

This necessarily brief glimpse into the complex lifeways of the Arakbut demonstrates ways that the society is maintained through engaging with their territory and its land-scape with understanding and respect for the human and non-human beings that inhabit it. The women learned through participation in a wide range of activities in a familiar social group where they watched, listened, and learned in a scaffolded and safe environ-ment. They learned and acquired knowledge and skills through dreaming and forming relationships with the spirits and from listening to myths and stories told by their elders

which are rich with important understandings about their history and identity. Arakbut lifeways are the basis of their ‘education system’, founded in their shared values, meaningful social relations and forms of communication. In this way, following Tom, Huaman, and McCarty (2019, 5–6), Arakbut education is ‘accomplishing the fundamental task of surviving over time through the production of healthy, caring individuals committed to a shared way of life’.

The precarious nature of indigenous Amazonian lifeways

The section above outlined in broad brush strokes some of the ‘complex threads of landscape, memories, expectations and desires’ (Blaser, Feit, and McRae 2004, 26) of the Arakbut as documented by anthropologists and ethnographers in the 1980s and early 1990s. These threads, unique to the Arakbut have been ‘unrecognised and uncomprehended by “Western” scientific knowledge where humans are seen as hegemonic masters subordinating other species to their needs’ (Descola 2005, 26) through an ever-expanding desire for control over resources. The Amazon has been subject to the search and extraction of natural resources for hundreds of years which have had a heavy toll on not only the forests and rivers of indigenous territories. This process intensified ‘the destruction of indigenous knowledge, spirituality and territories that began five centuries ago with the European invasion of the New World’ (Elias 2020, 1), which targeted the production, preservation and transmission of Indigenous peoples’ knowledges.

There are documented incursions and expeditions onto Arakbut territory from the 16th century and the presence of missionaries contact from the 20th century but it was only with the increase in the price of gold since the 1970s that there has been a permanency of people on their territory. And as the price of gold continued to rise, wave after wave of migrants continued to arrive and settle. With increasing intensity since the 1990s, the Arakbut have borne testimony to the harm that colonial invasion and exploitation have done to their indigenous knowledges and ways of knowing and the spirits of the invisible world, once hidden from view, have become scattered and knowledge of them fragmented.

The alluvial sub-soils of Western Amazonia contain mineral deposits mixed with tiny gold particles and the Madre de Dios region contains the highest concentrations of these (Anser et al. 2013). The gold is mined by largely unregulated groups and individuals working in dangerous and chaotic conditions. During the 1970s and early 1980s gold was primarily panned on a small-scale basis by migrants seeking alternatives to urban and seasonal rural poverty who worked in labour-intensive practices on riverside beaches during the dry season. With the introduction of petrol water pumps mining could also to take place inland on ancient riverbeds and transient miners’ camps quickly spawned into permanent settlements. Through the 1990s dredges became a common feature on the rivers and small towns sprang up in now treeless environments.

Arakbut communities on the rivers Karene and Inambari found themselves in the midst of a gold rush. By 2014 an estimated 59,000 artisanal gold miners operated in the region and rates of environmental destruction, social unrest and violence soared (Damonte et al. 2013). While Madre de Dios was being hailed a biodiversity capital of the world, the devastation and violence of the alluvial gold mining and the environmental impact of deforestation and liquid mercury has grown in notoriety. By 2021, Amazon

Conservation Association (2021) estimated that in 30 years more than 96,000 hectares of primary forest cover had been removed.

Since the 1970s the Arakbut have been panning for small amounts of gold by the river banks to provide them with access to the money economy of Madre de Dios, itself growing through the presence of the miners. From the late 1980s the massive increase in the influx of miners led to clashes with Arakbut over access to beaches and streams. In one Arakbut community in 1980 there were 100 illegal gold colonists on their titled lands and by 1986 the number had risen to 443 (Gray 1986). Much of Arakbut titled territory today is a denuded landscape, where panning boards and washing hoses lie perched precariously on the edge of craters with deep stagnant pits and mini-mountains comprised of pebbles, washed and discarded in the mining process.

