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Book chapter

Sensory ways to indigenous multimodal literacies : Hands and feet tell the story

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Chapter Title: Sensory Ways to Indigenous Multimodal Literacies: Hands and Feet Tell the Story

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Abstract This chapter reports original research that asks the question: What are the ways of knowing, being and communicating that are valued and practiced in Indigenous communities? Literacy curricula, internationally and nationally, typically do not take into account the multi-sensorial dimensions of non-Western forms of representation that go beyond narrow conceptions of print. For example, in multimodal semiotics, literacies are often conceived as drawing on print, visual, spatial, gestural and audio modes, but the role of haptics (touch) and locomotion has typically received little attention. This chapter highlights examples of the multi-sensoriality of Indigenous literacies observed in participatory community research with an Indigenous school. It extends recent theories of sensory studies in the history and cultural anthropology of the senses, applying these principles to literacy education. Sensory literacies is a theoretical perspective that gives priority to the sensorial dimensions of the body and its role in communication in literacy practice, because without a sensing body, we cannot know about or communicate with the world. The data demonstrates how the forgotten role of the hands and feet in dominant theories of communication is central to Indigenous identity and literacies. Written by a white academic and an Indigenous researcher, the chapter problematises the privileging of narrow, logocentric, and Western forms of literacy and its implications for rethinking the role of the whole body in literacy and the literacy curriculum for Indigenous students.

Introduction

This chapter extends recent theories of sensory studies from cultural anthropology (Howes, 2014), applying these principles to literacy education. It highlights examples of the sensoriality of Indigenous literacies observed in participatory community research with an Indigenous school. The theory of *sensory literacies* was first outlined by Mills (2016a) to

give greater priority to the sensorial dimensions of communication in literacy research and practice. Without a sensing body, we cannot know about or communicate with the world.

Sensory studies have demonstrated the importance of the senses across many cultures and historical periods (Howes and Classen 2014) but the potentials of a sensory approach for Indigenous multimodal literacy learning have been under examined. Indigenous researchers have identified that epistemologies and ontologies of Indigenous groups involve sensing natural entities, such as land, waterways, and animals (Martin 2003), pointing to the need for such an approach to culturally responsive schooling. Schooling systems throughout the world have struggled to authentically negotiate literacy practices, and Indigenous cultural identities, including those of Canada (Van de Kleut 2011), Scandinavia (Pietikäinen and Pitkänen-Huhta 2013), New Zealand (Tuhiwai Smith 2006), and Australia (Sarra 2003).

There is a growing collection of studies that acknowledge the body in encoding and decoding (e.g., Mills 2010; Nespor 1997; Stanton et al. 2001; Stein 2006). Sensory literacy approaches recognise that communication, with or without digital technologies, involves the practical action of the physical body (Mills 2016a). As Scollon and Scollon argue (2003, p. 45), “Our bodies...anchor us in the real, physical world in which we are performing as social actors.” At the same time, the mind is not seen as separated from the body, nor the role of the body taken-for-granted; rather, both mind and body are seen as integral to literacy practice. Such a view repositions the body, recognising the primacy of active, sensing beings to all communicative action.

There has been a long period of ocularcentrism—the dominance of the visual over other forms of perception—across many disciplines (Howes 1991; Porteous 1990; Stoller 1989). In modern Western societies a widespread empiricist view has persisted that objective truth is what can be observed through the eyes. Theorists such as Ingold (2000) and Pink (2009) argue that the visual dimensions of human action should be considered in interrelationship with other senses. This is because human action is constituted and experienced multisensorially, including experiences of sight, sound, touch, posture, movement, odour, taste, and other forms of awareness (e.g., response to external temperature).

With regard to some of the non-visual senses, theorists have recently drawn attention to the neglect of haptics or tactility (Paterson 2007). Others, such as Pandya (1993), have demonstrated the power of olfactory senses and identity in culture. Individual identity in Ongee society of the Little Andaman Islands can be defined by one’s body odour (Pink 2009). Similarly, Porteous (1990) researched the *smellscapes* and *soundscapes* involved in

various human experiences. Still others have demonstrated a case for understanding the world perceived through the feet—through human locomotion (Ingold and Vergunst 2008). While theorists sometimes focus on one sense or another, the majority are united by a recognition of a “democracy of the senses”, not a “hegemony of sight” (Arola and Wysoki 2012, p. 7).

Contributing new understandings of historically and culturally informed literacy practices, this chapter examines sensorial meanings that are valued and practised in an Indigenous¹ school community. Literacy curricula, internationally and nationally, typically do not take into account the multisensorial dimensions of non-Western forms of representation that go beyond narrow conceptions of print (Mills 2016a). For example, even when a broadened view of literacy prevails, such as theories of multimodal literacy, interpreting the meanings of lower limb movement has received less attention than the grammar of images (e.g., Kress and van Leeuwen 2006). While gestures have always been central to communication (Leeds-Hurwitz 1987), there has been renewed research interest in haptics—movement of the hands—in an era of touch-pad technologies and video games (Paterson 2007). Haptics has recently been foregrounded in literacy learning (Walsh and Simpson 2014) while the central role of kinesthetics and locomotion has been researched in children’s filming of movies and photography (Mills, Comber and Kelly 2013).

