Multimodal Language Rights and Indigenous Totemic Identity: Cross-Cultural Participatory Research

Kathy A. Mills, Katherine Doyle, and Lesley Friend

Australian Catholic University; Griffith University; Queensland University of Technology

ABSTRACT
Indigenous language rights and identity practices are marginalised in education, bringing a need for mainstream educators to understand and respect Indigenous ways of knowing, being, and sharing knowledge. Engaging elementary students (ages 4.5 to 12 years), the cross-cultural participatory research was conducted for three years to understand Indigenous language practices that were multimodal, including digital storytelling, singing, e-book making, dance and video making. The Indigenous school community gave central place to totemic traditions in their multimodal language use. To understand Indigenous views of lifeworlds through a non-linear view of time, Bakhtin's chronotope is used to illuminate time-space in the students' multimodal texts. The findings are significant because failure to engage with and understand Indigenous knowledge contributes to the production and maintenance of inequity. The research counters hegemonic effects and silencing of Indigenous communities, demonstrating how Indigenous culture and multimodal literacies can be taught hand-in-hand in the 21st century.

KEYWORDS
Bakhtin; culture; digital media; Indigenous; multimodal language; totem

While accounts of historical marginalisation have illustrated patterns of inequality in schooling systems, the current research provides a positive account of Indigenous language use in the context of the Indigenous schooling movement in Australia. It demonstrates the centrality of totemic traditions aligned with Indigenous ways of knowing, being, and doing, which were taught through multimodal language practices in an Indigenous K–12 school (students aged 4.5–17 years). It describes the innovative development of culturally aligned approaches to the multimodal language practices of a culturally vibrant Indigenous school community over three years.

Language is often used by institutions and social structures as a means of dominance, cultural hegemony, power, and ideological control (Ehlich & Wagner, 1995), while a long history of ethnographies of communication since the civil rights movement have shown that the nature and evaluation of language ability varies cross-culturally (Crawford, 1992; Gumperz & Hymes, 1972; Hymes, 1996; Lakoff, 1990). Such studies have drawn attention to patterns of inequality in institutional language use within and beyond educational sites, particularly for cultural minorities and Indigenous speech communities, whose language rights and cultural identities have often been institutionally suppressed (Iyer et al., 2014).

This research works against imposing theories of language as “standardised” written English on Indigenous communities. The colonising view of literacy that underpins most standardised English teaching and testing in schools is called the autonomous model of literacy—the view that literacy is a set of uniform technical skills that must be imparted by the dominant culture to groups lacking them (Street, 2001). In contrast, socio-cultural literacy theorists, who often research in cross-cultural settings, are united in the view that there are multiple literacies that are valued, useful, and socially
embedded (Heath, 1983). This view of literacy practices underpins the conceptual framework and aims of the research.

**Literature review**

*Multimodal and indigenous views of literacy*

Aligned with this view, the authors and the Indigenous leaders of the school saw the potentials of a multimodal social semiotic view of language and communication in the curriculum, which sees language as social and cultural, rather than a fixed, ready-made code (Kress & van Leeuwen, 2021; Mills et al., 2016). The resources of language are the outcome of cultural work using the available cultural materials at hand in communities, shaped through their social use as semiotic resources (Jewitt, 2012). Multimodality is meaning making that involves combinations of semiotic resources that extend beyond speech and writing to combine multiple modes, including image, touch, gesture, gaze, smell, body posture, movement, sound, and music (Mills & Unsworth, 2017). Such practices complement Indigenous ways of communicating because they do not privilege written language, but honor oral language and storytelling, art, music, dance, and other powerful forms of meaning making that are important to Indigenous communities (Mills et al., 2016; Yunkaporta & McGinty, 2009).

The speaking rights of communities is the right of communities to use their own vernacular, mother tongue, or local spoken language (Gumperz, 1964); it is extended here to our concept of “multimodal language rights”—the right of communities to use multimodal ways of communicating consistent with their cultural values and meaning-making resources. While the phrase “multimodal language rights” is new, it builds on the established understanding that there are multiple modes of language, extending beyond spoken and written language to include visual, gestural, auditory, kinesics, and other modes (e.g., smell in Indigenous smoking ceremony: see Mills & Dooley, 2019). The concept allows for a greater range of cultural expressions, while challenging the hegemonic and hierarchical emphasis on written language over other modes (Stein, 2012). For example, the centrality of totemism to Indigenous People has often been instantiated through storytelling, songs, dances, and painting (Mills & Doyle, 2019). With the ubiquity of digital technologies today, dynamic rather than static ancient traditions, such as storytelling and visual arts, are now also represented through digital media (Kral, 2010).

Indigenous school communities in Australia teach English, as well as multiple Indigenous languages belonging to different local geographical regions. Indigenous academic, Sarra (2014), argues regarding the often-perceived tensions between teaching English and cultural knowledge: “Speaking, reading, and writing in English should not come at the expense of pride in, and knowledge of, our own culture and languages. The two are not mutually exclusive: they must live hand-in-hand in our communities and our people.” Similarly, Indigenous students, including those in remote areas “are not insular and disconnected from the rest of Australia” and the world.

*Indigenous knowledge and totemic identities*

Australian Indigenous totemic understandings have been sustained through generations as part of the ongoing connections of the Dreaming central to Australian Indigenous perspectives. Totemic knowledge emanates from Indigenous Dream Lore, central to an Indigenous worldview, and which plays a central and continuous role in language, culture, and identity (Lawlor, 1991). The identity focus in this article is on cultural identity—the dimension of identity that is reflected in the cultural ways of being, knowing, valuing, and doing shared by the Indigenous community (Martin & Mirrabooka, 2003; Weaver, 2001), exploring the important cultural role of totemism in Indigenous identity, which is vital to sustain and build “social relationships among close and distant kinsmen” across time (Palmer et al., 2008, p. 719). For example, in ancestral totemism, members of an Indigenous group
identify with a totemic ancestor signifying the ongoing connection to beings who originated in times past, and relatedly, the long-term existence of an Indigenous group belonging to a region (Keen, 2004).