I have described the mining in some detail to convey a sense of the enormous transformation in the physical and social environment which has constrained and transformed many aspects of the Arakbut lifeway described in the previous section. Gold mining slowly became a necessary means of sustaining a livelihood for the Arakbut; for a few it has been a successful way forward but for the majority it has meant poverty. Today, Leyla, Elena and Lucia no longer plant a rich diversity of crops in their gardens or collect fibres for their *wenpu*. Nor do they plant and harvest barbasco, a crop that had an ancient and very important role in their relationships with their *wadari* of the 1980s. Instead, their lives are dominated by gold mining.

The Arakbut 'education system' of the 1980s and 1990s emerged as complex, with densely woven threads of landscapes, memories, expectations and desires. Its underpinning aim was the production of healthy, caring individuals committed to their unique shared way of life and their vision of the world. But with the advent of uncontrollable invasions by migrants in their rush for gold, these threads became looser and twisted in different ways. The shared values of a lifeway shaped by interactions between the visible and invisible worlds and its inhabitants, both human and non-human began to change and relationships between kin, clan and community were fragmented. New relationships developed as miners arrived to work and live alongside Arakbut and as the community village dispersed into small gold camps and families built houses in the regional town. Meaningful social relations became those relationships valuable to being a successful gold miner while close relationships with spirits and intimate knowledge of the forest, important for being a successful hunter, fisher and gardener, waned. Reliance on purchased foodstuffs and tools for daily life and work increased and were bought with money from gold mining. The need for and the time to make items such as *wenpu* and bows and arrows were shrinking and the detailed knowledge of where to find the materials and how to make them fragmented among the older members of the community. Younger generations, who boarded far from their communities, brought back schooled knowledge and experiences while their denuded *wadari* offered few opportunities for intergenerational knowledge sharing and transmission. Arakbut social life became more oriented and dominated by the presence of Spanish speaking outsiders. For many Arakbut contemporary communication is more likely to be about negotiating with traders, workshop owners

and gold dealers in Spanish than myth and story-telling among each other in Harakbut. Dialogue with forest spirits is less necessary for daily life, and, moreover, busy miners are not developing the knowledge and skills for communicating with them through dreams.

The dynamic lifeways of the Arakbut

McGregor (2004) points out that indigenous knowledge, which is critical to indigenous identity-making, emerges not only from a history of engagement with the landscape but also from increasingly connected and interconnected lives. The changing conditions of Madre de Dios have been brought about by gold mining but also new relationships with wider national and global societies influencing aspects of ethnic identity, political ideology and valued knowledges (Gray 1997a). Arakbut lifeways have always been dynamic and regenerative, as witnessed through their relationships with their landscape and its animals and spirits. As the features of the landscape have changed with the gold mining so has their need for different kinds of knowledge and learning, different social relationships and forms of communication, particularly in oral and written Spanish. These in turn involve new ways of acquiring knowledge as is happening through experiences in gold mining, working with alliances within the mining sector and through strong Indigenous political organisation (Garcia Altamirano 2003). Younger generations of Arakbut bring their schooled knowledge to new contexts and new threads are woven into the changing fabric of Arakbut lifeways. But what do these changes and transformations mean for Arakbut relationships with the invisible world of the spirits, and the knowledge and learning passed down through generations since time immemorial?

Gray, in his ethnographies of an Arakbut community in the 1980s and early 1990s, discusses the importance of regulating the spirit world to avoid destruction of Arakbut society. He understood the Arakbut world to be dynamic and embedded in changing relationships with the spirits of the invisible world, the spirits that inhabited the physical form of animals and fish. The close everyday relationship between humans, species and spirits was the foundation for dreaming and curing practices to maintain the health of the community (Gray 1997a).

Arakbut individuals I have talked to in recent years say that the spirits have gone from community territory; they are no longer present in the denuded lands of the mining areas where there are no animals or fish. Over time there has been a shifting of relationships between human and non-humans as relationships with actors engaged in the gold economy became important. The particular densely woven threads of landscape, memories, expectations and desires that shaped Arakbut shared values, social relationships and communication of the 1980s and 1990s have, through invasion and exploitation, become frayed, unpicked. The vibrant relationship between the people, the forest and river, plants, animal and birds and the spirits been transformed leaving them, in McKinley and Smith's terms, fragmented, scattered, some destroyed.