Multimodality has become a significant area of research amidst a broadened range of available designs and media forms in digitally networked and globalised textual ecologies. While there are varying definitions of multimodality, this chapter applies a social semiotic perspective that interprets language as fundamentally cultural and social. The term *multimodal literacy* describes communication practices that use two or more modes of meaning (Mills 2011; Mills 2016a). Multimodal literacy is dynamic and able to be modified by users, rather than being a static code (Jewitt 2006). Similarly, the meanings of texts, objects, and events are influenced by the situational context within a culture or community (Mills and Unsworth 2017; O’Halloran 2009).

Language and literacy practices are inherently multimodal—combining two or more modes, including spoken or written words, visual images, gestures, posture, movement, sound, or silence (Mills 2011). Preferences in the use of modes of presentation, such as linguistic, auditory, gestural, and so on, differ according to the uses defined by culture and

¹ The term *Indigenous* in this research refers to Aboriginal and Torres Strait Islander peoples of Australia. It is acknowledged that there are many First Nations People worldwide, each with their own culture.

social context (Mills 2011). The regular pattern of use of modes is called a modal grammar, and these grammars have shared meanings within communities or cultures (Jewitt 2006). Sensorial approaches to literacy give attention to human experience more broadly than representational forms or texts. While multimodal semiotics explicitly deals with systematic *principles of composition* (e.g., Kress and Bezemer 2008, p. 167), and *multimodal metalanguages* (See: Kress 2000), sensorial approaches also attend to the sensory practices of the body in the social process of meaning making.

This research describes the literacy practices observed in an Australian Indigenous school community that is under the care of the Aboriginal Elders. The research was conducted over the course of one year with students in the lower and upper primary school (ages 7.5 to 11.5 years) in an Indigenous Independent school in South-East Queensland, Australia. The project applied participatory research methods in which the research agenda was negotiated with the cultural community. Indigenous ways of practicing literacies in this school site involved multiple senses, including the use of haptics—being able to touch, feel, and manipulate objects—and locomotion—the position and actions of the limbs.

Indigenous education in Australia has suffered long-term inequality in the interests of Whites, such as limiting Indigenous access to schooling past the third grade during the 1930s and 40s. The first Northern Territory government-funded education for remote Indigenous students did not occur until 1949, and secondary education only become available in remote areas in the 1980s. This was applauded as forward thinking, yet non-Indigenous students had free access to primary and secondary education throughout the entire twentieth century (Ford 2013). Bilingual teaching and education for students who spoke Indigenous languages ended in the 1990s, reinforcing White dominance and monolingual English. The gross inequality of achievement between Indigenous and non-Indigenous students is currently masked in the reports of the National Assessment of Literacy and Numeracy (ACARA 2016) to downplay the extent of failed political rhetoric that claims to close the Indigenous achievement gap (Ford 2013).

Internationally, research of Indigenous students' counter-storytelling and the use of pedagogies informed by critical race theory has been documented with Chicano students. Using narrative counter-histories, teachers and students have challenged the majoritarian American stories to validate Indigenous epistemologies (Romero, Arce and Cammarota 2009). A promising approach for American Indian and Alaskan Indigenous students in US schools has been culturally responsive schooling, which sees that an essential beginning for Indigenous schooling is to provide students with knowledge of their local heritage, language,

and culture (Castagno and Brayboy 2008). More research is needed within the politics of school settings to decolonise Eurocentric notions of knowledge and literacy practices, and to embed dynamic ways of communicating through the whole body and the senses in Indigenous schooling. This research is a response to the need for a radically revised approach to literacy pedagogy that follows the dynamic contours and sensory pathways of Indigenous knowledge—central to the decolonising deficit assumptions about Indigenous literacy achievement (Mills, Davis-Warra, Anderson and Sewell 2016).

1 Research Question

Indigenous people take pride in the valued epistemology (i.e., nature of knowledge) and ontology (i.e., beliefs about existence) of their ancestral history, yet they must continually adapt to the Eurocentric ways of practicing literacies and learning in the institution of schooling (Mills and Dreamson 2015). The mainstream educational practices in many postcolonial societies are not culturally neutral, but are often based by default on the dominant White norms and ways of valuing language and literacy practices. In developing a culturally consistent approach to the multimodal literacy for Indigenous students, the research question asked: What sensory ways of making meaning are valued and practiced in one Indigenous community? It aimed to develop, with Indigenous leaders, an innovative approach to literacy that follows the dynamic contours of Indigenous knowledge and its many forms of expression—central to decolonising Indigenous literacy practices.

2 Research Context

Participatory research was conducted over the course of one year at an Indigenous independent, suburban school in Queensland, Australia. The students belonged to the Yuggera, Jagera, and Ugarapul language regions of Southeast Queensland, and identified as Aboriginal and Torres Strait Islander. The location permitted the researchers to have a sustained presence in the field—an ethical requirement of Indigenous research. Cross-cultural, participatory community research involves genuine collaboration between researchers belonging to a different culture to the research participants. Community leaders address an identified need, rather than the aims being driven by the researcher's own agenda (Stoecker 2005). The researchers have a long-term history of collaboration with the community leaders because outsiders conducting Indigenous research must knock before entering, give rather than take, and build long term trust (Martin 2008).