For Indigenous People across many continents, totemism is paramount to their identity and being, involving kinship between humans and spirit beings in the form of animals and nature (Cain, 2001). The totemic system is related to the genealogy of life from creation, with the totem akin to an inheritance and ancestral lineage—one's custodial land determines one’s totemic identity (Voight & Drury, 1997). Although the concept of totemism may vary regionally among Indigenous tribes, there are several common features. First, the totem is a spirit being, entity, or emblem that is representative of the identity of Indigenous People (e.g., kin, clan, family, lineage), often taking the form of a native animal, including birds and reptiles, and associated with a specific geography or place. Second, totems are associated with a system of identity rites commonly performed in specific places. Third, ancestral totems are interwoven within a system of narratives connected to Sacred Places and activities of Ancestral Beings (Keen, 2004).

Importantly, embedding Indigenous knowledges in the mainstream curriculum, particularly when actively engaging Indigenous People in this knowledge work, does not constitute cultural appropriation (Whatman & Meston, 2016). Rather, failure to engage with Indigenous culture, the absence of Indigenous knowledges, and the silencing of Indigenous culture in schools and the curriculum only serve to impose the dominant culture—a form of cultural appropriation called cultural dominance (Rogers, 2006). Indeed, embedding Indigenous knowledge and teaching multimodal literacy has become a national curriculum requirement (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2019) and it is within this context that this research took place.

**Materials and methods**

This paper describes cross-cultural, participatory research over three years with an Australian Indigenous independent primary and secondary school led by Indigenous staff and Elders located on a rural–urban fringe. The research agenda was negotiated with the local Indigenous community, rather than the aims being driven by the researcher (Mills et al., 2016; Stoecker, 2005). Multimodal literacy was identified by the Indigenous principal and Elders as an important area of focus, including school resourcing in digital expertise and technologies. The Indigenous community invited the lead researcher of multimodal literacy, to collaborate with the school leaders and teachers to create and support opportunities for the students to compose multimodal texts across a range of digital media to tell cultural stories.

A cross-cultural, participatory approach to the research enabled cultural inclusiveness and reciprocity (Dreamson et al., 2017). For example, the researchers had a lengthy presence in the field, which continued positive relationships with community leaders established years earlier. Developing relationships of trust is a noteworthy ethical requirement of Indigenous research given the historical oppression of Indigenous People by the colonisers (Australian Institute of Aboriginal and Torres Strait Islander Studies [AIATSIS], 2020). This history meant that as outsiders conducting Indigenous research, researchers emphasised giving rather than taking (Martin, 2008; Mills & Dooley, 2019).

The project addressed the development of Indigenous leaders and teachers as researchers (see Smith, 2012), three of whom presented with the lead researcher at academic conferences. The project followed Indigenous protocols for sharing research to make visible, and to respect, Indigenous knowledge systems to contribute to transforming mainstream and Indigenous schooling, teacher education, and educational research for future generations (see Martin & Mirraboopa, 2003; Mills & Dooley, 2019).

**Research question**

The overarching purpose of the research project was to understand Indigenous ways of knowing and being in this community, and relatedly, the development of identity in an Indigenous schooling
context, taught through multimodal language practices of the school community. This paper addresses the following specific research question about Indigenous identity and multimodal language: How are students’ totemic identities and related time-space configurations exemplified in the multimodal language practices of an Indigenous school community?

The Indigenous school community prioritised the development of the students’ cultural and spiritual identities, where understanding totemic identities was developed from an early age, consistent with the view that Indigenous teachers and leaders are well-positioned to play an active role in educating successive generations in authentic and meaningful ways (de Souza & Rymarz, 2007).

**Technology context**

In the first year the first author routinely transported a large set of iPads and chargers to use in the Indigenous research classrooms. In subsequent years the school obtained a grant to purchase a trolley of iPads and laptops to be shared by classes on a timetable and easily moved into different classrooms. The school had desktop computers in its central library, and a technology support staff member authorised and maintained the use of software downloads and hardware on school devices.

**Principal and teacher participants**

The project involved the Indigenous principal and five teachers—three of whom were Indigenous. The non-Indigenous teachers had lived and worked with remote Australian Indigenous communities. One of the Indigenous teachers, a Kamaroi woman, had both teaching and arts degrees and was undertaking a PhD, while the early years teacher was completing a Master of Education. These participants worked with the lead author and a visiting media artist to plan cross-curricular multimodal and digital literacy practices that were informed by local Indigenous knowledge and culture (Yunkaporta & McGinty, 2009). The program addressed the outcomes and Indigenous cross-curricular priorities of the Australian Curriculum, as well as the national English, Languages, Technology, and the Arts curricula (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2019). Planning was similarly guided by the Queensland-based curriculum framework developed with Indigenous educators, *Embedding Aboriginal and Torres Strait Islander Perspectives in Schools* (Department of Education and Training, 2011).

**Student participants**

The student research participants identified as First Nations People of Aboriginal and Torres Strait Islander ethnicity, belonging to the Yuggara, Jagara, and Ugarapul language regions of South East Queensland, Australia (see Dixon, 1980 on language areas). In total, 115 students of varied genders from the first to the final year of elementary schooling (ages 4.5 to 12 years) participated in multimodal language practices across multiple modes and media. Teachers and students participated in semi-structured teacher and student interviews or small focus groups to describe their texts and practices.

