



MONASH University

A QUIPU OF THE CHILEAN CHAIR IN POST-PINOCHET CHILE:
PROPOSITIONS TOWARDS SOUTH-SOUTH PEDAGOGICAL POSSIBILITIES.

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Bachelor of Physiotherapy (Hons)

A thesis submitted for the degree of

Doctor of Philosophy

at Monash University in 2019

Faculty of Education

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Acknowledgements

I would like to begin by acknowledging that I wrote this thesis in the lands of the Kulin Nations next to the Merri Creek. As an uninvited guest to this land I pay my respects to their Elders past, present and emerging, to whom I am grateful for their lands and waters, which nurture me and my family every day. We respect and look after Country in reciprocity.

I would also like to acknowledge my ancestors, abuela Amanda, tata Gabelo, tatita Ortiz, and particularly my great-grandmother abuela Rosa, whose presence I have felt through all this process of connecting to a source of knowledge that invisibly but profoundly wove us together. For her presence in my life I am thankful. Through my abuela Rosa I also acknowledge her daughter my grandmother Meme, a loving and strong woman with whom I learned about contradiction, cooking stories and female empowerment. Later in this lineage of strong women comes Daisy, my mother. Thanks Daisy for your biophilic heart and pragmatic living, to remind me of the importance of ideas that matter and materialise, to believe in social justice and in sharing with me the stories that I now share with my children.

I also acknowledge my family in Chile, all of them, as they supported me and sent me their good energies throughout this process: my sister Valentina, always co-inspirer in intellectual and poetic adventures; my brothers Gabriel, Marcelo and Javier, who came to visit in Australia at different stages of this process, for laughing, eating and not taking things too seriously and for being caring uncles to my children. And to my father Ramón who, without knowing, through the practice of love, taught me about utopian politics.

I also acknowledge my grandfather Victor because having you in my family makes it impossible to inhabit a place of certainty and judgement. Your life has taught me that there is no

good side or bad side but situated becomings. This work is my contribution towards the healing and restoration of still bleeding wounds in the recent history of Chile.

A crucial part of this process has been the warm and always challenging role of both my supervisors Iris Duhn and Sue Grieshaber. With them I learned of feminist rigour and joyful academic thinking. I am grateful that you always pushed me to think in different ways and I am sure that this quipu-thesis is also a manifestation of our collective thinking and time together. Iris, thanks so much for encouraging me to work always with theories, ideas and practices that are close to my heart; I am so grateful that our paths crossed, and working with you has been a joyful honour. Sue, you encouraged me to practise decoloniality and commit to experiment with Latin American thinkers. Your own feminist scholarship reminds me never to forget that the driving force of this process is attention to social and environmental justice and better futures for all.

I would like to thank the generous Chilean human beings who collaborated with my thinking. My deeply felt thanks to poet Cecilia Vicuña for your generosity, time and encouragement; to educator Carlos Calvo for your refreshing perspectives and for reminding me that education is always political; to Teresa Gonzalez for being a living memory and generous contributor to my thinking; to Silvia Lopez de Maturana for being always supportive; to poet Luis Weinstein for a life of learning together; to Tamara Dupré for being upa chalupa! and Yanira Plaza for your intellectual companionship and generous support through this journey.

A mi querida Camila Marambio, compañera de ruta and compassionate companion. For our endless conversations, creative collaborations and for being always there for me. You inspire me and I am so grateful that our lives crossed paths in Melbourne. For many more swims, flute playing sessions, divinations, thinking and fun together.

To my dear friend Hani Yulindrasari because with you I learned of parallels in the Third World. Through the friendship of our children we became friends and PhD companions. We found out that there were so many things in common between Indonesia and Chile, and we shared an embodied understanding of life growing up in dictatorship, totalitarianism and different currents of neoliberal model implementation. But mostly we shared food, laughs and possibilities of thinking differently together.

To all my compañeras of Feministas Latinoamericanas Abya Yala: Renata, Josefina, Liliana, Melissa, Marcela, Astrid, Tabita, Carolina, Camila and Pamela: for your support, our shared meals, the stories we told each other and our intimate encounters through reading, experimenting and thinking/making together. For our practices of reparation, reconstitution and healing, I am thankful compañeras.

A special mention to my comadrita Carolina for your encouragement and always being available for giving me suggestions, critique and support. For those many afternoons of teas, arepas and talks, gracias.

Thanks to Kimba Thompson the amazing force behind Blak Dot Gallery for providing an amazing home for our Latin American feminist collective and also for making Blak Dot a place where First Peoples from all around the world connect, share and learn from each other. Blak Dot means a lot to me and my family because we have found there a place where we feel home and we learn from local Indigenous people and beyond. I am also thankful because part of this thesis was written in Blakademy, a community-run library that Kimba recently founded as an extension of Blak Dot Gallery.

To my Monash PhD friends and companions Blanche, Felicity, Kerry, Hanif, Jess and Louise, thanks so much for being always there when I needed to discuss, share ideas and worries. Your presence throughout this journey has made me feel supported and nurtured. Those memories of our PhD meetings with Iris at that little bar next to the beach will always stay with me as a testimony that academia should be exciting, grounded and fun.

To all parents and children at Moreland Primary School, because with you I learned not to alienate my life from ideas, and your trust in my propositions has allowed this PhD to become alive in this particular community at this particular moment in time.

Most of the time of writing this PhD I have co-mothered my children with Bryan and a bunch of women and men and children who have become our family here in Melbourne. Spending time laughing, eating cake and playing with humans young and old has made this process delightful; my special thanks to my dear Sally, Liz, Joanne, Bronwyn and Sooji.

I acknowledge the financial support I received from an Australian Postgraduate Award scholarship. Without this ongoing support life would have been totally different and I am grateful for the possibilities that this scholarship brought to our lives, allowing me to support my family while studying.

I would like to acknowledge Kai Jensen for his careful and thoughtful editing of my thesis. Kai copy-edited the draft thesis, in particular to help me express myself correctly in English, as English is an additional language for me. Kai's doctorate (completed in 1993) was in English literary studies, so only peripherally related to the content of this thesis, and he limited his assistance to matters of style. I would also like to thank Tessa Laird, who put me in touch with Kai – your intuitive suggestions always inspire me.

My heartfelt thanks to my compañero de la vida Bryan Phillips and our children Samik and Nawely. You are my three favourite human beings in the world and I am so grateful that we get to share our life together. This work is in so many ways moved by our everyday life, political concerns and hopes for more liveable futures. I am learning as we go along these lines of life, making, thinking, loving and caring for each other and for the worlds we world. I love you very much.

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Abstract

The Andean quipu is a living archive that after colonisation continued to live in the crevices and margins of Latin American (feminist) thought. This thesis is an interdisciplinary exploration of the quipu as a situated knowledge practice. Experimentally I expand the use of the quipu as a research methodology that allows me to enact performative research in education. My practice with the quipu (knot in Quechua) is not pure and does not try to decode it or use it in a traditional way. Inspired by the work of Latin American thinkers, feminist and decolonial scholars and postqualitative researchers, I aim to risk my pre-given ideas and embark on an experimental practice of knowing that challenges the socio-politics of knowledge production.

Translating the structure of the quipu into a textual form I present a written quipu that is composed with a mother thread, *cayte* or main knot and a series of interrelated pendent knotted cords where the stories of this thesis live. The knot is a vital concept of my research and expresses the intensity and proliferative force of thought (Kirkwood, 1984). The mother thread of this research is inspired by a curiosity to understand practices of knowing from an embodied perspective. Using Chilean philosopher and biologist Francisco Varela's concept of enactive cognition alongside Chicana poet and philosopher Gloria Anzaldúa's concept of *conocimiento*, I propose enactive *conocimiento* as a form of post-representational and post-Cartesian way of understanding knowledge production as a situated, spiritual, embodied, embedded and emotional practice.

The main knot of this quipu emerged in the form of the Chilean chair in education. The chair does not work as an end, but as a force that is embedded in the material-discursive apparatus of colonial modernity and intensified in post-Pinochet Chile. Rather than offering an exhaustive account of why the chair is so prominent in Chilean education, I let the chair interfere with other non-human forces in the creation of multiple storied knots that are presented in the threads of this quipu. These knots speak of the forces of

decoloniality through the living threads of the body, geological formations such as land and rivers as living forces, the creative potential of sediments such as clay and the relevance of Latin American radical pedagogies in the context of our critical times.

These stories are actualised by my present time as a mother of two children in Australia and the urgency of attending to what it means to be human in the geological era of the Anthropocene. In times that require us to mobilise thought, creative propositions and hope I propose this quipu as a collection of situated memory and a call for restoring our relation to the lands and waters we are part of. To conclude I share my experiences with the PhD becoming alive, and how this quipu (without my knowing) entangled itself in the territory close to the Merri Creek in the lands and waters of the Kulin Nations in Australia. Far from what I anticipated, this thesis enacted *conocimiento* that animates a pedagogical proposition that is now being implemented in a local public school in Coburg, Victoria, Australia.

Chapter 1: Introduction

This thesis proposes the quipu as a relational and performative archive bringing forth a methodology that disrupts dominant systems of knowledge production in education. Embedded within the rich textile tradition that weaves a complex matrix of thought in the Americas, the quipu, a technology of knots and threads (Figure 1), aims to enact ways of connecting to practices of knowing that precede and exceed Eurocentric representationalism (Bryan-Wilson, 2017; Gargallo, 2014). I offer insight into an embodied and performative process of thinking where the quipu allows me to materialise stories, memories and *conocimiento* that have emerged from my curiosity to understand the symbolic and material power of chairs in Chilean education. To engage with the epistemological and ontological potential of the quipu as methodology, I investigate and expand on the work offered by Latin American philosophers, feminists, artists and educators, postqualitative methodologies and feminist relational materialisms. The stories knotted in this quipu are proliferative, generating patterns of interconnectivity between efforts in the Americas and Australia that aim to decolonise and create spaces for imagining sustainable curriculum and pedagogies for more liveable futures for all.



FIGURE 1: ANDEAN ANCIENT QUIPU. PHOTO RETRIEVED FROM THE WEB UNDER CREATIVE COMMONS LICENCE.

QUIPU AS PERFORMATIVE ARCHIVE

The notion of a performative archive is at the core of this quipu as a methodological practice. Etymologically archive comes from the root of place and record and also is strongly related to government and power (Singh, 2018). Historically, the quipu has worked in the Andes as an archive of accountability, history and poetry for thousands of years (C. Allen, 2017; Salomon, 2004), but has usually been studied as a passive archive that can be decoded, deciphered or read (Stone, 2017). By adding the performative force to the quipu as archive I offer a different version of the quipu that is lively, agentic and participatory (Vicuña, 2010a). This twist to the archive is a move beyond a representationalist understanding of the archive as a physical record that is separated from the researcher.

Challenging the Western dualist distinctions between human and non-human that render humans as agents and the non-human as passive, I propose a conceptual shift for the quipu to be understood as a post-representational performative archive. Using feminist philosopher Karen Barad's (2003) extension of Judith Butler's notion of performativity into the quantum field theory realm I understand performativity as a reconceptualisation of the force and agency of matter. In Barad's (2003) elaboration, within a performative

understanding, matter (here, the archive, quipu) is an “active participant in the world’s becoming” (p. 803). The shift from representationalism to a performative post-representational understanding of matter has important consequences in how we recognise practices of knowing because ‘data’ (like all matter) participates in the making of the research (Maturana & Varela, 1987; Varela, Rosch, & Thompson, 1991).

According to Barad (2007) matter is not fixed and solid but “matter-in-the-process-of-becoming is iteratively enfolded into its ongoing differential materialisation” (p. 179). In that sense, the quipu is a performative archive because it is always in the making with multiple other non-human forces and species. The quipu is affected and affects in its ongoing materialisation of intensities and flows, therefore it is a sensitive archive of ephemeral existence. I offer this quipu as a modest attempt to experiment with what might be possible in the field of methodologies in researching education. This process it is far from being pure, painless or providing truths. Rather it is a messy process with many loose ends, and a source of joy and pain, at the same time (Braidotti, 2010a).

The quipu as archive participates in this research in ways that are important to detail. Firstly, the fibrous materiality of the quipu matters to the research. Crafting my own textile quipu has been my way to respond to this thinking process (Figure 2). I have spun threads of thought literally and metaphorically and I have spent a long time contemplating, touching and being touched by different fibres. I experimented with alpaca wool from the Andes, Australian sheep wool, and other fibres such as cotton and silk. All of these fibres are entangled with a series of toxifying and violent forms of economies, colonisations, animal labour, water consumption, among others. They carry that memory as well as the memory of the present quipu. Secondly, there is the actualised memory of the fibres in the knots of the quipu,

intensities that have emerged along the path of *conocimiento* (Anzaldúa, 2015). Chicana¹ philosopher and poet Gloria Anzaldúa (2015) proposed *conocimiento* as a form of understanding practices of knowing that resist rationality and expand into intuitive and spiritual ways enacting reality. In Spanish *conocimiento* literally translates as knowledge, nonetheless Anzaldúa's *conocimiento* offers a feminist and decolonial twist to this notion. *Conocimiento* is a key concept in my thesis and I will explain in great detail how *conocimiento* is embedded in the fibres and the colours of the quipu.



FIGURE 2: TEXTILE QUIPU THESIS MADE BY AUTHOR. PHOTO BY AUTHOR

¹ The term Chicana was coined by Mexican American women who wanted to establish social, cultural, and political identities for themselves in America. Chicana refers to a woman who embraces her Mexican culture and heritage, but simultaneously, recognizes the fact that she is an American (See more: <http://chicanas.com/intro.htm>).

SITUATING THE QUIPU WITHIN A WOVEN MATRIX

The quipu is embedded in the woven matrix of knowledge of the Americas where textiles exist as a tangible manifestation of Southern onto-epistemologies (C. J. Allen, 2005). Far from mere decorations, in the Americas textiles are language, archives of stories, biographical accounts and cosmological performances, among others expressions of thought where women have had an important role through history (Albers, 1965; Bryan-Wilson, 2017; de Sousa Santos, 2014; Haraway, 2016; McLerran & Kennedy Museum of, 2006; Pérez-Bustos, 2016). I recognise how academia has paid attention to the onto-epistemological value of textiles in the past years, but my encounter with textiles, threads and knots did not begin in academia. I resonated with them because they were in my life since my childhood in the stories of my aunties and grandmothers, and they play an important role in my process of becoming aware of the hidden stories of Pinochet's dictatorship during childhood.

I come from a long tradition of women who have sewn, woven and knitted. And I am not alone, women around the world may share similar knotty stories. Perhaps our ancestors used different fibres, some linen, some cotton, some sheep wool, some nettle, some acrylic, some camelid wool, some reeds, but it is quite likely that most of us carry in our bodies the memories of these fibrous practices. My female ancestors share many stories about textile making. For instance, my aunty Tere in the 1950s was particularly creative and made clothes for her sisters that perfectly replicate those boutique outfits they could not afford. My aunty Maria in the early 1970s was a textile Unionist during Salvador Allende's government in Textile *Viña*. My mum in the 1980s experienced her master sewing ability as a heavy domestic chain which she broke as soon as she could afford to buy mass-produced items. I vividly remember when she put her sewing machine away. Yet she continued weaving tapestries, and sporadically knitted for her loved ones. Resisting patriarchal exploitation, my mother refused

textile work as a chore but continued with textile practices for pleasure. My practice of quipu making is related to this too as I experiment with the textile quipu as a creative expression of thought rather than a domestic labour. Rather than perfecting knots and spinning movements what matter to me are the stories, theories and events knotted in the quipu. Early in my life I learned about stories stitched into textiles.

As a young girl I spent a long time learning stories of repression during Pinochet's dictatorship, observing *arpilleras* in my uncle's house. The *arpilleras* are colourful and animated tapestries made by women as an act of resistance during the most brutal years of Pinochet's dictatorship (Caldwell, 2012). They work as storytelling devices that usually tell stories of hunger, repression and solidarity (Bryan-Wilson, 2017). Women used to sell them to increase their family income when men were unemployed, disappeared as detainees, or were imprisoned. Art curator Dayna Caldwell (2012) explains that what the *arpillera* movement did in Chile was empower women to become politically active and she argues that this movement enacted a "collective memory framework to catalyze women's, especially the *arpilleristas*', political mobility that was not only reactive but creative" (p. 7). The creative potential of storytelling through textile making during the dark years of the dictatorship connects to how I experience the quipu as a storytelling device. Somehow, these early experiences created the conditions for me to understand experientially the notion of performativity (Barad, 2003).

Through lived experience, I learned that textiles were performative, that stories were living in the *arpilleras* waiting for an observer to animate them. My uncle is a Catholic priest, influenced by the theology of liberation, and lived for many years in shanty towns in Santiago de Chile, where repression and the economic crisis affected the population the most (Caldwell, 2012; Froese, 1983). It was in his house, through spending a long time touching and observing *arpilleras*, that I learned the traumas of my country, otherwise hidden from me, invisible in the

official press and silenced within my predominantly right-wing, conservative family. I gained access to a parallel archive without words and I was transformed by it.

A different form of language became available to me, a language that engaged my body through other senses such as touch. These stories were told in silence. As a young girl, I touched the arpilleras and the arpilleras touched me. I animated their stories, and their stories animated me, awakening an awareness of justice, a suspicion about the, until then, indisputable truth of the written word. In the documentary 'Periodico de Tela' (cloth newspaper), arpillera Silvia Pinto explains that for her the arpilleras were a textile 'newspaper' that spread across Chile and overseas subverting the logic of censorship that ruled Chile at the time (Gambardella & Valdivia, 2007). The apparent innocence of these colourful textiles and the historical dismissal of women in political action were crucial for this movement to thrive in the margins of Chilean history (Gambardella & Valdivia, 2007). I find similarities between the arpilleras, another form of textile archive, and the quipu that was equally dismissed after colonisation, as I explain in chapter 2.

To me, these encounters with the arpilleras were crucial to my political awareness and through the process of this study I also recognise that they created the conditions for understanding the practice of quipu as a performative way of animating stories through touch, breath, and song. But perhaps more importantly, to bring forth the inseparability between knowing living body and knowing textile body. My research questions always go back to my desire to understand knowledge production as an embodied, sensual and lively practice, a curiosity that has its roots in my relationship with my mother and her biophilic heart, always inviting me to dream mitochondrial tales of oxygen and sugar.

Learning with my mother, I became aware that our bodies are collections of many different kinds of threads, aerobic threads, anaerobic threads, electric threads, porous threads, thick and thin. During adolescence, I was captivated by the living threads and tissues of our body, especially threads as nerves, tissues as fascia. Afterwards, our main mammalian thread, the umbilical cord between my body and my son's body, became a life/death matter. My first son was born after an emergency caesarean because he was all tangled up with the umbilical cord. After that experience, I read a book about Mapuche women's wisdom, where I learned that some Mapuche women do not weave or knit when pregnant because they believe that making knots in thread is mimicked by the body and the umbilical cord. I was much intrigued by their complex understanding of the agency of matter (Mora, 2007): a question that resonated again when I found the reconceptualisation of agency in feminist relational materialisms (Barad, 2007).

These stories of textiles, storytelling, women and cords are somehow related to writer Ursula Le Guin's (1989) "The Carrier Bag Theory of Fiction", a story inspired by the propositions of anthropologist Elizabeth Fisher (1979). Fisher (1979) contested the idea that the first and most important human-made artefact was a sharp piece to spear animals. She argues that the most crucial human-made artefact is a container made from fibres, from spinning and twisting, looping and tensing. Containers are artefacts to carry things with: to carry babies, to carry seeds, to carry fruits. In her story, Le Guin (1989) takes the kernel of Fisher's idea and turns it into a feminist speculative tale that poetically weaves the fibres, threads and knots that made caring practices possible. Displacing the heroic masculine stories that emerged from the bloody encounters of spears, Le Guin calls for a rewriting of the history of humanity.

Feminist scholar Astrida Neimanis (2017) internalises the threads from Fisher (1979) and Le Guin (1989), theorising our mammalian bodies as carry bags, as bodies of water. Weaving feminist scholar Stacy Alaimo's (2008) concept of transcorporeality with feminist phenomenology and climate change sciences, Neimanis's call is to pay attention to the ethical dimensions of everyday practices of carrying waters in our bodies in relationship to other bodies of water. I resonate with Neimanis's attention to the porosity of our human tissues blurring boundaries, traversing membranes, watering our everyday life with urgent pedagogical matters of concern and wonder at the physicality of our bodies as carry bags (Alaimo, 2017). Yet my focus with the quipu is in the fibres themselves, their memory.

Vicuña (2016) proposes that each body is a quipu, a fibrous archive of phylogenetic (multispecies) and ontogenetic (biographical) memory expressed in the form of knots. In that sense my fibrous understanding of practices of knowing emerges from bodily childhood memories of visceral knots. These knots were materialisations of how political events leave marks when tension traverses the smooth muscles of the body such as throat, mouth of my stomach and guts. From this visceral understanding of knots, and the body as a quipu, I connect to the quipu as methodology. What is important about this quipu is how it is through quipu making that I enact *conocimiento* (an alternative path for the production of knowledge). In the following section I explain the notion of enacting *conocimiento* drawing on the work of Chilean philosopher-biologist Francisco Varela (1999a, 2000) and Anzaldúa (2015).

THE QUIPU AS A PROCESS OF ENACTING CONOCIMIENTO

The quipu is a process in the sense that it consists of a series of gestures such as knotting, unknotting, assembling and storying that exist in a continuum. Quipu making is slow, and it changes along the way. That is why this thesis offers *a* quipu of material

encounters and not *the* quipu: this distinction is a way to acknowledge the transitory existence of a quipu. This quipu is not fixed, unitary nor universal. More than a final product, this quipu offers knotted propositions that materialise a situated path to enact *conocimiento* of the symbolic and material power of chairs in Chilean education, and beyond. In that sense, the quipu has multiple existences as an ephemeral, transitory, situated archive.

Re-turning to Vicuña's (2010a) conceptualisation of the body as quipu I begin untangling the early ruminations and stories that brought me to education, to the quipu, and to chairs. I re-turn in a Baradian (2014) sense troubling temporalities and chronologic events to illuminate how the concept of enactive *conocimiento* emerged in this thesis. As an interdisciplinary (un)disciplined thinker a decade ago in my last year of *kinesiología*² (study of movement, similar to physiotherapy in Australia) I moved fields into education. At that time my research question was: How do we learn to move ourselves within this gravitational world we inhabit? This was a question that emerged when I was simultaneously teaching early motor development at a *kinesiología* school in the Central North Coast of Chile and witnessing how my first baby learned to move himself. All I learned at university, from European schools of movement, seems inadequate to explain my observations of this young human rolling, creeping, crawling, kneeling, and his exuberant variety of ways of sitting. Floor sustaining, body pushing, being pulled by gravity, wobbling, letting himself be held, falling, resting and repeating. A lively choreography of postures that changed in less than 10 seconds, all at

² Kinesiología translates etymologically as study (logos) of movement (kinei). In Australia this degree is known as physiotherapy. I use the Chilean version because it provides a broader field of knowledge without the immediate clinical implications of physical therapies.

different speeds, over and over again. There was an excess of movement possibilities that seem to overflow the field of movement studies as I had experienced it so far.

Studying *kinesiología* in Chile, I conceived of the body through a reductive, biomechanical model; an individual, anatomical body, separated from the mind. Furthermore, little did I know that what I learned in my movement studies was heavily influenced by the lines of transport of developmental practices that reinforce colonial, capitalist, patriarchal discourses in education, a field extensively criticised by feminist early childhood scholars (Blaise, Hamm, & Iorio, 2017; Burman, 1994; Cannella, 1997; Dahlberg & Moss, 2005; Duhn, 2006; Grieshaber, 2010; Lenz Taguchi, 2010; Ryan & Grieshaber, 2005a, 2005b; A. Taylor, 2013). I was curious about how to (un)learn these teleological lines of transport, and what new lines would emerge that would enable me to connect movement to education differently (Ingold, 2018). Were these new lines *new* or perhaps an old linear territory that wanted to be seen, heard and sensed? How was this related to practices of knowing?

In Chile, when I was practising *kinesiología*, I was introduced to Chilean educator Carlos Calvo (2005), whose tradition of philosophical education comes from the radical pedagogical movement in Latin America inspired by Brazilian educator Paulo Freire (1972, 2005, 2018) and Argentinian philosopher Enrique Dussel from the Theology of Liberation. From Calvo (2010) I learned that inquiries about bodies, pedagogies and movement were political and more importantly, that education was a political, ethical and aesthetic practice (Snaza, 2013). With him I began to understand the complexity of education and that there was a strong tradition in Latin America of pedagogical practice for emancipation and social justice that I was not familiar with (Cabaluz-Ducasse, 2016; Osorio, 2018; Osorio & Weinstein, 2013; Rivera Cusicanqui, Domingues, Escobar & Leff, 2016; Rubio, 2018). At that stage, I did not notice that some of these scholars' main critiques and pedagogical propositions were about overcoming

the Eurocentric and colonial model of ways of knowing and living imposed on Latin America for more than 500 years (Anzaldúa, 1999; Gargallo, 2014; Rivera Cusicanqui, 2016).

In 2011 when I moved to Australia with my young family I was vibrating with these resonances. And it was only years after my encounter with Calvo and other Latin American scholars that my onto-epistemological curiosity emerged here in Australia (Rubio, 2018). Following this curiosity, I decided to start a PhD so that I could begin to think our human body differently and in relation to non-human bodies such as the cultural body, social body and geological bodies, as well. Some of the things I was interested in exploring were how are we moved, how we are constrained to move, and how we sew back together the separation of the mind and body. How do we think through the fibres of the body in movement? How do we think through fascia, think through muscles, think through bones, think through tissues, think through mitochondria? How do we conceptualise thought as an interstitial, intra-corporeal fluid, as a material flux that runs through bodies? These questions amplified a core curiosity about how we think, and how methodologies are embedded in particular apparatuses of knowledge production.

This inquiry led me to the work of Varela (1999a, 2000) and his collaborations to reconceptualise the living body and related practices of knowing (Varela, Rosch & Thompson, 1991). Through his work in neurobiology within cognitive sciences, Varela et al. (1991) offer the concept of enactive cognition as an alternative to representationalism, the dominant form of understanding knowledge production until today (MacLure, 2013). Varela et al. (1991) used the word enactive as a neologism and introduced it to the Spanish as “*enacción*.” Within this context, enactive cognition suggested that worlds, organisms, knowledge and everything in between are not pre-given but *emerge* in their interdependent relation. Varela (1999a) used *hacer emerger*, or *traer al frente* translated into English as *bring forth* to express how the concept

of enactive cognition works. In that sense, the quipu as methodology materialised through threads and knots *brings forth* situated patterns of interdependency, where theory, place, bodies are knotted together to animate an affective relationality.

In this thesis I elaborate on enactive cognition with Varela's (1991, 1999a, 2001). Varela explains that practices of knowing are embodied, embedded, enacted, emotional and extended. These propositions challenged brain-centred, individual, representational, rational and anthropocentric paradigms that underpin and continue to dominate the field of research methodologies (Lather & St Pierre, 2013). To Varela (1999a) knowledge is enacted, transitory and contingent, bringing forth an immanent relational ontology that connects with his phenomenological and Buddhist philosophical leanings. Even though I was intrigued with his propositions I felt dissatisfied with his somehow obscure writing and lack of reference to ancient relational ontologies and epistemologies of Latin America and to extensive feminist and postcolonial scholarship that also provide alternatives to representationalism (Braidotti, 2011). Instead of moving away from Varela (1999a, 2000) I added a feminist twist to his conceptual work by reading his propositions alongside Anzaldúa (1999, 2015).

Reading Varela et al. (1991) through Anzaldúa (1999, 2015) allowed me to make visible the bridge between contemporary manifestations of relational onto-epistemologies and post-representationalist forms of knowledge production such as enactive cognition and ancient and contemporary performative forms of knowledge attended by Anzaldúa's (1999) conceptualisations of borderlands. In her latest work, Anzaldúa (2015) proposed the path of *conocimiento* that offered a reconceptualisation of knowledge as processual, intuitive, embodied and spiritual. To Anzaldúa (2015) *conocimiento* is a fully embodied relational force of thought is imaginative and perceptual, political and incorporates social justice concerns. According to Anzaldúan scholar AnaLouise Keating (2006), "[c]onocimiento enables those who enact it to

make insightful connections among apparently disparate events, persons, experiences, and realities. These connections, in turn, lead to action” (p. 10). To me this lively and more-than-human notion of *conocimiento* finds commonalities between my understanding of Varela’s (1999a) propositions of practices of knowing, and textile possibilities of the Andean quipu-thinking. So from now on in this investigation, to refer to ways of knowing as cognitive processes, I will experiment with *conocimiento* as embodied thinking.

What Anzaldúa (2015) brings to Varela (2001) goes further to make explicit the decolonial force of their conceptual work. To Anzaldúa (2015) spirit and life are expansive and embedded in the material world; traversing Cartesian binaries, she acknowledged that rocks, rivers, moon, mountains, plants and all insects and animals have spirit. The liveliness of Anzaldúa’s (2015) universe is rich and her path to *conocimiento* invites us to inhabit universes that were (and continue to be) suppressed by colonialism (De Sousa Santos, 2007, 2014). According to Anzaldúa (2015) what is needed are bold gestures in our research practices. By bringing the spirit to the dualist concept of body/mind, Anzaldúa (2015) offered a decolonising and ethical understanding of practices of knowing to critically and creatively engage with the complex human, non-human and more than human issues of the twenty first century (Garbutt, Biermann, & Offord, 2012; Koegeler-Abdi, 2013; Schaeffer, 2018).

According to anthropologist Tim Ingold (2011), colonisation is not the imposition of linearity upon a non-linear world, but of one kind of line on another. In Latin America (and also in Australia), this ongoing imposition expressed in coloniality, reinforced through education, is a violent process that perpetuates the marginalisation of ancient ways of knowing and living (Saavedra & Pérez, 2017; Sepulveda et al., 2015; Tuhiwai Smith, Tuck & Yang, 2019; Snaza, 2016; Tuck, McKenzie & McCoy, 2014). The philosophical work of Anzaldúa (2015) and methodological implications of her conceptualisations offered me opportunities to unlearn

some of the effects of those imposed lines in my thinking and slowly connect with forms of knowing that resonated with fibrous practices and methodologies which I intuitively valued as *conocimiento* as a young brown girl (Cruz, 2001), such as the stories embedded in the *arpilleras*.