The Aboriginal principal and Indigenous Elders identified multimodal literacy as an area of potential development. Aboriginal and Torres Strait Islander students participated in multimodal and arts-based literacy practices, and semi-structured interviews. The research was conducted across Year 3 and Year 5–6 composite primary classrooms (students ages 7.5–11.5 years). The principal and two teachers were involved in the planning of the multimodal literacy practices with the university academic. They were involved with the university in planning meetings, organised the curriculum content, selected resources, and assisted with the collection of ethics consent forms from parents and students.

The first author is an Anglo-Australian university professor of literacy education, and former primary school teacher. The second author is an Aboriginal teacher and Kamilaroi woman who taught a Year 5–6 class and has degrees in both contemporary arts (visual art) and education. Her teaching and research aims to provide frameworks for the Indigenous acquisition of knowledge, values, and skills in culturally inclusive learning environments. This chapter was written with the Indigenous teacher to strengthen the authenticity of the Indigenous perspectives and to respect the ownership of Indigenous knowledge (e.g., See: Martin 2003). A non-Indigenous teacher of the Year 3 class was from the United Kingdom, who had also taught Aboriginal students in a remote area of the Northern Territory of Australia.

3 Summary of the Learning Experiences

The learning experiences within the curriculum combined different modes of literacy learning with the teaching of vital cultural knowledge. The integrated literature and history unit for the Year 5 and 6 students (ages 9.5–11.5 years) was based on *The Rabbits*, a graphic novel written by John Marsden and illustrated by Shaun Tan. The novel is simply written using metaphoric language intended to create an empathetic view of the impact of colonisation on First Nations Peoples. The final page of *The Rabbits* asks the question, “Who will save us from the rabbits?” The students were required to script and dramatise a narrative that utilised the symbolism and allegory depicted in the novel. The unit allowed the students to rewrite and act out a new position of Indigenous self-determination and resistance in the face of colonisation and dispossession. The teacher stimulated discussion about the question, “Do we need saving?” The multimodal task involved scriptwriting, papier-mache mask-making, prop-making, speaking, gestures, filming, and digital editing. The students were required to apply dramatic action, empathy, and use of space in improvisations and utilise play-building

and scripted drama to develop characters and situations of importance to Indigenous people (ACARA 2017).

The Year 3 students (ages 7.5–8.5 years) created individual tempera paintings of the land, applying Indigenous visual art techniques and colour palettes that were introduced to them by Indigenous Aunties who visited the classroom. The students participated in weekly Aboriginal and Torres Strait Islander dances that were taught by Indigenous young men as part of the school curriculum. The dance group used clapsticks to accompany chants in local Indigenous dialects, while demonstrating the dances. They danced along to video recordings of traditional Indigenous dances performed in the Australian bush, displayed on a large digital television, providing an audiovisual portal between the present and the past. A short video segment of one of many dances practiced by Year 3 students can be viewed by cutting and pasting this link into a browser: goo.gl/6cbTep.

4 Methods: Data Collection and Analysis

Three data sets were collected to answer the research question described in section 1 above:

- i. multimodal artefacts (texts) produced by the Indigenous students—photographs of student paintings, videos of dance performances, and dramatic performances;
- ii. semi-structured interviews with Indigenous students about their multimodal texts and practices; and
- iii. semi-structured interviews with teachers about the integration of Indigenous forms of meaning making in subject English and across the curriculum.

Data analysis involved attending to the engagement of the senses and embodiment across the range of observed literacy and arts practices, including Indigenous paintings, dances, and dramatic performances (Mills and Dreamson 2015). Focus interviews with students provided understandings of the children’s intended meanings for their dances, artwork, and drama. The students’ multimodal texts and performances were coded and analysed as sites for the embedding Indigenous cultural knowledge and contextualised with reference to the specific cultural meanings in this Indigenous community (Mills et al. 2016).

Semi-structured interviews were conducted with approximately 40 students across three grade levels, using an interview protocol. Example questions included items such as: “Tell me about your painting?”; “ Why did you use these symbols/colours?”; and, “What does this song/dance/art mean to you?” Semi-structured interviewing was chosen to be responsive to the content of the students’ texts, and to allow new ideas to be examined during

the interview (Raworth, Sweetman, Narayan, Rowlands and Hopkins 2012). It enabled the adult researchers to obtain insight into the students' emic or insider cultural frames of reference as Indigenous children and youth (Mills et al. 2016). The coding and analysis of the semi-structured teacher interviews aimed to identify the modes and involvement of the senses in the observed literacy practices, allowing the researcher to learn the viewpoints of the teacher participants. The student and teacher interviews were transcribed and coded for key themes and subthemes that were recurring in the students' talk and multimodal texts, including the participants' own terms (Silverman 2014). Gaining the participants' clarifications of the meanings in their multimodal texts strengthens interpretations of the symbolic meanings intended by the authors, multiplying the semiotic power of multimodality.