**Research ethics**

Participation in the research was voluntary, informed, written, and understood, with caregiver permissions for minors, including the use of audio and image. For students and caregivers who did not give consent, the students participated in the learning experiences as part of their schoolwork, but no data were collected from them. Interviews were conducted in English because this was the common language spoken in the school, while a variety of Indigenous languages were used in the school and community for ceremonial and cultural purposes. The research received ethical clearance from a university research ethics committee following the *Guidelines for Ethical Research in Australian Indigenous Studies* (Australian Institute of
Aboriginal and Torres Strait Islander Studies [AIATSIS], 2020). All names in this paper are pseudonyms following the approved ethics processes.

**Data collection**

Data collection included two main types of data: recorded interviews and multimodal texts created by the students. Semi-structured interviews were conducted with teachers and students about Indigenous perspectives of multimodal language teaching (113 interviews in total), and multimodal texts were collected that were produced by the students from six classrooms across the primary school (60 texts in total). The data was collected by the first author over several years, typically working weekly with the teachers in the classrooms and regularly participating in cultural events. Table 1 describes the data sets and corresponding school year levels that were found relevant to our research questions. Each of the data sets is further described in the findings section, as well as in data analysis.

Semi-structured entry and exit teacher interviews (10), student interviews (86), and focus groups (17) provided Indigenous perspectives of Indigenous and totemic meanings, values, and practices. The use of oral language to share knowledge is key to Indigenous ways of communicating and guided the selection of research methods that respected the language rights of the community (Leavy, 2011). Language rights are defined here as the right of people to use their own language, which has been challenging for minority and multilingual communities (Iyer et al., 2014).

Student interviews were used to inquire about individual student artefacts, while focus groups were used to reflect on group activities, such as dance and filmmaking. Focus groups were recommended by the Indigenous teachers because the students were confident to talk about their culture in group contexts consistent with language practices in the school.

**Table 1. Data Sets and Year Levels.**

<table>
<thead>
<tr>
<th>Data Sets</th>
<th>Year Levels</th>
</tr>
</thead>
</table>
| **Fifteen Digital story retellings**—Year 1 students portrayed animals and Dreamtime stories related to their birth totems. Each student created a series of labelled drawings to retell their stories, which were photographed and uploaded to Smilebox, a digital scrapbooking service. The teacher assisted students to type text beneath the images in the online software. | • Preparatory & Year 1  
• Ages 4–6  
• 16 participants |
| **Five Interviews/role plays**—In groups of three to four, students conducted interviews in role play as Indigenous leaders, filmed by a media artist to highlight the important caring for indigenous scared sites. Filmed on the location of Mooggerah Dam, the films called for care of Indigenous land, waterways, and native animals. | • Year 2  
• Ages 6–7  
• 18 participants |
| **Three Dances**—Students’ traditional Indigenous dance performances with lyrics from the local Indigenous languages (Yuggera, Jagara, Ugarapul) and Torres Strait Islands were recorded during formal lessons with an Indigenous dance group. The dances were later performed at cultural events. | • Year 3  
• Ages 7–8  
• 14 participants |
| **One Class music video**—Students created individual storyboards, composing, singing, and performing a song. Children wrote and drew pages about their values, including animals superimposed over their portraits. The lyrics and rhythms were created as a class, and the video was filmed by a media artist. | • Year 4 & 5  
• Ages 8–10  
• 23 participants |
| **Five Knowledge videos**—Using iMovie for iPad, students worked in groups of four to create films addressing the problem of ghost nets that injure and kill Indigenous animals, such as turtles, of the north-eastern coastline of Australia. | • Year 4 & 5  
• Ages 8–10  
• 29 participants |
| **Ten e-books**—The students created e-books using an application on tablets. The topics were freely chosen. Students wove local Ugarapul language with English in their e-books. | • Years 4 & 5  
• Ages 8–10  
• 20 participants |
| **Semi-structured teacher interviews, student focus groups, and student interviews:** Five teachers participated in two interviews each (20 minutes, 10 interviews). Student interviews and focus groups were conducted for each unit of classroom work listed above (103 interviews). | • 113 interviews |
Data analysis

Social semiotic multimodal analysis, following Jewitt (2014), was used to code the data inductively—a process of allowing the themes to emerge from the data rather than deductively testing a theory (Saldana, 2013). We coded the full corpus of data from the classrooms to gain new knowledge of Indigenous totemic identities in answer to our research questions. The importance of totemic knowledge was gained from working in classrooms, interviewing, and collecting the students’ texts with the Indigenous community over three years, also helping to refine our research questions from a general focus on Indigenous ways of being, to specific questions of totemic identity. The team of researchers and an Indigenous author discussed the emerging themes in the multimodal texts and interviews that exemplified different dimensions of totemic identity, such as the relations between totemic identity and care for the animals, or the connection between totemic identity and belonging to place, drawing from Indigenous sources on totemism and epistemologies (Battiste, 2000; Martin & Mirraboopa, 2003; Wilson, 2008), and the modal systems and semiotic resources used in the texts that are socially and culturally contextualized (Jewitt, 2014).

Key themes of totemism were connected to the teachers’ learning aims for curriculum units of work, and the concepts taken up by students in their multimodal texts. Segments of coded texts from the interview transcripts and digital student files were then categorized and grouped by the following themes: birth totems and identity, belonging and self-determination, totemic connections to the natural world, sustaining totemic animals and waterways, sustaining totemic sea life, and totemic protection. Embedded within these central cultural identity themes, the underpinning chronotopic time-space relations were interpreted and elucidated. Table 2 outlines the totemic Dreamtime themes related to totemism that were foregrounded in each data set.