What, then, does national and international attention to indigenous rights mean in terms of making visible what has been made invisible (Fasheh 2008) or, indeed, for the Arakbut, of achieving recognition that their relationships to their territory are more than 'economic' but that their ties are through their cosmology, their worldview, passed down generations and woven together through shared learning, experiences and values. The

invisibility and lack of recognition of the way that Indigenous peoples share their landscapes and lifeways with non-humans as well as human can lead to policies and strategies which are not implementable for Indigenous peoples. As Henrikson recognised in his work with the Innu, project and programme reports 'do a poor job of conveying the deep meaning and emotion that many Innu have for the land and living entities that reside in the study area (Georg Henriksen, cited in Blaser 2013, 559). Virtanen (2019) echoes this when she discusses how international cultural laws offer insufficient space for non-human actors in biocultural heritage protection. Likewise, for many educational policy makers the integrity of spirits and spirits worlds to Indigenous lifeways remains invisible.

Indigenous peoples face the challenge of marginalisation and loss of their territory and its history and are being forced into situations where they have no alternatives but to make choices with devastating consequences. Bennoune (2019, section 29) is deeply concerned that 'future generations will inherit these losses as their connections to the past, to place and to practices that are stolen from them by choices made today'. The choices facing the Arakbut in the mining areas are stark. Arakbut are engaged with mining in different ways in the belief that it will be the answer to their struggle to survive on their denuded territory, or, indeed, that it will make them rich. But in making these choices their options for the future become even starker as the mining activity itself undermines the forest and river habitats of the animals and birds.

In 1990 the Arakbut, and leaders of their indigenous organisation, began a process to protect an area of their ancestral territory, their *wadari* that was still beyond the reaches of the rapacious gold mining industry. In 2006 the Amarakaeri Communal Reserve was formally recognised, a place where they could nurture and renew their vibrant relationships with the forest, river and spirits. Indeed, it is seen as the place where the spirits have sought refuge together with animals fleeing the devastation of the gold mining. Thus, alongside the importance of protection for the rainforest environment and ecology, the establishment of the Amarakaeri Communal Reserve aims to safeguard the cultural heritage of the Indigenous peoples of the region including their languages, knowledges, sacred sites. It has the potential to maintain or regenerate the Arakbut's ability to communicate with the invisible world of the spirits and contribute to a thriving and healthy social and physical environment. It has a unique co-management arrangement between the Indigenous peoples of Madre de Dios (Harakbut, Yine and Matsiguenka) and the Peruvian Government (Peruvian Ministry of the Environment 2016).

Corisepa Neri (2021) has sent out a wake-up call. The spirits have scattered but, he says, they are waiting for the Arakbut to reconnect. He asks Arakbut to remember how they used to live, to reclaim their territory and ancestral way of life, activities and interactions with nature and the spirit world and attune themselves to their cosmovision through self-governance and self-determination. He is asking them to construct and take control of an Arakbut lifeway that has threads woven tightly around close relationships with each other and the invisible spirits of their *wadari*. He also calls for a new form of engagement with mining and, more broadly, with global capitalism. The Amarakaeri Communal Reserve offers the potential for renewed vigour for all generations through workshops and

trainings for community members on forest management, use of resources and recovery and discovery of ancestral knowledge (https://amarakaeri.org/amarakaeri-informa). And elders are becoming aware of the importance of their responsibility to teach younger generations and pass on their knowledge and learning. They are encouraging young people to go to the sacred sites and gain spiritual strength as well as develop visions of struggle and resistance that will help protect their territories (Corisepa Neri 2021). This is about re-energising young generations so that they will build their Arakbut lifeways upon stability, sufficiency and a relationship with all the inhabitants of their *wadari*, a relationship which encompasses all dimensions of Indigenous knowing.