5 Findings: Hands and Feet in Indigenous Art, Dance and Drama

Two Indigenous Aunties quietly prepared paints and materials as they talked to each other, and then worked with the students over several hours. They closely guided one student at a time, while observing the whole student group who were absorbed with their painting. The Aunties supplied warm colours for the earth and sky in the background and demonstrated how to mix and blend the paint on the canvas. They allowed the backgrounds to dry during the mealtime. Then the students used vivid, contrasting colours to symbolise birds, animals, and other significant elements of Indigenous Country. The instruction of the Aunties is consistent with Oodgeroo's (1990) description of the traditional methods of Aboriginal modes of communication:

They [Aboriginal ancestors] successfully sustained our people and environment as they talked, sang and danced knowledge to the young, while others used...sticks, stones, ochre, fire and smoke for communication...Messages were shared...through clan and family gatherings, message stick carriers, storytellers, songs, dance and paintings.

The students talked about the cultural significance of the land, waterways, birds and animals, and ceremonial traditions depicted in their paintings. A significant finding was the continuation of an Indigenous legacy for future generations through the use of the hands in their artwork. In the artwork photographed in Figure 1, Eli² chose to represent a number of native Australian animals, which are central to Aboriginal ontology and to Eli's

² All student names are pseudonyms



Fig. 1 Eli's painting of Australian animals

family totems. The researcher asked Eli about the meanings of the painting:

Researcher: Can you tell me about your painting? What are the different symbols?

Eli: So a turtle. A few snakes, a dingo, a platypus, koala, and an echidna.

Researcher: How did you decide what animals to put in? Are they all special animals to you?

Eli: A few of them—the turtle is one of my totems. The rest, I just thought of them.

Researcher: What about the circles or dots everywhere?

Eli: They represent where they [the animals] go.

Eli's painting featured a variety of native Australian animals, including his family totem animal, the turtle. In this Indigenous community, many of the students were assigned a totem animal at birth, which signifies their ecological and spiritual connectedness to the animals and to place. The totem bird or animals passed on from the mother, father, and clan are often significant to the child. Totems are a vital part of cultural identity in many Australian Indigenous communities and are especially significant in songs, dances, and music. Totems are often depicted on cultural implements, such as through carvings on message sticks used in ceremonial dances. While Aboriginal totemic traditions have many variations, totemism makes significant ontological connections to the period of the Dreaming, describing a vital relation between living humans with ancestral beings and nature, such as plants, animations, and land formations (Monroe 2011). Humans, animals, and natural phenomena find their origin and meanings in the Dreaming period (Mills and Dreamson 2015).

The students shared their familial, historical, and ancestral connections to the creatures in their local sensory ecology and their place on the land. Eighty-three per cent of the children's paintings included Australian native animals of the land, seas, or sky that were either personally significant as totems or are important to Indigenous knowledge and culture. The meanings of multimodal literacy practices were entangled with material and spiritual

worlds, which were connected in performative or active ways to their identities (Mills and Dreamson 2015).

A recurring motif in the children's paintings was the handprint—featured in two-thirds of the artworks. Handprints were often integrated into the painted landscape as trees, evoking symbolic connections to the land. For example, Figure 2 is a photograph of Lily's painting of a bird and handprint below.



Fig. 2 Lily's handprint and bird painting

Lily created the handprint by drawing around the outline of her hand once the red and yellow background had dried. When asked to talk about her painting, Lily explained:

Lily: There's a big bird [in the middle] and little turtles. Those colourful bits [dots] are the feathers, and it's got a tail, but no beak.

Researcher: And what about the dot patterns and other symbols, like the spiral?

Lily: I've seen them in our other art—they are for decoration.

Researcher: Whose is that handprint?

Lily: Mine.

Lily explained that her dots were for decoration—aesthetic rather than having a corresponding content plane or equivalent meaning (Eco 1976). The practice of successive knowledge is transferred in ways often unseen by normative Western pedagogies. The children's artwork represents an embodiment of practice through observation, conversation, and direct instruction or modelling of art by their Aunties and Elders. Indigenous teachers teaching Indigenous students is pivotal to this knowledge sharing. Other students similarly indicated that they included dot patterns or other repeated shapes because they had observed these designs in other Indigenous paintings. The use of arts-based pedagogy was part of the transgenerational telling of stories as a cultural heritage practice received from the Elders.

Handprints appear in traditional Aboriginal artwork, forming an embodied symbol or signature of belonging and respect for the place, such as caves or rock walls, where the

handprint is marked. In Aboriginal culture, events inextricably belong to places, and places speak through the artwork. The handprint involves using touch or tactile sensation as a connection between the body and the natural world. Unlike some other forms of touch, the embodied practice of Aboriginal handprints made with ochre from the earth has particular meanings, because the hand marks place, and place similarly marks the hands (Mills 2016b).

A third painting is illustrated in Figure 3, which combined a number of visual motifs that were evident across the artworks. In addition to the handprint, totem snake, and Aboriginal flag in Paige's artwork is the circle of respect—a series of concentric circles.



Fig. 3 Paige's painting of a hand, totem, flag and respect circle

The circle of respect was a significant, repeated visual motif in the children's paintings that symbolised values that were modelled and taught in the broader curriculum and taken up by the students. It was featured on classroom walls and worn on their school uniform. The circle of respect appears in red, white, and black dots, which form concentric circles in the bottom left of Paige's artwork (See Figure 3). Paige explained:

Paige: That's my totem, and that's my family (top right), and that's the butterflies around us. Then there's the snake, and hands, and then I put the Aboriginal flag. Then I painted what we have on our shirts [school uniform].