Bakhtin’s (1981, 1986) well-known concept of the chronotope, was used as a theoretical touchstone to illuminate the findings from Indigenous perspectives because, unlike other dominant views of time as linear, Bakhtin’s Great Time conceives of time-space as cyclical and continuous, “in which all utterances are linked to all others, both those from the primordial past and those in the furthest reach of the future” (Bakhtin, 1986, p.xxi). Having metaphorical parallels to the continuous voices of Dreaming, that extend from the beginning of time through to ancestral past, present, and the ongoing generation of life, Bakhtin’s time-space concepts provide a theoretical entry point or springboard for readers to see how Indigenous cultural lifeworlds can be interpreted in non-linear time-space relations. Bakhtin’s concept of time in written narratives is extended here to multimodal texts through the idea of visual chronotopes—an extension of Bakhtin by Johnston (2004) to Indigenous narratives. The visual chronotope is the visual portrayal of the relations between time-space and people-events in narratives, since narrative representations of time can be depicted through multiple modes beyond written or spoken words (Best, 1994).

The chronotope essentially denotes ways that time and place are configured in narratives originally conceptualized and represented through language and discourse of the novel (Bakhtin, 1981). Bakhtin’s chronotope (space-time) is an underutilized concept that centres narratives as a valid way of knowing, whether it be through histories, myths, or didactic stories. For example, disputes over Indigenous land in Canada have exemplified its potential application for understanding Indigenous perspectives of reading the landscape (see Lawson, 2011). Importantly, appreciating the Indigenous significance of totems in the present is enriched by understanding the narrative time-place relations of totemism from the Dreaming. The Dreaming represents a cyclical nature of time and place central to Indigenous being, as opposed to the linear nature of time-place relations from dominant non-Indigenous (and non-Bakhtinian) perspectives (Lawlor, 1991). Attending to textual chronotopes and Bakhtin’s non-linear view of time-space, helps to expand, interpret, and particularize the data by seeking to understand how cultural lifeworlds are configured in specific time-space relations of the narrative. This was embedded in the analytic coding for repeated Indigenous totemic identity themes across the texts, which reduced and classified the data, while Bakhtin is used here to expand, interpret, and theorize the findings as a springboard for readers to engage with non-linear, Indigenous perspectives of time-space in narratives.
Table 2. Data Sets, Modes, and Totemic Themes.

<table>
<thead>
<tr>
<th>Data Sets</th>
<th>Modes</th>
<th>Totemic Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital story retellings</td>
<td>• written words</td>
<td>Dreaming stories that centered totem animals of relevance to the children’s birthplace and language region and its relation to space of generations of life</td>
</tr>
<tr>
<td></td>
<td>• still images</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• graphic design</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• drawings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• reading/retelling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Listening</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• speaking</td>
<td></td>
</tr>
<tr>
<td>Interview/roleplays (filmed)</td>
<td>• written script</td>
<td>Sustaining totem sacred sites, including creatures of the waterways</td>
</tr>
<tr>
<td></td>
<td>• researching</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• drama</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• interviewing</td>
<td></td>
</tr>
<tr>
<td>Dances</td>
<td>• dance</td>
<td>Totem connections to the natural world including time-space relations of the Dreaming</td>
</tr>
<tr>
<td></td>
<td>• instruments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• singing/lyrics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• discussion</td>
<td></td>
</tr>
<tr>
<td>Class music videos</td>
<td>• composing lyrics</td>
<td>Totem belonging to place, kindship, solidarity, and Indigenous self-determination</td>
</tr>
<tr>
<td></td>
<td>• singing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• instrumental music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• moving images</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• drawings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• speaking</td>
<td></td>
</tr>
<tr>
<td>Knowledge films</td>
<td>• written words</td>
<td>sustaining totem sea life with a vital identity connection to the conservation of the environment connected to chronotropic time-space of ancestors continuing the present</td>
</tr>
<tr>
<td></td>
<td>• researching</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• drama</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• still and moving images</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• digital effects/editing</td>
<td></td>
</tr>
<tr>
<td>E-books</td>
<td>• written words</td>
<td>totemic protection, how totemic birdlife, such as the Black cockatoo and owl, are present in everyday lives through chronotropic ancestral time-space relations</td>
</tr>
<tr>
<td></td>
<td>• still digital images</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• drawings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• graphics</td>
<td></td>
</tr>
<tr>
<td>Teacher interviews Student</td>
<td>• discussion</td>
<td>all themes above</td>
</tr>
<tr>
<td>focus groups and interviews</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results

The results address how totemism was embedded in the digitally mediated and multimodal language practices of the Indigenous school community, organised by the totemic themes that were significant across the multimodal data sets derived from the coding: (a) birth totems and identity; (b) totemic belonging and Indigenous self-determination; (c) totemic connections to the natural world; (d) sustaining totemic animals and waterways; (e) sustaining totemic sea life; and (f) totemic protection. Interpreting an illustrative sample of the analysed texts here, we make parallels to thinking about time-space with chronotopes in narratives following Bakhtin (1981, 1986), extended to visual textual elements, following Johnston (2004, 2014), to show how the community’s collective cultural knowledge of the past coalesced with modern modes and media of the present as dynamic forms of cultural making—language and identity forms to which Indigenous communities have rights that are salient within the broader context of education (Ginsburg, 2002; May, 2014).