Conclusion

Indigenous peoples' lifeways are the foundation of their education systems. This brief exploration of the nature and dynamics of Arakbut knowledge and learning has identified some of the dimensions of their 'education system' that, over decades, have become hidden and fragmented, such as the spirit world. For research and policy focused on the inclusion of Indigenous people in formal education systems, these dimensions have been largely unrecognised and overlooked. For this study I have drawn on concepts of lifeways, learning and knowledge. I use the term 'lifeways' to help identify the different layers of meaning, the complex relationships and threads and the epistemological and ontological diversity of Indigenous lives. Indigenous learning and knowledge transmission are embedded in and constituent of Indigenous lives and lifeways, world views and histories of engagement with a particular place and its human and non-human inhabitants.

Change – radical social, cultural, economic and environmental change – are the backdrop to the lives and lifeways of Indigenous peoples around the globe. This investigation of the nature and impact of change for one Arakbut community in the South Eastern Peruvian Amazon, is illustrative of the forces of change that many Indigenous peoples are experiencing. Change is a constant but the nature and violence of the changes in this gold mining area are echoed across continents. The depth of this change tests the value of shared understandings and of established social relationships. It puts huge stress on the sustainability of place-based oral languages which have been the bedrock of knowledge transmission over generations. And, of course, it heralds new social relationships, knowledge and skills.

Schooling, university and adult literacy are today part of most Indigenous peoples' lives and woven into the fabric of their landscapes. But these are only one aspect of their 'education systems'. The Arakbut case here has shown that formal education is only one thread, one part of a complex whole. In order to gain more profound understanding of Indigenous education, it is necessary to recognise that Indigenous peoples have diverse but unique place-based lifeways. It underlines how aspects of Indigenous knowledge and learning, elements of Indigenous lifeways, have been scattered and fragmented through processes of marginalisation, exploitation and degradation. But it demonstrates, too, that vibrant lifeways can emerge from the formation of new and renewed meaningful social

relationships, forms of communication and shared values leading to the revitalisation and reconstruction of Indigenous-determined education systems.

Notes

1. Over time the Arakbut have been referred to by different names. In the 1980s, they were called Amarakaeri but changed to using their own names for themselves Arakmbut, which was more recently changed to Arakbut. There are also orthographic distinctions and differences in the spelling of Arakbut. I use current spelling (see www.FENAMAD.org.pe). See Aikman (2017) for a discussion of the linguistic identification and status of the Arakbut and Harakbut languages.
2. The names used here are the author's.
3. For more detailed discussions of the accumulation of knowledge and understanding of plants, animal and the spirit world see Gray (1997b) and Helberg (1996).
4. see Aikman (1999) for more detail about Arakbut knowledge and learning and Aikman (2021) on different kinds of knowledge acquired through formal education and informal interactions in Madre de Dios.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

Aikman, S. 1999. *Intercultural Education and Literacy: An Ethnographic Study of Indigenous Knowledge and Learning in the Peruvian Amazon*. Amsterdam: John Benjamin. https://doi.org/10.1075/swll.7.

Aikman, S. 2009. "The Contradictory Languages of Fishing and Gold Panning in the Peruvian Amazon." *MAST, Maritime Studies* 8 (2): 53–72.

Aikman, S. 2017. "Changing Livelihoods and Language Repertoires: Hunting, Fishing and Gold Mining in the Southeast Peruvian Amazon." *International Journal of the Sociology of Language* 2017 (246): 85–108. https://doi.org/10.1515/ijsl-2017-0014.

Aikman, S. 2021. "Indigenous Knowledge, Skills and Action: Indigenous Women's Learning in the Peruvian Amazon." In *Indigenous Women and Adult Learning*, edited by Aikman and A. Robinson-Pant, 45–62. London: Routledge. https://doi.org/10.4324/9781003054870-4.

Amazon Conservation Association. 2021. "Radar Monitoring, the Newest Ally in the Fights Against Illegal Gold Mining. News and Resources." October 31, 2021. https://www.amazonconservation.org/?s=Radar+monitoring .