It is not a coincidence that text and textile share their root in the Latin *texere*, which translates as to weave or to create with elaborate care. According to Bryan-Wilson (2017) the quipu materialises this connection as an embodiment of a fibre language. Also, text and textile are both practices that require time to craft, and both are done by hand. Hands in contact with fibres, hands in contact with a laptop keyboard. Fingers making, digital technologies. Bryan-Wilson (2017) suggests that the quipu is “a manifestation of the way fibre-based creations hold and organise information, as well as tactile, spatial ways to transmit memory” (p.111). Quipu scholar Gary Urton (2014) makes a distinction between quipus and textiles: in his argument he suggests that even when they share materials, techniques (spinning, plying, twisting, knotting) and the thread as a primary unit, their purposes differ. For Urton (2014) the quipu is a governance and record keeping device of the Inca empire (census, tributes, among others).

But how does the quipu enact *conocimiento*?

What the quipu does, as methodology, is to connect previously disconnected (and often disparate) stories and theories past and present to generate *conocimiento*. Once put together the quipu becomes an offer, an archive of knotted memory. In many ways, this methodology is a living testimony of a situated process of making memory with an intention to heal and decolonise the self, and by extension, the ways we think and research in education (Delgado Bernal, 2018). Within the knots of dis/connection, phenomena such as amplification and interference occur in the generation of *conocimiento* that lead to action, or as Anzaldúa (2015)

describe it *inner work, public acts*. What results is practices of caring for self, caring for land and waters and local more-than-human ecosystems (Cruz, 2001; Saavedra & Pérez, 2017).

Before the quipu, but after the quipu.

After conocimiento, but before conocimiento.

In the middle, it was the chair.

Zig-zagging, re-turning I move, I let the threads move me.

And I am in the middle, again.

In the knot.

With the chair.

My process of enacting conocimiento began from alienation, hyper-separation and desire for memory, but also intuition and a strong connection to place. All of this somehow materialised in the encounter with the chair. My background in movement enabled me to notice how the material and symbolic force of the chair enacts stillness, inertia and stasis, all experiences of which not only do I have vivid memories in my body but also I recognise as imaginary restrictions on the body of my country, Chile. When I encountered the chair during the first years of this research I felt that the power of the chair in Chile was amplified by the transition to a neoliberal democracy after the tortuous period of the Pinochet dictatorship and massive economic reforms. I could sense that something about the numbness required to continue with business as usual was expressed in the materiality of the chair.

THE POWER OF THE CHILEAN CHAIR

Therefore, the process of thinking with the Chilean chair began early in my research. Furthermore, it was the Chilean chair itself that brought me to the quipu as an archive to think its complex ramifications and elusive existence. I still remember that I was reading Karen Barad's (2007) 'Meeting the Universe Halfway' sitting in a desk chair at Monash Parkville Campus. I had already enrolled in a PhD in education wanting to explore how colonial legacies of Chilean education materialised through bodies. As I went through the pages, I began to pay attention to my material surroundings, the position of my body, the quality of the artificial light, the weight of the book in my hands, the stiffness of my hips on the cold plastic surface of the office chair, the atmosphere of this Australian university, the different human bodies that surrounded me, and through the window, the gumtrees dancing with a breeze I could not feel.

By noticing my present presence, I entered into a material conversation with Barad's (2007) propositions, becoming more and more entangled with her provocative ideas and temporal juxtapositions. Elusive scientific stories about waves and particles, delightful examples of micro-technologies that incorporate the principles of quantum physics. Questions of justice and past-present political events. But the notion of the agency of matter resonated at a cellular level, a form of knowledge I intuitively attuned to. And I remember a conversation with early childhood educator Ximena Gómez held years ago in Chile when I was practising as *kinesióloga*. I was talking about movement and the capacities of the body, and Ximena offered me a mystery. In her early childhood organisation, that was a dependant of the Chilean government, innovative educators were given a miniature chair as an award for their contribution to the field.

My research began navigating the Chilean version of Google. And multitudes of chairs started to proliferate within the virtual space. Photos of educators holding miniature chairs, small chairs painted by children in an exhibition, Chilean celebrities holding chairs in their hands to promote early childhood education. Those chairs took me to more Chilean chairs, the three chairs of the memorial made in 2011 to three members of the Communist party murdered during the last years of Pinochet's dictatorship who were teachers or were related to education. And then the chairs of *Fundación Oportunidad*, a non-for-profit Chilean organisation aimed to contribute to the development of Chilean education. Fundación oportunidad did a public intervention in 2015 called *A monument to our children's future* where nearly thirty small chairs were placed in Santiago's downtown, some of the chairs were painted in colourful tones and decorated with words: life, friendship, identity, play and think but the great majority were painted in black to denounce young children not attending early childhood education (Oportunidad, 2015). With the chairs came the questions. Why is the chair a symbol of education in Chile today? How does the chair come to matter? What are the marks left by the chairs on our bodies?

I decided to find answers and follow the miniature chair to Chile. In October of 2015, I embarked on a research trip aiming to interview scholars in education, philosophy and feminist studies and early childhood educators about this chair phenomenon. I organised interviews with well-respected scholars in Santiago de Chile, people I already knew in the field such as Carlos Calvo and Silvia Lopez de Maturana in La Serena and organised visits to some early childhood centres. I wrote consent forms, explanatory statements of my thesis, received approval from the ethics department at Monash University. Enacting the theoretical underpinnings of my research design and following my supervisor's advice I called this trip *Material encounters*.

I could not anticipate that the process of naming my research trip material encounters would make me become attuned to how the Chilean chair was materialised and materialised relations to place, land, water, history, humans and many more non-human bodies in unpredictable ways. Rather than finding straightforward answers to my questions about chairs I experienced the twists and turns of interferences and dissonances creating elusive knotty patterns. My research trip did not produce any grand narrative that enabled me to explain the chair problem in any certain, coherent and exhaustive manner. Quite differently, I came back to Melbourne unsure and with my body knotted with the sadness of experiencing a country that still has open wounds from the traumas of dictatorship and brutal inequalities in everyday life (Guzmán, 2019).

It took me months and even years to notice that the chair was not there for me to resolve anything. Rather than a problem to be solved the chair acts in my thesis as a catalyst for patterns of interference that usually proliferate in unexpected connections I materialise in this quipu, such as the ones described by Anzaldúa (2015) with her concept of *conocimiento*. An evident example of this performativity of the chair was the encounter with the quipu. It happened in Chile after a long conversation with an ethnomusicologist from the Pre-Columbian museum of art in Santiago de Chile, where we looped and looped and looped ideas through the chair. He told me stories of the extinction of languages in the Americas and as he spoke I wondered at the extinction of the capacities of the body to inhabit place and space differently due to the sameness of posture imposed on bodies through sitting on chairs. At the end of the conversation he mentioned a poem I *needed* to read.

The poem was written by Vicuña (2014) in the late 60s and pictured the chair sitting habit as a torture. It describes the limitations of the body of civilisation and in the tone of her erotic poetry at the time speaks of the sensuality of the flesh. I liked the poem and the explicit

relation she made between the chair, civilisation and education, but what was more important to me was that through Vicuña's poem the quipu spoke. The poem was presented as a knot within an oeuvre called "Kipu Son" that I understood as the sound of the quipu. At that stage I was reading the conceptual work of Chilean sociologist Julieta Kirkwood (1984, 1986) and her knots of feminist wisdom, and this encounter with the quipu was my opening to get in touch with Andean onto-epistemology.

CONNECTING THREADS OF THOUGHT

My encounter with the quipu and interest in research methodologies were supplemented by the post-representationalist, posthuman, experimental and poetic turn in qualitative studies also known as the growing field of postqualitative research (Duhn, 2017; Haraway, 1988, 2004; Koro-Ljungberg, Löytönen, & Tesar, 2017; Koro-Ljungberg & MacLure, 2013; MacLure, 2013; Nordstrom, 2017; C. Taylor et al., 2018; Weaver & Snaza, 2017). The textile, tactile and affective practice of knotting stories, events and encounters in the quipu, a practice of situated knowledges, and the experimental and transient nature of an archive that can be knotted and unknotted as I move along the storied landscape of the quipu, echoed some of the key elements of postqualitative methodologies (Lather & St. Pierre, 2013).

Postqualitative methodologies have emerged from a critique within qualitative methodology of the persistence of representationalist and humanist assumptions at the core of research practices (Lather & St. Pierre, 2013; MacLure, 2013; St. Pierre, 2013; St. Pierre, Mazzei, & Jackson, 2016). Inspired by affect theory, feminist new materialisms and posthuman theory, this turn, which is not homogenous nor static, has opened spaces for methodological approaches that are situated, experimental, post-anthropocentric and post-representationalist (Duhn, 2017; Koro-Ljungberg et al., 2017). The possibilities of moving

from representationalism as a dominant knowledge production system towards more performative ways of knowing is a guiding thread through this quipu thesis (Barad, 2003).

Aligning myself with critical theory scholars who have challenged the Eurocentrism of the theoretical underpinnings of postqualitative methodologies (Gerrard, Rudolph, & Sriprakash, 2016; Wu, Eaton, Robinson-Morris, Wallace, & Han, 2018), I propose this quipu thesis as a contribution to the field by expanding and interweaving contemporary Latin American thinkers and Latin American decolonial feminisms through the ancient Andean practice of making quipus as a way of performing methodological difference. My engagement with Latin American scholarship has allowed me to (re)encounter with textile practices that are intimately related to my life and the life of my female ancestors and through encountering threads of thought to begin a process of decolonising myself that continues today. These theoretical encounters were prompted by my engagements with the ideas proposed by the school of new materialisms and posthuman theory (Braidotti, 2005, 2011, 2012; Dolphijn & van der Tuin, 2012; Neimanis, 2013; Pérez-Bustos, 2018).

THE THREADS AND KNOTS OF THE TEXTUAL QUIPU

In the following section I introduce the chapters of this thesis in the form of knots, pendent cords and subsidiary cords of the quipu (Figure 3). Most quipus available for study today have a similar textile arrangement of one horizontal main thread or mother thread that holds the quipu together and from which hang the pendant knotted strings. Some quipus have a *cayte* or first knot at the beginning of the mother thread: this *cayte* speaks of the subject matter of the quipu. So the main parts of the quipu are: mother thread, *cayte* or first knot and pendant knotted cords from which sometimes subsidiary cords emerge. To help the reader to

follow this quipu in the first page of each chapter I provide an illustration of the quipu with a small narrative that signals the location of that particular text within the textile quipu.

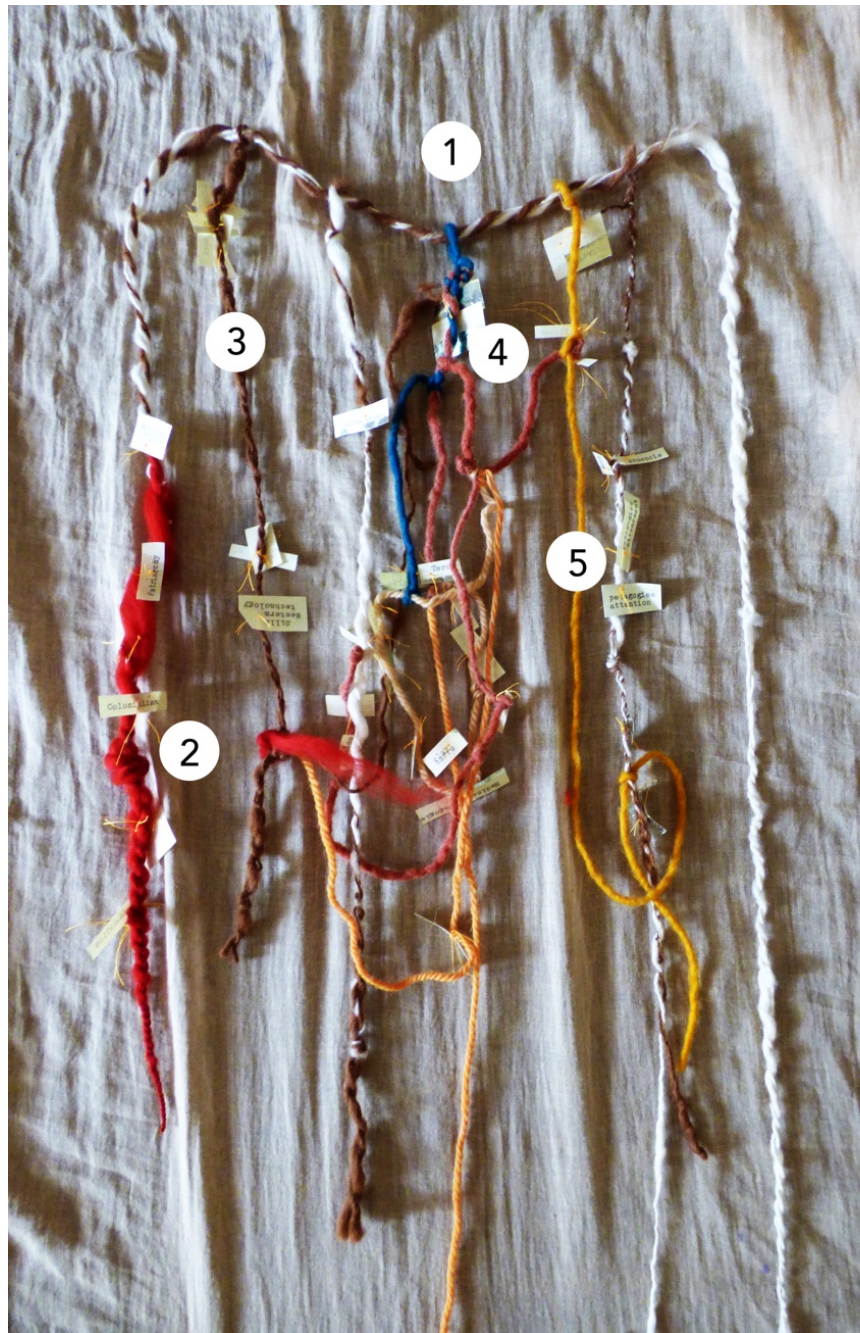


FIGURE 3: QUIPU THESIS. 1: MOTHER THREAD, 2: CAYTE OR MAIN KNOT, 3: PENDANT CORD, 4: KNOT, 5: SUBSIDIARY THREAD OR CORD. QUIPU MADE IN STUDIO BY AUTHOR AS THE TEXTILE VERSION OF THIS THESIS. PHOTO BY AUTHOR.

OUTLINE OF THE CHAPTERS OF THE QUIPU

In chapter 1, Introduction, I provide an overview of the thesis and outline key concepts such as quipu, coloniality/modernity, archive, performativity and enactive *conocimiento*. I indicate that the purpose of this research is to contribute to the field of research methodologies through the experiment of the quipu (Andean technology to tell stories with) as a situated performative archive of memory. Drawing on Latin American thinkers such as Francisco Varela, Julieta Kirkwood, Cecilia Vicuña and Gloria Anzaldúa, I argue that the quipu allows me to enact *conocimiento*, that is, to bring forth a form of knowledge which is intuitive, emergent and relational. I introduce the Chilean chair as the main knot of my thesis and explain how this quipu tells the stories that emerged in my research trip of material encounters in Chile in 2015. Using the concept of coloniality/modernity I make my own textile quipu as my particular way of enacting the geopolitics of sensing and knowing; through touch, breath and textile techniques I attempt to embark on the decolonial option of reconstituting ontologies and epistemologies that have been marginalised historically within the frame of coloniality.

Following the introduction, chapter 2, On quipu, provides a historical overview of the quipu, from its origins in the Pre-Columbian Andes to contemporary manifestation in Latin American feminist thought and art practice. In the Andes, the quipu emerged as a textile expression of a cartographical system of virtual lines called *ceque*. This system of lines was used to map cosmic connections between bodies of water, irrigation systems and ritual sites from the centre of Cusco. There is therefore a parallel existence between the textile quipu where lines are threads, and the *ceque* where virtual lines were connected to bodies of water. The

relationship between the quipu and the ceque makes evident the relational way of thinking in the Andes, a tradition that has existed for thousands of years. In this chapter I explain how the quipu as one of the expressions of this onto-epistemology has endured the effects of coloniality. The quipu has been banned, burnt, ignored and neglected, but nonetheless has found ways to materialise thought and is still doing so today. The history of the contemporary quipu is expressed in the conceptual work of Chilean sociologist Julieta Kirkwood's (1984) knots of feminist wisdom and poet Cecilia Vicuña's (2010) quipus and thread thinking: both manifestations are examples of how this ancient form of knowing has persisted in the Andes, a legacy I aim to continue and expand into the field of research methodologies.

In chapter 3. Quipu as research methodology, I engage with the crisis of representationalism in educational qualitative research and the current turn of post-Cartesian, post-representational, postqualitative research in education. I explain how the quipu came in the form of a poem after my research trip to Chile in 2015, and describe how I use the quipu as a storytelling device in my research of material encounters and specifically with the Chilean chair. Informed by the history of the quipu in the Andes, postqualitative methodologies, Braidotti's cartography and multispecies ethnography I expand the possibilities of the quipu into research methodologies. I provide detail of the movements involved in the quipu making: collecting the fibres/collecting thoughts, spinning threads/spinning the world, assembling the quipu, quipuni (tying knots), knotations and unknotting. As methodology, the quipu offers a performative archive practice. In that sense the quipu, as a *bodymind* itself, is a performative force in this study. Knowledge production is therefore not a representation of a separated event, conversation or experience, but a situated performative phenomenon that manifests through the creation of difference as a lively practice of being part of the world.

Chapter 4, Mother Thread of the quipu, offers a hybrid (multi-fibre) and multi-coloured thread of thought that enlivens the quipu as a whole. The purpose of this chapter is to provide a lively conceptualisation of practices of knowing as embodied, embedded, extensive, emotional and enacted. Using colour as an entry point to my theorisation I draw on Francisco Varela's post-representationalist notion of enactive perception (Varela et al., 1991). Reading Varela et al. (1991) and Varela (1999a) through Anzaldúa (1999, 2015), I enact a feminist twist to Varela's proposition and elaborate on the concept of enactive *conocimiento* (as an alternative to the use of cognition). Varela proposes enactive as a neologism to explain that living organisms do not precede their relations, in other words, as living organisms, we are not pre-given entities that are somehow parachuted to a pre-given world, but bodies and worlds emerge as a process-in-the-making, or as Haraway (2015) suggests, a process of reciprocal induction. And Anzaldúa proposes *conocimiento* as a holistic, spiritual, material engagement with practices of knowing, refusing the modern rationalisation of practices of knowing. By engaging with science that emerged from a particular historical and political effervescence in Latin America (and the world) in the late 1960s, I experiment with Maturana's and Varela's (1994) non-teleological and self-organising notion of autopoiesis (systems that self-create their ongoingness) and extend their ideas to contemporary feminist thought.

Chapter 5, First knot or cayte of the quipu, is the main knot of this thesis, an exploration of the Chilean chair in education. In this chapter I draw on anthropologist Tim Ingold (2011, 2018) and designer Galen Cranz (1998, 2013) to argue that even though, a mundane, familiar and ubiquitous technology, there are stories to be told about chairs. Stories of colonial/racist violence, homogenising educational practices and a physical enactment of the separation between humans and earth. Following the straight lines of the school chair, I animate this knot by bringing to the fore some situated stories of chairs in Chile from colonial

times to neoliberal individualism, offering the concept of *straightification* of education. I pay attention to the materiality of the chair to acknowledge that it offers a productive intensity to think material-discursive practices such as chair-sitting in schools. I explore how this practice is linked to the production of the rational Man of modernity, where the body is understood as a mere vehicle of the transcendental mind, connecting the chair to a sedentary apparatus of knowledge production. I turn to Mignolo's (2008, 2011) notion of coloniality/modernity (which in the Americas was inextricably linked to Catholic theology) to make visible the onto-epistemological link between coloniality and modernity.

What follows is the entangled territory of the pendent knotted strings. By paying attention to the colours of the quipu, and its multi-fibre composition, these knots will tell stories that connect them to the main forces infused in the Varelian and Anzaldúan mother thread of this quipu. In chapter 6, Thread of material encounters in Chile, I provide a brief description of the context where these material encounters took place in central and northern Chile, and how they are actualised in my present location in the lands of the Kulin Nations in Australia. I elaborate on how 'data' of this thesis were produced in multiple material encounters between humans, nonhumans and more-than-human forces that were recorded through audio, film and photo.

In chapter 7, Decolonising myself, I investigate my process of understanding how I have been produced as a mestiza woman within the effects of coloniality in Latin American and the brutal authoritarian Pinochet's regime that I was born into in Chile. This laborious process demands careful attention to unlearning habits of thought, ways of moving and feeling that were produced in this specific context. Embracing this process as a feminist task I experiment with Braidotti's (2011) concept of desidentification, Anzaldúa's (2015) neplantera and Vicuña's (2010a) understanding of the human body-as-quipu as my feminist navigational tools. Using

extracts from different data media (audio journals, poems, journals, sonic production, and drawings made in Chile and Australia), I tell past/present stories that describe the complexities of a feminist practice of healing. In that sense, the quipu as a performative archive works for me through repairing the fabric of memory as a situated form of epistemological reconstitution. Rather than an outcome oriented, teleological process I embrace Varela's (2000) radical embodiment as my form of healing, a practice of being present in the body. I propose that these stories that attempt (and many times fail) to enact a different form of self are relevant to the field of research methodologies as a way to produce research that honours the ethical commitments to awaken ancestral and present memory of sustenance that is living in the land, bodies and waters we are part of.

Two subsidiary cords emerge from the previous knot in the form of short chapters. Chapter 8, Shedding the chair, embodying decoloniality, tells the story of how decoloniality is a radical embodied practice that enhances the multisensory body as site of actualisations of the flesh. Expanding on Vicuña's (2017) idea of the body as quipu I wonder how shedding the chair and extending my movement repertoire are connected to the call by Saavedra and Salazar (2017) to decolonise the body at a cellular level. I attempt to practise what Varela (1999a, 1999b, 2000) suggested that modifying our ways of sensing modifies our ways of knowing by embracing Anzaldúa's (2015) call to awake our bodies in movement. The following subsidiary cord, chapter 9, Decoloniality as communal action, explains how decoloniality is a communal practice that is sustained in conversation with others, humans and non-humans. I use the example of the foundation of a Latin American decolonial collective as a practice of togetherness and healing.

I continue with chapter 10, Knot of interfering miniature sculptures. In this chapter I follow a thread dyed with Australian ochre that runs parallel to a thread dyed with indigo: the

expression of water and earth in the quipu. This knot traverses bodies of clay and wood through Valle del Elqui in Chile to Merri Creek in Australia, producing generative interferences in the form of riparian thinking. A wooden miniature chair used as trophy to reward innovative early childhood educators during Sebastián Piñera's presidency of Chile (the first right-wing government in Chile after Pinochet) was placed next to a miniature clay sculpture of an Indigenous educator with two young children by an early childhood educator. A pattern of interference emerged. This knot maps the effects of these multiple overlapping and time hopping patterns of interference between the miniature chair and the clay, and later between the clay of the riparian zones in the Elqui, Chile and beside Merri Creek, Australia. Waters and sediments that move to here from there. By encountering the memory (and erasure) of past and presents rituals of clay that connect riparian habitats and their inhabitants across the Pacific Ocean, *conocimiento* is enacted as a form of thinking and potential pedagogies that practise attending, listening and caring for the memory of land and water.

A subsidiary cord emerged from the previous knot in the form of a short chapter.: chapter 11, *Textile becomings*, tells the story of an unexpected event that provides evidence of the role of textiles in the historic memory of Latin America. A textile reference, an *arpillera*, which tells the story of the *Programa de Ocupación para Jefes de Hogar* (POJH), appeared mysteriously in Melbourne, Australia. This subsidiary cord loops back to the threads of memory and protest section in chapter 1, where I explain the *arpillera* movement during the dictatorship in Chile and its role in telling the stories that were not allowed in the official press. Today the *arpilleras* are a living archive of this memory of resistance, and in this subsidiary cord, this new encounter with an *arpillera* allows me to question what counts as knowledge: can I cite an *arpillera* as a bibliographical reference to make this ancient knowledge visible?

Storytelling (and orality) has always been considered a lower form of knowledge (Minh-Ha, 1989). In relation to the previous chapter, in Chapter 12, Knot of southern currents, radical pedagogies, I animate a sleeping story of the Chilean pedagogical memory during Allende's *Unidad Popular*. Using Mignolo's (2011, 2018) proposition of decoloniality I aim to return to this interdisciplinary collective pedagogical program, offering a contemporary reading that makes it relevant yet problematic today. This re-turning is also inspired by Barad's (2014) understanding of the past as always entangled with the present and future. Informed by Freire's "Pedagogy of the Oppressed" (1972) and the theology of liberation, Operación Saltamontes (Grasshopper operative) emerged, in this study, out of a dense silence between heavy bodies, a place of discursive exhaustion. As soon as this story was told, the atmosphere of the room changed. There we were, four Chilean women from different generations, political and socioeconomic backgrounds, sharing stories and listening to the eldest woman among us. This knot speaks of silence, practices of listening in a more-than-human sense, and patience. Instigated by Minh-Ha (1989), Barad (2018) and Haraway (2016), this knot poses important questions to the practice of response-ability and storytelling: what happens once a story has come to life again? What are the response-abilities of the listeners of the story? How do we practise our response to the stories we enact?

The end of this quipu is chapter 13, Sympoetic pedagogies, an *ensayo* (rehearsal) of my ability to respond to these material encounters and the ways this quipu enacts *conocimiento*. This chapter is about looping back to the multisensory historical body as site of actualisation, bringing ideas to life in local contexts through pedagogical propositions that animate enactive *conocimiento*. Situated sympoetic pedagogies, that is, making-with poetically, value intergenerational, interspecies and poetic encounters. Even though, during most of the time of this study I had a strong conviction that I was preparing this quipu to come back to Chile, to

bring back what I learned through this methodological process, the quipu had slightly different plans. Using Ingold (2015) conceptualisations of threads I pay attention to the threads of the quipu becoming tracks on the surface of my present life in the lands of the Merri Creek, in Australia. Slowly but effectively the quipu wove its threads and knots into my present context along the Merri Creek and at my children's local public school. Attending to pressing environmental, political and historical issues that affect humanity as a whole, but not all in the same way, the end of the mother thread of this quipu entangled itself with these differential becomings in the contested territory of Australia in the form of a *creekulum*, a curriculum of Merri Creek. The end of the mother thread speaks of the nomadic and transnational presence of the quipu as research methodology, a practice that resonates with winds, currents, and climate systems, that traverses borders, as we know them, opening possibilities for migratory forces of South-South passages to imagine more liveable futures for all.

CHAPTER 2: ON QUIPU

Introduction

This chapter provides a historical examination of the quipu over time and links it to more contemporary manifestations in the conceptual and artistic work of Chilean feminist sociologist Julieta Kirkwood (1984, 1986) and artist Cecilia Vicuña (1997; 2009). I map the quipu's existence from its pre-Inka times, signalling key moments such as its peak during the Inka Empire, neglected existence in the first period of colonisation, prosecution towards the end of the sixteenth century and then resistance and continuity in the margins of Latin American nation-states. Drawing on well-respected quipu and Andean researchers such as Gary Urton (2015), Catherine Allen (2005, 2017) and Frank Salomon (2004, 2011), alongside Vicuña (2010a, 2017), I attempt to make the quipu evident as a manifestation of ancient and present Andean forms of relational thinking.

The purpose of providing a historical account of the quipu is therefore ontological and epistemological because it reveals how the knots of the quipu manifest an intensity that has resisted interpretation through the tools of decoding and categorising of Western academia. Until today the quipu remains mostly silent (Bryan-Wilson, 2017). I understand the quipu as an expression of the Andean geopolitics of sensing and knowing and I explain the sensuality of the quipu as an archive of memory that is touchable and breathable (Rivera Cusicanqui, 2019). Drawing on Andean anthropologist Veronica Cereceda (2010) the multisensorial quipu is also conceptualised as a non-human body that is an active participant in the making of worlds.

I follow the thread of the quipu to contemporary expressions in the feminist conceptual work of Kirkwood (1984, 1986) and Vicuña (1997; 2012, 2017): both thinkers expand the vitality of thread and knot thinking as their way to engage with complex issues such as class, gender and power relationships in Kirkwood's work and epistemological injustice, erasure of Indigenous memory and environmental crisis in Vicuña's. To me, these recent manifestations are evidence of the performativity of the quipu that encourage me to continue their legacy and take the quipu into the methodological arena as a performative archive of memory.

A TEXTILE MULTIVERSE IN THE ANDES

The richness of textile practice in Latin America expresses a continuum that precedes and succeeds colonisation (Bryan-Wilson, 2017; Gargallo, 2014; Vicuña, 2017a). These forms of textile expression, such as quipu, resist neat categorisations as art, craft, language, protest, labour or feminisation (Haraway, 2016). Feminist scholar Francesca Gargallo (2014) argues that the territory of Abya Yala (Indigenous name for Latin America that in the Cuna language of Panama means 'land in full maturity') is woven through textile practices that constitute a living epistemic and ontological archive of other ways of knowing, sensing and living (Gargallo, 2014).

In recent decades, Latin American feminist thought has responded to the historical epistemic exclusion of textiles as a valid form of knowledge production, and reappropriated the conceptual potentiality of multiple textile expressions by paying attention to textile processes and textile metaphors in language (Cereceda, 2010; Coleman, 2016; Espinosa, Gomez & Ochoa, 2014; Gargallo, 2014; Pérez-Bustos, 2016; Vicuña, 2012). To me, the interest in historical fibres is what allows me to notice the parallelism between textile, embodied thinking and textual processes as an act of feminist response-ability (Barad, 2014). Barad (2014) proposes a

hyphen in responsibility that allow us to pay attention to the concept as our ability to respond, therefore responsibility is conceptualised as a responsive practice of ethical accountability.

Through the work of Vicuña (2016) I learned about the connection of the quipu to an Andean cartographical system of virtual lines called *ceque*. In the ceque system the Incas proposed a complex of virtual lines that emerged from Cusco (the centre) to the four parts of Tahuantinsuyu (the name of their territory) (Moyano, 2011). These lines had marks that signaled geographical intensities where sacred spaces or *huacas*, sources of water and irrigation channels were. To Vicuña (2018) these ceques are the virtual counterpart of the textile quipu. The parallel existence of these virtual and textile relational lines and threads connected the Andean territory through governance practices and ritualistic relations to sacred bodies of water and the invisible cosmic forces on land (Moyano, 2011).