Birth totems and identity

Students in preparatory and year 1 (ages 4–6 years) produced and published digital scrapbooks which represented animals and Dreamtime stories directly related to their birth totems (View playback here:
http://play.smilebox.com/SpreadMoreHappy/4e449774f5445784e6a453d0d0a. Requires Adobe Flash Player). The students learned about the Dreamtime by reading picture books produced by Indigenous authors. The class was visited by an Indigenous Elder who spoke about birth totems, many of which are birds, reptiles, and land animals featured in Dreamtime stories. The children then worked with their families, Indigenous teachers, and the visiting Elder to identify their language region, totem animal, and Dreamtime narrative of significance to read and retell, relevant because Dreamtime narratives are located from specific Indigenous language areas (McKay, 2001).

The Dreamtime retellings were produced as digital stories that combined words, pencil drawings, and background digital music selections and graphics, created using the free online photo-sharing program, Smilebox. The young students first retold their chosen Dreamtime story through a series of coloured pencil drawings, which the teacher scanned and uploaded to the online digital scrapbooking software. After sequencing the images in the digital slideshow, the students retold the story verbally to the teacher who scribbled their verbal story retellings beneath the images. Figure 1 provides an example of two slides from one of the presentations by Lillie. This example depicts the Rainbow Serpent surrounded by a digital background of nature in the first slide, and on the second, Indigenous People and an array of Australian totemic animals, including kangaroos, goannas, and emus.

Lillie’s digital story was entitled “The Beginning of Life” retelling the Dreamtime narrative of the Rainbow Serpent that “was made a long, long, long time ago.” The text read:

One day the Rainbow Serpent woke, pushing her way through the earth’s crust, moving anything in her way. Upon the earth she left her winding tracks and the print of her sleeping body. The frog’s bellies were heavy with water. The Rainbow Serpent tickled their stomachs. When the frogs laughed the water ran all over the earth to fill the tracks of the Rainbow Serpent. That’s how the lakes and rivers were formed. The Rainbow Serpent turned the good animals into people for generations and generations. The animals that did not allow the Rainbow Serpent’s rules were turned into mountains and hills. The Rainbow Serpent watched over her tribe forever. She loved them dearly.

The students’ multimodal and digital retellings of the Dreamtime narratives, including Lillie’s above, narrate events within the Dreamtime that included their kinship or birth totems, thus bringing together the connections between the ancestors, totemic traditions, and the Indigenous students “across other times and places” (Johnston, 2012, p. 436). Students explained in the interviews how their Dreamtime narrative was connected to one of their birth or kinship totems, such as the “black cockatoo,” the “Tasmanian Devil,” and the “turtle.”

The text beneath the illustrations references a moral code within Indigenous Lore that involves consequences for actions, implicit in the work of the Rainbow Serpent who transformed the “good animals” into human beings. Contrastingly, the animals that did not “follow the Rainbow Serpent’s rules” were “turned into mountains and hills.”

The chronotope or time-space ordering of events in Lillie’s narrative is understood through her naming of the story as the “Beginning of Life,” as well as the interpretive statement in the text: “That’s how the lakes and rivers were formed.” Supported by images of the rainbow serpent winding through the book, the visual chronotropic relations similarly point to the significance of the Dreamtime as the beginning of life and its genealogical connection to totemic ancestral lineage, illustrated through the animals and people depicted throughout the book (Figure 1, second image). Significantly, for these students, the act of retelling ancient narratives through a multimodal and digital presentation in an Indigenous community is part of the transgenerational flow of knowledge that is enlivened dynamically to connect the past and present through totemic worldviews portraying Indigenous identity. The time-space relations of events in the Dreaming are akin to (Bakhtin, 1986), continuing from First Light or the Creation (Sandercoc, 2020), and with ongoing significance for students through their birth totem connected with the Dreamtime narrative into the present day.
Figure 1. Two Pages from a Smilebox Digital Story.
**Totemic belonging and indigenous self-determination**

Demonstrating totemic language practices and identity work with pre-teen students, this section turns to the analysis of a class music video or chant produced by year 4 and 5 students (ages 8–10 years). The song tells a clear statement of Indigenous belonging and self-determination through the lyrics and screen text. The rhyming lyrics were created by the whole class guided by the classroom teacher who scribbled their ideas on the board. The students created a percussive rhythm using drumsticks, which was later filmed by a media artist from the research project (See Figure 2).

The key refrain, “We are the People of the First Nation, culture gives us self-determination” was prefaced by the words “It belongs to us. This is who we are” (full video: https://drive.google.com/file/d/1byHZ_4pRZkTTXR23h6xx-wFYPU-p-Erd/view?usp=sharing). To Indigenous People the sense of belonging to place is central to their being (de Souza & Rymarz, 2007). The students’ storyboards supported the statements of belonging through drawings of their birth totems around their individual portraits. Example storyboards (Figure 3) show the students’ pencil and paper drawings (far left and right), which were superimposed over their individual video portraits (middle) by the media artist in the editing of the music video.

The students were asked to use their storyboard or portrait page to highlight the cultural values of their family and kin that were significant to them. While most of the children combined written words and drawings of totem animals, some students used wordless totem drawings. What is significant is that each set of drawings in the video foregrounded totem animals as enunciations of identity, reinforcing that totems are paramount to Indigenous belonging, and referencing kinship and ancestral lineage.