Researcher: Yes, that circle with the larger circles around it.

Paige: Yeah.

Researcher: What does it mean, do you know?

Paige: Respect [Circle of respect].

The symbol of concentric circles—sometimes composed of dotted lines—was used to remind the student to show respect for self, followed by outward movement of respect for family, community, and Country. The pattern of circles is sometimes joined by a pathway to another set of circles, and similar patterns can be observed in Australian Indigenous artwork, rock paintings, and drawings in the sand that are made using touch. Depending on the language

region, it can invoke a range of meanings, such as waterholes, campsites, or ancestral connections (Morphy 1991). The Year 3 teacher noted:

I sometimes think, “I wonder how much they identify with their culture? When I see this art I know that the students are being really observant and they're taking things in. Whoa!”
[laughs].

The significance of handprints was also observed more widely in the school, such as during a welcoming ceremony. Several of the students dipped their fingers in yellow ochre and water, using touch to physically transfer the earthen mixture from person to person. They painted a pattern of two parallel lines on the arms of each visitor. This symbolised in an embodied, haptic way, a physical co-presence with each other and the encompassing land. We later participated in ceremonial washing to return the soil from our skin to the original earth. This was done to guard against tangibly and symbolically removing the soil from its place of origin. We returned the particles of earth to their physical coherence with the native land and its Indigenous peoples (Mills and Dreamson 2015).

The children’s embodied visual art practices became transgenerational flows of Indigenous knowledge from the ancestors, to the Aunties, and to the children. The notion of haptics has been explored in art history and aesthetics across a range of cultures and continues to be an important dimension of the arts, philosophy, and aesthetics (Paterson 2007). Literacy teachers and researchers need to embrace the possibility of attending more consciously to haptics or touch in literacy and the arts, with cultural relevance for Indigenous students (Mills 2016a).

The significance of foot and lower limb movements, synchronised with meaningful movements of the whole body, similarly emerged as central in the children’s performance of traditional dances; becoming a kind of kinesthetic pathway to children’s understanding of Indigenous knowledge and their appreciation of Dreaming narratives. Connections to animals and Country became embodied in their muscle memory and their minds. Aboriginal and Torres Strait Islander knowledges were sometimes embodied in the dances through movement, adornments, body paint, and the song lyrics and rhythms of percussion instruments that are associated with storytelling. Many of the students began dancing with their extended families as soon as they were able to walk, while others were first introduced to Indigenous dancing in the school curriculum. The Year 3 teacher explained the centrality of dance for the communities she worked and lived with in the Northern Territory:

Whenever there were ceremony funerals—and funerals will go for days—they will be dancing every day. The little ones would get up, have a dance for a while and then sit down. Then they get back up, because that’s how they learn.

The students explained that the dances they are taught at school come from “Queensland, New South Wales, the Northern Territory...and from the Torres Strait”:

Researcher: So what do the dances mean to you?

David: It's culture—Aboriginal and Torres Strait...and see those Aboriginal turtles outside? Yeah, they're in the words of one song. And then there's *madin*... [begins to sing] *Kona bodela madin, bodela bodela madin, bodela, madin madin.*

Researcher: What does that mean?

David: It means one, two, three...

Researcher: So it's a counting song.

David: Yeah. But for NAIDOC, we're doing *Tamila*.

The students pointed to lyrics posted on the classroom walls and explained that they had been taught to sing the songs using a range of Indigenous languages “like Yugumbir”—an important part of their cultural heritage. The students code-switched between several languages and the English translation, a vital communicative resource (Mills 2011), and these linguistic meanings then became embodied through singing, dancing, and playing musical instruments—the didgeridoo for boys and clapsticks for girls.

The boys and girls took turns to dance their respective dance sequences within the same song, based on traditional Indigenous roles for males and females. For example, the dance step *shake-a-leg* is only for the boys, and the boys make their legs into a diamond shape. The girls explained that they don't do “shake-a-leg or play the didgeridoo”... “because that's boys' business”. The girls' steps are differed by Indigenous tradition, with the feet kept closer to parallel, and the girls play the clapsticks.

Some of the movements in their dances evoke native Australian animals. The students listed the “kangaroo, goanna, eagle, crow, emu, snake, and gecko” as significant, and movements imitate the transit of the animals of the Dreaming. Thus, movements of the feet have specialised meanings that embody Indigenous knowledge. We asked the students about other embodied meanings of traditional dance, such as the way the body is adorned:

Researcher: Do you ever wear special clothes or paint when dancing?

Jackson: Yes, we have to wear ochre and lap-laps and like, a red sash around our head, and handprints on our face. We wear no shoes or shirt, but only girls wear shirts,

with pants and skirts. When we're performing this dance, we have to wear, like, lap-laps and no shirt on, and that's where we put our paint on [points to chest].