HISTORY OF QUIPUS

This story is far older than the oldest of the ancestors I can name as it goes back nearly to 3000 BC (Bryan-Wilson, 2017; Salomon, 2004). This is the story of the quipu, an enigmatic textile linguistic technology from the Andes in the territory of Abya Yala. Quipu refers to a singular knot, and also to knots in the plural. Quipu is a poetic technology for storytelling and a governing device for accountability used for thousands of years in the Andes. Quipu is an ancient archive, a collection and reconfiguration of memory. Quipu is an embodiment of a different form of somatic (corporeal) thinking, a language from the Andes (Allen, 2005; Bryan-Wilson, 2017; Salomon, 2004; Vicuña, 2017).

Most of the quipu available to study are made of spun and plied cotton or camelid fibres dyed with natural colours from plants and insects. The majority are assembled in a basic composition with a primary or mother thread from which dangle many thinner parallel strings

called pendant cords, and from them subsidiary cords in multiple levels (Allen, 2005).

Sometimes these parallel threads are also connected with traversal threads, creating a non-linear complex artefact (Allen, 2005; Salomon, 2004, 2011; Urton & Brezine, 2005).

Anthropologist Sabine Hyland (2017) explains that some quipu also have a primary knot, or *cayte* in Quechua, which can be a bundle made out of needle work attached to or a knot in the mother thread. The cayte is believed to indicate the quipu's subject matter (Hyland, 2017).

For centuries following the first encounters between indigenous people and Spaniards, this Andean technology was understood by the colonisers as a numeric device for keeping count of the Inca empire's wealth, animals, crops and people, and barely studied (Salomon, 2004; Urton & Brezine, 2005). Furthermore, it coexisted for many years alongside its Arabic mathematical counterparts brought with colonisation. This reductive way of understanding the quipu practice continues today in Chile. For instance, during all my years of schooling it was mentioned once that quipu were the "Inca abacus" used to count cattle and maize; even today many Chileans have not heard anything about the quipu (Bryan-Wilson, 2017). However, in the past thirty years researchers have expanded those initial understandings, attempting to unveil the complexity of the quipu as an ancient writing device, an archive of stories, poetry and more (Allen, 2005, 2017; Mann, 2005; Salomon, 2004; Urton & Brezine, 2005).

Quipus have been generally related to the Inca empire, yet it is important to note that although they reached their maximum development during this period, they were present in the region thousands of years before the Incas (Shady, 2006; Solis, Haas, & Creamer, 2001). Peruvian anthropologist Ruth Shady (2006) discovered the oldest quipu or proto-quipu to date in a pyramid of the *Caral* culture near Lima, Perú. This fully formed quipu, dated to almost 3000 BC, provides evidence of the Andean textile tradition, and also the possibility that

sophisticated technology for telling stories was developed in the region thousands of years earlier than previously thought (quoted in Mann, 2005). Furthermore, Shady (2006) has argued that Caral culture is probably the oldest culture of the territory of Abya Yala.

Through the beginning of the colonial time, quipus coexisted in parallel with Spanish literacy and Arabic numeracy practices brought by colonisation. This simultaneity was presumably based in an intellectual underestimation by the Spaniards of native intellect and ways of knowing (Allen, 2005). As a result quipus were, at this stage, considered innocuous and even useful as accounting technology (Salomon, 2004). Nevertheless, by the end of the sixteenth century this hybrid system was under attack. Spaniards became suspicious on learning that quipus were used to track offerings to pre-Christian deities, and ordered a universal destruction of quipus. As Salomon (2004) puts it, “quipus came to be seen as a resource for defending specifically indigenous interests” (p. 115). At the same time, colonisers increased their efforts to civilise through literacy (in Western mode) and evangelisation through Catholic practices and religion. Quipus were burned, *quipucamayuks* (those who animate the quipu) worked clandestinely, and by 1600 the quipu art was largely silenced (Urton, 1998 quoted in Salomon, 2004).

The suggestion that quipus were used for purposes beyond “counting” posed a threat to the coloniser, and later intrigued many researchers. It is suspected that oral poetry, history, biographies, stories and myths were knotted, twisted, coloured, unknotted and plied, in these, still elusive, archives (Martinez Cereceda, 2013). Although Western efforts to “decode” them have visibly increased in the past years, the quipu, as Allen (2005) mentions, persists as an enigma. Using the metaphor of talking knots, it becomes apparent that the quipu itself is somehow withholding, resisting in silence. Addressing the fact that for centuries the quipu has remained silent to the West, anthropologist Frank Salomon (2004, 2011) has suggested an

epistemological alternative to quipu studies, proposing that quipus did not encode alphabetical signs or units of speech, but things, i.e., knots are not symbols that represent an independent reality.

The quipu challenges the imperialist implication of valuing some forms of communicating over others, i.e. literacy over orality (de Sousa Santos, 2014; Mignolo, 2011). Expanding our ways of understanding Andean practices of knowledge production, Brokaw and Smith (2014) advocated replacing writing with media of communication as means to flatten the hierarchy between literacy and other forms of communication such as the quipu. According to Martinez Cereceda (2013), the originality of Brokaw and Smith's (2014) proposition is to understand the quipu as an emergent technology in the Andes that changes through time because it is co-dependent with cultural changes. Therefore, the forms of communication that the quipu enacted changed over time. The quipu is an archive in constant transformation.

In that sense, it is interesting how Ingold (2018) extends, through John Dewey, the notion of communication beyond transmission of information, emphasising the concepts of commons and communality embedded in communication. Using common as a verb, Ingold (2018) proposes that "communication is the commoning of life" (p.4) that allows us to carry on our lives together. This shift invites us to conceive the onto-epistemological underpinnings of the quipu as a medium of communicating more than numbers in a relational universe such as the Andean (de Zegher, 1997).

A remarkable example of the use of the quipu as more-than-numeric archive is "Letter to a king," a hybrid document crafted by Quechua nobleman Guamán Poma de Ayala during the colonial era between 1532 and 1542, and found centuries later unpublished in Denmark (Poma de Ayala, 1978). Poma de Ayala (1978) used drawings mixed with his Quechua infused

Spanish to tell the Spanish king about the atrocities Indigenous people were suffering during colonial times. At the beginning of his text, Poma de Ayala, who remained loyal to the Spanish crown, explains that he consulted quipus as one of the archives to tell how the Incas lived before colonisation, or as he mentioned, he relied on “*los quipus y las memorias y los reportes de los yndios antiguos*” (Quipus, memories and reports from Elders, my translation, Poma de Ayala, 1978).

The poetic work by Vicuña (2010a) and the quipu offer a different way of engaging with and understanding the practice of making knots or *quipuni* in Quechua. She explained that what fascinates her about quipus is their ability to remain ungraspable to the Western mind. It is their elusive character, or as she says “a perfect embodiment of the other side of the world, other way of being ... the South” (de Zegher, 1997, p. 24). In a similar vein, Salomon (2011) argues that “for reasons that remain far from obvious, no Spanish writer in all three colonial centuries seems to have learned and explain the khipu art” (p. 71). Allen (2005) agrees on the necessity to reconsider the onto-epistemological approach to the quipu and Andean artefacts in general.

In her elaboration, Allen (2005) emphasises that it is only by paying attention to Andean animism, and what she defines as their “relational mentality” (p. 993) that we may possibly understand Andeans past and present. This perspective is also evident in Cereceda’s (2010) approach to Andean cultures: she proposes that according to Andean animism all bodies (human and non-human) have spirit. In that sense it is crucial to contemplate the quipu in context, as the quipu practice is a situated knowledge. When exposed to Andean animism, one wonders about the novelty of Western theorisations of the agency of matter, new materialisms and posthumanism.

From this section of the history of the quipu it is possible to have an understanding of how the quipu was a vital way of communicating in the Andes before colonisation but also how the notion of coloniality/modernity (the ontological and epistemic extension of Eurocentrism) has pervaded the territory of Abya Yala until today (Mignolo, 2018; Quijano, 2007). The erasure of the quipu and its tradition of relational thought did not stop after independence from the Spaniard crown in 1810 in the territories where the quipu had a wide and effective existence such as Perú or Northern Chile but continues today (Bryan-Wilson, 2017; Vicuña, 2017b). The decolonial option here is relevant to think methodologies because place epistemic reconstitution as an imperative task to de-link from the overall structure of knowledge production. According to Anzaldúa (1999) epistemic healing involves engaging with ways of thinking, living and doing that the logic of coloniality and the rhetoric of salvation, progress and civilisation of modernity/rationality disavowed for more than 500 years since colonisation.

I understand epistemic reconstitution as a laborious craft that involves a process of tracing and mapping erased ways of thinking, living and doing while simultaneously unlearning through the body, mind and spirit the effects of coloniality and what Anzaldúa refers to as the epistemic wound (Anzaldúa, 2015). To me, epistemic reconstitution is about mending, repairing and restoring memory through making. As part of this process of reconstitution I have mapped the presence of the quipu in contemporary Latin American thought. I found explicit and implicit connections between the quipu and the work of Chilean feminists Kirkwood (1984, 1986) and Vicuña (2010a, 2010b; 2009).

A contemporary manifestation of knots in the Andean territory materialised in Chilean feminist thought before and during Pinochet's dictatorship. Sociologist and activist Julieta Kirkwood's knots or *nudos de sabiduría feminista* (1984) and Vicuña's (2012) fibre art and poetic quipus provide an original conceptual contribution to the field of Latin America feminism in recent years (Amich, 2013; Bryan-Wilson, 2017; Castillo, 2007; Coleman, 2016). Kirkwood proposed concepts as knots: knots of power, knots of class, knots of feminist politics, knots of gender. For her, knots are movements that tie thought to historical complexity. Instead of trying to effectively unknot them and resolve complex issues, her approach is more connected to what Haraway (2016) refers to as "Staying with the trouble" in the sense that affirmative and generative engagement with complex matters does not necessarily aim for a complete resolution, but to offer multiple unfinished possibilities.

In a similar vein, Vicuña (1997) has named her art as *arte precario*. *Lo precario* comes from the word *preces* that Vicuña poetically reads as an act that is done in a hurry, but also a prayer (de Zegher, 1997). As unfinished rituals her ephemeral works are completed by more-than-human forces, as tides, wind, waves, river flows and gravity, among others (Pollock, 1996). For instance, her *basuritas* are made from discarded elements, debris of all sorts that is held together in precarious balance by threads and twigs, always nearly falling apart (Vicuña, 2017). She uses these unwanted elements, because as a mestiza woman she situates her work in the South, experienced as a territory unwanted by the North (Vicuña, 2012). She argued that peoples, territories and knowledges of the South are equally discarded, perishable, yet still hold together in precarious balance. Her art is about caring and loving what has been denied, marginalised and unwanted. That is why she listens to her (our) Indigenous memory, and

through her body, to the Andean Indigenous forms of knowledge that continue to flow through the veins of Abya Yala (Vicuña, 2010a).

In her theorisation of knots, Kirkwood (1984) conceptualises los nudos as a movement of growth, not an obstacle but a movement that challenges what is already there and forces a new geometry. Furthermore, her knots are not blind nor monolithic but alive and part of a constant movement. Intricate, and certainly not straightforward to approach, Kirkwood invites feminists to engage with knots almost in a meditative state, to sense, observe, touch and study their threads and fibres in order to attempt to unknot them or loosen them up by following the reverse movement of the threads. This embodied way of engaging with theoretical matters demands slowness and intimacy with our concerns. Rigour is therefore not about an outcome but a way of being present through the process of thinking.

Chilean feminist philosopher Alejandra Castillo (2007) argued about the relevance of Kirkwood's conceptualisations in Latin American neoliberal times. For Castillo (2007) the continuity of the same colonial and patriarchal structures that concerned Kirkwood (1984, 1988) in the production of her conceptual knots and activist work posed unresolved questions about the role of women in the creation of democratic and sustainable forms of living. To me, it is interesting that Castillo (2007) connects Kirkwood's knots to the tradition of fibre, threads and knots in ancient Greek mythology, and particularly refers to how Kirkwood's knots are connected to women's labour in history, from Penelope who wove and un-wove waiting for Odysseus, to Ariadne's thread and labyrinth. In a different yet non-exclusive direction, I consider Kirkwood's conceptual knots as an expression of a more ancient origin in Andean thought and the quipu thinking. And I suggest that this connection is vital to understanding the discontinuous continuity of Andean ways of thinking (Vicuña, 2010a).

To me, Kirkwood's (1984) idea of the knots as alive and in movement is productive when reading ancient quipus. Even in her writing, Kirkwood moves from one knot to the other, and in the middle she proposed more knots, suggesting a radically different way of engaging with ideas by creating a proliferative surface of knots. Another geographical synchrony that remained unnoticed in literature is that Kirkwood's (1984) knots of thought were conceived after her trip to a Latin American feminist encounter in Lima, Peru in 1983. This indicates that Kirkwood was in the land of quipus when this form of thinking developed through her.

Reading Kirkwood (1984) was for me entering into a knotted, messy and urgent territory. Her writing was all done during Pinochet's dictatorship, and activates a memory of a form of language I remember adults practising during my early years: signs, turns, silences, twists, codes; explicit and elusive at the same time. A form of experimental language people used to tell and not tell, both at once. A language that was born in the urgency to communicate under the highly regulated and vigilant dictatorship environment. I found and translated into English this quote from Kirkwood (1984) that I experienced particularly moving as I read between the lines her desire to communicate an impossible:

Impertérrita seguí adelante: feminista, poco seria. Que si la formación teórica, que si muy difícil, que si hermética, que si teórica, que si no popular. Ensayando suavidad y huecos. Palabras femeninas, dije lo que había de decir; me subí al valor de hacer un curso. Otro y otro más; lo escribí con pelos y señales. (p. 11)

Undaunted I continued: feminist, little serious. What if too theoretical, too difficult, maybe hermetic, what if not of the People. Rehearsing tenderness and learning caves from within. Feminine words, I said just what I needed. I gathered

strength and shared my thinking. And did it again, and again. I expressed my thinking with hair and signs.

In this paragraph Kirkwood (1984) poetically refers to her life as activist and feminist, here and there, writing with hair and signs, practising tenderness and learning caves from within. Her grammar refuses to set in any established and correct manner, her words are messy and there is a subjacent tone of urgency that I particularly connect with. What also stands up is her radical voice and ongoing contradiction, which also speaks to me about knots, always not-yet-resolved, always in-the-making, always in-process-of-becoming. Yet not paralysed by doubt, this is, to me, a praxis of her feminist understanding of knots as living entities, unfinished processes. Furthermore, her expression “writing with hair and signs” to me connects with the quipu practice, hair as threads, signs as knots (Kirkwood, 1984, p. 11).

Quite differently from Kirkwood’s (1984, 1988), Vicuña’s (2017a) oeuvre began during Allende’s government, and the coup d’état found her studying fine arts in London, where she continued living in exile. In 1974, she wrote her journals of objects for the resistance in Chile, and co-founded “Artists for Democracy” to support Chilean resistance. During Allende’s government she devoted her poetry and performance to the creation of a revolution that in her opinion was necessarily a revolution in consciousness, a shift within Latin America to radically embrace a different way of living, a care for the land and for the Indigenous knowledges that we carry in our bodies (Vicuña, 2017a).

It is relevant to explain more of the context of Kirkwood’s (1984, 1986) work as well. In the middle of Pinochet’s brutal dictatorship, feminists reorganised and reactivated their old organisation MEMCH (*Movimiento por la Emancipación de la Mujer Chilena*, Movement for Chilean Women’s Emancipation) and began their fight for democracy and women’s rights. This

was a crucial revitalisation as Chilean feminists experienced a long period of numbness after the suffragette movement's victory in 1949 (Godoy Ramos, 2013). During the dictatorship, feminists were ferociously critiqued, particularly by their male counterparts in left-wing movements, who considered it inadequate to fight for women's rights and not purely human rights, considering the hostile conditions thousands of Chileans suffered due to state repression, torture, disappearance, execution and exile.

One of Kirkwood's (1984) most compelling knots is that of feminist politics, where she elaborated a severe critique of patriarchal left-wing politics and proposed an affirmative feminist politics. Despite criticism, women continued their struggle, intertwining opposition to the dictatorship with their call for reimagining women's participation in politics. Chilean women gathered and created a big collective called "*Mujeres por la vida*" (Women for life) where academic, rural, urban, professional, labourer, housewives and student women joined forces in a chant for life, providing a counter-position to the politics of death and fear that prevailed in Chile at the time (Kirkwood, 1986; Valdes, 1987).

Through her situated and partial knots of power and politics, Kirkwood (1986) investigated how Pinochet's authoritarian regime was not the beginning of authoritarianism in Chile, but an extreme intensification of a hyper-patriarchal state that preceded him and had its origins in colonisation. For her, Chilean patriarchal practices were completely naturalised, permeating the pores of the public and the private, the left and the right. One of her most remembered slogans, was "*democracia en el país, en la casa y en la cama*" or democracy in our country, home and bed. While organising women's meetings in Santiago, and writing articles for academic journals and grass roots magazines that she co-founded, Kirkwood knitted and wove. There are several stories of her weaving and knitting in feminist meetings, making knots, twisting threads, tensing, unknotting through thinking, and discussing (Kirkwood & Montecino, 1987). It is not a coincidence that her books are called *Ser política en Chile: Los*

nudos del pensamiento feminista (Being political in Chile: Knots of feminist thought) and *Tejiendo rebeldías* (Weaving rebellions).

In the documentary *Calles caminadas* (The streets we walked) feminist filmmaker Eliana Largo & Qüense (2005), as have many feminists, explained how Chilean feminists were silenced by the neoliberal political class that ruled Chile in the transition to democracy. Chilean feminist scholars Marcela Ríos, Lorena Godoy and Elizabeth Guerrero (2003) explained that the transition to democracy was seen with sceptical tension because the reinstallation of the same political practice of powerful elites was now also supported by technocrats and aspirational middle-class men. As I write this text, a third wave feminist movement is happening in Chile, after nearly twenty years of silence during neoliberal democracy (Figure 4).



FIGURE 4: “FOR A NON-SEXIST EDUCATION: FEMINIST AND DISSIDENT PEDAGOGIES,” FEMINIST PROTESTS IN CHILE 2018. EL MOSTRADOR NEWSPAPER, OCTOBER 2018.

Enduring the lethargic climate of numbness in the transition to democracy, Chilean students, mostly women, have made their voices heard as pictured in Figure 4 during a protest

in Santiago de Chile, 2018. Similarly, many feminist artists and thinkers such as Vicuña (2017a) have not been silent. Vicuña's quipus, *basuritas*, quantum poems, *knotations*, ephemeral performances have all been speaking their multiple material tongues for the healing of democracy and attending to land. Her somatic practices enact what Indigenous feminists from Abya Yala refer to as *territorio cuerpo*, *territorio tierra*, the fluid dance between our bodies and land through art making and ritualistic performance (Gargallo, 2014). It is their legacy and manifestation that I aim to honour in continuing to expand the quipu as a research methodology and feminist pedagogy.

CHAPTER 3: THE QUIPU AS RESEARCH METHODOLOGY

Following the historical account of the quipu and the legacy of thread and knot thinking in Latin American feminist thought, I further extend the quipu to the field of research methodologies. I explain in detail how the quipu came to matter in my research and how my encounter with the postqualitative turn in qualitative research enabled me to experiment with the quipu in ways that amplify the relational, performative and material existence of this archive of memory. I connect the postqualitative turn with methodologies that have emerged from poststructuralism such as Braidotti's (2011) cartography, understood as mapping the present through attentive elaboration of power relationships and the field of multispecies studies in its most expansive version where rivers, mountains and the land itself are considered valuable contributors to the research methodology, a concept that has been present in Andean animist societies for thousands of years (Kirksey, Münster, & van Dooren, 2016; Rose, 2017).

Expanding on the idea of the quipu being a technology to animate stories and events, I made my own textile quipus by a series of moves. This choreography of knot making involves six moves that I explain in detail later in the chapter:

1. collecting fibres, collecting thoughts
2. spinning thread, spinning the world
3. assembling the quipu

4. quipuni (or tying knots)
5. knotations
6. unknotting.

Each process happens simultaneously at a virtual and physical level, for instance the first move, *collecting fibres, collecting thought*, is about selecting and attending to the fibres to spin the threads of the quipu. Through physically touching, observing and sensing fibres such as unspun alpaca wool that came from the Andes, I also began paying attention to my thinking and how I am affected by this sensing and knowing (Mignolo, 2011). The process of quipu making is a methodology that animates the senses and offer opportunities to expand thinking as a relational force that materialise through knots. I loop again through the work of Anzaldúa (1999, 2015) and Vicuña (2017a) to situate my practice. Making quipus is to me an attempt to reconstitute an ontological and epistemological memory through the creation of this performative archive (Anzaldúa, 1999). The quipu as archive becomes an offering that enacts ways of thinking, dreaming and doing education informed methodologically, philosophically and practically by Latin American scholarship and poetic tradition (Saavedra & Pérez, 2017). Alongside early childhood scholar Fikile Nxumalo's (2017) engagement with Black methodologies and Indigenous relational thinking, I allow time and space for situated radical thinking in education to materialise a methodology that bring forth connections with land and living waters. A form of thinking that practice response-ability with our current environmental crisis through an emphasis in relationality and active resistance to dualistic ontologies (Nxumalo, 2017).

The manifestation of quipu

When I visited Chile in 2015 for my material encounters trip I had a thread in my hands most of the time. Sometimes I was crocheting, other times making and learning knots, but

most of the time I was just thinking and playing with a thread in my hands. Thinking with Chile, with memory, with oppressive neoliberalism, with trauma, with tremors, with chairs, with knots and the land. One of these encounters was a long conversation with ethnomusicologist José Pérez de Arce, who worked for many years in the Museum of pre-Columbian art. We met at the Catholic University's *Campus Oriente*, where the ideologist of the most conservative and neoliberal reforms in Chile during dictatorship, Jaime Guzmán, was assassinated by a left-wing armed collective in 1991.

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We talked (and wailed) for a long time about Chilean education, chairs, extinction of ancient languages and orality. Together we looped and looped and looped through the chair. I was asking him about ways of sitting in pre-Columbian America and the missing folds of the hundreds of ways human sat before the chair arrived from Europe. We were sitting on chairs talking in this Catholic university. After all our laments and laughs he promised to send me a sonic experiment he was making with a poem about chairs written by Vicuña (2013). Never had I heard about this poem of chairs. I was intrigued.

Once I was back in Coburg, Melbourne, Australia I received an MP3 file called “*Kipuson*” with seven poems. One of these poems told me a story about the limited repertoire of

movement and positions of the body of civilisation. The poem voiced stories of chairs and how students are expected to spend long periods of time sitting on chairs at schools. A torture, the poet says. In the erotic tone of Vicuña's early poetry, her poem was also a call for the creation of furniture that enhanced the sensual capacities of the flesh. *Kipu-son* translates as sound of the quipu. To me, the poem manifested as a knot within a sonic quipu, and that is how the quipu came to my research for the first time.

The quipu came poetically threading its way into my thinking. Was I calling for the quipu to come when playing with the thread in my hands? Perhaps (without knowing) Latin American feminism, the thread, the forces of the territory and I were creating the conditions for this mysterious process to happen? Perhaps, if thinking poetically, the quipu sensed that I was tracing lines of memory, lines of chairs, lines of thought and made itself sensitive as an archive wanted to be found? Perhaps it was the desire for memory-making practices that made these ancient archives manifest at that particular space and time?

A POST-TURN IN QUALITATIVE METHODOLOGIES OF RESEARCH

Within qualitative research, postqualitative methodologies are a relatively recent turn in methodology, one that responds to the urgency to integrate the proposition by post-humanist, new materialism feminists and affect theory that we need to move beyond research practices that reinforce Western representationalism, humanism and anthropocentrism (Braidotti, 2013a; Duhn, 2017; Koro-Ljungberg, Löytönen & Tesar, 2017; Lather, 2016; Lather & St. Pierre, 2013; Maclure, 2013; Nordstrom, 2017; Nxumalo, 2017; Nxumalo & Rotas, 2018; Saavedra & Salazar, 2017; St. Pierre, 2013; Youngblood Jackson & Mazzei, 2012). What these researchers attempt is to disrupt the separation at the core of Cartesian dualisms that are still infused through qualitative inquiry (Lather & St. Pierre, 2013; Maclure, 2013). It is important

to note, as Koro-Ljungberg et al. (2017) emphasise, that postqualitative inquiry is not all homogenous, but a heterogeneous field with rough edges and poetic tunes, where thinking, writing, and making of research are necessarily entangled, dissonant and open to multiple forces of experimentation.

But what does it mean to move beyond the effect of representationalism, humanism and anthropocentrism in our research practices? Why is this necessary? What does it change? And more appropriate to this thesis, does the quipu enact this difference and, if so, how? To me, to move beyond these notions is a healing practice to stitch together a historical wound, an epistemic wound, a colonial wound of separation (Anzaldúa, 2015). In a nutshell, these notions are constructs founded in the separation between knower and known, and more importantly, between human and non-human as I explain in detail in chapter 4: The mother thread of this quipu. Within representationalism, rational humans create knowledge (in the mode of representations) through representing/extracting/recovering properties of a pre-given or projected world using their humanity as measure of all measures (Barad, 2007; Varela et al., 1991).

This form of knowledge is claimed to be objective because it is created from a presumably independent source. Therefore, it is replicable and serves as a universal truth (Maturana & Varela, 1987). Even though this idea has been contested for decades by many qualitative scholars, the ontological separation that underpins much of what is done in qualitative research in social sciences today continues to privilege humanistic, gendered and anthropocentric practices (St. Pierre, 2013; Varela et al., 1991). Addressing this issue, feminist scholar Maggie MacLure (2013) wondered if it is possible to research without representation by moving towards a more performative understanding of what data is and what data *do*. Drawing primarily on Deleuze's (1988) (and earlier Spinoza's) experimentation with the concept of

affect, MacLure (2013) provided examples of how data is affective at a multisensory level as it is bodily experienced. Data leave marks in the body (Barad, 2012).

But as many scholars have proposed before me, this painful separation/wound between human and non-human is not only at the core of research practices, but as Tuhiwai Smith (2012) has clearly explained, it is also the foundation of the colonial imperialist project. Framed within the modern grid of exclusionary binaries that can be traced back to Plato, and which intensified in Descartes (Varela, 2001b), this separation is a bleeding wound. One that not only enables the categorisation between human and non-human, knowledge and belief, but also between human and many others categorised as less-than-human, that is, all beings who do not fit into the category of rational, able, objective, civilised Man (Anzaldúa, 1999; Nxumalo, 2017; Smith, 2012).

Decolonial scholar Buoaventura de Santos Souza (2007, 2014) explained this phenomenon using lines. de Santos makes visible a line drawn by the so-called Global North (as a geopolitical term, not geographically) as part of the colonial project that continues today and which concealed all forms of knowledge production that do not conform with Western terms. Instead of acknowledging the ontological limitations to understanding these different manifestations of knowledge production, they are labelled as myth, belief, popular or mystery, or even worse, exoticised and forcefully fitted into pre-existing Western grids of thought.

By contesting the humanistic principle of humans as measure of all, postqualitative scholars opt to engage with material thinking: experimental, affective and speculative practices that challenge the dominant idea that researchers collect, act upon and affect their data, moving to an understanding that the process looks more like a crossroads where data and researcher and place and politics and cosmic energies co-constitute each other: data is affective

and performative (Duhn, 2017; Nordstrom, 2017). Or in Barad's (2007) terms data and researcher intra-act and do not pre-exist these intra-actions. Boundaries, cuts are made in the continuous engagement. In that sense, Koro-Ljungberg et al. (2017) argued that postqualitative research attempts to "think data beyond anthropocentrism toward different human and nonhuman forces creating, generating, and reproducing knowing, affect, and sensory experiences" (p. 2).

I understand this call as a methodological shift that requires attention to the entanglements of human and non-human forces as the chair, or the quipu itself. In that sense, a more radical (and exciting) turn that the quipu poses towards a post-anthropocentric understanding of knowledge production in post-qualitative studies is the conceptualisation of quipu, as technology, with "a mind" of its own; an animist idea that is not extraordinary to Andean cultures (Rose, 2017). In her semiotic analysis of textiles, Cereceda (2010) has explored how many Andean woven pieces such as *talegas*, or bags for keeping seeds, among others, actually play, act and do "things" in the physical world. They possess, in Cereceda's terms, "a magical-religious effectiveness" (2010, p. 183, my translation).

I connect the liveliness of the bags described by Cereceda (2010) with Anzaldúa's (1999) way of understanding her written pieces as sleeping texts waiting for the reader to wake them up, to be enacted through the reading or, as she described it, "the work has an identity; it is a 'who' or a 'what' and contains the presences of persons, that is, incarnations of gods or ancestors, or natural and cosmic powers" (p. 89). I find resonances between Cereceda's (2010) observations in Peruvian cultures and how Anzaldúa understood her ways of knowing as a contemporary Chicana poet and scholar.

Their propositions about how "inanimate" artefacts such as seed bags and written texts perform liveliness as part of the world in the Andean textile universe described by Cereceda (2010) and the textual world of Anzaldúa (1999) is intriguing to me as a manifestation of the

geopolitics of sensing that are located in these territories. I wonder how this is connected to my experiments with the quipu as performative archive where every knot is a confluence of ideas, humans, nonhuman, events and stories. The quipu with a mind of its own is metaphor that enacts a lively reality where the research methodology is a participatory force in the process of inquiry.

When I encountered these ideas I came back to my initial question explored in chapter 1 about practices of knowing, educating and living. About thinking as doing in a broader sense and wondering how our research, pedagogies and daily living practices enact thinking as being *really* the stuff of the world, performed in not pure nor innocent collaboration with nonhuman, more-than-human forces? Barad (2014) argues that we need to attune to the idea of “Responding – being responsible/response-able – to the thick tangles of *spacetime mattering* that are threaded through us, the places and times” (p. 184). I loop back to that initial idea of thinking as a process that runs through bodies, places, times. And through our human bodies, traversing our cells, bacterial bodies, parasitic bodies, viral bodies, mucous, fascia, bones, hairs, ligaments and juices of all kinds.

What makes the quipu a postqualitative methodology is the way in which the quipu becomes a performative archive that affects and is affected in the making of the research. Being non-fixed, the quipu responds to contingency, improvisation, and is open for experimentation. This is a post-representationalist way of doing research, because knowledge is not recovered from an external world or projected from personal history, but enacted, performative, situated and partial (Varela et al., 1991; Varela, 1999a). This form of knowledge production is aligned with feminist situated knowledges (Haraway, 1988; Harding, 1987) that disrupted modern scientific grids of knowledge production as neutral and objective in the 80s and its fruitful legacy in feminist thought, but also attends to relational forms of thinking that

were suppressed by the colonisation of the minds (Anzaldúa, 1991, 1999; Vicuña, 2010b; Rivera Cusicanqui, 2019). As I map the intensities of my material encounters in the quipu by knotting, I engage my multisensorial body in the making of the quipu through touching, breathing and posturing. Body, self and quipu are making each other up.