Similarly, the lyrics “We are the People of the First Nation, culture gives us self-determination,” depicts a sense of kinship and belonging (Herrero, 2005). Repeated lexis in the lyrics and written screen text—“mob” (us), “belongs” and “Murri”—reinforce the message of solidarity, kinship, and belonging, fluidly blending Indigenous and English words with pedagogies that support translanguaging or using multiple language resources (García, 2009). Other concepts, including “respect,” “family,” “myself,” “Country,” “land,” and “self-determination,” were captioned extensively in both the background visuals and in the lyrics.
Indigenous self-determination has salience here (see Hogarth, 2018), as discussed by the Indigenous teacher: “We don’t need saving … we have an ancient culture, and that’s what grounds us and keeps us moving forward in a positive way.” When asked about the words in the storyboards and lyrics, one of the students, Mia, commented that the words she chose “are proud” and that “you have to respect Country,” conveying a strong understanding of Indigenous respect and a deep connection to land. In the video, this assemblage of words and totemic representations, brought together through percussive rhythms.

The chronotropic time-place relations in this transgenerational, multimodal narrative, one that digitally combines written and spoken words, images, and percussive rhythms, brings totemic knowledge of the Dreaming to the present day through a collective re-enactment of cultural belonging. The video weaves epistemic connections between the past and present through the re-enactment of totemic identity in students’ present lives and birthplaces, the students themselves becoming a vital part of their collective totemic traditions. Importantly, these lived entities and events of their common past were reassembled dynamically into a contemporary digital and multimodal text (Mills et al., 2016; Silberman & Purser, 2012). Ancient totemic traditions, re-enacted in the present, were communicated through time-place configurations of the multimodal music video in a dynamic and living way.

**Totemic connections to the natural world**

The students in year 3 (ages 7–8 years) were taught dances by an Indigenous dance group who sang in Ugarapul and Maori Indigenous languages, two of the local Aboriginal and Torres Strait Islander cultures in the school. Dance is an important mode through which Indigenous People tell stories across generations, sometimes for ceremonial purposes and celebrations. Oliver explained in interviews: “It’s part of our culture. When we do our dancing, that’s how we tell stories. We also do it through singing and storytelling. We have songs and movements about the eagle, crows, kangaroo, goanna, and geckos.” Similarly, Riley commented that the dances are about “celebrating animals,” while Charlotte understood the transgenerational responsibility to tell the stories to the young: “When you get older you can teach other people” (see Figure 4).

Many of the Indigenous dances communicated totemic meanings through the lyrics, rhythms, and dance movements that embodied the motion of the carpet snake, kangaroo, or emu. View the video of the students’ Indigenous dancing at: https://drive.google.com/file/d/15QKaWB2Iqjr3tUFknDiO5tjFk87oI5Uw/view
The students explained that for performances and celebrations, they would wear traditional clothing and have painted skin using yellow ochre from the ground. In this way, the dances created visual chronotropic relations that reconfigured ancestral meanings via the re-enactment of living totemic identities and referencing Indigenous connections to the natural world (Lawlor, 1991). Similarly, dancing connects intergenerational knowledge from one generation to the next, telling stories from other times and places.

Dances are performed in particular locations, including the beaches, and the borders between land and sea, as important signifiers of the “omnipresence of Indigenous sovereignty” (Moreton-Robinson, 2011, p. 67). Likewise, Indigenous dances embody the connections between tribe and totem animals as inheritors of a particular region. Dances afforded the students a vital cultural expression of identity connected to their totems. The teacher explained that when learning the dances, “The students copy the older ones until eventually they get it right. It gives them a sense of ownership and identity.”

Sustaining totemic animals and waterways

Preparatory and year 1 students (ages 4.5–6 years) planned, scripted, rehearsed and performed role play interviews in small groups which were filmed by the media artist, within a lesson series on Indigenous places. View the video at: https://drive.google.com/file/d/1yZTU6qZdVbWkjG0aSXjXGtON7_zPl2L4/view?usp=sharing. An Indigenous community Elder from the Moogerah Dam region spoke to the students about the cultural significance of nearby sacred places. The class travelled to the dam site to film on location. In the videos and interviews, the students explained Indigenous stewardship of the land, animals, and the waterways, taking on the role of traditional owners of the Ugarapul language area where Moogerah Dam is located (Figure 5).

To illustrate, Jasmine who is shown speaking in Figure 5, referenced totemic connection to place, kinship, and belonging across time:

This has been our land for thousands of years. This land means a lot to me and my People. Our totem, the green tree frogs, enjoy living here.

Jasmine’s statement can be understood from Indigenous perspectives in terms of the signification of place and custodianship of the land across time. In Indigenous Lore, time, place, and custodianship in the present are connected to the Dreamtime when ancestors, who are connected through totemic traditions to Indigenous identities, called life into being. The green tree frog is a totem connected to
Jasmine and the Indigenous People, and associated with the particular place of Moogerah Dam, signifies kinship and belonging.

Each of the films portrayed Indigenous connections to the land, animals, and water through the visual elements and recorded audio narration, supported by the students’ gestures and bodily orientation (e.g., turning toward each speaker). The interconnected modes, including scenes of Moogerah Dam, combine with the audio narration, highlighting the beauty and significance of the land, mountains, and water.

The chronotopes or time-space relations inherent within the filmic narratives address Indigenous stewardship of the land and waterways that have historical significance, while the visual narrative shows the living emplacement of Indigenous students on the land in the present. This enables the students and the viewers to connect ancient understandings of Indigenous land to Moogerah Dam in the present. Significantly, the images of the landscape and waterways depicted behind the students across the films enables the visualising of emplacement that also works to instantiate the Dreamtime in the situated present, and the present in the Dreamtime. The students also discuss how Moogerah Dam was once a thriving river, significantly named by the Indigenous People as the home of thunderstorms.