The students explained that the painting of the skin has ceremonial significance— usually “white or yellow ochre from the ground”. The “girls wear muu muus” while “boys wear lap-laps, and a red sash around the forehead, sometimes a handprint on the face”. The students continued: “The boys wear no shoes or shirt”. Thus, the way the body is adorned is as significant as lyrics and dances themselves. Other students explained that the painting of the body can also be used for “medicine” or healing in some ceremonial dances. Spears are sometimes used to symbolise protection of the body. In the children’s own words, the dances are “about respecting our country and community”, “respecting the ancestors...and the elders”, “connections” to the past, and being “connected to each other dancing”.

An imperative expressed by some of the boys was their active engagement in teaching the dances to others—to kindergarten children, to cousins and other family members, to the public, and to future generations. Importantly, students’ retellings of Indigenous narratives through their moving feet and bodies provided a platform for the flow and reconstruction of collective memories—through dances that tell the cultural themes of their common ancestral past (Giaccardi 2012). The Year 3 teacher reflected: “The dance and the artworks that they did...they definitely come alive! They know it's serious and they know that it's something that deserves respect”.

Similarly, in the upper primary school history and English unit on colonisation and the allegorical, graphic novel, *The Rabbits*, the students’ moving bodies were salient. The groups communicated through a multimodal and sensory ensemble of digitally-recorded dramatic performances. A critical reading of the text *The Rabbits* sees the First Nations Peoples positioned as merely passive victims of colonisation. Collins-Gearing and Osland (2010) note:

The narrative constructs dichotomous representations of the “coloniser” (Rabbits) and “colonised” (Numbats): strong, weak; modern, ancient; civilised, primitive; centre, peripheral; conqueror, victim. Such binary oppositions are a legacy of pre-Mabo colonialist discourses in Australian children’s literature and reveal the text’s seemingly neutral colonialist discourses to be rooted in colonialist ideologies and legacies.

The critical retelling of the narrative involved a Welcome to Country ceremony. The students’ reinterpretation respected Indigenous cultural protocols and attended to their responsibility as custodian—not owners of the land. The students enacted a smoking ceremony that sensorially and symbolically cleared away the wrongdoings of the past,

enabling forgiveness and positive direction into the future. The class used branches of gum leaves to gently sweep the white smoke over each other, as the marsupial characters in the book had gently swept the aromatic smoke over the rabbit characters. They bathed the rabbits in cleansing smoke in a kinaesthetic and olfactory ritual. Movements of the feet and hands were salient in the ceremonial practices, involving a historically rich repertoire of meaningful dance movements, chants, aromas, and instrumental rhythms.

Kinesthetics—sensory awareness of the position and movement of the body—has been rarely regarded in theories of literacy learning. The findings in this chapter are significant given the lack of attention to kinesthetics in Western thought in many fields. For example, the exclusion of sensations of the feet in the Western taxonomy of the five senses, has been recognised by a number of scholars, from Descartes, to Dewey, and from Gibson to Merleau-Ponty (Farnell 2012). More recently, Ingold (2000) has forged a number of studies that draw attention to kinesthesia in human action because: “The world of our experience is a world that is suspended in movement...” (p. 242). Without bodily movement, we can experience very little of the world directly.

We need to create bridges between Eurocentric and Indigenous knowledges, and an important part of this is acknowledging the power of the body in community practices. For many Indigenous people, schooling has failed if it has not developed a student’s cultural identity, and this includes the tangible, corporeal nature of human experience and communication. In Australia, multimodal literacy is also a vital part of the Australian Curriculum, with *multimodal* appearing over 290 times (ACARA 2017). There is scope in Australia to transform the official curriculum to seriously attend to multiple modes that together are more powerful in communication than words alone. We need to challenge Western sensory hierarchies that relegate movements of the hands and feet and the meanings of aromas, to a lesser plane than sight.

6 Recommendations for Research, Practice, and Policy

This chapter has problematised the privileging of logocentric, narrow, Western forms of literacy and the need to rethink the integration of multiple senses and the body in multimodal literacy learning. The findings illustrate that the hands and feet, and aromatic burning or smoke, are central to certain Indigenous identities and community practices. This is not to suggest that linguistic forms of literacy, such as writing, are not similarly valued by Indigenous communities; rather, Eurocentric ideologies of literacy practices in education do

not respect the deeply sensorial nature of Indigenous ways of communicating, such as through handprint painting, dances and dramatic performances. These can be much more powerful forms of communication than words alone. Arola and Wysoki (2012) argue that when we teach through varied modes and media we should ask how the media engages with the senses, and how it contributes to the embodiment of Indigenous knowledge.

A key recommendation is not that teachers should exclusively offer Indigenous students colourful and highly sensorial practices: all literacy practices engage the senses in some way. For example, even when a seated audience is required to be still and listen, there is always an undercurrent of highly nuanced, subtle gestures, gaze, postures, breathing, and movements. Rather, we need to shift Eurocentric, ocularcentric views of literacy practices to acknowledge the integral role of multiple senses in communication across varieties of cultures. We also need to begin to recognise the biases and limitations of long-held sensory hierarchies in education, and politically blinkered judgements of *what counts* as powerful communication and literacy achievement for all.