It is also important to note that the postqualitative turn, and more specifically the ontological turn in methodology, has also been critiqued, particularly by postcolonial scholars such as Wu, Eaton, Robinson-Morris, Wallace, and Han (2018); and Gerrard, Rudolph, and Sriprakash (2016), who asserted that many of the claims made by postqualitative scholars continue to reinforce Western hegemonic thought. These researchers agreed that the field of postqualitative methodologies fails to account for ancient relational ontologies and epistemologies, such as southern African *Ubuntu*, eastern Tao's *wu wei*, which precede by thousands of years their Western counterparts (Wu et al., 2018). Emerging from the Andean animist relational mind, the quipu also corresponds to an ancient technology rooted in a relational ontology that understands the cosmic interconnection between things of all sorts.

In my experience, quipu and postqualitative methodology render each other capable of becoming something else. The quipu as a methodology enables me to see how post-qualitative research practice allows me to attune my research to ancient relational practices of the territory I am from, and furthermore, to understand methodological practices as political, historical and situated. To me, it is within this dissonant friction where Western and Indigenous onto-epistemic methodologies encounter each other that generative possibilities can be cultivated that do not perform an exclusion of one from another. I therefore place my inquiry within the post-qualitative turn and at the same time am accountable to the situated geopolitical context of this ancient practice that precedes and succeeds the field.

The situated quipu has the peculiarity of being a non-fixed archive where movements of knotting are coupled simultaneously with movements of unknotting, as non-exclusionary practices in a present continuum. It is this quality of non-fixedness and openness to constant modification that is, for me, the core of the quipu as an open-ended script method, and its potential. The way every string is plied, the colours used, the knots, the direction of every action are evidence that in the quipu subtleties materialise difference. In a similar direction to what Barad (2007) has proposed in her diffractive methodology, the *quipukamayusqs* (those who made and animate quipus in the Andes) paid attention to sensual subtleties, to what is included but also to what is excluded. Difference is thus perpetually produced as the script continues to be in movement, corresponding to Kirkwood's (1984) conceptual knots.

This characteristic is described by de Zegher (1997) when referring to Vicuña's (2012) art and specifically the notion of quipus in her work, where she argues "In contradistinction with other writing systems the *quipu* provides opportunity for infinite inscription since what is 'inscribed' is never fixed. The act of doing and undoing, as in weaving, offer multitudinous possibilities or beginnings, flexibility and mobility" (p. 34, italics in original). As a methodology I use quipus by paying attention to the particularities of material encounters, how forces interfere with each other, and where these forces take us.

My approach to the quipu is amplified by feminist theory and specifically by Braidotti's (2005, 2012, 2013a) cartography as posthuman methodology particularly related to her project of nomadic subjects and posthumanism. To Braidotti (2006) a cartography is:

A cluster of interconnected problems that touches the structure of subjectivity and the very possibility of the future as a sustainable option. 'We' are in *this* together, in

fact, enlarges the sense of collectively bound subjectivity to nonhuman agents, from our genetic neighbours the animals, to the earth as a bio-sphere as a whole. (p. 136)

Braidotti's cartographical approach is a theoretically-based partial and situated mapping of the present that is never exhaustive, always politically informed and accountable (Braidotti, 2011). The aim of this methodology is "tracking the production of knowledge and subjectivity and to expose power both as entrapment (*potestas*) and as empowerment (*potentia*)" (Braidotti, 2018, p. 3). It is this interest in tracking practices of knowledge production and power relations that resonates with how I have experimented with quipu and account for its historical and political origins. Being politically-informed is also crucial to contextualising the mapping of the present within the specificities of Chilean politics.

Weaving in Kirkwood's (1984) unfinished character of her conceptual knots I also emphasise the quality of Braidotti's (2011) cartography of being "never exhaustive." Nothing has been more difficult for me than letting go the conditioned desire for exhaustiveness in my quipu-making practice. I notice how I value an exhaustive study as synonym for excellence and rigour. It is a torment. Yet at the same time I understand that this awareness of incompleteness is what makes evident the feminist and pedagogical commitment to subvert universal claims (Braidotti, 2018; Rubio, 2018). In chapter 7: Decolonising myself, I explore some of these processes of unlearning habits of thought as an embodied practice.

This awareness is fuelled by the embedded, embodied and multi-species existence of this methodological practice, where our taken-for-granted human ways of knowing are challenged and expanded (Braidotti, 2018; Ingold, 2018). A cartography "assists us in the process of learning to think differently about ourselves, in response to the complexity of our times" (Braidotti, 2018, p. 4). The carnal and situated empiricism of Braidotti's (2018)

cartography amplifies the call for understanding practices of knowing that traverse the mind/body and culture/nature binaries. Furthermore, informed by a Spinozist ethics of affirmation, cartographies are committed to producing joyful, affirmative and sustainable values and projects (Braidotti, 2018).

With all these resonances, confluences and amplifications it is important then to examine how the quipu and cartography differ from one another. A main difference is the material presence of the quipu, which is not an abstract conceptualisation but a tangible, coloured and fibrous body which brings forth a corporeal practice of collecting, knotting and unknotting. The quipu animates the metaphoric Andean universe, exists as part of the world in its textile form and, to an extent, the quipu is a co-author of this thesis. Rather than an abstract theorisation, in this research the human body and non-human body quipu enter a process or dance of (de)composition that occurs in the thinking and making as material engagement.

Quipu making is materialised in between the territory of the body and the territory of the land where the practice take place. The quipu, as situated practice that has its origin in an ancient thread of thought that comes from the Andes, enacts a vital concept in decolonial feminisms from Abya Yala, namely the fluidity between territorio cuerpo~territorio tierra (territory body~territory land) (Gargallo, 2014). The moving, sensing and thinking body is therefore a porous site of actualization that exists only in relation as part of a shared world (Varela & Flores, 1999). This process is therefore not bounded to the Andes, but actualised in the territory where this practice is performed.

Therefore, processes of thinking, learning and attending to our present time are attuned to an anthropological perspective that amplifies the radical imaginings of the field of

cognitive sciences in the past decades (Ingold, 2018). Ingold (2015a) describes many currents of post-cognitivist approaches, and I elaborate on one of them. My decision is grounded in my desire of making this quipu a Southern force, therefore I attend to Varela et al.'s (1991) concept of enactive cognition (I elaborate on this in chapter 4, The mother thread of this quipu) to explain how I understand perception, attention and practices of knowing and how they are enacted in my practice of quipu making.

To Varela (1999, 2000) knowing occurs through the active handling of the world where body and world are not separate but, similarly to what Barad (2007) argued, bodies are cut together/apart through intra-action. The quipu does not pre-exist the active handling to be animated through orality. Rather the quipu animates orality and at the same time is animated by hands, touch and breath. According to Barad's (2007) agential realism one could argue that the quipu is a performative archive, that is in flow and which provides opportunity for infinite inscription. This is a vital element in how the quipu offers, as a research methodology, its openness and possibilities to be knotted and unknotted in infinite ways.

So what can the quipu do for research in education? The quipu enacts a methodology that animates relational thought making visible connections between ideas, artefacts, bodies and lands that have been rendered invisible by the colonial ongoing apparatus of knowledge production. By paying attention and knotting this quipu with Latin American scholarship and art and their (our) particular forms of sensing and knowing this quipu becomes a force of difference that aims to disrupt the field and offer a perspective that contributes to imagine how does education could look, feel, taste and move like if other forms of materialising thought were taking into deep consideration and experimentation? I emphasise that I do not believe in any way that the quipu is *the* answer to these questions, but it is the methodological avenue that I have chosen to enact an affirmative and ethical path to enact *conocimiento*.

THINKING/MAKING A QUIPU

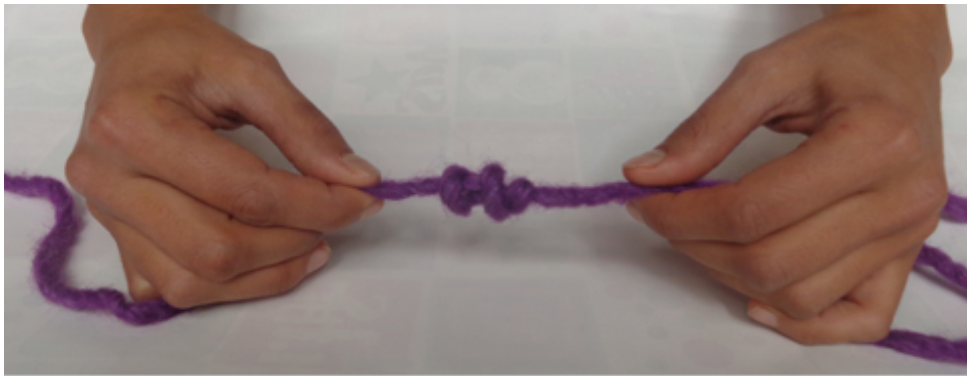


FIGURE 5: ACT OF QUIPUNI, THINKING/MAKING KNOTS WITH “HANDS THAT KNOW.” PHOTO BY AUTHOR.

In what follows I describe in detail how I think and make my quipu as research methodology. This detailed explanation provides an overview of the moves involved in the quipu: by using the whole body in the making of the quipu I practise what Bolivian sociologist Silvia Rivera Cusicanqui (2019) called “*la mano sabe*” (hands that know) as a way to make explicit how we connect through the memory of our bodies to other ways of thinking and doing (Figure 5). As explained in the introduction to this chapter, there are six movements, or phases, of my quipu making as methodology. These movements sometimes overlap, and they do not necessarily follow a linear succession of events. Nonetheless in what follows I engage with each in this particular order:

COLLECTING FIBRES/COLLECTING THOUGHTS

To collect fibres is a movement born out of curiosity and wonder. Fibres become somehow visible or vibrant or loud for me to sense and respond to. This process is about including, excluding, conserving and letting fibres go. Fibres operate on material and immaterial planes, and I cross over these territories. Sometimes I speak of fibres literally, as I

collect unspun alpaca wool, or cotton, or sheep wool, or hemp to spin threads, or when I speak of bodily fibres such as muscles, tendons, synovial tissues, cartilage. But I also speak of fibres as literature, as authors, as stories that are also in the making of the quipu. Fibres work sometimes as nouns, but sometimes they also perform fibre-ing through the text as they go.

I understand the process of collecting fibres as a two-way road, of collecting and also being collected by particular textures, forms, intricacies, smells, dissonances and interferences within theoretical fibrous territories. What prevails is that I, as a multisensory human knower, am inseparable from what is collected or collects me, and the accountability for how this practice occurs and what it does is important. Some authors and not others resonate as I go along in my readings, some theory and not other allows me to amplify the possibilities of my argument, some parts of history and not others are relevant to the sharing of these stories.

In this process of connecting my thinking to fibrous territories and bodies by using the quipu as my research methodology to map situated and emergent stories, I find the work of multispecies scholars Van Dooren and Rose (2012) illuminating to my understanding of what a story is. For them a story is “that which emerges out of an ability to engage with happenings in the world as sequential and meaningful events” (p. 3). What stands out for me is what they refer as “ability to engage,” which echoes how they enact an “art of attentiveness” (p. 4) that is about paying careful and multisensory attention, and crafting responses to the lively entanglements of historical multispecies relationality, a communicative matrix that is woven with practices of becoming-with (Haraway, 2016; Kirksey, Münster & van Dooren, 2016).

In other words, the quipu as an archive is my way to craft a response that materialises in the fibrous practice of collecting the fibres, knotting and unknotting the intensities of events that emerged during the process of this research. Collecting the fibres is therefore a

practice of becoming-with theory, involving non-human and more than human forces that are continually in the making. That is why I stress the partiality and inseparability of this particular quipu, but also its potential to materialise situated memory that is post-anthropocentric and post-representationalist because it is alive as part of a multispecies and more than human world.

My practice of collecting fibres resonates with the propositions from multispecies scholars such as Kirksey et al. (2016) when they explain that “only-human stories will not serve anyone in a period shaped by escalating and mutually reinforcing processes of biosocial destruction – from mass extinction to climate change, from globalization to terrorism” (p. 3). The stories of this thesis also have lively non-human participants who do not fit into the taxonomic category of species. Drawing on Indigenous onto-epistemologies, Kirksey et al. (2016) trouble and expand practices of fibre collections in many fields, understanding living and non-living entities such as geological formations from mountains, rivers and glaciers as distinctive ways of life that affect and are affected in patterns of becoming-with, histories and entanglement (Haraway, 2016; Haraway & Braidotti, 2017; Kirksey et al., 2016). Through this disruption of anthropocentric narratives, these fibres also speak of the force of Andean animist history and ecologies (Allen, 2016; Cereceda, 2010).

Furthermore, in this particular quipu the stories of the chair are entangled within the matrix of colonial, authoritarian and neoliberal unequal power relations that materialise the geopolitics of the territory of post-Pinochet Chile and are actualised in living close to Merri Creek of the Kulin Nations in Australia. As a result, collecting the fibres for this quipu is a situated response to particular events/ideas/materialities to which I have paid careful attention over the years of this study. As an embodied practice, collecting the fibres happens by a double movement inside~outside where my memory, lived history and the bacteria

infused living matter of my body co-emerge with the territory, ideas, authors and events I immerse myself in (Kirksey et al., 2016).

SPINNING THE THREAD, SPINNING THE WORLD

Within quipus everything is flow, because fibres and threads and knots are all carrying and intensifying stories, ideas and forms. After collecting fibres and colours the following movement is the spinning. As material engagement to spin I move the fibres with my hands in opposite directions using a hand spindle when I do it in the Andean way, or my legs as surface when I use the technique I learned from Pacific Islander women. The fibres become entangled through tension and a thread is created. A thread is therefore a collection of fibres in close proximity, in tension. Always one and multiple at the same time, the thread carries the memory of the fibres in time.

I am curious about how the hand spinning of threads translates to human, chair, land and historical fibres spinning worlds. According Vicuña (2010a) the movement of spinning required to create a thread enacts, in human scale, the spinning movement that is crucial for living in the universe (Coleman, 2016). In her analysis of Vicuña's visual poetry, Coleman (2016) explains how textile thinking connects to a planetary scale where our planet Earth is constantly spinning, and at a subatomic scale where even electrons spin, and DNA has a similar composition to a thread. For Vicuña, the spinning energies are those of creation (*poiesis*), a movement that sustains biodiversity on earth (Vicuña, 2010b). I propel the poietic force along this thread of life, letting the fibres I picked let themselves go with the spinning forces that are already there for the creation or *worlding* of worlds (Haraway, 2016; Ingold, 2015b)

Fibres of life become thread as worlding is set in movement, as a poietic territory for the creation of something that was not there before. Spinning is attuning to a crafting process

where fibres are not separate, static unities but are in constant intra-action with the universe. Spinning requires attention, skill and energy, and I notice that the threads I have spun are never perfect but I sense in my hands the desire of the fibres to stay together to become something else. Most of my threads are fragile, they break easily and my threads of thought similarly seem to hold themselves in precarious existence. Nonetheless, they exist aware of their incompleteness, they are the keepers of a feminist memory in the making. This is how the threads of the quipu as archive are touched into existence.

Not all the threads are the same; colour, direction of spinning and thickness are all taken into consideration for the making of this quipu. I also used some threads spun by other humans, and even machines. The quipu is hybrid and speaks many tongues. For example, I knew it was important to spin the mother thread of this quipu from raw Alpaca wool from the Andes. In the process of spinning this thread I was thinking of the theoretical propositions contained in that thread, my adventures trying to understand Francisco Varela's work and how it is relevant for education today. How does it speak to the field of postqualitative research in education? Does it amplify the praxis of Latin American radical pedagogies? How can it be twisted using some feminist propositions? How does it illuminate how I understand what our bodies can do? With the mother thread in my hands, in what follows, I enter the intricate intimacy of the knot, and the practice of tying knots.

QUIPUNI (OR TYING KNOTS)

How does the knot emerge in the quipu? Quipuni is Quechua for tying knots. In this quipu thesis, knots are intensities, events, stories that have affected me in particular ways. I notice that I have used the word *intensity* several times in this text and it is appropriate to elaborate more on how I understand its presence as I write spatially,

t
h
r
e
a
d
in-tensi-ty
t e n s e
in-tension in-tención
in-tention
t
h
r
e
a
d

According to the English dictionary the word intensity communicates a quality and degree of power, vigour and potency. Tension lives within intensity, a tension that is generative because the knot is a mark in time and space where propositions, ideas, imaginings and theory momentarily intensify by looping, twisting and tensing: a mark signalling the thread. To me this is related to the (in)tension of the encounters that proliferated in this research over the years, how these encounters affected the way I think, live and practise. They emerged as knots in the quipu mapping stories. It is only now, while writing that spatial poem, that I noticed the relation between intention and tension. It was only when writing them in Spanish and English that I observed their mutual entanglement.

Feminists scholars Niccolini, Zarabadi and Ringrose (2018) experimented with the concept of tension and argued that “opposed to a humanist progress narrative that views tension as something to be overcome or eradicated, we see tension as an activating force” (p. 325). Their call resonates with the knots in the quipu, whose tension activates memory, healing and possibilities to create difference. The in-tension of the quipu is not about

transmission of a separable information because the quipu exists only in relations through breath and touch. Touching the quipu and being touched by it, the knots signal the relational, immersive and intensive way human and non-human bodies intra-act to augment capacities of understanding and becoming.

But my relation to knots did not began with quipus, or even threads. I learned knots from within. Visceral knots, bodily tissues becoming whorls of tension, sometimes painful and sometimes just asking for attention. Marks in the guts, muscles and fascia. My relation to knots is experiential. Before making quipus I felt my body as a living quipu. Encounters and events leave sensitive marks on my body. A knot in the pyloric sphincter. A knot in my throat. A knot in my shoulders. A knot in my hips. Knots are the effects of affects in Bradotti's (2010b) Spinoza-infused language. But how can I describe a knot?

Mathematician scholar Elizabeth de Freitas (2012) argues that "topologists and knot theorists study boundary relationships and connectedness. Knots are themselves composed of curves or curvilinear lines that are embedded in dimensional spaces, but the curve in n-space is an unruly and nonlinear creature" (p. 564). I like this image of the unruly and nonlinear creature because it reminded me of my first experiments with knots (Figure 6). As de Freitas (2012) goes further to explain, "the knot has no interior or exterior. It is all line, or all outside" (p. 565). These theorisations connect me back to Ingold's (2015b) understanding of knots as proliferation of lines that are inventive and expressive.



FIGURE 6: EXPERIMENTS WITH KNOTS. KNOT MADE IN MY STUDIO IN 2016. PHOTO BY AUTHOR.

Most research about the quipu refers to knots as a sort of encoded language, signifiers or mnemonic devices for the transmission of information (Niles, 2007; Salomon, 2004). I prefer to experiment with de Freitas (2012), Ingold (2018) and Vicuña (2012) not as signifiers but a performative collection of memory that connects fields of reality in the creation of an expressive tissue where colour, form and position evoke “the stretching, twisting, and folding processes that characterize becoming” (de Freitas, 2012, p. 365). Rather than a code a knot is a site of interference, where things come together in unexpected ways (Barad, 2014; Coleman, 2013).

In pre-Columbian Andes those who “read” quipus were called quipukamayuk, and it was a woman or man who animated the knots or breathed life into the knots (Vicuña, 2010a). This emphasises the idea that the quipu is not a symbolic language to be represented, but a sleeping story waiting to be enacted again through touch and the breath of orality. Similarly, the process of quipuni or tying knots is an act of poiesis, creation, where something that was not

there before materialises. The knots I present in this thesis are creations in an Anzaldúa's sense: for her, "creation is really a rereading and rewriting of reality – a rearrangement and rewriting of pre-existing elements" (2015, p. 40). This reality enacted is dependent on me as perceiver, I emphasise again that this does not mean I project a reality, but that I am entangled within these knots, and I am created by them.

Creativity is an embodied (im)pulse where the artist/creator uses her body, soul, mind and inner force to create collaboratively (Anzaldua, 2015). And these acts animate "other" ways of knowing, dreams, body, intuition and senses beyond the five physical senses or what Anzaldúa (2015) refers to as *La Facultad*. She affirms that this kind of process contributes to heal colonialism's wounds, that epistemic wound referred by de Santos Souza (2007) and Smith (2012). This is relevant for this thesis as the practice of quipu has played a significant role in the process of decolonising the self and healing those wounds (see chapter 7: Decolonising myself).

Anzaldúa's (2015) understanding of the process of material creation is attuned to Varela (1991, 2001) and Barad's (2007) understandings of practices of knowing, as both stress that knowing is not a closed, individual practice but about coming together as part of the ongoing performance of the world. To Barad (2007) the shift from representationalism towards a performative alternative requires a shift from "questions of correspondence between description and reality" to "matters of practices, doings and actions" (p. 135). The practice of quipuni is therefore a performative approach to knowledge production, where the marks or knots in the quipu are collections of entangled memory, doings and actions. This form of knowledge is what Anzaldúa (2015) refers to as *conocimiento*.

So what to expect in each knot? Patterns of difference and reiteration. The creation of difference has been an important feminist task of the past decades, a conceptualisation of difference beyond its negative Modern legacy, and a rejection to reinforce the perpetuation of sameness (Braidotti, 2009, 2014). Every knot in this quipu collects partial stories, actions and doings. As Braidotti (2018) argues, these kind of projects are not exhaustive but enact partial, situated, embodied and embedded accounts of the present. Knots mark the *spacetime mattering* where the stories (data) as verb are actualised by new encounters that interfere and diffract them, creating new patterns, new intensities and different ways of understanding the phenomena, new *conocimiento* (Anzaldúa, 1991; Barad, 2014; Rivera Cusicanqui, 2019; Schaeffer, 2018).

These emergent stories are autobiographical, political, historical, geographical and pedagogical. The stories are entangled in messy temporal patterns, and together they create a situated archive of memory. To create a bridge from the knots of the textile to the knots in the text quipu, I have borrowed the poetic notion of *knotations* from Vicuña (2010a).

KNOTATIONS

The territory of Abya Yala, and Chile specifically, has an exuberant poetic tradition that precedes colonisation (Vicuña & Livon-Grosman, 2009). From the mixture of ancient oral tradition and Spanish written verses, mestizo poetics have arisen as one of the many voices of this territory (Coleman, 2016; de Zegher, 1997). Within mestizo poetics, Vicuña (2010b; 2009) has had a pivotal role in linking conceptual art to orality and textile experimentations. de Zegher (1997) describes how one of Vicuña's artistic mestiza practices is the elaboration of notes as knots, notations as knotations. I understand knotations as textual experiments with

the language of knots, and I use them in this text to weave through words a poetic bridge between textile and text.

Within this thesis, knotations are pieces of poetic text written in italics that emerge as disruptions within the prosaic text of each knot. Knotations are here and there, \; some are poetic field notes, others are poems I have written as my hands go along the thread and explore knots; many of them are oral forms that I transcribe conserving their oral grammar, some are in Spanish; others are written as I read and re-read the text. Feminist poet Adrienne Rich (well-known for her concept of politics of location) has argued that poetry “is an instrument for embodied experience” (p. 49). I am not convinced that the word *instrument* actually meets my understanding of what poetry can do. Nonetheless, I agree with Rich that poetry is the voice of embodied experience, and flows somehow through an intuitive channel parallel to reason. A similar connection is made by Anzaldúa in her poetry (Anzaldúa, 1999).

To Anzaldúa (1999), poetry “pulls us out of our habitual grounding and takes us to unusual associations, to see and feel the spaces between, to feel the absence – but also fullness – of what is not visible in rational time and space” (p. 61). The practice of knotations allows me to experiment with less rational ways of engaging with the way everyday life events (as data) interfere with material encounters in continuum, to actualise itself as it goes data-ing through the woven tissues of cosmos and my body (Duhn, 2017). My desire for poetic experimentation is similar to how Barad (2012) describes her engagement with poetry: in her words, expressing her ideas through poetic modes emerges “not in order to move away from thinking rigorously but, on the contrary, to lure us toward the possibilities of engaging the force of imagination in its materiality” (p. 216).

My own ways of understanding matter, relations and pedagogies are transformed as knotations are written and rewritten. Knotations do not aim to be exhaustive or conclusive. In a different direction, knotations open spaces for the flourishing of new possibilities of imagining events, knots and ways of becoming human. I think of them as sentences-as-threads that get tangled in an intimate space with other threads, sometimes bringing forth perceived qualities, at other times dissolving boundaries. In all cases, knotations are creations in the in-between and the words in italics signal this shift in mode.

UNKNOTTING

I go back to the pre-Columbian Andes, where the knots that “talk” were not only those that held form, but also the twisted cord, where knots were not there anymore. Unknotted knots, those that were somehow excluded, were also enacted when the quipu was brought to life by the quipukamayuk, acknowledging that although the knots were not present any more marks were left in the cord/body (Barad, 2007). In a similar vein, referring to her work Knot II, Bauhaus textile artist Anni Albers (1965) suggested “although it is small, each thread seems charged with uninterrupted energy: the underlying units twine and intertwine with nonstop vitality, as if to say that they exist singly but also as part of something greater” (p. 203). In my opinion and from my material experience with knots and threads, it is through the process of unknotting and opening the thread that another universe unveils.

When referring to Vicuña’s art and specifically the quipus and the practice of unknotting in her work, de Zegher (1997) argues “in contradistinction with other writing systems the quipu provides opportunity for infinite inscription since what is ‘inscribed’ is never fixed. The act of doing and undoing, as in weaving, offer multitudinous possibilities or beginnings, flexibility and mobility” (p. 34, *italics in original*). In the same sense, the knots are

closer to propositions than fixed products: they are knotted, yet open to be unknotted as I go along the quipu. Furthermore, it is my dream that as the reader animates these knots through reading, her own stories enter in conversation with the knots actualising them in different, situated and embodied accounts of the present.

Unknotting is also an act of undoing that is not erasure. A potential that plays with the possibility for transformation and change. This force connects to *conocimiento* as a form of unlearning, undoing knowledge production in its dominant cognitive and rational form (Anzaldúa, 2015). Nonetheless, it is not an erasure of other forms of knowing, but an elaboration that occurs otherwise, by unknotting enfleshed thoughts and making them differently. The memories of the previous knots continue to live within the fibres of the quipu, but there is always possibility for things to change and become undone.

ASSEMBLING THE QUIPU

I have assembled this quipu using the most common quipu structure. This quipu-thesis has a mother thread that holds the quipu together; this text as thread has the particularity of materialising a flow of ideas in tension that define the space for the rest of the quipu to take place. The mother thread is sustained by the philosophies that respond to the *why* of this research project. In this quipu, the mother thread is a deep engagement with the work of Chilean philosopher and biologist Francisco Varela (1999a; 1991), his conceptualisations of perception and embodiment. But I also provide a feminist twist to his work by reading it along with feminist philosophers such as Anzaldúa (2015), Braidotti (2010b) and Haraway (2016).

Every thread, pendant cord and subsidiary cord that hangs from this mother thread carries this force with it. Theory and stories travel constantly within the quipu. In the mother thread I made a cayte or opening knot that tells about the subject matter of the quipu, the

Chilean chair. This is a concise yet very detailed version of the story that animates this quipu, and the political, social, geological contexts where these stories take place. Then the reader enters into the knotted territory of pendant cords and threads. These knots are the data entanglements of the thesis where I share stories of my 'material encounters' research trip to Chile in Spring, 2015. Field notes, audiorecordings, drawings, photos and memories are animated in the form of stories where the Chilean chair becomes a site of interference for other non-human forces such as land, water, clay, living fibres, popular pedagogies and neoliberal materialisations. From some of these knots subsidiary cords emerge that tell more stories about bodies, post-human positions and textiles of resistance.

This quipu finishes at the end of the mother thread by telling how this process of philosophising the Chilean chair, and actualising the body, through decolonising the self through practices of making quipus, and thinking relationally, has enabled me to become attuned to my present presence. In that sense what I share in this last piece is a pedagogical proposition called the creekulum, a curriculum of the creek, where local Indigenous knowledge, experimental art and science come together for our local community, young and old, to wonder and be curious together about how to learn to be humans differently as a cultivation of our response-ability for the precarious times in which we are living.

CHAPTER 4: THE MOTHER THREAD OF THE QUIPU



This is the mother thread of the quipu that holds the quipu as a whole and the starting point of the process of telling the stories of this quipu. To craft the mother thread I use red thread to elaborate on perception and the living fibres of the quipu and the brown and white middle section of the thread express the conceptual coming together of Anzaldúa and Varela. The precarious existence of this handspun thread materialises how conocimiento is crafted, partial and always situated.

Introduction

I have my PhD quipu next to me as I weave this text; the thickness of the mother thread makes it different from all the other threads. The mother thread of the quipu is the traversal thread that holds the space for the pendant cords to hang their knotted stories, intensities in an emergent path. If thinking geographically, the mother thread would be something like the glacier, the source of energy that nourishes the quipu as a whole (Figure 7). Therefore, every thread that depends from the mother thread of the quipu carries some of this energy. Through touch I find the mother thread of this quipu-as-bundle, I slowly pull from one end and let it appear. I have spun this thread myself, I had the idea that the practice of spinning my own threads would express the parallel materiality of the process of spinning my own thought. Thread as thought. Awareness as stream. This thread is the only thread of the quipu that not only has a different thickness, but also different colours and different fibres. It is a hybrid and multicolour mother thread.

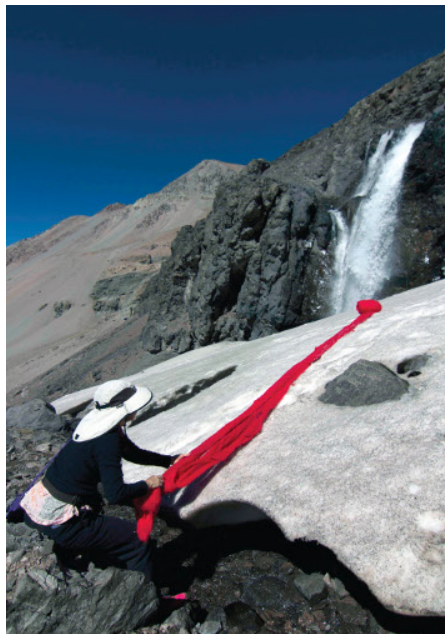


FIGURE 7: QUIPU MAPOCHO: CERRO EL PLOMO GLACIER. CECILIA VICUÑA. RETRIEVED FROM: THE STORY OF THE RED THREAD (2017). USED WITH PERMISSION OF THE ARTIST.