The cultural significance of the land is described by the children in interviews: “Moogerah Dam is a celebration place. Indigenous mobs from the area gather and celebrate together,” and “we have to take care of this place because it’s a celebration place.” Reflecting on the chronotropic time-place configurations in the narration, supported by the images of the land, knowledge about celebration, gathering, and land care, is a lived reality in the present—the “dam is a celebration place” and “mobs gather there.” At the same time, the intergenerational practices of Indigenous People, referenced by the students, recognises an enduring heritage and system of custodianship and rites performed in place (see Voight & Drury, 1997).

The narration across each of the videos included messages of Indigenous environmental sustainability, supported by the student and teacher interviews. For example, in one film the students argue that “the dam has impacted the wildlife,” a land once populated by an abundance of native animals including “lizards, bush turkeys, snakes, frogs, kangaroos, koalas.” Another group of students explained in their video that “it is important to protect Moogerah Dam because the animals live and drink from it.” The teacher noted: “Among the children there was lots of thinking back, thinking of the future, thinking about how the dam has impacted the natural environment.” She explained how the children were “becoming a bit worried about some turtles that they could see in the murkier water.” Throughout the video the visual chronotope operates through multimodal design to transcend time and place to consider a past beyond the lifetime of these students. As the children reflected on
then and now, they connected to ancient Lore, appreciating the importance of how this Indigenous place was teeming with life in past times, and how the land should be sustained in the present.

Totemic references in the films, particularly turtles and the green tree frog, which were significant to the Indigenous families in the school, were reinforced and encoded through these digital recordings located at Moogerah Dam, emphasising the importance of care and respect for land, nature, and water as part of a totemic cultural heritage. In this way the filmed interviews highlighted important connections to Country, supported visually in the narratives by the students’ subjective emplacement on the very ground upon which their Indigenous identities were connected.

**Sustaining totemic sea life**

Knowledge films created by students in years 4 and 5 demonstrated another strong example of totemism, which brought attention to the practice of discarding old fishing nets in marine systems on the eastern coast of Australia. The students explain in one of the films: “Ghost nets are nets that have been either abandoned or lost at sea. They drift out to the ocean . . . catching a wide range of marine life.” The films were researched, scripted, rehearsed, and recorded in small groups by the students using tablets, supervised by the teachers, researcher, and a visiting media artist (see Figure 6).

In the filmic narratives the students drew attention to the environmental damage to marine life, such as turtles, dolphins, and dugongs, which become injured, malformed, or killed when they become entangled in the discarded nets. The students connected this knowledge to their understanding of the totemism, observing that many of the injured sea animals were totem animals of the students, their families, and Indigenous People.

Across the films the students used scripted narration to convey that, “Ghosts nets are a big problem in the top part of Australia, because they are killing marine wildlife and Indigenous species.” More forthrightly, one of the students observed: “People are killing our totems.” In these multimodal texts, the narration was supported by filmic cutaways to footage of injured totem animals in the sea, juxtaposed with recorded scenes of the students speaking persuasively. Some of the films also referenced the importance of particular sea creatures as sustenance for Indigenous People, noting the consequence for some: “Indigenous families and elders have no food.” These quotes reflect a cultural valuing of nature, the sea, and its animals in the face of a reality, and in the presence of pollution (Mundy, 2000).

![Hymba yumba news](image-url)

*Figure 6. Screenshot from Jessica’s Ghost Net Video.*
Focal in these accounts is the threat of environmental pollution on the marine animals and relatedly, the spiritual connections of Indigenous People to totem animals (see Cain, 2001). For example, the following video narration illustrates the urgent concern about degradation of marine life:

Killing marine wildlife affects Indigenous People because of a strong belief in caring for Country and their totem. As Aboriginal People we have a strong connection to Country. It is very sad to see so many dead wildlife in the ocean. We need to get the ghost nets out before it’s too late.

The chronotopic relations across the films shows Indigenous perspective of totemic ancestral connections that extend from times past, and the related concept of Indigenous sovereignty over the seas and the life within it today (Bakhtin, 1986). Importantly, the ghost net films present a message of responsibility for the conservation of the sea and totemic life seen through an Indigenous lifeworld in which ancestral Lore and totemic understandings are integral to environmental care and sustainability. Likewise, the integrated nature of Indigenous kinship, identity, and endangered totem animals of the sea is conveyed explicitly through the narration (e.g., People are killing our totems), because conserving totems is paramount to the very nature of Indigenous cultural being (see Cain, 2001; Lawlor, 1991).

**Totemic protection**

Year 4–5 students (ages 8–10) created e-books in pairs or groups of three using the Book Creator application by Red Jumper on topics arising from their personal interests. Without any instructional imperative to do so, five student groups decided to compose transgenerational narratives about totemic animals of significance to them and their People. A dynamic theme made visible by attending to the chronotropic time-place patterns or cultural perspective in the texts, was the Indigenous ancestral message of taking responsibility for the land and totem animals, and the totemic protection that was integral to the students’ daily lives in the present (see Figure 7).

For example, Tanya and Mia’s e-book referenced the totemic owl as a repeated motif in the narrative, invoking inheritance (our totem) and protection—because it “looks after us.” As members of a shared totemic ancestry, they are bound together through inheritance and kinship (Keen, 2004). The owl’s totemic role is inscribed through written words in the title and text: “The owl looks after us.

![Figure 7. Two Pages from Tanya and Mia’s E-book.](image-url)
It is our totem,” and its personal significance is similarly invoked through images of the owl, which are juxtaposed with the photographs of the students.

Throughout this narrative the continuous presence of the owl as totem is identified in their daily lives, “when walking in the bush,” when they “go outside,” and when they “went fishing,” pointing to the continuing omnipresence of the owl as totem in the girls’ everyday lives. Across the multimodal narrative that integrates words, images of the owl from the internet, and photographs taken from the iPad’s camera role, the chronotope draws attention to connections between Dreamtime totemic ancestry of the past and the continuing role of the owl in their present lifeworlds.