Ames, P. 2012. "Language, Culture and Identity in the Transition to Primary School: Challenges to Indigenous Children's Right to Education." *International Journal of Educational Development* 32 (3): 454–462. https://doi.org/10.1016/j.ijedudev.2011.11.006.

Anser, G. P., W. Llactayo, R. Tupayachi, and E. Raez Luna. 2013. "Elevated Rates of Gold Mining in the Amazon Revealed Through High-Resolution Monitoring." *PNAS* 110 (46): 18454–18459. https://doi.org/10.1073/pnas.1318271110 .

Battiste, M. 2008. "The Struggle and Renaissance of Indigenous Knowledge in Eurocentric Education." In *Indigenous Knowledge and Education*, edited by M. Villegas, S. Neugebauer, and K. Venegas, 85–92. Cambridge, MA: Harvard Educational Review.

Bellier, I., and J. Hays, eds. 2016. *Quelle Education Pour Les Peuples Autochtones?* Paris: L'Harmattan.

Bennoune, K. 2019. “Cultural Rights.” *UN Special Rapporteur on Cultural Rights, Section 29. A/75/298*. https://search.un.org/results.php?query=Karima%20Bennoune&lang=en&tplfilter=documents&tpl=dist_search.

Blaser, M. 2013. “Ontological Conflicts and Stories of People in Spite of Europe: Toward a Conversation on Political Ontology.” *Current Anthropology* 54 (5): 547–568. https://doi.org/10.1086/672270.

Blaser, M., H. Feit, and G. McRae. 2004. “Indigenous Peoples and Development Processes: New Terrains of Struggle.” In *In the Way of Development: Indigenous Peoples, Life Projects and Globalization*, edited by M. Blaser, H. Feit, and G. McRae, 1–26. London, UK: Zed Books. https://doi.org/10.5040/9781350220720.ch-001 .

Cajete, G. A. 2008. “Sites of Strength in Indigenous Research.” In *Indigenous Knowledge and Education*, edited by M. Villegas, S. Neugebauer, and K. Venegas, 204–208. Cambridge, MA: Harvard Educational Review.

Corisepa Neri, J. 2021. “Mining Activity in the Peruvian Amazon is Impoverishing the Arakbut Indigenous People.” *Debates Indigenas* (134). https://debatesindigenas.org/ENG/ns/134-mining-activity-peruvian-amazon.

Damonte, G., M. Bueno de Mesqita, V. H. Pachas, M. Chavez Quijada, A. Flores, and J. de Echave Caceres. 2013. “Small-Scale Gold Mining and Social and Environmental Conflict in the Peruvian Amazon.” In *Small-Scale Gold Mining in the Amazon: The Cases of Bolivia, Brazil, Colombia, Peru and Suriname*, edited by L. Cremers, J. Kolen, and M. de Theije, 46–67. Amsterdam: Centre for Latin American Studies and Documentation.

De la Cadena, M. 2008. “Alternative Indigeneities: Conceptual Proposals.” *Latin American & Caribbean Ethnic Studies* 3 (3): 341–349. https://doi.org/10.1080/17442220802462501.

Descola, P. 2005. “Ecology as Cosmological Analysis.” In *The Land Within: Indigenous Territory and the Perception of the Environment*, edited by A. Surralles and P. Garcia Hierro, 22–35. Copenhagen, Denmark: International Work Group for Indigenous Affairs.

Dyer, C., and C. Aikman. 2012. “Developing Education, Challenging Marginalisation.” Special Issue, *Compare* 42 (2): 177–185. https://doi.org/10.1080/03057925.2012.652816.

Elias, S. 2020. “Epistemic Violence Against Indigenous Peoples.” *Debates Indigenas* (59). https://debatesindigenas.org/ENG/ns/59-epistemic-violence .

Fasheh, M. 2008. “Community Education: To Reclaim and Transform What Has Been Made Invisible.” In *Indigenous Knowledge and Education*, edited by M. Villegas, S. Neugebauer, and K. Venegas, 320–338. Cambridge, MA: Harvard Educational Review.