*The mother thread begins with a thin red thread of Australian sheep wool
that becomes t h i c k e r and t h i c k e r
where the cayte or first
knot is.*

*Then it changes to a thread made out of a brown Alpaca thread
and white sheep and silk thread spun together
and finishes in white
thinner
thin
thread.*

As I touch this thread, I am affected by the beauty of the precarious spinning. It is as precarious as my thinking, I think. The quipu infuses my thinking with its aesthetic proposition (de Zegher, 1997). It is a form of art, although I never thought I was making art when I made it. But a particular form of art, perhaps connected to what Vicuña (2017b) refers to in her mestiza conceptualisation of art where art is a form of attention, an awareness, or even more, an awareness of the awareness of more-than-human manifestations.

Enacting the colours of the mother thread, this text moves along three main sections. A red section, that engages directly with Varela's (1991) extension of autopoiesis into perception, and *conocimiento*. Then a bicolour brown and white section where I spin Varela with contemporary new materialist theory. And finally a white section, where I finish by briefly exploring an art work by Varela (1999b) called "The Portable Laboratory," with the idea of the body as topological site of *conocimiento*.

The question that guides this mother thread is how do we think through our bodies? How do radical biologist perspectives about living organisms allow us to sew back the split

between mind and body? And perhaps most important, what emerges when we read these perspectives alongside feminist and decolonial theories? And how does this inform our research methodologies and pedagogies? The purpose of the mother thread is to become a nutritious glacier that brings forth a different way of understanding what it is to be human from a philosophical-biological perspective that is not familiar to Anglo-Saxon educational theory. If education is about the creation of relations, learning, and knowledge, then what can change if our understanding of the materiality of our human bodies changes? What worlds become available if we embody a different understanding of perception?

I position this inquiry within the current political context of climate change and the anthropocene, where the impact that humans have had on planetary ecosystems threatens multispecies liveability (Duhn, 2017; Somerville, 2014; Somerville & Hickey, 2017). Today we know that our children will experience the extinction of thousands of species in their lifetime (Duhn, Malone, & Tesar, 2017), so if creativity is at the source of being alive as Varela (1999a) suggested, then I wonder about the creative pedagogical possibilities we have to create more liveable futures for all?

RADICAL EMBODIMENT IN A VARELIAN SENSE

Suddenly this hybrid and multicolour thread speaks to me of an animated Andean complexity that connects me with a theoretical glacier that has nourished my thinking during these years of the PhD, the work of Francisco Varela (1991, 1999a, 2000) and particularly his notion of radical embodiment, a form of awareness that is a bodily presence. Although almost absent from the new materialist discussion about embodiment and the intelligence of self-organising living matter (Braidotti, 2011), I propose that Varela's (1991, 1999a, 2000) situated understanding of practices of knowing and radical embodiment, furnishes a generative perspective to conceptualise pedagogies (Thompson & Varela, 2001; Varela, 2000). My

intention is that by bringing forth the liveliness and expansiveness of our human bodies with Varela's (1999a) post-anthropocentric approach, it will be possible to open spaces for thinking differently about perception, knowing and therefore education.

How we understand living, perceiving and knowing is inseparable from how we think education. The primary intention of this mother thread is to rethink how we understand what it is to be alive, to be a complex knowing living organism among a myriad of non-human others. Ingold (2015a) is right when he challenges the persistence of outdated understandings of cognition that reinforce a cognitivist comprehension of reality (the separation of knower and what is known). And how these understandings continue to shape education as instruction, transmission and outcome oriented practices (Ingold, 2018). Ingold (2015a) provided a brief outline of a series of post-representationalist efforts to understand practices of knowing in cognitive sciences. Rather than expanding on them, I undertake a close reading of a particular school of thought that emerged in Chile in the late 1960s.

In the effervescent times of the Chilean revolution, Maturana and Varela (1994) were researching and philosophising about the conditions for life to emerge on earth. They wondered about *what* happened on our planet hundreds of millions of years ago that a specific molecular organisation spontaneously came to life in the primitive soup. In the late 1960s, when they were thinking along these lines, inquiries about the origin of life were alien questions within the field of biology, a field that paradoxically has everything to do with life. Maturana and Poerksen (2013) explained that most scientists at the time avoided the question *what is life?* as they said it was too theoretical, too philosophical or too hard to grasp.

Continuing with their historically situated philosophical and biological inquiry in the early 1970s, Maturana and Varela (1994) proposed the notion of autopoiesis. In a nutshell,

their theory of autopoiesis suggests that life originated in the planet when discrete molecular units, through circular metabolic processes, were able to produce a boundary that at the same time enabled them to sustain their living. This self-organising property of living systems is, as they proposed, the key for life to flourish and sustain itself through time and space. They named it autopoiesis, a neologism that suggests that organisms create (poiesis) themselves (auto) as an operationally closed living organisation (Maturana & Varela, 1994).

The creative force at the core of being alive was a completely different proposition to the deterministic and reductionist perspectives of biology at the time (Vörös & Riegler, 2017). Nonetheless, thinking with biology and specifically cognitive sciences suggests a challenge for feminist thought. Feminist biologist Lynda Birke in conversation with Cecilia Asberg (2010) argued that “to be sure, there is a plentiful feminist literature now on the body; but so little of it deals with biological embodiment” (p. 417). There are reasons for feminists to avoid biology, mainly because of the reductive essentialism that continues to have effects on the life of women. Nonetheless, Asberg (2010) encourages experimenting with more progressive approaches within biology, and considers it an ally for feminist thought.

Similarly, the field of cognitive sciences instantly brings the loaded word cognition into this particular spacetime-mattering (Barad, 2007). Inevitably, alongside cognition comes Descartes’ cogito (the notion of the exceptional knowing rational disembodied subject: capital M Man as universal and ideal norm) and the heirs of cognitivism, understood as the first wave of cybernetics (and still dominant today in many fields), which applied the Western logic of representationalism to understand the mind/brain as a data-processor or computer in the head (Varela et al., 1991; Maturana & Varela, 1994; Maturana, 2001; Thompson & Varela, 2001).

The concept of cognition has ongoing effects in the field of childhood studies and education, where it is tied to developmental psychology and the neo-positivist brain-centred turn of neurosciences (Pitts-Taylor, 2016). Embedded in cognitive advanced capitalism, the effects of cognitivism continue to shape education around the world (Braidotti, 2013b; Burman, 1994; Calvo, 2014; Cannella, 1997; Pitts-Taylor, 2016). Haraway (2016) is emphatic when she encourages us to consider with *what worlds* this material-discursive (she would say material-semiotic instead) concepts *enact*, and to pay close attention to what *worlds* the use of these concepts have made invisible, and also what *worlds* the use of these concepts have stopped from emerging (Haraway & Braidotti, 2017). She claims that perhaps the worlds these concepts have blocked are the ones that provide vital energies for the thinking we need (and must do) in our current times (Haraway & Braidotti, 2017; Somerville, 2014; Somerville & Hickey, 2017).

I respond to Haraway (2017) by acknowledging that the concept of cognition will not be able to do much generative work for us any more, as it is too loaded with rational ideas of the bounded individual mind. Nonetheless, and this is also a Haraway lesson, we cannot trash *everything* that has been done in the name of cognition (Haraway & Braidotti, 2017). So I take the risky path. I pay close attention to Varela et al., (1991) and Varela's (1999a, 2000) cognitive sciences, but as explained in chapter 1, I use Anzaldúa's (2015) word *conocimiento*, as an alternative to cognition. To me this notion of *conocimiento* expresses the commonalities between my understanding of Varela's (1999a) propositions of practices of knowing, and Andean quipu-thinking.

For *conocimiento* to do work within a Varelian (1999a, 2000) context, it is necessary to move away from the representationalist paradigm that still infuses the understanding of *conocimiento* in some Anzaldúan scholars such as Keating (2006). In her understanding of

conocimiento, Keating (2006) argues that it is about “an epistemological process that gathers information of the context” (p. 10). Keating (2006) refers to concepts of gathering and information that are the notions of perceptual representation which Varela (1999a, 2000) actively moved away from. I have not noticed until now the correspondences between the epistemological propositions of Anzaldúa (2015) and Varela (1999a), their shared interest in phenomena, perception and spiritual practices, and how differently they weave their conocimiento from different sources. This is important for my methodological practice because it allows me to think about epistemic reconstitution as a situated practice that connects to the geopolitics of sensing and knowing (Mignolo, 2011, 2018).

Weaving threads from phenomenology, cognitive sciences and Buddhism, Varela et al. (1991) and Varela (1999a, 2000) created an eclectic research project that built on his earlier work in collaboration with Maturana (1994) and the notion of autopoiesis or self-creating living systems. Varela (1994) pointed out in the preface of the publication of Maturana and Varela’s (1994) book *Machines and living beings, autopoiesis: the organisation of the living*, that for him, autopoiesis, came to life within the revolutionary atmosphere of Chile at the time. For him the process of collective dreaming that the majority of Chilean population was experiencing at the time of the so-called Chilean way to Socialism was crucial for the development of this concept, an insight Maturana did not agree with (Maturana & Varela, 1994). In the middle section of this chapter I explain in detail how the historicity of autopoiesis is important because it sets a great example of historically situated knowledges.

CONOCIMIENTO IN RED

In what follows, through colour, I delve into the Varelian theory of enactive and embodied perception (Varela, 1999a; Varela et al., 1991). Because I have never thought with colour before I draw on the work of Melbourne-based art historian Tessa Laird (2013) and

Melbourne-based textile artist Katie West's (2018) ecological understanding of colour and place to bring the colours of the mother thread and the quipu to life. Through touch I experiment with the textural rugosities, or intricacies, of molecular autopoiesis and what it is to be a cellular human body, welcoming Dempster's (2000) and Haraway's (2016) proposition to let sympoiesis engulf autopoiesis in a gracious symbiogenetic gesture of response-ability.

Colour is an important feature in quipus. Urton (2005) explains how every detail in the quipu speaks: the direction of the spinning of the thread, form and direction of the knot, traversal connections, position of the threads and, of course, colour. Colours appeared in my quipus in 2016. Until then, I used natural fibres and threads from Australian and Chilean sheep, and the threads looked all the same, between cream, beige and white (Figure 8). My first PhD quipu had colour only in the mother thread, a purple thick thread that came from Chile. What I did not notice in the making, but I did when I animated this quipu, is that sameness did not work for the quipu. The contrast and experiential difference between the threads, and not only the knots, but the thickness and colour were profoundly important to animate the stories that slept in the knots and the threads. That is why when I made my next quipu I unknotted the white quipu and began practising with pigments, colours and dyeing techniques to bring a new quipu to life.



FIGURE 8: FIRST PhD QUIPU IN WHITE. PHOTO BY CECILIA VICUÑA. MELBOURNE, NARRM, OCTOBER, 2016

I start with the red thread, the beginning of this quipu. In *A rainbow reader*, Laird (2013) began telling her situated story of the colour red from the Kundalini serpent, an ancient description of a dormant energy in the form of a serpent that gets activated as it travels and transforms the living experience of the body. This coiled serpent sleeps in the root chakra in the core of the body connected to pleasure and sexuality. The root chakra is expressed with the colour red, warmth.

It is in this red fragment of the mother thread that the cayte (the first knot, subject matter) of this quipu is tied. According to Ingold (2011), the chair works by dividing the body in two: into the upper “thinking” body (head and hands), and what in Modernity was known as the “mechanical body” (legs and feet), barely considered as a part of the knowing body (Ingold, 2011). As I was writing this, I did a quick Google search to find out that *cadera* (hips in Spanish) comes from *cathedra*, that is chair, because of the intimate relationship between hips and chairs. How appropriate for a quipu of the chair to begin with a red thread! - I thought when I read Laird’s (2013) work and her connection of red with the root chakra.

Thus, at beginning of this quipu, the red thread marks the place in the body where a boundary (between mechanical and thinking body) is enacted by the ubiquitous practice of sitting on chairs. But there is more. This thread came to me when Cecilia Vicuña was visiting Melbourne in spring, 2016 (Figure 9). She asked me to take her to a cooperative of weavers in Carlton to get unspun wool for one of her performances in Tasmania. We went straight to the red thread, and as we were there all surrounded with wool, she explained about the relationship of the red thread and the Andes, and spoke of it as *la fibra vital* or the fibre of vitality. Red thread is simultaneously enacting non-exclusionary worlds of meaning, the Hindi world through Laird (2013), and the Andean world through Vicuña (2010a). I took one piece of

this unspun wool and I spun it at home for this quipu. Andean, magical practices, hips, centres of energy in the body. I wondered what else is there in the mystery of the red thread?



FIGURE 9: MY CHILDREN SAMIK AND NAWEL PLAYING WITH RED THREAD AND CECILIA VICUÑA. NORTH MELBOURNE, NARRM, OCTOBER, 2016. PHOTO BY AUTHOR.

To Vicuña (2017a), the colour red also connotes the living menstrual blood, and the connection between menstrual blood, water and feminine forces of creation. In her piece “Menstrual quipu: the glacier’s blood” (2006) she wrote a letter to the first female president of Chile, Michelle Bachelet, whose father was tortured and assassinated during Pinochet’s dictatorship, while she with her mother were both imprisoned and tortured, and lived in exile until returning to Chile during the transition to democracy. In her letter, Vicuña (2006) tells Bachelet that she voted poetically for her by offering a quipu of red threads to the Andes in the “El Plomo” mountain where the Mapocho river is born. The purpose of this quipu was to connect the red fibre to the waters of the glaciers for Bachelet to remember the call of dying

glaciers of the Andes threatened by the greed of transnational mining corporations, such as Barrick Gold Corporation.

The connection of these seemingly disconnected events such as water, red thread, menstrual blood, glacier, multinational corporations, painful memories, dictatorship and greed in Vicuña's (2006) quipu offers an example of how the artist engages with the quipu in her works. In her film *Un quipu menstrual* (A menstrual quipu), Vicuña (2006) sang this quipu into life in "El Plomo" glacier on the same day that presidential elections took place in Chile. To me, this is how the quipu works as a performative archive: in this case, enacting an archive that brings forth the connections between neoliberal greed, dictatorship, pain, fresh water sources and government ideologies through the artist's body and song as she remembers through the practice of making the quipu the ancient connection between menstrual blood and water in the Andes (Vicuña, 2006).

In her poem "Oir es el oro, Manquemilla, cóndor de oro," (listening is gold, Manquimilla, golden condor), Vicuña (2006) speaks of a cultivation of listening, a more-than-human listening that connects humans to place and to water, by hearing the "tone" of place. I translated her words as she speaks that a place is a sound, and a way of hearing it. A web of interrelationships, an exchange between people and earth. The space of naming (Vicuña, 2006, p. 9). To me, listening to the Andean ancient call of water animates a form of living that sustains the earth. Her invitation to understand that water is gold, the blood of the earth, listening to us speaks to the sacred link between ancient Andeans and water to weave a relationship with Aboriginal Australians' revival of their songlines, which she referred to as the poetic oral history of the ritual narrative of place (Vicuña, 2006, p. 12). For her, both are examples of the resilience, strength and regenerative work of Indigenous people around the world. She goes on to explain that in Chile, the condor and the history of water, the memory of

our Indigenous ancestors are our ‘songline,’ a chant as line that enters the earth bringing fecundity” (Vicuña, 2006, p. 15).

Through Vicuña (2016), the colour red becomes something else. Red is sound, place, memory, history, cry, resistance, water, life. The particular connection between colour and place has been explored recently by West (2018), who states that “The ways of knowing, being and doing imposed upon country for the last 230 years are modes of existence that grew from an ecology far from here. It takes time to find our place. Too many years of non-recognition means there are many relationships in need of repair” (p. 73). As a Yindjibarndi woman, West (2018) speaks of a form of repairing relationship through listening similar to that proposed by Vicuña (2006), and she goes further to explain that “working at the pace of our old people and tending to good relations with non-human kin is where I wish to dwell” (p. 73). To me this resonates with Mignolo’s (2011, 2018) geopolitics and body-politics of sensing and knowing, and the intentionality at the core of decoloniality not as a universal good but an option that both artists Vicuña (2006) and West (2018) materialise through their practices, and which reflects how I experience my relation to the quipu as research methodology.

In relation to place, West (2018) explains that through the process of dyeing what traverses from plant, mineral, insect to the fibres is place in its multisensorial existence. Place as sound, smell, texture, colour, ancestors. For her, this process always engages more than one sense. Colour perception, through West’s (2018) and Vicuña’s (2006) poetic and textile practice becomes something other than the classical reductive visual input/output process, where the eye distinguishes varieties of light wave due to many physical phenomena such as reflection, refraction, absorption, etc. Laird (2013) offers a more personal and phenomenological perspective, referring to colour as an experience. Laird (2013) delves deeply into cultural specificities of these experiences, for example, in her homeland, Aotearoa New

Zealand, Maori people had more than 60 ways of naming red. Their way of naming was related to the hue but also to the context where the red occurred.

Holding red in my hands makes me think of the red blood beneath the skin of my hands: I imagine the flowing movement of red within veins and arteries, in the membranes that allow that fluid to stay inside the body, carrying molecules of the air through the breathing body. I think of air and atmospheres and red and blood and cells and life. I am all permeated by red now, thinking in the Andes, mountains and magical rituals. Thinking about my present life as a mother in Australia. If red is not light wave information, not data, not information, what is red? And what is there in Varela's (1991) body of work that provides an alternative to the representationalist version of colour. I first explain how I engage, as a feminist, with Varela's work, to delve through red into his perceptual approach.

RE-TURNING TO VARELA

The first time I heard of Varela's (1994) work was in university, through the institute of complex systems in Valparaíso. Later on, his name was mentioned again during my honours research about sensorial systems and attention, I remember I asked my grandmother for his book *Conocer* (to know), but I did not enjoy the reading. Afterwards when I was practising as kinesiologa and researching how babies learn to move themselves, an early childhood educator and professor in education I met in La Serena said "You have to read Varela and his notion of *enacción*!" (In Spanish the verb *to enact* does not exist as such: Varela chose it with the idea of explaining the action of "*hacer emerger*" or "to let emerge"). I read a little bit and found it fascinating, but really hard to grasp.

After all these glimpses, I only became familiar with his work while writing this PhD. And I vividly remember when learning about autopoiesis, here in Australia, I felt so

disappointed with how I passed my biology, microbiology and biochemistry subjects at university without knowing about autopoiesis at all. But at the same time I noticed that it was my engagement with philosophy and feminist theory that made Varela's (1999a) work compelling for the first time. Biology was not enough to engage with his ideas, I needed a philosophical thread to weave his work, too. But I was not reading just any philosophy at the time, but feminist philosophy.

Approaching Varela et al. (1991) and Varela's (1999a, 2001) work as a non-scientific and non-Buddhist feminist is not an easy task. Perhaps that is why I have gone through intense reading, listening, researching periods followed by deeply critical and disengaged phases. My (dis)engagement from some of his work occurred because of the dry science, graphics and mathematical concepts he used. Thanks to my background in biology and chemistry, I could understand some of them but most were elusive, yet fascinating. I experienced similar difficulties trying to create an affirmative path through many of the key Buddhist concepts that are experiential and not transferable yet important to his argument.

I do not pretend to be an expert in Varela, nor even attempt to "get it right," as an abstract concept. But for the past four years I have gone along with some of his ideas, experimenting with what they might bring to our lives. It has been a slow process of (un)learning, of embodying *conocimiento* (Ulmer, 2017). Reading Varela (1999a) as a feminist with posthuman affirmative ethics I also struggle with how Varela et al. (1991) use and praise controversial animal research that was done in the 1970s within the field of behavioural research to make their scientific claims. How can an experiment that separates baby kittens from their mother at birth to raise them in the dark be a 'beautiful' experiment? (Wolfe, 1995).

In this text I do not hide my reactions to Varela's work, or my (in)capacity to let it go or fully embrace it or claim that I can fully understand it. I cannot fully understand it, and I have to come to terms with feeling that I am constantly a beginner with Varela. Nonetheless, when reading/thinking/making/discussing ways of knowing, perception, mind/body dualisms, etc, I always think of Varela, and there is always something in his body of work that offers a different perspective. And it is this re-turning to his work over and over again during the years of this study that animates this text.

Rather than perform the undutiful daughter as Braidotti does with her mentors Deleuze, Foucault and Irigaray, engaging critically with their work, but also acknowledging their indissoluble bond, I follow Barad's diffractive engagement with Bohr's work and engage with Varela's work through a feminist practice (Dolphijn & van der Tuin, 2012). Practising my quipu methodology, I choose particular fibres of his work, understand them as situated partial knowledges, spin them alongside feminist knowledges and practices and let colours infuse the fibres for the creation of something new: this mother thread.

Responding to Haraway's (2016) call, I stay with the trouble as I attempt to put his conceptual practice to work with a feminist twist, bringing to the fore the often neglected, situated politics embedded in his ideas (Davis, 2014; Vörös & Riegler, 2017; Youngblood Jackson & Mazzei, 2012). I work primarily with ideas borrowed from 'The Embodied Mind,' a collective piece published in the early 1990s, and read it alongside interviews in Chilean/Spanish, columns published in small dissident magazines during the dictatorship, and his writing on ethics and the arts (Varela, 1979, 1983, 1999a, 1999b, 2000, 2001a, 2001b; Varela & Flores, 1999). In what follows I spin his ideas of colour perception, to make my way into the notion of autopoiesis, enactive cognition and ontological inventiveness as I move into the lively multi-stories of this quipu of material encounters and the Chilean chair.

I am still sensing the colour red. How many stories can a red thread tell? The story of the animal whose hair was cut? The story of the plants that nourished those hairs for them to grow? The story of the weather that shaped that hair? The story of the sadness and terror the sheep felt as they were violently shorn? The colonial story of sheep in Australia? The story of the mineral that was infused in those fibres to change its colour? Were millions of insects killed to get the pigment? Can the mineral tell the story of the mountain where it came from? Or perhaps the story of the energy that those humans invested when preparing the pigments? Did they sing to the pigments? Does red remember songs? Suddenly, colour is not a representation of something 'outside' but becomes deeply entangled in histories, geopolitical economies of situated lives, memories of magic ceremonies, Atlantic adventures and colonial violence. Colour becomes matter that desires and remembers, colour speaks languages I am just learning to attune to (Dolphijn & van der Tuin, 2012).

As I explained, the quipu invites me to re-turn to Varela's et al.'s (1991) explanation of colour vision with fresh eyes, as they present a radically different perspective on colour perception. For them colour does not exist as such, in other words, there is *nothing* red in the world that we perceive via our visual system. In other words, according to Varela et al. (1991), there is no external correlation between what we, humans, call red and what is supposed to be 'out there' independent from us. How is it possible to say that colours do not exist as such? How does perception occur then? What can perception do? How are we in relation to the world? The shift away from representationalism that this kind of thinking requires is literally substantial, away from substance and flesh. Varela (1999) dedicated decades to the study of colour vision in birds. What emerged from this research provided the empirical grounds for the proposition that colours do not represent features of an independent world. That is to say that

what we call red does not exist separate from who is observing it. In other words, he asserts, colours are emergent phenomena. Neither wavelength of light nor our sensorial visual system is enough to make colour independently. Colours do not exist independent of the observer. Neither projected from the human, nor incorporated from the outside, colours are enacted in-between our human multisensorial systems (not only vision), language and the worlds we bring forth through the situated history of our coupling with the world.

Colours as observer-dependent experience bring to the fore three important issues: 1. colours do not pre-exist our relation to them; 2. what counts as reality is not fixed; 3. through language we create shared worlds of colours that are linguistically and culturally specific but not transferable to other species. Varela explains how human capacities for colour vision are constrained by the evolution of our specific mammalian sensorium, and that the worlds enacted by other living forms with different sensorial systems are completely different. He uses birds' colour vision to explain that it is not that birds can see "more colours" or "better colours" than humans, but an incommensurable differently coloured world altogether, they see *dimensions* that we cannot even begin to imagine (Varela, 1983).

Furthermore, Varela et al. (1991) report on empirical research to suggest that vision is not an affair of a passive, single sensorial system, but an active multisensory embodied coupling with our environment, which we perform as historically embedded and situated living systems. In other words, the prevalent idea that our body passively 'receives' visual data in the form of light waves in our retina, 'processes' it in our nervous system to make sense of it and relate it to previous experiences, and 'responds' through action, is turned upside down by this approach that Varela et al. (1991) call "enactive cognition." In the enactive cognition approach, practices of knowing are not separated from our concrete engagement as part of the world, where sensorium and motorium do not work in a linear logic input-output but in a loop that is

simultaneously aware of and embedded in the sensuous environment. By this approach, perception is action perceptually guided, where living, thinking, moving, knowing, sensing are not happenings that occur in a linear way, independent of each other, but are part of an interdependent continuum – an analysis that presents a performative disruption to the notion of representationalism.

A feminist twist to this notion can be found in the work of Barad (2007) and her approach of ‘agential realism.’ Using concepts from quantum physics, Barad (2004) argued that agency is not something that someone has, there is not an agent that acts upon things. Rather, agency emerges in intra-actions where boundaries are enacted through the phenomena of cutting/together/apart. What Barad adds to Varela’s approach is how non-living matter is also animated and reconfigured in every intra-action. This is an issue that also resonates with Indigenous relational ontologies, as I explained in chapter 3. This poses ontological questions that are important to me as I experiment with methodologies.

Is the four or five-dimensional world of birds the “true” version of reality, or ours? What counts as world? Varela et al. (1991) use this example to explain that living beings bring forth a simultaneous multiplicity of worlds as we move along our lines of life. Some worlds are two-dimensional, others three-dimensional, others four-dimensional (and this is only if we consider vision). Living systems are not pre-given entities parachuted into a pre-given world, but their boundaries emerge and are continually actualised in what Varela and others refer to as a dance, an active coupling with the environment (Varela & Poerksen, 2006; Varela et al., 1991). This idea illustrates the radical notion of pluriverse, or multiverse, a wide and broad ecology of knowing organisms that weave worlds. from bacteria, to cochineal, to humans, to salamanders, to bonobo, to plants, to fungi, to marine environments, to mountains. Within this approach what counts as intelligence has nothing to do with abstract problem solving, but

with the cultivation of the response-ability for the worlds we bring forth that are not pre-given, and the awareness that we are co-creators of shared environments alongside multiple human, non-human and more-than-human co-creators (Varela, 1999a, 2001; Irigaray, 2015).

My son Samik taught me that the *phasmatodea* or stick insects do not move by relying on their vision, but in touch. Through extremely sensitive micro filaments on the end of their feet they sense surfaces as they move along them. When Sam and I watched videos of walking stick insects we were in awe witnessing the improvisational nature of their walking. Finding their way, stick insects 'hold' to suitable surfaces through minuscule sticky pads that allow them to wander even on vertical surfaces. I keep these walking stick insects in mind as I return to a speculative story inspired by Darwin and published by Varela in 1983, during the dictatorship in Chile, in *Revista Mensaje* (a dissident magazine funded by the Catholic church). In this story, Varela fantasises about what would have happened if Darwin had woken up 100 years after his death and looked at what had happened in the field of biology and ecology since the proposition of his theory of evolution.

Varela's (1983) speculative tale re-visited some key aspects of Darwinian theory that have been used by the school of Neo-Darwinism to reinforce modern ideas such as human exceptionalism, survival of the fittest, and competence as the force that drives evolution (Feldman, 2018). In the story, the Varelian version of Darwin was surprised to find out the reductionist understanding of his proposed mechanism of natural selection, the idea that organisms modify their phenotype over time in order to adapt to their environment. Already in 1983, enough evidence supported some multiple routes that included stasis in some organisms that did not change their phenotype even under dramatically changing environmental conditions. Furthermore, a growing body of research on organisms' altruistic gestures

dissipates the idea of brutal competition at the core of evolution (Feldman, 2018; Margulis, 1998).

Back to perception: what Varela (1983) critiques is that the computer-like representationalist notion of how our nervous system works creates the illusion that perceiving is a form of data or information recovery, where sensory systems act as data translators, and the brain as data processor. This is what has been consumed by the school of Neo-Darwinism (ND) and expanded into economics (Feldman, 2018). Neo-Darwinism, a field widely critiqued by feminist science and other radical circles within science, is the school of thought that applied Darwin's principles of natural selection such as competition and survival of the fittest to capitalist economies (Feldman, 2018). This is relevant to education in neoliberal times, where the Neo-Darwinian principles are embedded in the teleological curriculum, and the notions of data and information become crucial to implementing technology-driven curricula (Aravena & Quiroga, 2016; Charteris, Smardon & Nelson, 2017; McKnight, Rousell, Charteris, Thomas & Burke, 2017).

A CHAIR PAUSE

It is time to pause, and walk. I leave Brunswick library and take a walk on Sydney Road in Brunswick; as I walk I notice the Counihan Gallery at Brunswick town hall is open. I have not been in that gallery for months and decide that maybe art helps to dissipate the anxious emotional tone I experience when writing does not flow, that feeling of being stuck that emerges when the text becomes a blind knot. So I go in, and I do not particularly engage with the exhibited art. I walk distractedly around the gallery, until I see them. Two tall black chairs in the very middle of the exhibition. How come I did not see them as I went in I think? Oh perception, I think. So interesting always, what gets unrecorded, unperceived, and what is

brought forth. And chairs, always making themselves sensitive in the, most curious ways. As I look at the description I learn that these are school chairs.

The school chairs on my walk invite me back to the text to loop back. Until now, I have discussed some key issues of representation and how this notion is applied to perception in general and colour perception in particular. Through the work of Varela (Varela, 2001a, 2001b) and Varela et al. (1991), I have offered a particularly radical perspective about practices of knowing and living. In summary, for Varela (1999, 2000; 1999), thinking does not happen in the head/brain, nor in the individual body, but is an embodied multisensory process that emerges as we participate in the world. Through the notion of molecular autopoiesis (self-creating living systems), with Maturana (1994), they argue that living systems are not teleological (goal oriented) nor open (in a logic input-output), but occur in a metabolic loop where the system creates its boundary that at the same time creates it.

KINAESTHETIC MEMORY

This loop to Maturana and Varela (1994) is not a mere feedback loop, as this would mislead us into the old solipsistic bounded individual system notion. This ongoing loop is about situatedness, embeddedness and what Barad (2007) refers as being part *of* the world, and Varela et al. (1991) also refer to as a dance in-between body-brain-environment. Even though I like dancing, I prefer the term Haraway (2008) proposes for these purposes: ‘reciprocate induction’. There is a story behind my choice. I vividly remember when I learned as a teenager that enzymes (molecules that make metabolic processes quicker and more effective) have different ways of encountering their substrate. Some of them act as a “key-lock” model where the molecules of the enzyme and substrate were made to match to each other; there is nothing new in this.