Discussion

This research has demonstrated how Indigenous totemism emerged as central in the multimodal and digital practices of an Australian Indigenous school community through key themes: birth totems and identity, totemic belonging and Indigenous self-determination, totemic connections to the natural world, sustaining totemic animals and waterways, sustaining totemic sea life, and totemic protection. Indigenous identities and ways of being were clearly portrayed using multiple modes in students’ digital media representations. The transgenerational narratives conveyed respect for self, each other, and Country, which were seen to be intimately connected to the ethnology of totemic Lore (Cain, 2001; Lawlor, 1991).

Using Bakhtin’s (1986) and the chronotropic time-space configurations in narratives as a touchpoint (Bakhtin, 1981; Johnston, 2014), the findings highlight the discursive and visual unfolding of time-space relations in the construction of totemic identities in the Indigenous school community through their textual lifeworlds. It was observed that the multimodal language practices were not taught as ideologically benign but were laden with significant cultural values that were taught in ways that resonated with the students’ individual and collective identities, and a sense of Indigenous self-determination and belonging. These connections, encoded in their multimodal narratives, demonstrated a vital recognition of ancestral lineage and cultural heritage that extended beyond individual experiences of the present to the Dreaming, including the ongoing responsibilities attached to a spiritual and cultural inheritance (Voight & Drury, 1997). The pedagogical approach supported the right to develop students’ Indigenous identities through multiple modes, at times, dynamically extended to digital practices, through a vibrant and powerful transgenerational interplay of Indigenous culture and Lore. Similarly, the work of Indigenous teachers addressed the national curriculum requirements for teaching multimodal literacy throughout each grade level.

A key implication of this research is the important recognition that language and culture matter to Indigenous schooling practices. In fact, Indigenous schooling has failed if it does not develop the students’ Indigenous cultural identity (Sarra, 2003). The research provides an example of how Indigenous multimodal language practices can be taught in ways that support the development of students’ Indigenous cultural identities—the shared ways of knowing, being, valuing and doing in the school context.

At the same time, attending to cultural values in Indigenous schooling is insufficient if the discriminatory practices of educational institutions and their power and control mechanisms are not problematized. Nakata (1993), an Indigenous academic, has argued that any policy instrument or pedagogical approach that focuses on equality, access to education, and cultural agendas for Indigenous students, while failing to problematize vastly and historically uneven social and material conditions, negative stereotyping, patronizing and racist interactions, and discriminatory practices in schooling and assessment, will be insufficient alone (Phillips & Lampert, 2012).

Conclusion

For several decades, ethnographic studies have demonstrated that language varies cross-culturally, while highlighting the disparities between institutional language use and the cultural language uses of minority and vernacular speech communities (Gumperz & Hymes, 1972). The speaking rights of
Native American and other Indigenous People worldwide, that were acknowledged decades ago in language studies (e.g., Labov, 1970), are ignored more acutely than ever before in educational contexts of increased standardised testing and intensified accountability systems worldwide.

Relatedly, educational systems have not attended to developing the cultural identities of many Indigenous People, which are inextricably tied to language, yet are still an often-overlooked dimension of educational inequality (Mills & Dooley, 2019). Extending the concept of speaking rights (Hymes, 1996) to examine Indigenous community uses of multimodal language as cultural ways of working highlighted the meaningful identity work that can enrich schooling for Indigenous students. Texts, both old and new, frequently combine spoken, written, visual, gestural, musical, and other modes, and are shared beyond local communities through global and contemporary digital media environments.

There is an imperative for language education to enable students with Indigenous, minority, and other culturally diverse language and identities to combine valued oral, musical, visual, and dance traditions with contemporary modes of language as legitimate ways of communicating. The reconnection of students’ cultural and spiritual heritage through the multimodal language of their formative years can equip Indigenous students to develop a strong sense of identity, place, and purpose (de Souza & Rymarz, 2007). Until such connections between language, culture, and identity are given priority in schooling systems and educational research, regardless of their political or economic status, language education will continue to be maintained as an unequal means for power and dominance, cultural hegemony, and ideological control in the reproduction of language, social, and educational inequality.

**Note**

1. The term Indigenous in this paper refers to the First National People of Australia. We acknowledge that there are many Indigenous People, each with their own cultural and language identity.

**Acknowledgments**

We acknowledge the Hymba Yumba Listening and Learning Place, including school community and teachers who participated in this research, and the Australia Research Council for funding this project. We also acknowledge Indigenous Elder, Debb Mundy and the Indigenous teachers for providing critical feedback on this paper.

**Disclosure statement**

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

**Funding**

This work was supported by an Australian Research Council Australian Future Fellowship [FT180100009] funded by the Australian Government. The views expressed herein are those of the authors and are not necessarily those of the Australian Research Council.

**Notes on contributors**

**Kathy A. Mills** is a Professor of Literacies and Digital Cultures at ACU Brisbane and Future Fellow of the Australian Research Council researching multimodal literacy learning in primary education. Mills has published over 100 academic works, including eight books on multimodality, literacy studies, sensory literacies, and digital media.

**Katherine Doyle** is a research fellow and lecturer at Griffith University, Australia, and a consultant to the Science-Art Research Centre. Her research interests include Science-Art and Indigenous Lore, Systemic Functional Linguistics, and STEAM literacies.

**Lesley Friend** is a lecturer in the School of Early Childhood and Inclusive Education, QUT. Lesley’s PhD explored how cultural difference interplayed with place, power and socio-materiality in two primary classrooms in two countries. Her research interests include literacy and language learning in globalisation.
References