Garcia Altamirano, A. 2003. “Fenamad 20 anos despues: apuntes sobre el movimiento indigena amazonica en Madre de Dios.” In *Los Pueblos Indigenas de Made de Dios, etnogafia y conjuntura*, edited by B. Huertas Castillo and Garcia Altamirano, 271–309. Lima: International Work Group on Indigenous Affairs, FENAMAD.

Garcia Hierro, P. 2021. “Territorial Governance and Indigenous Peoples.” In *Towards the Conquest of Self-Determination, 50 Years Since the Barabados Declaration*, edited by A. Chirif, 205–210. Copenhagen, Denmark: International Work Group for Indigenous Peoples.

Garcia Hierro, P., and A. Surralles. 2005. “Introduction.” In *The Land Within: Indigenous Territory and the Perception of the Environment*, edited by A. Surralles and P. Garcia Hierro, 8–22. Copenhagen, Denmark: International Work Group for Indigenous Affairs.

Gray, A. 1986. *And After the Gold Rush? Human Rights and Self-Development Among the Arakmbut of Southeastern Peru*. IWGIA Document 55. Copenhagen, Denmark: International Work Group for Indigenous Affairs.

Gray, A. 1996. *Mythology, Spirituality and History in an Amazonian Community*. Oxford: Berghahn Books.

Gray, A. 1997a. *Determining Self Identity and Developing Rights: Development and Self-Determination Among the Arakmbut of Amazonian Peru*. Oxford: Berghahn Press.

Gray, A. 1997b. *The Last Shaman: Change in an Amazonian Community*. Oxford: Berghahn Books.

Helberg, C. H. 1996. *Mbaisik: en la Penumbra del Atardecer*. Lima: Centro Amazonico de Antropologia y Aplicacion Practica.

Hill, R., and S. May. 2011. “Exploring Biliteracy in Maori-Medium Education.” In *Ethnography and Language Policy*, edited by Teresa L. McCarty, 161–184. London: Routledge.
Hornberger, N. 1996. *Indigenous Literacies in the Americas*. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110814798.
IWGIA. 2021. *The Indigenous World*. 35th ed. Copenhagen, Denmark: International Work Group for Indigenous Affairs (IWGIA).
Kalman, J., and B. Street, eds. 2013. *Literacy and Numeracy in Latin America*. London: Routledge.
King, L., and S. Aikman, eds. 2012. “Indigenous Knowledges and Education.” *Compare* 42 (5): 673–681. Special Issue. https://doi.org/10.1080/03057925.2012.706450.
Massey, D. 1999. “Imagining Globalization: Power-Geometries of Time-Space.” In *Global Futures: Migration, Environment and Globalization*, edited by A. Brah, M. Hickman, and M. Mac an Ghaill, 27–44. New York: St. Martins Press. https://doi.org/10.1057/9780230378537_2.
McCarty, T., ed. 2011. *Ethnography and Language Policy*. London: Routledge.
McGregor, D. 2004. “Traditional Ecological Knowledge and Sustainable Development: Towards Coexistence.” In *In the Way of Development: Indigenous Peoples, Life Projects and Globalization*, edited by Mario Blaser, H. Feit, and G. McRae, 72–91. London: Zed Books. https://doi.org/10.5040/9781350220720.ch-005.
McKinley, E. A., and L. T. Smith. 2019. “Towards Self-Determination in Indigenous Education Research: An Introduction.” In *Handbook of Indigenous Education*, edited by E. McKinley and L. T. Smith, 1–15. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-10-3899-0_77 .
Moll, L. C. 2013. “Foreword.” In *Literacy and Numeracy in Latin America*, edited by J. Kalman and B. Street, x–xi. London: Routledge.
Moore, T. 2003. “La etnografia tradicional Arakbut y la mineria aurifera.” In *Los Pueblos Indigenas de Made de Dios, etnogafia y conjuntura*, edited by C. B. Huertas Castillo and Garcia Altamirano, 58–90. Lima, Peru: International Work Group on Indigenous Affairs, FENAMAD.
Moore, T. 2021. “Ethnocide and Ethnogenesis in Madre de Dios, Peru: The FENAMAD Experience.” In *Towards the Conquest of Self-Determination, 50 Years Since the Barabados Declaration*, edited by A. Chirif, 297–322. Copenhagen, Denmark: IWGIA, International Work Group for Indigenous Peoples.
Noe, S. 2021. “World Intellectual Property Organisation (WIPO).” In *IWGIA Indigenous World 2021*, 805–813. Copenhagen, Denmark: International Work Group for Indigenous Affairs.
Peruvian Ministry of the Environment. 2016. *Plan Maestro de la Reserva Comunal Amarakaeri, 2016-2020*. Lima: Government of Peru.
Rhea, A. M., and G. R. Teasdale. 2000. “A Dialogue Between the Local and the Global.” In *Local Knowledge and Wisdom in Higher Education*, edited by G.R. Teasdale and Z. Ma Rhea, 1–14. Oxford: Elsevier Science Ltd.
Rivera Andia, J., and C. V. Odegaard, eds. 2019. *Indigenous Life Projects and Extractivism, Ethnographies from South America*. London: PalgraveMacmillan. https://doi.org/10.1007/978-3-319-93435-8.
Rosengren, D. 2006. “Transdimensional Relations: On Human-Spirit Interaction in the Amazon.” *Journal of the Royal Anthropological Institute* 12 (4): 803–816. https://doi.org/10.1111/j.1467-9655.2006.00364.x.
Sueyo Yumbuyo, H. 2003. “Los Harambut en un lugar deconocido.” In *Los Pueblos Indigenas de Made de Dios, etnogafia y conjuntura*, edited by C. B. Huertas Castillo and Garcia Altamirano, 310–314. Lima: International Work Group on Indigenous Affairs, FENAMAD.
Thaman, K. H. 2000. “Towards a New Pedagogy: Pacific Cultures in Higher Education.” In *Local Knowledge and Wisdom in Higher Education*, edited by G.R. Teasdale and Z. Ma Rhea, 43–50. Oxford: Elsevier Science Ltd.
Tom, M. N., E. S. Huaman, and T. McCarty. 2019. “Indigenous Knowledges as Vital Contributions to Sustainability.” *International Review of Education* 65 (1): 1–18. https://doi.org/10.1007/s11159-019-09770-9.