7 Conclusion: Indigenous Multimodal Literacy through Sensory Ensembles

The sensory literacy practices observed in this research were orchestrated in a way that developed the students' cultural identities through meaning making practices that engaged multiple senses, including touch, movement, and smell. This research has demonstrated how movement in drama, dance, and visual arts were integral to the transgenerational knowledge formation in an Australian Indigenous community through their sensorial reconstruction of collective knowledge. Such responses to the curriculum are aligned with honouring an Indigenous cultural heritage. Teachers were key facilitators of culturally inclusive pedagogy, who continually sought ways to develop relationships with the wider Indigenous community. Teachers can readily become a part of the process of layering Indigenous community experiences of culture in multimodal practices, as successive generations inherit, interweave, and feel cultural stories and maps of their experience through sensory ensembles.

While this participatory research was limited to one Indigenous Australian school community, and involved students across three years of primary schooling, the research has provided generative examples of culturally responsive multimodal literacy pedagogy. It demonstrates the successful weaving of the senses with Indigenous narratives and histories that were encoded, experienced, and perceived in the students' bodies. The orchestration of

multiple senses is important in disrupting the cultural exclusivity that often pervades schooling and ideological views of literacy achievement in colonised countries. This research has demonstrated how authentic Indigenous arts, dance, and dramatic performances can be used for collective cultural remembering through the integration of the senses.

Embodied sensory experiences, including aromatic drama and the movement of the hands and feet, have particular cultural codes that need to be seen as rich resources for representational work in the classroom. This recognition is significant given the regulation of the bodies and the senses in education sites, and the favoring of certain modes that is typically to the detriment of equitable literacy learning. It highlights the need to challenge the idea that the mind is only active when the body is still, and to begin to acknowledge the communicating body in motion. It calls for the transformation of education institutions that uncritically enact a *hegemony of vision* to challenge our sensory ideologies.

References

- Arola, K. L., & Wysoki, A. (2012). *Composing media, composing embodiment*. Logan, UT: Utah State University Press.
- Australian Curriculum Assessment and Reporting Authority [ACARA]. (2016). National assessment program: Literacy and numeracy (NAPLAN). Sydney, Australia: Australian Government.
- Australian Curriculum Assessment and Reporting Authority [ACARA]. (2017). *Australian Curriculum: Version 8.3*. Canberra, Australia: Australian Government. Retrieved 13 December, 2017 from: <http://www.australiancurriculum.edu.au/?dnsi=1>.
- Castagno, A. E., & Brayboy, B. M. J. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research*, 78(4), 941–993.
- Collins-Gearing, B., & Osland, D. (2010). Who will save us from the rabbits? Rewriting the past allegorically. *The Looking Glass: New Perspectives on Children's Literature*, 14(2). Retrieved 13 December, 2017 from: <http://www.lib.latrobe.edu.au/ojs/index.php/tlg/article/view/227/225>
- Eco, U. (1976). *A theory of semiotics*. Bloomington, IN: Indiana University Press.
- Farnell, B. (2012). *Dynamic embodiment for social theory*. London, UK: Taylor and Francis.
- Ford, M. (2013). Achievement gaps in Australia: What NAPLAN reveals about education inequality in Australia. *Race Ethnicity and Education*, 16(1), 80–102.
- Giaccardi, E. (2012). *Heritage and social media: Understanding heritage in a participatory culture*. London, UK: Routledge.
- Howes, D. (1991). *The varieties of sensory experience: A sourcebook in the anthropology of the senses*. Toronto, Canada: University of Toronto Press.
- Howes, D. (2014). Anthropology and multimodality: The conjugation of the senses. In C. Jewitt (Ed.), *The Routledge handbook of multimodal analysis* (2nd ed., pp. 225–236). London, UK: Routledge.
- Howes, D., & Classen, C. (2014). *Ways of sensing: Understanding the senses in society*. London, UK: Routledge.
- Ingold, T. (2000). *The perfection of the environment: Essays in livelihood, dwelling and skill*. London, UK: Routledge.

- Ingold, T., & Vergunst, L. (2008). *Ways of walking: Ethnography and practice on foot*. Aldershot: Ashgate.
- Jewitt, C. (2006). *Technology, literacy and learning: A multimodal approach*. Abingdon, UK: Routledge.
- Kress, G. (2000). Design and transformation: New theories of meaning. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures* (pp. 153–161). South Yarra, Australia: Macmillan.
- Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design* (2nd ed.). London, UK: Routledge.
- Kress, G., & Bezemer, J. (2008). Writing in multimodal texts: A social semiotic account of designs for learning. *Written Communication*, 25(2), 166–195.
- Leeds-Hurwitz, W. (1987). The social history of the natural history of an interview: A multidisciplinary investigation of social communication. *Research on Language and Social Interaction*, 20, 1–51.
- Martin, K. (2008). *Please knock before you enter: Aboriginal regulation of outsiders and implications for researchers*. Flaxton, Australia: PostPressed.
- Martin, K. L. (2003). Ways of knowing, being, and doing: A theoretical framework and methods for Indigenous and Indigenist research: Voicing dissent new talents 21st century, next generation Australian studies. *Journal of Australian Studies*, 76, 203–214.
- Mills, K. A. (2010). Filming in progress: New spaces for multimodal designing. *Linguistics and Education*, 21(1), 14–28.
- Mills, K. A. (2011). *The multiliteracies classroom*. Bristol, UK: Multilingual Matters.
- Mills, K. A. (2016a). *Literacy theories for the digital age: Social, critical, multimodal, spatial, material, and sensory lenses*. Bristol, UK: Multilingual Matters.
- Mills, K. A. (2016b). *Rethinking Indigenous ways to literacy assessment: Hands that speak, feet that tell the story*. Paper presented at the Research and Innovation in Classroom Assessment Conference, Brisbane, Australia.
- Mills, K. A., Comber, B., & Kelly, P. (2013). Sensing place: Embodiment, sensoriality, kinesis, and children behind the camera. *English Teaching: Practice and Critique*, 12(2), 11–27.
- Mills, K. A., Davis-Warra, J., Sewell, M., & Anderson, M. (2016). Indigenous ways with literacies: Transgenerational, multimodal, placed and collective. *Language and Education*, 30(1), 1–21.