But other encounters were more fluid as molecules enter in a co-shaping process where both enzyme and substrate change their molecular structure as they get closer to each other: this is reciprocal induction, where boundaries are not pre-given but in-the-making within the contact zones. Friction and tension within the sensual encounter are crucial for the making of these ephemeral boundaries that simultaneously transform and conserve the self. I remember my young mind being blown away imagining these micro-scale processes happening inside me. Molecules changing their structure as they move along! If that happens at a micro-scale what about a human scale? Barad (2014) proposes that quantum physics allow us to blur scales, a useful mode of thinking: what happens at the microscale of electrons can be transposed to material-discursive macroscale events.

What the concept of enactive cognition proposes is that this apparently solid and stable self, this *I*, is also in-the-making (Varela et al., 1991). To be clear, that does not mean that the self is perpetually getting undone or dissolving. The creative force of autopoiesis is at the core of this process of self-creativity. As well as being open to transformation, the molecular self, circulate and combines historically situated memory over time, a phylogenetic memory (of all our non-human ancestors) and also the ontogenetic memory of our life. Based on her movement based research, dancer and theorist Maxine Sheets-Johnstone (2009) referred to this memory as our kinaesthetic memory. To Varela (1999a), the history of our corporeal and emotional coupling with the world is fundamental to understanding the worlds we enact today. Out of our history we enact some worlds, not others. This is the biological substrate at the core of situated knowledges (Haraway, 1988).

At this stage it is important to note that Varela (2001) extended the notion of autopoiesis into different domains, specifically neurosciences and immunology. I am particularly interested in what he and his long-time collaborator Evan Thompson suggested:

radical embodiment, defined as practices of knowing that are framed by what they referred as the four Es: embodied, embedded, enactive and extensive (Thompson & Varela, 2001; Varela et al., 1991). As feminist sociologist Pitts-Taylor (2016) explains, in recent years another E has been added: emotional. This E has been replaced by some authors with an A for affective (Vörös & Bitbol, 2017). These 4E concepts provide an alternative to the following dominant ideas:

1. Embodiment challenges the idea that the mind is somehow secluded in the brain that is in the head, proposing that mind is in-between the brain-whole body-environment,
2. Embeddedness questions the idea that the mind is independent of the environment, proposing that mind and world co-arise, co-emerge and are not pre-given,
3. Enactive contests the idea that the mind extracts, recovers or projects properties of a pre-given world in the form of representations, instead proposing that worlds bring forth and are mutually shaped by the environment and its organisms,
4. Extensive problematisation of the idea that the mind is individual, and that
5. Emotional practices of knowing are deeply imbricated with emotional tonality.

This non-representational notion of perception is different from Gibson's (2008) ecological perception. Ingold (2007, 2011, 2015b) drawing on Gibson argued that ecological perception provides a sound frame to understand direct perception (not in the form of representations) where humans can move from the notion of occupying the world, to the notion of inhabitant where humans are "woven from the strands of their continual coming-into-being" (2011, p. 34). Even though Gibson decentres the perceptual focus from the human and pays attention to the invariances and affordances of the environment, Varela et al. (1991)

argue that his perspective is still representational as it reinforces the idea that there is a pre-given world, out there. In this regard Varela suggests a similar shift to Barad's in the sense of calling into question "the exceptionally narrow framing of scientific concerns and scientific literacy" (Dolphijn & van der Tuin, 2012, p. 98).

How do we create a passage to learning science differently? Pitts-Taylor (2015, 2016) has mapped connections between feminist thought and neurosciences with critical accuracy, explaining how early feminist theorisations of the body as primary ground of knowledge and the contributions of situated knowledges (Haraway, 1988) are particularly productive for thinking through contributions from particular neuroscientific perspectives. Nevertheless, (Pitts-Taylor, 2016) acknowledged feminists' "historical suspicion of biological materialism" (p. 21), which many times has limited the possibilities that could emerge from reading them alongside one another.

As Haraway (1988, 2016) has argued, it is within science that many generative movements of radical thought emerge to question its very foundations. Varela's (1991) contributions are engaged with the latest theories, as his research project was conceived from its very beginnings as a counter-position and strong critique of Western science, especially the notion of representation and its implications for the understanding of phenomena of living and knowing (Vörös & Riegler, 2017). Nonetheless, much of the radical tone of his body of work has been watered down and/or neglected by mainstream science today (Vörös & Bitbol, 2017; Vörös & Riegler, 2017).

In a recent publication, Chicana feminist scholars Saavedra and Salazar (2017) suggested that decolonisation as a process should happen at a cellular level. Their call excites me, but also made me wonder about how to (un)learn our cells, the myth of the bounded

membrane, or the fixed notions of identity at a cellular level. We know our bodies are made of collections of multiple differential cells. Cells with different functions, shapes – ideas? Millions of years ago our eukaryotic cells came into being, these cells are themselves a community of different beings that in a particular time in history began to live in close proximity and ended up becoming a permeable, yet self-organising organism. I wonder if a path to modify ourselves from a cellular level can be enacted by learning living systems through the propositions offered by radical scientific literacy of scientists and philosophers such as Varela, Margulis, and Haraway. In the next section I bring to life these ideas through a bodily journey to the juicy life of our human cells.

LIVING FIBRES OF THE BODY

I never thought of the quipu or the chair as cellular tissues. But they are. Composed of dead hair cells of animals, the quipu is a body. And composed of dead vegetal cells, wooden chairs are also cellular bodies. Perhaps some could argue that they are bodied with a mind of their own (Cereceda, 2010). But there is a big difference: their life has been taken away, they now live more-than-human lives, or deaths. In this section, I talk about life. I inherited from my mother a *biophilic* heart, a fascination for living phenomena of cells and membranes and electric potentials. That was nurtured by her and my biology teacher at school, who enacted biology for us, becoming enzyme, amoeba and pore in class. He was a shape-shifter, a magician, and I fell in profound love with the processual materiality of living bodies. Not a coincidence that I went on to studies in *kinesiologia*. In this section, I attempt to honour the forces of life and particularly our living matter from a biological and philosophical perspective.

I hold my mother thread again and pay attention to the middle section of the thread where I had spun a thread of alpaca wool with a thread of sheep wool. I noticed the parallel

existence between these two material threads spun together, their distinction in colour but also their intertwinement. It makes me think about this middle section of the text where I also spin two threads of thought: one that comes from a radical period in Chile's scientific production with another one that comes from feminist materialisms; both travel together from our molecular existence through perception to ontological inventiveness (Haraway, 2016). Perhaps the quipu knew this in advance? The natural colours of the fibres speak of a raw existence of these multi-fibre threads, still in-between animal hair and thread. Hair composed of animal cells, as my hands hold it.

There is excess of intelligence in the living matter that composes our bodies: enzymes that change their molecular structure in intimate proximity with their substrate match to meet in a snugly hug, living marrow flows inside bones, gut bacteria symbiotically digest-with us, nerves as threads more than one metre long conducting electricity between muscles, fascia connecting a myriad of muscles in a complex meshwork, vesicles as miniature carry-bags following chemical signs from one side to another, a broad variety of juices of all kinds (synovial, pleural, cerebrospinal fluid, etc.), and this is to name a few of the sophisticated processes that are happening as we write, think, read and live. Not to mention the porosity and plasticity of these tissues that blur inside/outside as completely exclusive and fixed domains. It is therefore for me inconceivable that thinking has nothing to do with these material collective happenings (Irigaray, 2015).

The mother thread breathes life into this quipu and by doing this responds to feminist philosopher Luce Irigaray and Michael Marder's (2016) call to cultivate life, an art that Western culture has deprived us of. Teleological (goal oriented), input-output logic and fixed ideas about living are still dominant, particularly in education (Calvo, 2014; Snaza, 2016). Perhaps we need to (un)learn our bodies again if we want to learn to be humans differently:

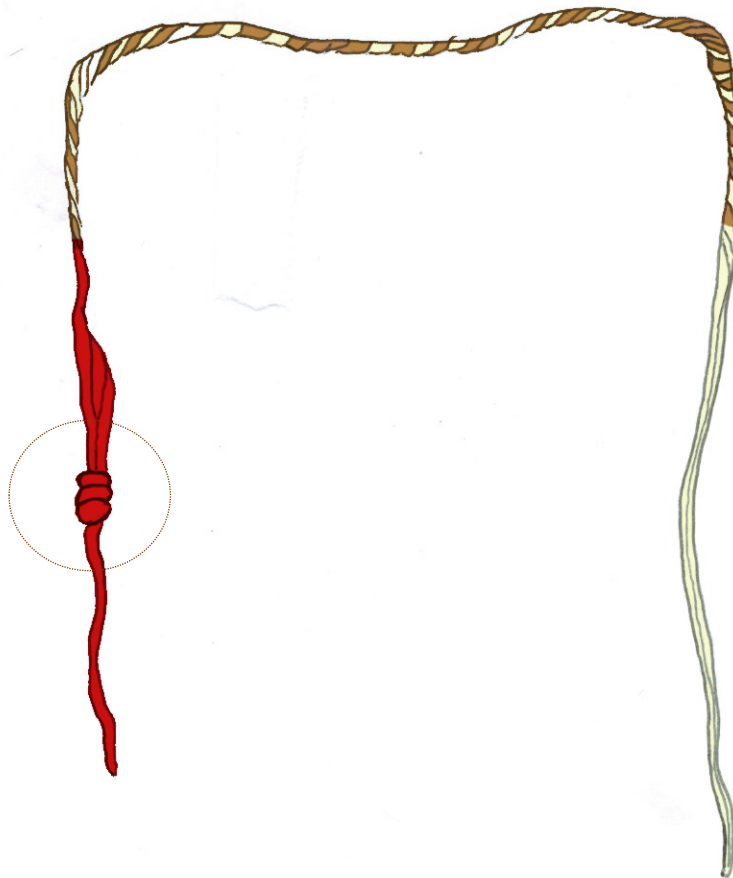
will our cells join in different synaptic conversations, will different currents electrify our bodies, and how would we care for the forces of life that traverse every fibre of our body and the many non-human and more than human bodies we encounter as well (Saavedra & Salazar, 2017). To me, Varela (1999a, 2001) through Anzaldúa (2015) offered an alternative to think our bodies as molecular sites of memory (human and non-human) and production of sensual, lively and material knowledge. Varela's (2001) refusal of abstract ways of knowing framed within representationalism and attention to everyday material and postural engagements aligned with Anzaldúa's (2015) *conocimiento* and also to the ontological turn in post-qualitative research in education providing the theoretical and political underpinnings of my investigation.

Artistically I engage with a somatic practice that enacts Varela's (1999b) propositions to understand our bodies as a portable laboratory, a site for the production of knowledge. By connecting with Vicuña's (2010a) notion of the body as quipu and Singh (2018) elaborations of the body as a fragmented archive of historical memory I move through this thesis by paying attention to my body in a very material way. From breathing to a wide experimentations of ways of sitting to read and write every one of the words of the thesis cultivating forms of inhabiting the world that the Westernised and conservative culture I grew up within have taught me to ignore (Irigaray, 2015). Squatting, kneeling, crossed-leg sitting are a few examples of how I have enacted the principles of becoming aware of my body as a complex living system that is always becoming-with.

Continuing with this somatic curiosity, the following chapter is the *cayte* of this quipu, the main knot of the thesis, the Chilean chair in education. In this *cayte* I continue to problematise ideas of embodiment, mind and education by collecting fibres from history, economy, education, geography, architecture, among other fields to map connections and

disconnections in the territory of post-Pinochet Chile: by looping, tensing and looping again
through the power of the chair in Chilean education I create the cayte of this quipu.

Chapter 5: Cayte or first knot of the quipu



Marked in the circle is the cayte or the main knot of this quipu. This cayte in the mother thread is the manifestation of the power of the Chilean chair in education. An entangled question to the geopolitics of Chile and the tensions between chairs, modernity and embodiment. Knotted in the thread of perception this cayte animates the memory of the chair tracing its historical, architectural and material force.

WRITING A KNOT

*Salí de un laberinto de cerros y algo de ese nudo sin dentadura posible, queda en lo que hago,
sea verso o prosa.*

Gabriela Mistral, 1992

In this verse Chilean poet and educator Gabriela Mistral (1992) speaks of originating from a labyrinth of mountains and explains that some of that knotted quality always manifests in her writing, whether prose or poetry. When I listened to this verse a while ago I got goosebumps because I never thought before of our shared homeland as a labyrinth, a knot of mountains. This was not the only verse that affected me when I read her *Antología Mayor*. In that same text about practices of writing she says that she writes on her knees and that tables have never been useful for her, neither in Chile, in Paris nor in Lisbon. Mistral (1992) also describes the practice of writing as having been her way of healing her soul and body from what some people called the ‘original sin’, but for her the true sin was the great sadness that humanity experienced after falling into the trap of rationality away from the song of intuition.

I was in awe. All my thesis was somehow contained in those words written by Mistral decades ago (1992). Echoes of a song wanting to be heard. As I explain in chapter 7, the postures I have used for writing this thesis are all experiments in a broad variability of sitting and standing on the floor and on chairs. Kneeling, squatting, crossed-legged are just a few of the options I have tried in order to explore what the body can do and how to practise writing differently in a material sense. Now I feel how I am entering into the knotted territory of the *cayte* of this thesis, that main knot of the quipu where the subject matter is expressed: the chair.

I wonder how to write a knot and not replicate a thread? In a thread thought and ideas flow in continuity. But knots are different. I stop writing to make a knot in a cord next to my desk and slowly tie a knot, paying attention to the details (Figure 10). Knots are composed of turns, loops and tensions. There is a practice of repetition in the knot, constantly coming back to the loop. In this *cayte*, or main knot, I enact these principles in the text by looping theory, memories, poems, letters and Chilean history through the chair-as-loop creating the many turns that form the knot of the Chilean chair.



FIGURE 10: TYING A KNOT. PHOTO BY AUTHOR.

I anticipate that each turn will create a difference in the possibilities of thinking with chairs in this specific context. Using the words *loop*, *turn* and *tension* I signal the moments of the knot making. I begin by making a loop that evokes the story of how the chair emerged in this research as an affect and how this resonates with the memory of my body. Then I turn to history, exploring how the ways we stand, sit and rest are embedded in material-discursive apparatuses. I pay attention to the chair as a technology, a material expression that enacts a fundamental separation between human and earth. In this turn I argue that the chair is embedded in the Modernity/Coloniality apparatus that enacts a particular way of knowledge production (Ingold, 2011; Mignolo, 2011b, 2018).

I continue this knot by turning to Chilean history to understand the chair in its particular geopolitical context as “the Chilean chair”, and add tension by providing the concept

of *straightification* of education in post-Pinochet neoliberal Chile. The final turn of this knot pays attention to the materiality of chairs, specifically to the memory of the trees and their fibrous origins embedded in the neoliberal apparatus that continues to evade Indigenous people's claims to contested lands. By making explicit how the chair is embedded in complex power dynamics I do not attempt to reduce the chair to a mere force of *potestas* (Braidotti (2018) that diminishes the capacities of the body, but also its *potentia* as a site of interference where the possibilities of a different chair may come into being (Braidotti, 2005; Dolphijn & van der Tuin, 2012).

AN INTIMATE LOOP: CHAIR AS AFFECT

What is needed is a robust account of the materialization of all bodies "human" and "nonhuman" – including the agential contributions of all material forces (both "social" and "natural"). This requires an understanding of the nature of the relationship between discursive practices and material phenomena; an accounting of "nonhuman" as well as "human" forms of agency; and an understanding of the precise causal nature of productive practices that take account of the fullness of matter's implication in its ongoing historicity (Barad, 2007, p. 66).

What I understand from Barad (2007) is that processes of materialisation are all entanglements of material-discursive forces where psychic, cultural, social, geological, biological, physical, economic, natural and geopolitical forces affect and are affected in their intra-action. I remember that encountering her work I felt both overwhelmed and excited. I was baffled. I remembered a conversation about freedom of movement I had years before with an early childhood educator in Chile. She told me that in the institution she worked for, educators received a miniature wooden chair as an award for innovative pedagogies. A chair as

a trophy. This friction between the exuberance of human movement and the chair-as-symbol of innovative early childhood pedagogical practices stayed with me.

Barad (2007) argues for a shift in how we understand the agency of matter in the physical realm, and thus how we come to enact realities and practices of knowing. According to Barad's (2007) physical theorisations we cannot account for the chair as a static object that is separate to the human and which is passive and unanimated. Nor as an anthropomorphised chair that has feelings and which moves like a living entity. Her approach is in between, half-way. Her interest is not in separate entities because according to her quantum field theorisations, separation is always in the making of the process of coming-together-apart. Human bodies and non-human bodies (like the chair) are co-emergent, boundaries are ephemeral and co-shaped. The chair is a force, a doing in the *worlding* of worlds (Haraway, 2016).

But what is a chair? A technology. A device. A practice.

If the chair is an affect? How does it affect? What can a chair do?

Four legs, back support, and a seat. Hip and knee joint at ninety degrees.

A HISTORICAL TURN

In the Western and Westernised world, education is tied to chairs and embedded in a complex meshwork of power relations (Ingold, 2018). It is not a coincidence that the word *chair* comes from the Latin *cathedra* and the Greek for *throne*. The chair has been historically linked to power, the throne as a place where decisions are made (Cranz, 1998, 2013; Ingold, 2011). Still today a "chairperson" in Anglo-Saxon institutions is one who presides over a meeting (Oxford, 2012). Furthermore, these vertical lines that bring those who make decisions

closer to heaven, to the head, and away from the ground are also tied to patriarchy, whose etymological origin is the Greek *patriarkhia* or ruling father; the head of the family, the head of government (Kirkwood, 1986).

If we consider that humanity has inhabited Earth for at least 600,000 years (Gibbons, 2015), we could assert that chairs, although not a new technology for humanity, have only widely spread in Western households in the past 300 years. The origins of the chair remain difficult to tell: some authors such as Dampierre (2006) trace its origin to Egypt in 2000 BC, whereas Cranz (1998) has traced it back to the Neolithic period, earlier than 8000 BC. What is clear is that chairs have carried with them stories of power since their conception, and their centre of expansion is the West.

Ubiquitous in its existence the chair speaks of a project called Modernity/Coloniality. Even though in the twentieth century, the expansion of the chair around the world and across classes was considered a dignifying and democratic practice, it is relevant to pay closer attention to the 'good' intentions of the time. For example, during the first half of the twentieth century, educator Maria Montessori was revolutionary in paying attention to the design of "children-size" furniture for schools. Chairs and tables that were adequate to children's bodies was her way to create a comfortable working space for children. Years ago when I explained my research topic to my father I remember him telling me how he was influenced by Montessori's ideas (shared with him by my uncle who was a priest) and invested in children's chairs and a table for us to do homework at. It is dignity, he said.

Similarly, early in the twentieth century after years of negotiation, the working movement of Chile achieved what is now called "*La ley de la Silla*" (the chair's law). This was a law that business owners have chairs available for their workers to rest on between their shifts

working in a standing position. These historical examples suggest that the privilege of sitting on a chair has been perceived as a democratic practice across age groups, classes and races. The focus is still on how the chair becomes inclusive and expands rather than paying attention to what the chair excludes. What other forms of moving, making and resting are absent from the chair? And why is the chair so linked to the project of Modernity/Coloniality? (Sand, 2013).

Ingold (2007) explained how straight lines tell the story of the project of modernity, and the linear progression of outcome-oriented practices towards development, progress, and building the modern state of certainty. Freire (2018) argued that it is “certainty in certainty” (p. 167) that produces immobilisation and what he called “existential fatigue.” It became apparent to me that the chair was not only tied to western education, but was linked more broadly to a particular philosophy, that of Enlightenment or Modern thought (Smith, 2012). I am not claiming that chair-sitting began with modernity. As explained, Cranz (1998) has demonstrated, that the habit of sitting on chairs is much older than that, and can be traced to the Neolithic period. Yet, as I explain later in this chapter, the massification of chair-sitting through serial production, low cost and access occurred in parallel to the project of Western Modernity/Coloniality (Cranz, 1998; Ingold, 2011).

Ingold (2011) claimed that the chair as technology is particularly relevant to the onset of modernity. According to him, the chair materialises the Western binary between mind and body, or in his words it “conspired to lend practical and experiential weight to an imagined separation between the activities of the mind at rest and a body of transit, between cognition and locomotion” (2011, p. 37). Even though I do not explore this further, it is not surprising that the modelling of the rational human-machine in the proto-cybernetics of the eighteenth century gave life to the automaton, a proto-robot in human shape. What is intriguing about this rational robot is that they were anthropomorphic and seated on chairs with immobile legs

so their ‘automatic’ and ‘rational’ actions were restricted to movements of hands and head (Sussman, 1999; Tresch, 2011).

Western modernity has been conceptualised by Ingold (2011) as the *sitting society*. Looping back to chapter 3, where I introduced the poem by Vicuña (2013) about chairs, it becomes clearer that the chair itself is a “compelling symbol of civilisation” (Caplan, 1978 quoted in Ingold, 2011). Ingold (2011) explains how in Modernity thought was related to the upper half of the body and the chair embodies “the value placed in a sedentary perception of the world ... unimpeded by any haptic or kinaesthetic sensation through feet” (p. 39). Chilean scholars explain how this logic is still embedded in Chilean education as they describe the constrained environment of the formal schooling system where movement is punished and quiet order is celebrated (Calvo, 2005, 2014; Moreno Doña, Calvo & López de Maturana, 2013).

Today Western humans spend at least eight hours a day sitting on chairs (Biswas, Oh, Faulkner & et al., 2015; Lynch & Owen, 2015). Chairs are an individual technology that works to sustain individual human bodies distant from the ground, in a position that humans cannot sustain by themselves. Chairs also have back support that allows the body to ‘rest’ in this unsustainable position. What boundaries are enacted as we sit? Usually ninety degrees in our hips and knees and a ‘straight’ spine fitted to the back rest. The unsustainable feature of this practice always surprises me as an evolutionary paradox. One of the main qualities of vertebrates is that our skeleton supports our bodies from the inside. Our bodies are designed to sustain positions such as standing on two feet, or sitting for long periods of time. But the chair, apparently a progression towards a Modern Advanced Rational Man, works as an exoskeleton, an external support that numbs the capacities of our bodies to sustain themselves.

TENSIONAL THOUGHT: ALINEATION OR ALIENATION?

Historically in schools the chair has been portrayed as the artefact that allows students to maintain a good posture and thus creates the conditions for learning (Keifer-Boyd, 1992). According to ergonomics, a field that Haraway (2004) has identified as part of the informatics of domination, the effectiveness of the chair is related to the appropriateness of the chair size for the human body. But the idea of “good posture” is contested by designers, anthropologists and historians (Cranz, 1998, 2013; Hewes, 1957; Ingold, 2011). Designer Galen Cranz (1998) explained that during colonisation diverse forms of sitting on the ground such as squatting and/or crossed legs were considered ‘primitive’ ways of moving by the colonisers.

The ground was considered a place for animals and primitive humans. The elevation of *manhood* from the ground is crucial here to create a distinction between being civilised and a savage (Ingold, 2011). To historian Edward Tenner (2003), “the chair, apparently so natural, turns out to be one of our most complex and least understood technologies” (p. 106). I became fascinated by how many lines I could follow in this inquiry. Everywhere I looked I saw chairs, and the more I sat on them, the more discomfort and uneasiness I felt. My additive habit of thought fuelled by Haraway’s (2016) speculative figurations propelled me to wayfaring (many times erratically) through the aforementioned fields (anthropology, education, architecture, history, biology and philosophy, among others).

There is injustice in reducing our human movement repertoire to sameness in the name of civilisation. Although apparently innocuous, the chair excludes hundreds of ways of inhabiting *spacetime*. According to anthropologist Gordon Hewes (1957), there are more than 100 ways of sitting on the floor. This variety of movement repertoire is also sustainable as these forms of sitting allow us to strengthen crucial aerobic muscles that are

vital to our wellbeing. Modernity/Coloniality is also a racist and gendered matrix as Latin American feminist Maria Lugones (2010) has argued. I found a chronicle written in 1937 by German anthropologist Martin Gusinde in the South of Chile when speaking of the Yagán people:

They are somewhat unsteady when they stand; either their torsos are constantly swaying back and forth slightly, or they very inconspicuously move from one leg to the other ... They do not remain in an upright position for more than a few minutes. If they have a choice, they soon squat on the ground again, because they can rest better that way. (p. 378)

The privileging of a set of postures and the exclusion of others is the underlying violence of colonial practice (Figure 11). And the supremacy of some postures over others still continues today (Cranz, 1998). What is interesting for education is how the chair can be threaded by the mother thread of the quipu, the notion that our ways of moving and posturing are also related to how we enact *conocimiento*. It is probably not an exaggeration to claim that most academic knowledge today is written and read in the same positions (Ahmed, 2008). Ingold (2011) has called this the chair culture. So I make my loop where the chair enacts this particular form of knowledge production, creating an intensity to argue for a particular form of attention to the phenomenon of the politics of bodymind chair-sitting.



FIGURE 11: PARLAMENTO CELEBRADO EN HÍPINO ENTRE EL CORONEL SAAVEDRA Y TODAS LAS TRIBUS COSTINAS Y ABAJINAS, REPRESENTADAS POR SUS PRINCIPALES CACIQUES: 24 DE DICIEMBRE DE 1869 [PARLIAMENT CELEBRATED AT HÍPINO, CELEBRATED BETWEEN CORONEL SAAVEDRA AND ALL THE COAST AND LOWER MAPUCHE TRIBES, REPRESENTED BY THEIR MAIN CACIQUES (CHIEFS): 24 DECEMBER 1869]. AVAILABLE AT MEMORIA CHILENA, BIBLIOTECA NACIONAL DE CHILE; IMAGE RETRIEVED FROM: [HTTP://WWW.MEMORIACHILENA.CL/602/W3-ARTICLE-98654.HTML](http://www.memoriachilena.cl/602/w3-ARTICLE-98654.HTML). ACCESSED ON 1/6/2017.

Because of my background in movement studies, my attention to the chair goes beyond the discourse and symbolism of the chair as sign of authority to understand how the politics of posture are embodied (Sand, 2013). I am interested in the marks chairs leave on our joints, muscles, tendons, nerves and minds. American historian Jordan Sand (2013) argues that: “Thinking of chairs and sitting positions in terms of sensibilities – embodied habits, attitudes, and ideologies rather than symbolism – opens up a more complex field of contest” (p. 97). The drawing I presented in Figure 12 from the Chilean State Library manifests how the chair materialises the vertical hierarchy between the Westernised Chilean army officer in the presence of the most important Indigenous leaders of the Mapuche Nation (Ingold, 2011).

A CHILEAN TURN

The process of thinking with chairs began to intensify. Energy, stories, biography, theory, history all tangled. And what is a chair-as-trophy in neoliberal Chile? A symbol of what? Order, obedience, paralysis. Individual and rational economic humans. Status-quo. Barad (2007, p. 236) argues: "Questions of space, time and matter are intimately connected, indeed entangled, with questions of justice." And chairs began to speak to me about justice. The chair-as-subject resonated because of the mark left by chairs on my body, inscribed in my joints, in the length of my muscles and tendons. The chair is not separate from how I understand processes of thinking, learning and educating. The chair is archived in the memory of my body, it is familiar, safe and known.

I am probably not alone when I claim that most of my memories of formal education in Chile are tied to chairs. A red line marked on the skin of my thighs. When I visited the Museum of Education in Chile during my research trip in 2015 I was told by the director of the museum that the chair was the molecule and particle of Chilean education. Her certainty when telling this story of the chemistry of education stayed with me as I walked through the aisles of the museum noticing how Chilean education was a continual importation of pedagogies from the global North. The German phase, the Austrian phase, the North American phase, each with their specific furniture. Each intensifying in me a feeling of alienation of the territory, the history and the body.

What I observed in the Chilean Museum of Education was that the main noticeable change in the material culture of Chilean schools was an eventual series of separations. In the beginning of colonial education there were heavy long benches attached to the desks. Later the bench was separated from the desk. And finally it all became separable and individual. One

chair, one desk, one human. And that has not changed much since the beginning of the twentieth century (Cranz, 1998). But discourses in education have changed and I focus on what happened in Chile after Pinochet to understand how this materialises a particular chair. Since 1975, during the most repressive years of this brutal dictatorship, Chile was configured as a “laboratory” for the radical economics experiments of Milton Friedman and a slew of economists trained at the Chicago School of Economics (Letelier, 1976; Spira, 2012). The economic changes experienced during dictatorship followed political neo-conservatism and free market economic policies (Irrarrazaval, 1994; Umayahara, 2007).

Feminist scholar Tamara Lea Spira (2012) explained how Pinochet’s regime could be conceptualised as a hyper-patriarchal period in Chilean history. In October 1988, Pinochet lost the plebiscite. After seventeen years of cruel repression and drastic economic reforms, the opposition finally celebrated. The successful “NO” campaign filled the atmosphere of Chile, North to South, with the hopeful notes of “*Chile, la alegría ya viene*” (Chile, happiness is coming). Meanwhile, since the national protest strikes in 1983 the women’s movement *Mujeres por la vida* (Women for life), students and pacifist movements against torture such as ‘*Movimiento contra la tortura Sebastián Acevedo*’ opposed the dictatorship daily on the streets. In March 1990, Elected President Patricio Aylwin from the coalition of parties “Concertación” moved into La Moneda (President’s house) with an all-male government ministry (Figure 12).



FIGURE 12: FIRST MINISTRY DURING TRANSITION TO DEMOCRACY IN CHILE, ALL MEN, ELECTED PRESIDENT SITTING ON A CHAIR AT THE CENTRE. INTERVENTION WITH RED THREAD. DIGITAL COLLAGE MADE IN MY STUDIO, JUNE 2017.

What followed was far from happiness. Pinochet continued as chief of the army until March 1998, and then continued as senator (a title for life created in his constitution) until July 2002. He resigned after being judged in England and absolved in Chile due to mental illness, and died four years later. His legal constitution continues to rule Chile in present days, and according to the OECD (Cabalin, 2012; Lea Spira, 2012; OECD, 2004) Chilean neoliberal democracy is known through the world as a low-intensity democracy in one of the more unequal countries that is 'consciously organised' in a classed structure. Chile had moved from utter destruction and bloodshed as a means for killing revolution, to a systematic enshrinement of terror in the rhythms and patterns of daily life.