Trapnell, L. 2011. “Desde la Amazonia peruana : aportes para la formacion docente en la especialidad de educacion initial intercultural bilingue.” *Educacion* XX (39): 37–50. https://doi.org/10.18800/educacion.201102.003.

UNESCO/OREALC. 2017. *Indigenous Knowledges and Practices in Education in Latin America*. Santiago, Chile: Latin American Bureau of Education for Latin America and the Caribbean. OREALC/UNESCO.

Veber, H., and P. K. Virtanen. 2017. “Introduction.” In *Creating Dialogues: Indigenous Perceptions and Changing Forms of Leadership in Amazonia*, edited by Veber, H. and P. K. Virtanen, 1–23. Boulder, USA: University Press of Colorado. https://doi.org/10.5876/9781607325604.

Villegas, M., S. Neugebauer, and K. Venegas. 2008. “Editor’s Introduction.” In *Indigenous Knowledge and Education*, edited by M. Villegas, S. Neugebauer, and K. Venegas, 1–5. Cambridge, MA: Harvard Educational Review.

Virtanen, P. K. 2019. “Ancestors' times and protection of Amazonian Indigenous biocultural heritage.” *AlterNative, An International Journal of Native Peoples* 15 (4): 330–339.

Viveiros de Castro, E. 2004. “The Transformation of Objects into Subjects in Amerindian Ontologies.” *Common Knowledge* 10 (3): 463–484. https://doi.org/10.1215/0961754X-10-3-463.

World Council of Churches. 1971. *Declaration of Barbados*. IWGIA Document 1. Copenhagen, Denmark: International Work Group for Indigenous Affairs.

Wyman, L. 2012. *Youth Culture, Language Endangerment and Linguistic Survivance*. Bristol, UK: Bilingual Matters. https://doi.org/10.21832/9781847697417.