- Mills, K. A., & Dreamson, N. (2015). Race, the senses, and the materials of writing practices. In J. Turbill, C. Brock, & G. Barton (Eds.), *Teaching writing in today's classrooms: Looking back to look forward* (pp. 298–312). Norwood, Australia: Australian Literacy Educators' Association.
- Mills, K. A., & Unsworth, L. (2017). Multimodal literacy. In G. Noblit (Ed.), *Oxford research encyclopedia of education*. Oxford, UK: Oxford Univeristy Press.
- Monroe, M. H. (2011). Australia: The land where time began: A biography of the Australian continent. Retrieved 13 December, 2017 from: <http://austhrutime.com/geology.htm>
- Morphy, H. (1991). *Ancestral connections: Art and an Aboriginal system of knowledge*. Chicago, Illinois: University of Chicago Press.
- Nespor, J. (1997). *Tangled up in school: Politics, space, bodies, and signs in the educational process*. London, UK: Falmer.
- O'Halloran, K. L. (2009). Historical changes in the semiotic landscape: From calculation to computation. In C. Jewitt (Ed.), *The Routledge handbook of multimodal analysis* (pp. 98–113). London, UK: Routledge.
- Oodgeroo, N. (1990). *My people*. Sydney, Australia: Angus and Robertson.
- Pandya, V. (1993). *Above the forest: Andamanese ethnoanemology, cosmology, and the power of ritual*. Delhi, India: Oxford University Press.
- Paterson, M. (2007). *The senses of touch: Haptics, affects and technologies*. Oxford, UK: Berg.
- Pietikäinen, S., & Pitkänen-Huhta, A. (2013). Multimodal literacy practices in the Indigenous sámi classroom: Children navigating in a complex multilingual setting. *Journal of Language and Literacy Education*, 12(4), 230–247.
- Pink, S. (2009). *Doing sensory ethnography*. London, UK: SAGE.
- Porteous, D. (1990). *Landscapes of the mind: Worlds of sense and metaphor*. Toronto, ON: University of Toronto Press.
- Raworth, K., Sweetman, C., Narayan, S., Rowlands, J., & Hopkins, A. (2012). *Conducting semi-structured interviews*. Oxford, UK: Oxfam.
- Romero, A., Arce, S., & Cammarota, J. (2009). A barrio pedagogy: Identity, intellectualism, activism, and academic achievement through the evolution of critically compassionate intellectualism. *Race Ethnicity and Education*, 12(2), 217–233.
- Sarra, C. (2003). Cherbourg state school: Strong and smart. What works program: Improving outcomes for Indigenous students. Retrieved 13 December, 2017 from:

<http://www.whatworks.edu.au/dbAction.do?cmd=displaySitePage1&subcmd=select&id=111>

- Scollon, R., & Scollon, S. W. (2003). *Discourses in place: Language in the material world*. London, UK: Routledge.
- Silverman, D. (2014). *Interpreting qualitative data* (5th ed.). London, UK: Sage.
- Stanton, D., Bayon, V., Neale, H., Ahmed, G., Benford, S., Cobb, S., ...Pridmore, T. (2001). Classroom collaboration in the design of tangible interfaces for storytelling. *CHI Letters*, 3(1), 482–489.
- Stein, P. (2006). The olifantsvlei fresh stories project: Multimodality, creativity, and fixing in the semiotic chain. In C. Jewitt & G. Kress (Eds.), *Multimodal literacy* (pp. 123–138). New York, NY: Peter Lang.
- Stoecker, R. (2005). *Research methods for community change: A project-based approach*. Thousand Oaks, CA: SAGE.
- Stoller, P. (1989). *The taste of ethnographic things: The sense in ethnography*. Philadelphia, PA: University of Pennsylvania Press.
- Tuhiwai Smith, L. (2006). Choosing the margins: The role of research in Indigenous struggles for social justice. In N. K. Denzin & M. D. Giardina (Eds.), *Qualitative inquiry and the conservative challenge* (pp. 151–174). Walnut Creek, CA: Left Coast Press.
- Van de Kleut, G. (2011). The whiteness of literacy practice in ontario. *Race Ethnicity and Education*, 14(5), 699–726.
- Walsh, M., & Simpson, A. (2014). Exploring literacies through touch pad technologies: The dynamic materiality of modal interactions. *Australian Journal of Language and Literacy*, 37(2), 98–106.