But it is important to read the Chilean case in a broader Latin American and global context. Chilean sociologist Daniela Jara (2016) explained that many Latin American countries such as Guatemala, Bolivia, Argentina, Ecuador and Chile experienced a similar path of social upheaval after the Cuban revolution in 1959, with brutal dictatorships and a transition to neoliberal democracy. Jara (2016) explored particular local trajectories of the

Chilean case: the grey zones of memory, a crystallisation of social violence and the legacies of state terror that continued to operate after the official transition to democracy. What prevailed in Chile after dictatorship was the modes in which violence was inhabited, normalised and now remembered or forgotten (Guzmán, 2010, 2016; Jara, 2016; Moulian, 2002; Sisto, 2001).

The culture of fear that intensified in Chile after the coup d'état in 1973 aimed to bring the country back to order, straighten it and heal it by extirpating the so-called 'Marxist cancer' through firm control of the population under the narrative of 'salvation' (Jara, 2016; Lea Spira, 2012). Jara (2016) quoted Guillermo O'Donnell and Cecilia Galli, who have theorised fear in the Argentinean post-dictatorship context to explain that "repression and violence had provoked a depoliticization within civil society, leading to the individual decision to overlook the worst aspects of the repression" (p. 40). With phrases such as 'the past is the past' or what Moulian (2002) referred to the politics of oblivion or the collective amnesia as part of the neoliberal project, Chile has continued to unmake revolutionary actions through fear, and produce "highly privatized, self-governed subjects that fit in the new world order" (Jara, 2016, p. 36).

The chair is actualised in this context of post-terror neoliberal rules. Individualisation, privatisation, political numbness and advance cognitivism are reinforced by this artefact that enacts all these borders at once (Aravena & Quiroga, 2006).

TENSIONAL THOUGHT: STRAIGHTIFICATION OF EDUCATION

It is not a coincidence that chairs scattered around the world at the same time as modern ideas colonised not only territories but the very minds of those who inhabited them (Smith, 1999), excluding from the picture other ways of moving, sitting, thinking and producing knowledge (de Sousa Santos, 2014; Espinosa-Miñoso, 2016; Espinosa et al., 2014). If

bodies (human and not human) co-arise and worlds are enacted rather than pre-given (Varela, 1991; Barad, 2007), then what worlds do we world in the repetitive movements of sitting, standing, sitting? What boundaries are repetitively produced with the right angle in the hips? Human skin encountering clothes encountering wood, metal and/or plastic? Hip and knee joints coupling with the angles of the chair? Touching and being touched by the straight lines of modernity as we write, draw and read? For how long does the chair stay with us until its lines dissipate from our bodies? What marks do human bodies leave on chairs?

In the case of Chile, educator Carlos Calvo (2011, 2015, 2017), drawing on Indigenous pedagogies, quantum physics and Latin American radical pedagogy scholars such as Paulo Freire (1972, 2005), argued for the importance of continuing to distinguish between education and schooling. For him, education emerges from chaotic processes that are tamed in schools, where lines of order are constantly imposed on bodies. In a crude diagnosis, Calvo (2017) asserts that, at least in the case of Chile, schooling is the *worst* part of our education. What is it in schools that not only students do not learn, but furthermore learn not to learn?

Freirean scholar Jorge Osorio (2018) provides a revision of post-Freire education in Latin America and pays particular attention to Calvo's (2017) notion of *enclaustramiento* or enclosure, a concept that speaks to the *straightification* of the bodymind, a concept I borrowed from queer theory (Ahmed, 2008). Avoiding binaries, Calvo (2015) suggests that not all chaired-bodies are still bodies and education is not always-in-movement, quiet times of sitting in silence are also necessary to listen, contemplate, read, write and create. Calvo's (2017) ethnographical experience demonstrates how children are constantly resisting, ignoring and challenging the imposition of lines of order.

Nonetheless, I understand Calvo's (2017) claim as a call to notice that the hyper-patriarchal, hence deeply authoritarian schooling-as-straightification continues to shape Chilean education today. It is interesting that the word straightification is commonly used in a queer context to refer to the effects of heteronormative discourses (Ahmed, 2008). Surprisingly, that applies here as well. Straightification worked in the Chilean dictatorial context in all possible ways. The effects of the imposition of straight lines extended from sexual orientation to our spines (Spira, 2012). That is how material-discursive practices produce particular types of bodyminds, and to me, the straight lines of the chair are connected to the production of the straightification of education.

In Spanish chair is *silla*, a word that came from the archaic Latin *sedla* that is also the origin of sedentary and of the verb to sedate. *La silla te seda*. That sentence, which means *the chair sedates you*, came instantly to mind to understand (for a fleeting moment) how the chair might be understood in the neoliberal, post-dictatorship context of contemporary Chile where fear, order and the effects of Pinochet's hyper-patriarchal regime (Spira, 2014) are still very present in the atmosphere of everyday life. A population that is sedated, chaired. Yet Kirkwood (1984) taught us many years ago these issues are as intricate as knots, and authoritarian regimes in Chile did not began nor end with Pinochet's dictatorship. In history there are always more turns, twists, tensions to experiment with. The (his)story of massacres, displacements and torture in Chile is older than Pinochet and can possibly be traced back to colonial times.

Furthermore, Latin American Indigenous feminists Lorena Cabnal, Gladys Tzul Tzul and Julieta Paredes (Gargallo, 2014), reminded us that we also need to avoid romanticising Indigenous societies, and instead to acknowledge the presence of proto-patriarchal Indigenous nations in the territory of Abya Yala before colonisation. They have named this process *entronque patriarcal* (translates as patriarchal junction). Entronque patriarcal occurred when

ancestral forms of male domination were reinforced in the encounter with western patriarchy during colonisation (Gargallo, 2014). Decolonial Latin American feminists fiercely critique both ancestral forms and those inherited from the colonisers (Espinosa et al., 2014).

These knots in contemporary Chilean politics, civilisation, culture of fear during/after Pinochet's dictatorship and neoliberal individualism, are all embodied in the form of the chair: individualising, separating from the ground, and acting as a sedative of collective action. When thinking with chairs it becomes evident that chairs made out of wood not only carry with them specific discourses and social practices, but are materially entangled with a myriad of more-than-human processes such as forestry, water irrigation, soil, trees, politics, advanced capitalism, to name a few. Similarly to how I explained the connections Vicuña (2006) made in her menstrual quipu, I now turn to some connections between Chilean chairs, forestry, neoliberalism and the environmental crisis to make evident how they are materially intertwined.

ENVIRONMENTAL TURN: MEMORY OF THE TREES

When applying fibre thinking to chairs, it becomes evident that chairs made out of wood not only carry with them specific discourses and social practices, but are entangled with a myriad of more-than-human processes. In this turn of the knot I make some connections between Chilean chairs, forestry, neoliberalism and environmental crisis. Early this year I was writing letters to the chair as a strategy to deal with some ideas about my process of thinking-with chairs that were not easy to articulate, and during those months Chile was literally burning.

During the summer of 2017 massive bushfires destroyed thousands of acres in southern Chile (Watts, 2017). In Chilean media, the discussion oscillated between those who

support the idea of a climate change induced natural disaster, those who claim that fires were fuelled by forestry practices of extraction, soil erosion, water scarcity and lack of native firewalls (Kozak, 2017), and those who suggested that fires were human-induced. In one of my letters to the chair dated 17 February 2017, I wrote with anger:

Dear chair: where is the wood that made you comes from? Is February 2017 and Chile is burning as I write. Thousands of acres becoming black dust. The biggest bushfire in the history of the country, they said. You are made of displaced pines, and gumtrees. Decretal 701 from dictatorship feeding through states subsidises greedy oligarchs to exploit native forest, and plant fast-growing trees, soil is eroded, thirsty insigne pines, and eucalypts in the South of Chile. Mapuche people, traditional custodians of the land, are displaced as eucalypts are planted. So much sadness in the process. Soil is thirsty, dry, no native plants that can work as firewalls. Fire thrives, monster fire swallowing trees, houses, people, dreams. The consumerism of the fire resembles the greed of those few families that enchanted Chile through promises of economic freedom. The colonial project of building and literacy, where timber and paper was required and accomplished with death. Now in neoliberal times and climate change is death over death. Double death: the end of ongoingness.

How do trees become wood without memory? Do their knots continue to speak after death? Do they tell unspoken stories of their past life as trees? I pause and stay with these questions wondering about how shape and memory shift. Anzaldúa (2015) argued for a form of consciousness where we can make broader associations, therefore the boundaries of trees, chairs, water, ways of moving, monocultures, dictatorships and economic systems they all suddenly become blurrier and blurrier, offering the possibility of understanding them in a different form of flux and make unexpected connections and disconnections between them.

Anzaldúa called these kinds of moments of consciousness as the *Naguala* state, a part of the path of *conocimiento* (Anzaldúa, 2015; Zaytoun, 2016). As a result, the memory of previous existences or shapes is never lost but is shifting, and in that movement of transformation produces different forms of *conocimiento*. I am curious of how this *conocimiento* connects with concerns that resonate with our ecological critical times.

Following Haraway's (2016) matters of concern I began a conversation with these particular wooden fibres as it matters how chairs think chairs. These chairs are made of some trees and not others. The intensity of those bushfires in parallel to my letters to the chair made me think about forestry in Chile, a topic I have never thought before. I followed the lines of the purple ink stamped on the bottom of the children's chair of Fundación Integra that says 'Made in Chile' (Figure 13). It began to become clear to me that chairs are politically entangled with the history of the country. How do wooden fibres share their memories? How do we listen to chairs?

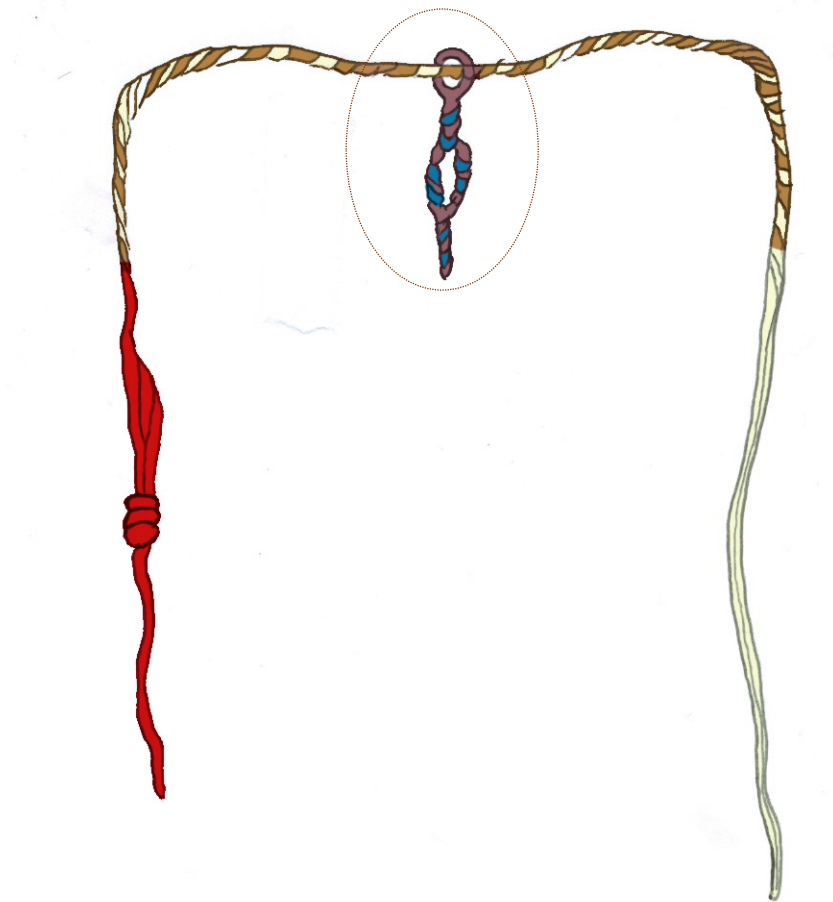


FIGURE 13: CHAIRS MADE IN CHILE. FUNDACIÓN INTEGRA. OCTOBER 2015. PHOTO BY TAMARA DUPRÉ FOR THIS THESIS.

The relations of bushfires, chairs, forestry industry, advanced capitalism and displaced lands of Indigenous people are themselves a knot that goes beyond the scope of this thesis, but I cannot avoid paying attention to how matter comes to matter (Barad, 2007) in the times of the Anthropocene. The intensification of these matters of concern really speak to the question, how do we move with grace in this climate of change (Marambio & Galvez, 2017)? Perhaps it is time to shed chairs from our bodies? And learn to touch and be touched by the earth once again? Learn to sustain our bodies from within? Awake our thinking feet, our expansive hips, our multisensorial bodies, our movement repertoire.

For Latour (2004), to have a body is to learn how to be affected, where the body is not solid but a sensory medium in a sensitive world. I wonder if it is possible to commit to posthuman postures? To really inhabit our bodies in their capacities to be otherwise. Experimenting with research methodologies, the embodiment of the chair and its historical entanglement in the Modernity/Coloniality apparatus is crucial to understand the geopolitics of sensing and knowing as situated and evolving. In what follows I enter the knotted territory of the quipu and explain how this chair inquiry took me to Chile in Spring 2015 on a research trip where the chair manifested as a site of interference. I begin by briefly explaining how I arrived in Chile, who I met and how human conversations turned into more-than-human material encounters which allowed me to pay attention to other forces that came into being.

CHAPTER 6: THREAD OF MATERIAL ENCOUNTERS IN CHILE



In the oval is marked the thread that guide us to the material encounters in Chile. A thread that carries the colours of the ocean and the land coming together. I animate this thread by contextualising my research trip to Chile in 2015.

When plans began to crumble

In this thread I attempt to describe the discursive-material conditions of my research trip to Chile. The process involved touching, an intimate contact with the fibres of this thread. In Spring 2015 I followed the miniature chair to the central valleys of Chile. From Australia, I organised a series of interviews with well-respected Chilean scholars in the fields of philosophy, biology, feminism and education. I carefully prepared all the paperwork required to visit and interview early childhood educators about the chair in Fundación Integra and received Human Ethics Certificate of Approval under the project number CF15/2980 – 2015001224. I tightly organised my schedule for three weeks, and organised for my brother to stay at my place in Coburg, Australia helping Bryan, my partner, with the children. This was going to be my second time in Chile after four years since we left to migrate to Australia, and my first time away from Bryan and my children. I was excited, nervous and felt I had a big mission ahead. To find out more about the power of the chair in education.

I took a picture of a chair in my pocket, as an amulet, a mnemonic device, or perhaps an extra weight. A bad quality photo of the wooden chair with straight lines and right angles was all the time inside my pocket, next to my hip. I took a journal, pencil, camera, audio recorder, drawing pad, good shoes, and organised with some film-making friends to document the odyssey. I called my research trip “Material encounters,” following my supervisor’s advice. In the beginning I thought about it merely linguistically, and found it useful to think of my trip in feminist new materialisms’ terms. Nonetheless, as soon as I arrived I realised that every encounter was affective in particular ways. That the material conditions for some conversations and not others to flourish were important. And that even landing in that territory was a deeply affective experience not to be dismissed. Paraphrasing Haraway (2016) I

could say that it matters what territories territorialise territories. What memories memorise memories. But nothing worked as I expected.

I was reminded that I had landed in the so-called Pacific ring of fire (active and seismic land of volcanos). Central Chile was trembling. A recent earthquake in the town of *Illapel* a few months before I visited had made sensitive the geological location of my homeland. The juncture of the Nazca and South American plates is not an abstract line of earthy crusts encountering each other, but an affective event. We can actually sense how we are moved by the earth. The agency of the earth, the power of transformation and the possibilities for everything to dramatically change in seconds is palpable. For me, after four years living on the more stable ground of Australia, the (un)familiar feeling of the earth moving brought anxiety, but also the joy of sensing in my body that I was actually moved by the earth. There is something about scale that comes with that experience. Becoming small as a flea trying to hold herself in the furry body of a big mammal. I felt as if the shaking was simultaneously happening inside and out. Being moved by the earth made new materialisms an experiential philosophy.

I noticed as soon as I landed that I was a different human being and somehow did not belong to Chile in the same way as before. My feminist readings and experimentation with critical theory enhanced my sensitivity to gender injustices and oppressive power dynamics, and the perceived inequalities made me feel physically unwell. I became a knot of sadness. Plans did not go as I expected and suddenly my whole research trip began to crumble. I tried to organise conversations with scholars from Santiago in the fertile valleys. I thought that having these 'famous' scholars was relevant to my thinking/work, and I made considerable effort to invite them to participate. Nevertheless, for many reasons this plan did not work out well.

I tried to speak with the people from Fundación Integra to interview them about the presence of the chair in their institution such as the chair-as-trophy, but they expressed concerns about the tone of my research, they were defensive and they found my work too political for early childhood education because Pinochet's name was part of the working title of the thesis at the time. I asked them to send me a written reply to explain their refusal. But they refused to explain any further. I did not accomplish the big mission, I did not meet famous scholars, I did not get permission to access Fundación Integra. I was not going to be a heroine who was going to come back to Melbourne with all the answers. I actually came back to Melbourne understanding even less what the chair is about in Chile and I experienced grief. The death of my great narrative allowed a myriad modest stories to emerge.

A MODEST ATTEMPT AND MORE-THAN-HUMAN MANIFESTATIONS

My research trip continued as a modest attempt to experiment with the notion of material encounters, to pay attention and see what happen. A curious engagement with the chair required letting myself go with the ongoing material unfolding, and although I resisted, I finally let go. With my voice recorder, a notebook and an old camera I followed a different journey. And unexpected stories began to emerge. There is a location, a place where these stories unveiled themselves. Rather than staying in Santiago I travelled north to my homeland in the traversal valleys, the boundary between the Atacama Desert (driest desert) and the fertile valleys of Central Chile.

It is a semi-arid climate of dunes, lizards, succulents, flowers that only bloom when it rains (sometimes they *sleep* for more than 15 years, see Figure 14), and three main rivers: Elqui, Limari and Choapa. At these rivers, I experienced three intense encounters in this land, which were knotted in the quipu. An encounter with the memory of the fibres of my body and

the transformation I was experiencing. An encounter with the miniature chair and a sculpture of clay. And an encounter with a silenced story of pedagogies during Allende's popular unity. I made many quipus of this journey: some such as "The heavy quipu" are shared in the following knots, and others were unknotted to make the quipu-thesis.

During my time in Chile I felt held by the geographical forces that materialised these encounters. Forces of rivers, coastal energies where land meets the Pacific Ocean and specific textures of this particular landscape unfold through my writing. I sensed how these geological, botanical and oceanic energies were becoming sensitive to me as I wrote: stories and bodies and landscape, configuring a spatial thinking. A commonality between them is probably that all of them are sites of memory. Memory not as a nostalgic fixed past, but as a past/present entanglement that materialises our existence in the present. As sediment in river banks, erosion in mountains, history leaves marks in bodies (human and non-human). In the following knots I pay special attention to sensing how these marks are non-fixed, but are intra-acting matter-real forces that materialised our encounters (Barad, 2007).



FIGURE 14: WILD FLOWER OF THE BLOOMING DESERT. PHOTO BY TAMARA DUPRÉ FOR THIS RESEARCH, OCTOBER 2015.

HUMAN AND MORE THAN HUMAN ENCOUNTERS

This land was also a place of human encounters: two friends came to join me in my research adventure. One friend, Yanira, travelled south from Atacama, and my other friend, Tamara, travelled north from the fertile valleys. I originally met both of them in Melbourne, in my house next to the Merri Creek in Coburg. Yanira was finishing her Masters in community cultural development, exploring other ways of knowing re-turning re-connecting to her ancestral Indigenous roots as Atacameña (from the Atacama Desert in the Andes). Tamara is an anthropologist and the granddaughter of one of my mentors, Luis Weinstein, and she offered to document my research. With Luis Weinstein I learned about entanglements many years ago, in his monthly open school of Humanities *las Coincidencias* (the Coincidences) in a small coastal town in central Chile named *Isla Negra* (Black island) by poet Pablo Neruda.

Luis Weinstein is a community worker, poet and psychiatrist who developed a particular teaching/learning methodology inspired by living poetics and a radical relational ontology. After many years of exile, he participated actively to recover democracy during dictatorship in Chile. Already in those turbulent years, his post-anthropocentric commitment placed him as one of the founders of the Chilean ecological movement, actively participating in a collective of *pensamiento planetario* (planetary thought) alongside Francisco Varela, Lola Hoffman, among other Chilean thinkers. The three of us, Tamara, Yanira and myself were born during the dictatorship, in three different geographical sites, to politically diverse families.

I also met with educator Carlos Calvo, who studied with Paulo Freire when he lived in exile in Chile, and educator Silvia Lopez de Maturana, both of whom I had met years before through Luis Weinstein. And Tere Gonzalez, an early childhood educator whom I met when I was practising as a *kinesiologa* in Chile working on babies' motor development. I even gained

permission to informally visit Fundación Integra in La Serena. I had a long conversation with ethnomusicologist José Pérez de Arce, who sent me the poem of chairs by Cecilia Vicuña, and a year after these encounters I met Vicuña in Melbourne. Because this encounter was a continuation of those conversations I marked her presence and our exchange in the next knot of this quipu about the living fibres and the process of decolonising myself.

During my time in Chile I had a strong desire to walk my homeland, or perhaps desire to be walked by it, to be walked by the hills of the coastal Andes (Figure 15). It was spring of a rainy year and many wild flowers were covering these hills. The particularity of this region is that mountains traverse the land from the high Andes to the coast, creating threads of mountains, which is the labyrinth referred by Gabriela Mistral in the opening of the cayte of this quipu. Between these threads rivers flow and valleys grow. This land is also prone to droughts and water is a precious resource. My father's family used to farm a piece of land at the entrance of the main valley close to a place called *El Romero*.

This land was illegally expropriated during Allende's government by local peasants and people who worked with my grandfather. During the dictatorship my family recovered a small piece of land with restricted access to water; on this land my grandfather planted a forest of gum trees. We grew up strongly connected to this land, walking *acequías* (small channels where water flows), chewing gum leaves and hearing stories about water and droughts. My parents' house is on the top of a hill in the city of La Serena where I grew up, so for me walking this land has always been a movement up and down hill, along a curvilinear landscape.



FIGURE 15: ALCOHUAZ IN THE ELQUI VALLEY. OCTOBER 2015. PHOTO BY AUTHOR.

THE DATA OF THIS QUIPU

In this final version of the quipu my “data” were three semi-structured interviews with early childhood educator Tere González, poet Cecilia Vicuña and professor in education Carlos Calvo with the purpose of understanding the power of the chair in Chilean education. All participants signed a consent form (Appendix) and agreed for me to use their real names for the purposes of this research. Informed by postqualitative methods in my analytical knots I elaborate in how the human, non-human and more than human aspects of the interviews came into being and interfere with each other. In a slow form of research I spend long time with my audio recordings, laments, drawings, field notes, videos, poems and respond to them by crafting this archive where I knotted the stories of this thesis (Ulmer, 2007). I made different kinds of knots (Figure 16) and quipus. I even remember how my first quipu was completely anthropocentric and each knot revealed a human encounter; this evolved to an entangled, knotted territory where non-human matter and stories began to lead the inquiry and the knot

making process. What I present in the next section of the quipu is the knots that have prevailed, the stories I have come to once and again over the years.



FIGURE 16: KNOT MADE IN MY STUDIO. JANUARY 2016. PHOTO BY AUTHOR.

STORYING KNOTS

In the next section of this quipu I present three knots that speak of these multiple fibrous encounters investigating the power of the chair in Chilean education. The first knot is called “decolonising myself” and begins with my encounter with Vicuña (2010a) and her notion that the body is a living quipu, a site of actualisation and archiving memory. Knotting in Varela’s (1999a) and Anzaldúa’s (2015) proposition of enactive *conocimiento* I argue that it is only through an embodied commitment and awareness of our bodies as sensory and intuitive media that other ways of thinking can come into being. This knot relates to Varela’s (1999a, 2001) and Freire’s (2018) call to be *de cuerpo entero* (fully present in the body) to participate in the worlding of the world (Haraway, 2016). I use two feminist concepts as navigational tools in this knot, *desidentification* as discussed by Braidotti (2011) and *neplantera* as theorised by Anzaldúa (2015). Two subsidiary cords emerged from this knot. The first relates to the process

of shedding the chair as a practical proposition for thinking, writing or reading, creating dissonance with the Modern posture patterns. And the second subsidiary cord speaks of how the process of decolonising oneself is never an individual practice, extending the practice to other women and to the land itself.

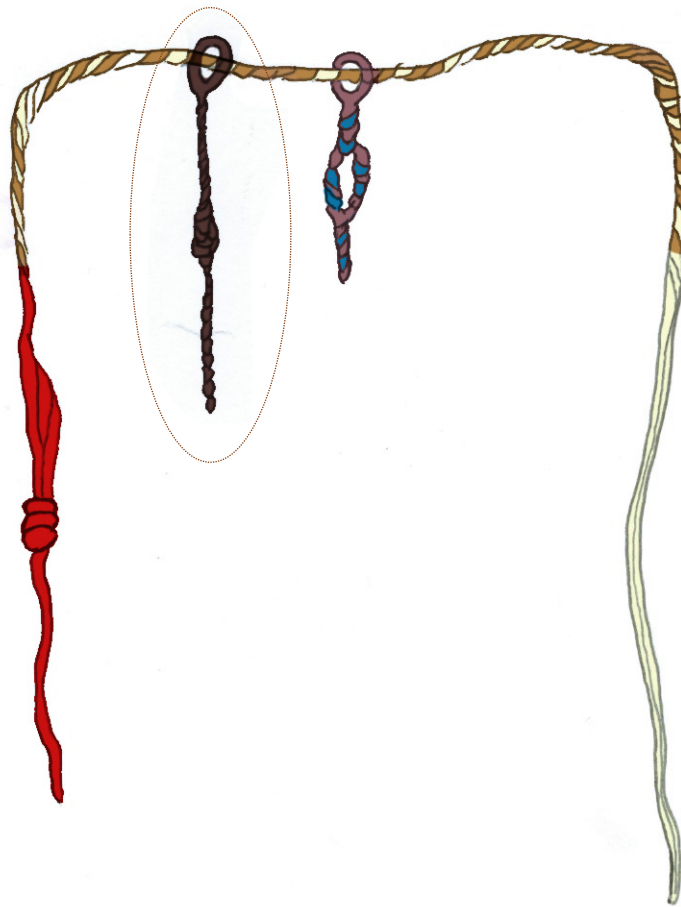
The following knot is called “interfering miniature sculptures” and expresses how the chair became a site of interference. In an encounter with Tere, I began to pay attention to the emergence of clay and wood and how that particular territory close to the mouth of the Elqui river began to tell sedimented stories of ancient ways of living and knowing. The force of clay irrupted into that encounter, bringing with it the materiality of history and the (dis)continuity of ancestral practices in contemporary contexts. The appearance of clay in this research happened in parallel to the biggest archaeological find in the area, the *Sitio arqueológico El Olivar*, a site that is currently rewriting the history of the Indigenous people of this land. Using Varela et al.’s (1991) and Anzaldúa’s (2015) hybrid concept of enactive *conocimiento*, I aim to exemplify how attuning to the more than human world provides an opportunity to enact *conocimiento* otherwise. The stories of clay surprisingly also connect *Diaguita* territory in Chile with Wurundjeri Country in Australia, which creates a migration of ancestral forms of *conocimiento* through a geological extension of the self.

The last knot of this quipu is called “Southern currents of coastal pedagogies” and aims to bring to the fore, through storytelling, the liveliness and relevance of Latin American radical pedagogies in the times of the Anthropocene. Using Mignolo’s (2018) concept of decoloniality as my navigational tool to make this knot, I attempt to move away from the two grand Western narratives of capitalism and communism as the only options to engage with the Chilean Popular Unity Revolution, and read its events and pedagogical manifestations through a decolonial lens. I pay close attention to one particular story that emerged in my encounter

with Tere and read it alongside my conversation with Carlos Calvo and Silvia Lopez de Maturana and their engagement with Paulo Freire. The emergence of one upside-down map of Latin America where the north is south in Carlos Calvo's office gave me the clue to embrace these stories as decolonial dreaming for more liveable futures.

I finish this quipu by coming back to the mother thread. My last piece is the end of the thread where I explain how the quipu became alive and situated in the lands of the Merri creek. The process of becoming aware of the memory of body, healing historical wounds and (un)learning to be present in my body decentred my attention into the more-than-human world, my body in relation to other bodies, such as bodies of water and land. Attuned to the forces of land and stories that connected the Kulin Nations' lands in Australia with Diaguita country in Chile, I began to notice that the quipu was already threading itself in this land that today I call home. This transnational quipu manifested in pedagogical forces of potentia and a creekulum emerged from this dreaming of possibilities. Weaving in Indigenous knowledges, experimental art and sustainability science, the creekulum is a materialisation of this PhD-quipu as a form of enacting *conocimiento*.

CHAPTER 7: DECOLONISING MYSELF



I knotted the process of decolonising myself in this brown thread and placed it between the material encounters in Chile and the cayte of the quipu as a way of locating my body within the quipu. The knot is convoluted and has more loops than the other knots of the quipu as an expression of the laborious process.

I was born in 1984,

11 years after the coup d'état, September 11th of 1973,

I did not want to be born,

I got stuck in my mother's birthing body.

Chile was again raising its voice,

Massive national protests began in 1983.

I was born with a paralysed arm,

The doctor pulled me so hard, that the threads of my brachial plexus

e l o n g a t e d

s o o o o m u c h

That communication was ~~lost~~.

((silence of the threads))

My arm was paralysed for nearly nine months,

Also paralysed was the collective body of Chile,

T o r t u r e d

~~Di s s a p e a r e a d~~

—————~~Silenced.~~ Living in fear.

Becoming neplantera

I wrote that poem (original in Figure 17) in response to poet Vicuña's invitation to write about fear and shame. I met her in Melbourne exactly one year after my trip of material encounters in Chile. After that trip the quipu came to me through her poetry, entangling body poetics with the chair. I began experimenting with the quipu as a postqualitative methodology in my thinking-with chairs, even though the quipu is an ancient language and a governing device from the Andes, my homeland, I still felt unsure about playing with the quipu, speculating with its possibilities in ways that probably were as new for the quipu as they were for me. More than fifty years ago the quipu manifested to Vicuña (2016) in the form of a line of words, a concept. The *quipu that remembers nothing* was therefore an (in)existent quipu of missing memory, and from then on, the forces of quipu have threaded through her work.

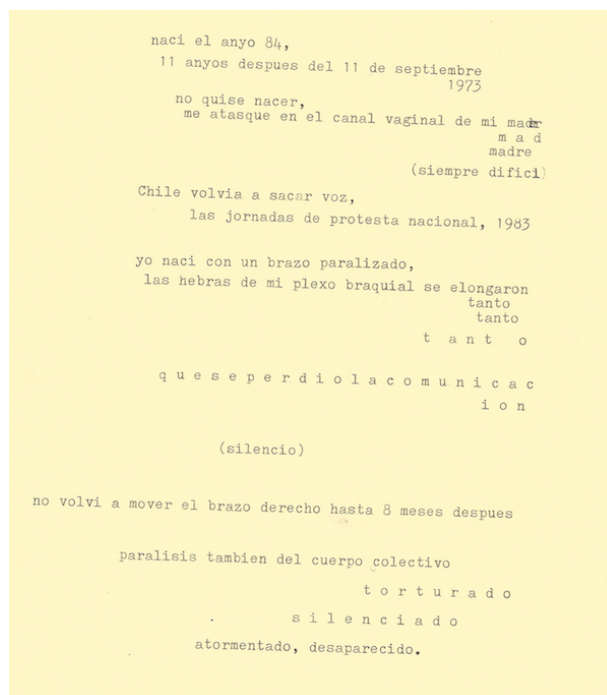


FIGURE 17: ORIGINAL POEM WRITTEN IN CHILEAN/SPANISH USING A TYPEWRITER IN MY STUDIO. MELBOURNE, AUSTRALIA. NOVEMBER, 2016.

In this poetic knot I draw on Braidotti's (2011) elaboration on the concept of *desidentification*, understood as a process-oriented practice that enables us to loose ourselves from previously familiar, yet constraining, modes of thought and living. Earthy colours carry the force of the mother thread of the quipu and the Varelian (1999a) and Anzaldúan (2015) hybrid concept of enacting *conocimiento*. As explained, this concept brings forth the notion that knowledge is transitory, embodied, emotional, enacted, tentative, partial and also geopolitical in the sense that the history of our posturing, moving and sensing are inseparable from how and what we come to know. Furthermore, as our posture and sensing are modified so is our knowing and vice versa.

In this knot I practise the transformation of the body as a fibrous engagement with the practice of decolonisation. I use the feminist navigational tools of *desidentification* and becoming *Neplantera*, from Braidotti (2011) and Anzaldúa (2015) respectively, to enact *conocimiento* differently by acknowledging my own colonised and colonising ways of knowing. The Western dualist grid where I grew up. Using data-as-fibres in the form of drawings, poems, stories, audios and conversations I knot a situated and storied passage of becoming *Neplantera*. *Neplantla* is a Nahuatl word used by Anzaldúa (2015) to refer to the land in-between, a site of transformation, where a perception shift occurs as fixed notions of identities are troubled and its delineated forms are dissolved.

Resonating with *desidentification*, Anzaldúa (2015) proposes the notion of *Neplantera* (inhabitant of *Neplantla*) as a shape-shifter, non-unitary subjectivity that finds her home in dissonance, the friction of porous contingent borderlands. This border thinking occurs in parallel to *desidentification*, which works as a shedding of old habits of thought. How and why is this relevant for this quipu? Why is it relevant for thinking with chairs? Because of becoming aware of how chairs leave marks on bodies and minds. The individualisation, separation,

direction and stillness evoked by the habit of extended periods of time sitting on chairs is inscribed in our ways of moving, sensing and knowing. It is important to note that nepantla as a generative force has been extensively explored both as concept and pedagogy by scholars in education (Delgado Bernal, 2018; Elenes, 2013; Prieto & Villenas, 2012).

Over the years of this research I have encountered so many pieces of poetry, theory, practices and ideas, particularly decolonial Latin American theory and practice that challenged not only how I think about education, onto-epistemologies and life in its broadest sense, but the very fibres of my body. This thesis has challenged me to think about who I am, and *what it is to be present in this present* as an ethical commitment. In this journey I struggle and resist, I surrender and let myself go. I become deeply emotional and transform into a bundle of nerves. The body is a quipu, says Vicuña (2012). And paying attention to the knots inside has been a transformative journey.

I have noticed the shifts I have experienced to become more present in my body, as a woman, as a woman of colour, as a woman of colour of a Third World country, as a woman of colour of a Third World country born during dictatorship, as a woman of colour of a Third World country born during dictatorship with Indigenous ancestors, as a woman of colour of a Third World country born during dictatorship with Indigenous and European ancestors, as a middle class woman of colour from a Third World country born during dictatorship with Indigenous and European ancestors. And the list goes on, and the longer it goes the more contradictory places it arrives at.

I also recognise the necessity to move beyond fixed notions of identity and the politics that emerge from delineated notions of self (Anzaldúa, 1999). I am this, and that. I understand that situating my thinking is to commit to the political task of bringing into Anglo-Saxon

academia marginal and subjugated knowledge that creates dissonance and difference in how we think about education – to bring myself into existence. But I also notice that delineating myself as “other” is problematic in its anthropocentrism because it reinforces the category “human” as the final realm, and potentially dangerous as it delineates the self as a bounded and fixed existence (Varela, Rosch & Thompson, 1991). I pause, wondering how to situate my thinking, living and pedagogical inquiry within the planetary concerns where human-only narratives and bounded individuals are no longer adequate to think with (Duhn et al., 2017; Kirksey et al., 2016; Somerville & Hickey, 2017).

After Varela’s death, Varelian scholar Amy Cohen (2002) wrote an essay where she presents ‘the self’ as the guiding thread of his work. Important to this understanding is the Buddhist notion of *sunyata* translated from Sanskrit by Varela and collaborators as *groundlessness* (Varela et al., 1991), but usually translated as emptiness. In a nutshell, their proposition is that the self is present, but it cannot be located, therefore it is empty. But their notion of emptiness cannot be explained by Newtonian physics as “nothing” because it is empty of independent arising, in other words, existence is always other-related, full of relationality. Simultaneously, *sunyata* demands an ontological openness towards a relational immanent plane of existence, a way of becoming present in your body with an understanding of the ephemerality, and transient existence of the Self (Varela, 2001).

As a non-Buddhist I acknowledge my limitations in understanding these notions. Less disciplined, and perhaps more playful, I engage with them as a corporeal practice, with less sitting still and more walking, through careful attention to bodily manifestations and healing somatic approaches. But also through feminism as my guidance to creatively connect to them. Surprisingly, Varela’s (1999a) propositions toward a selfless self, and specifically the ethics that arise from this, resonate with Anzaldúa’s (2015) *neplantera*, Vicuña’s (2010b) body as a

quipu and Braidotti's (2011) desidentification. All of them instigate a process of transformation in how we think about ourselves as part of the world.

Situating my thinking between Chile and settler Australia, I locate it in these lands and waters that, still today, negotiate their way amongst colonial, postcolonial and neo-colonial power relationships. Trauma, displacement and colonial education are not issues relegated to the past (López, 2019). Neither colonisation ended with the conformation of their nation-states. It is in this land in-between that I have encountered the term decoloniality, as an alternative that brings forth what for centuries has been denied, repressed or silenced (Mignolo, 2011a, 2011b, 2018). To me, decoloniality is a process-oriented political engagement towards healing, recuperating and restoring relations that were lost, repressed and made invisibilise through the privileging of the colonial Modern project of oneness and its universal claims (West, 2018).

But how to engage with decolonisation as something external to us? As a project? To me, education cannot be decolonised, other forms of knowing and living cannot be revitalised if those of us who are thinking, dreaming and doing education do not embark on our own healing process to recuperate these relations through an embodied practice. If we accept Braidotti's (2010b) call to understand the body as a site where enfleshed actualisations of the body occur, then we need to heal the relationship to our bodies as sites of knowledge (Anzaldúa, 2015) and not mere vehicles of the transcendental mind (Ingold, 2011).

From the beginning I have to say that the process of decolonising myself is yet to be finished. That what I present here is a collection of risky propositions, some nice findings and many failures that have left me with a sense of disorientation. An important part of this inquiry on decolonisation through desidentification is attuned to Anzaldúa's (2015) call for the

cultivation of different ways of knowing beyond rationalism. Therefore, in this knot I pay attention to how I affect but I am also affected by data-as-fibres of the quipu in their own performance. Poems, audios, drawings appear and disappear, invite and also refuse to say more. Like the “heavy quipu” that does not want to be spoken but prefers to be sung. From the poem at the beginning of this text, the reader will notice that I enter some dark historical places such as Pinochet’s dictatorship, colonialism and the effects of negative passions such as fear (Braidotti, 2010b).

In her “route to *conocimiento*,” Anzaldúa (2015) argues that “if you don’t work through your fear, playing it safe could bury you” (p. 544). She goes further to explain that the transformative healing process of working through fear is vital for *conocimiento*. *Conocimiento* is Anzaldúa’s (2015) concept of a form of thinking and knowing that is embedded in a world imbued with spirit. Similarly, for Braidotti (2010a, 2010b), the affirmative ethics of feminist neo-materialism is to move into an affective relational way of becoming part of the world that moves beyond individualistic rational consciousness. But is education beyond individualistic rational consciousness possible?

All educational institutions are involved in knowledge production: that is basically the *telos* of education. I have critically engaged with teleological practices in the mother thread of this quipu, suggesting that if we, as living beings, are non-teleological living systems as suggested by the theory of autopoiesis, and its extension sympoiesis, then why are our educational systems fixated on outcome oriented practices, individual performance and linear progress? Tuhiwai Smith, Tuck and Yang (2019) wondered how to think differently about education and schooling, in their potential for collective hope, when the very system has its roots in what decolonial Latina feminists have called the colonial racist apparatus of modernity (Lugones, 2010).

I respond to their call and embark on a journey of experimental desidentification, troubling notions of self, healing fear and exploring the postural capabilities of the moving body; I play with possibilities that go beyond individual healing and consumerist wellbeing, to collective dreaming for decolonising education. Rather than trying to provide any universal recipe, in this knot I share stories of desidentification that are woven through the living fibres of my situated body using audio recordings of my trip of material encounters in Chile, personal communication with Cecilia Vicuña, material encounters with deep bodily tissues, and poems I have written as the process unfolds, folds, and enfolds.

VISCERAL KNOTS OF FEAR

Meeting Vicuña was a serendipitous encounter, an old and young woman, Chilean and not Chilean, enormous and miniscule, all at the same time. And I had fear. A fear that has been with me as far as I can remember, but every now and then, becomes a restless anxiety-inducing monster. Very diffuse, almost like a trickster, fear is threaded through my body in the form of visceral knots. Knot in the throat, a knot in the entrance to the stomach, a knot in the hips. Experimenting with the quipu, I had fear of appropriating something sacred. Fear of not doing it well enough. Fear of not being Andean enough. Fear of not being Indigenous enough. So I went to visit Vicuña with my quipus, she was about to leave Melbourne when I decided to share my practice with her.

We sat together on the ground. Slowly, I began to unravel the quipus I had brought in my bag. She looked at me and warmly smiled at my self-centred concerns. With a fresh look in her eyes, she said something that I heard as *“It is the quipu who does it, the quipu finds mysterious ways to thread itself into our present, how marvellous that the quipu threaded its way into education.”* With her call, Vicuña invited me to decentre myself from the idea of the human

agent as uniquely responsible for the encounter with the quipu. I who act, who decide, who use and consume. I who found the quipu. In this encounter with Vicuña and the quipu, “my” self was momentarily dissolved by her animation of our porous relationality and I experienced a moment of delightful relief in embracing these mysterious entanglements.

I was amazed at how prevalent the notion of the agentic self is. Not only for heroic narratives of great discoveries, but also in the martyrdom of self-consciousness. I notice that after all those readings of Barad (2007) I still grasp the idea of the agentic I so strongly. So emotionally. Why, if I was just reading Varela’s (1999a) ethics of the selfless self, did I still hold the idea of the agentic I, the autonomous self, with such intensity? Perhaps reading does not have much weight to shift embodied experience? It seems that there is something missing which refuses to be grasped abstractly. Yes, it is true that I resonated with these ideas as a whole body experience, goose bumps of excitement, dance of emotion when ideas made me jump from the chair or ground. Varelian scholar Amy Cohen (2002) argues that to Varela “it was one thing to grasp a concept as an object, intellectually, and it was quite another thing to inhabit your ideas and be inhabited by them” (p. 1). This interacts with Freire’s (2005) ethics of praxis, and in particular his discussions of how to inhabit and let yourself be inhabited by your ideas. Breathing ideas, moving ideas. The embodiment of ideas is therefore deeply political. Why? In what sense? Why does this follow from my previous sentences?

In our conversation, Vicuña pointed out, experientially, that agency is not something someone has, but is enacted. The quipu as a form of knowledge emerged from the intra-action of chairs, me, poems, curiosity, colonisation, sound, Chile, Cecilia, Australia, epistemologies being cut/together/apart in a particular time in a particular geopolitical space (Barad, 2007). But this event, and her invitation to write about fear, enabled me to notice how emotions such as fear also cut the spacetime mattering together/apart (Barad, 2007). Where does this

additional gravitational pull of fear come from? That feeling of being heavy, exhausted and constantly trembling with fear.

This hybrid Varelian (1991, 1999a, 2000) and Anzaldúan (1999, 2015) concept of enactive conocimiento is embodied, enactive, embedded and extensive, and also emotional. Emotions infuse every moment of our life and, specifically, the way we bring conocimiento forth. To explain the role of emotions in practices of knowing, Varela (1999a) uses an everyday life example. Inspired in his story I wrote my own version:

A woman is walking down the street on an ordinary sunny day towards a meeting. She is walking slowly through a park, paying attention to the trees as they begin to bloom in spring. She listens with attention to the birds' songs and even notices a bird carrying twigs in her beak. She wonders about spring, birds weaving their nests, but also how early spring came this year. As she walks, she remembers an article she recently read about climate change and makes some connections about early blooming of trees, weaving nests, and global warming. She stops to make some notes about these observations. Finally, she gets to her meeting. She has a feeling of calmness, but also wonder at the unknown.

A different scenario. The same woman is walking towards a meeting but this time as she's entering the park she notices her wallet is missing. Heart beat rising, sweating in her hands, panic. She tries to remember where she was before. The park becomes blurred; she does not see the trees or listen to the birds; she walks fast in a straight line towards the last shop she visited. She feels her heart coming out of her mouth and is trembling. She is thinking about her ID, personal information and her credit card.

This simple example explains how our daily life is saturated with events that trigger emotions such as surprise, happiness, excitement, fear, embarrassment, self-consciousness, among many others (Varela, 1999a). These emotions manifest materially through currents of hormones, neurotransmissions, that literally affect every function of our bodies and our perceptions and actions as part of the world. That is why, according to Varela (1999a), the emotional tone of our daily life is not separate from the worlds we bring forth, the worlds we world (Haraway, 2016). To me this has historical and ethical dimensions. I extend his example of the wallet into a more complex, intricate and political scenario. To me, as for Anzaldúa (2015), this fear, *miedo* or *susto* has a historical origin.

Chilean American poet Marjorie Agosín & Paula Vega (1993) wrote that “the fascist dictatorship left us a legacy of internalised fear and fatigue” (p. 407). I empathise with her description, which reminds me of Braidotti’s (2017) embodied effects of negativity: arrest, blockage and rigidification. These are, according to Braidotti, the effects that trauma, violence or even intense boredom have on the body. To me they are historical visceral knots. I feel how I am threaded by fear. Agosín & Vega (1993) speaks of fear during the transition to democracy in Chile, of those grey years of paralysis, silence and neoliberal circus. The power of feminist affirmative ethics to Braidotti (2010b, 2017) is the belief that those negative effects can be transformed, reconfigured, not erased.

Goosebumps in my body.

Fear. Last night, as always.

Paralysis. Stiff fascia.

Fascia from fascism.

My fascia pulsates with the memory of fear.

Chilean historian Freddy Timmermann (2014) suggests that fear, as an invisible violence, was at the core of the Chilean civil-military dictatorship. To Timmermann (2014), fear was not only the predominant emotion of the dictatorship but a coloniser emotion, an emotion that infuses all others creating a social and collective terror. *El Gran Terror*, as he calls it (the Great Terror, my translation). Together with many Chilean scholars of post-Pinochet Chile, Timmermann (2014) argues that fear is an emotion that those who experienced everyday life in dictatorship carry in their (our) *bodymind*. I remember how I felt the amplifying call of these visceral knots during my trip of material encounters in 2015.

(audio recording made in a park of Providencia, Santiago de Chile, 14 October 2015)

Knotation

I feel lost in Chile,

I bear the heavy weight of a cultural collective body, cellular cultural body and extra-cellular from the matrix and interstices,

It is hard to move here, I am all the time groping, stumbling, hesitantly.

Writing and erasing.

I will now undo my weaving to do something different,

Meanwhile doing I think about undoing

Because what has been done, it is done and that is it?

(long silence, sounds of children playing far away, coughs)

Undo

Delete

The knot

The knot

But can knots be deleted? I remember the intense feeling of sadness I experienced at that time when I listened to this audio recording. I was sitting on the ground undoing the knots of a hyperbolic shape I had woven. Even when the knot is unknotted, marks are left on the thread; those marks remember the tension, the shape, they hold the tension of the absence within. The desire to delete history is what sustains the colonial mind. Barad (2018) argues for a different figuration of transformation that is reconfiguration. A knot can become something else, perhaps, but cannot be deleted; it exists as such in a temporal dimension that is juxtaposed.

As I was writing about fear, dictatorship and sadness in Chile, I felt how my body became really heavy. And my text was infused with it too. Text is body. Body is text. I had to leave for a walk along the Merri Creek. I wanted to listen to the birds, to find refuge in nature. I decided to cross the creek to the wetlands, and as I was crossing I found a knot in the creek. A knot made of wire (Figure 18). How long has it travelled in the creek? It is so rusty. That knot reminds me of a smaller version I remember in my uncle's house, who escaped at age fifteen from East Germany. Once the Berlin wall fell he visited Germany and brought back to Chile some pieces of the wall. I remember holding them in my hands and imagining them as part of a massive wall. Knots of reconfiguring past/present entanglements.

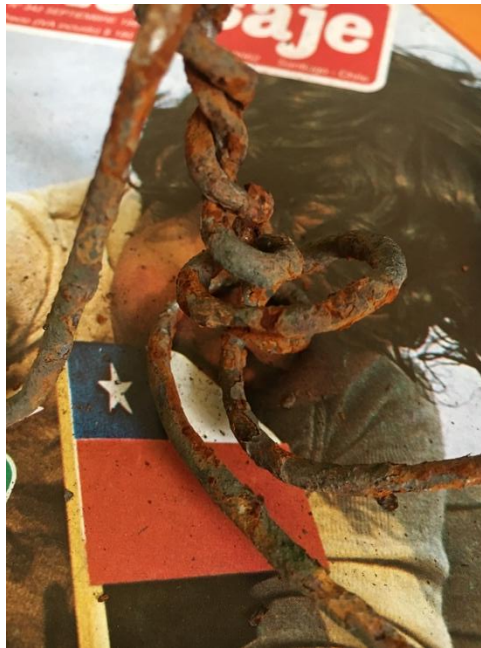


FIGURE 18: WIRE KNOT FOUND IN MERRI CREEK OVER A *REVISTA MENSAJE* (MESSENGER MAGAZINE). A DISSIDENT CHILEAN MAGAZINE FROM THE TIME OF THE DICTATORSHIP. PHOTO BY AUTHOR.

During my first year of this study I made a drawing (Figure 19) that for years was next to my desk. I thought of it as “the big picture” from which my geo-historical thinking emerges. Barad (2012) speaks of the responsibility of listening to these ghostly cries, screams and murmurs. Similarly, to Braidotti (2017), Anzaldúa (2015) and Barad (2012), thinking is a material act, always entangled, with juxtaposed spacetimes. In this drawing I made, I noticed that the chair was already there, inhabited by trauma. A blindfolded woman being tortured on a chair. My *susto más grande*. The trauma we, women, carry with us. And the bold black arrows pressing bodies down, making gravity more sensitive and bodies heavier.

model that continues to govern Chile. In that sense what is produced is an enterprising and competitive entrepreneur, or in a Chilean context an *emprendedora* (Peters & Tesar, 2018). This understanding of how neoliberalism makes us subjects to specific ideologies is to me another knotted layer of a form of desidentification, becoming undone as I spin theory through the fibres of my body as a site of simultaneous production and resistance to a competitive entrepreneur, or in Chilean, my *emprendedora* self.

The concept of *emprededor* (literally translated as entrepreneur) is widely used in Chile today to validate and praise a mode of being in the world that aims at economic success through individual effort and innovation in a labour matrix that is over time more precarious and unregulated. The intensity of the Chilean neoliberal form is probably directly proportional to the minimal presence of a democracy that does not touch us in the body. According to Chilean physicist and social scientist Carlos Perez (2015), Chilean democracy is not so much low intensity as an illusion. Perez explains how the heroic discourse of the Chilean transition to democracy has been used to mask the continuity and consolidation of the economic reforms of the Pinochet dictatorship. Nothing new in this, just the circus created by the state apparatuses and Chilean political class (Perez, 2015).

But I perceive that it is here within these notions of extractive power and individualistic ideologies that more-than-human worlds materialise, where I can actually theorise the boundary of the self that was critiqued by Varela et al. (1991) in their oeuvre. They explain how the notion of the bounded self is connected to neo-Darwinism and neoliberalism (also Feldman, 2018). In their description of the self as economic man, particularly the idea of the self as “territory of boundaries” (Varela et al., 1991, p. 246), they explain how goods are moved in and out of those fixed boundaries, the telos of this economic self being to bring inside the boundary as many good things as it can while paying out as few as possible, leaving outside the

boundary all the bad things it can. They go further to exemplify the unstable and uneasy relations of ‘cooperation’ between autonomous selves to get more goods. Relevant to education is how this transactional model of bounded self-interest is instilled, where bounded-selves-educators “may get (immaterial) goods by helping other selves (students), but they will become disappointed (even disillusioned) if those other selves do not reciprocate by being properly helped” (p. 246).

Furthermore, within the narrative of the dictatorship in Chile, the country itself became a bounded body. In his analysis of the aesthetic force of the civic-military dictatorship, Chilean scholar Luis Errázuriz (2009) explains how the military dictatorship was expected to cut the body of Chile to put outside the boundary the unwanted infectious tissue of revolution in Chile, and bring inside the boundary a collection of rituals, colours and ideas that recomposed the body back to order. In this hyper-patriarchal totalitarian geopolitical context, the individual chair enacts not only a separation between individuals, but also that of humans from the ground (Lea Spira, 2012), the chair governs the chaotic moving body back to order, the chair of the father of the nation who makes decisions gains an unprecedented force.

Knotation

Decolonising the bodymind is a move away from heroic narratives.

Left and right in Chile, and globally, are founded in heroic narrative.

The left-wing popular unity was a heroic narrative that created the most original way to Socialism and the liberation of the oppressed.

The right-wing coup d’etat was a heroic narrative that “saved” Chile from becoming Cuba.

The centre-left wing transition to democracy was another heroic narrative that established peace after a brutal dictatorship.

These heroic narratives populated with human male heroes are far too deterministic, pre-given, teleological and certain. Always a good side and a bad side.

And so many times I am trapped in explaining them, spending energy trying to be of the “good side” rather than none. Traversing the crevices and cracks of the patriarchal tunes that infiltrate heroism from left to right and back.

However, Kirkwood (1984), with her knots of feminist wisdom and rigorous historical analysis, illuminates the (dis)continuity of authoritarian patriarchal regimes in the territory of Chile since colonial times. According to her, the civil-military dictatorship between 1973 and 1990 was an intensification, but certainly not the first episode of oppression and violence that the Chilean people experienced. Anzaldúa (2015) speaks of fear and historical trauma as *susto*, and explains how minorities such as women, disabled people, children, queers, elders, Indigenous, and people of colour are particularly susceptible to *susto*. Supplementing Anzaldúa, Braidotti (2010b) explains how the regime of Sameness is structurally sustained through the negation of otherness (other than Man). In her words “They [the others] constitute the inter-connected facets of structural otherness, which are constructed as excluded” (p. 47). For Anzaldúa (1991) the origin of this *susto* is the violence experienced by our ancestors, and ourselves by colonisation in all its manifestations, new and old.

To Anzaldúa (2015) the transformative process of healing historical *susto* demands a historically situated awareness. In that sense she argues that “we need to look at our history. For us to know who we are now, and where we are going, it’s very necessary to retrace our steps, because we have an ethnic identity and that ethnic identity has a history” (p. 3). My

encounter with Vicuña was about retracing our steps, our ancestral memory and also about bringing into space the collective memory of the ghost nation we both know so differently and from afar. But at the same time as I connect to the history of the ethnic identity that was deleted by the colonial apparatus, I also notice how I grasp a fixed identity once again, less Chilena, more Andean.

In his call for planetary thinking, Varela (1999a, 2001) warns about the continuous grasping to a fixed identity, as individuals or collectives, being racial or tribal self-identities. For him, the politics of identifying are not only philosophical dilemmas but ethical and political. The challenge is to cultivate an openness to provisional and generative precariousness as a fundamental property of being alive (Cohen, 2002); but also, and significant to Western academia, to the provisional nature of theoretical frames (Varela & Poerksen, 2006). In that sense, the politics of current planetary crisis demand significant desidentification from Modern, anthropocentric, humanist, patriarchal, colonial modes of becoming human (Somerville, 2014).

Desidentification according to Braidotti (2011) is a process-oriented practice that enables us to lose ourselves from previously familiar, yet constraining, modes of thought and living. Following Braidotti (2011), I understand desidentification as a laborious process that is not devoid of pain, grief and loss, yet is also a source of joy and transformation. Braidotti (2011) distinguishes between the effort made by a snake to shed her skin, and the effortless action of changing one's garment. For her, desidentification is closer to the reptilian practice. It is about endurance, and mostly about a molecular transformation of our sense of self. That is Neplantla to Anzaldúa (2015), the territory one inhabits when transition occurs, the zone of contact, friction that makes desidentification possible, a transformative perception of yourself and the world.

To Vicuña (2017a), the desidentification process we need to endure to cultivate the relational presence we need for the years to come is decolonisation. In her poetic film *decolonising myself* (2017c) Vicuña explains how her process began as a young girl, when she moved from her village to the city. It is a migration line similar to that referred to by Varela when he moved from Montegrande to Santiago (Reichle, 2007). They were both extracted from the familiar, what is known. Somehow it seems that migratory lines sustain a process of becoming other to oneself, becoming unfamiliar, to meet difference. I think of my own migratory line and how it also triggered my awareness of becoming other. Anzaldúa (2015) said that it is by reconfiguring – in multiple forms of telling – our past that we reshape our futures. Vicuña (2017a) argued that migration is always a double migration “in the sense that you go to a place and it’s the opposite of your place, because your place is not available to you anymore, but you also migrate back into the source of who you are” (p. 117).

<i>Sleeping knowledges</i>	<i>El saber dormido</i>
<i>awakening</i>	<i>despierta,</i>
<i>with my hands</i>	<i>con las manos en el vellón camélido,</i>
<i>immersed in unspun camelid wool,</i>	<i>y vuelve la memoria dormida</i>
<i>the memory of knots and flowing streams</i>	<i>de nudos y acequías fluyendo.</i>
<i>re-turns.</i>	

(extract of poem by author to Cecilia Vicuña, Nov, 2016)

To Vicuña (2017a), as for Anzaldúa (2015), Braidotti (2010b), and Varela (1983), poiesis, the creative act, is at the core of this transformational process. We embrace the option of decoloniality through creativity, imagining, dreaming worlds that shape our present relations and the awareness of them. This kind of shift in consciousness described by Vicuña

(2017a) refers to what she envisions for the transformative process, which did not prosper in Chile during Allende's revolution; for her the fixation with the class struggle diminished the capacities for embracing a more radical change. And she says "a true revolution would have to be a revolution of the senses, a revolution of the body, a revolution of the way we love each other, the way we compose our poetry, our music. That would be a total transformation" (p.114). With her words still resonating, I go back to my quipu.

THE HEAVY QUIPU WANTED TO BE SUNG

After my trip to Chile I made a quipu of all the material encounters: my conversations but also visits to the Museum of Memory, Museum of Education and Centre for peace "Villa Grimaldi," built on a previous torture centre. I called it 'the heavy quipu' (Figure 21) because it expresses my physical experience of feeling like a heavy body in Chile. I added weight to the threads of this quipu. Fishing weights for the quipu to sink. The body quipu was the quipu body. During one of my panel presentations for my study I was going to animate this quipu, to animate the stories through touch and word. I imagined I was becoming a quipukamayuk, an ancient practice reserved for Inka noble's sons and grandsons: i.e., mostly men. But as I touched this quipu no words came to my mouth. Silence. I knew that quipu wanted something different from me, it wanted to be sung into being. The stories became laments, and I never performed this reading as I anticipated.

This is the first time I notice the resonance between the drawing with the heavy body and the heavy quipu. As I look more closely at the quipu again I see how those encounters were materialised in knots and how knots were tangled laments, cries and ancient whispers. To my surprise, fear, hips and torture are there too; *temor* is fear. *Caderas* is hips. *Memoria* is memory. How is this repetition enacting difference? Is this call towards heaviness also a grasping for a

kind of foundation or ground? Or an invitation to really feel the heaviness – to let the body inhabit the horizontal ground? Maybe the heaviness, as affirmation, is the call of the land? To sing the land? As soon as I touch the heavy quipu I begin singing, I am not even sure those sounds are song, but dissonant sounds come out of my mouth as my fingers travel through the knots of memory, hips, repetition, poetry. Wailing song. Bird song.



FIGURE 20 “THE HEAVY QUIPU THAT WANTED TO BE SUNG” MADE FOR MATERIAL ENCOUNTERS IN CHILE. MADE BY THE AUTHOR, JANUARY 2016. PHOTO BY AUTHOR.

In “(Re)membering in the Contact Zone: Telling, and Listening to, a Massacre Story,” Somerville and Perkins (2005) speak of this kind of song, in Australia. “High pitch singing, Tony says, is about fear” (Somerville & Perkins, 2005, p. 4) and they go on to talk about women and high-pitched singing: “Women seem to have sung higher all the times because I think they had more fear or something” (p. 4). Somerville and Perkins (2005) explain that the singing is about the voicing of the landscape. I wonder about this heavy quipu of material encounters in Chile, that is sung in Australia. Every knot of the heavy quipu was tied in the lands of the Merri

Creek, a land of massacres as well, of disappearance, of torture and colonial violence. But also a resilient, rebirthing Country.

It is in the contact zone, as theorised by Somerville and Perkins (2005), where storytelling, listening, non-Indigenous, Indigenous, place, ghosts, memory collide and produce a space of generative friction for hybrid possibilities in contemporary Australia. Singing has a role in bringing emplaced connections forth as an act of response-ability: “we need to make songs that are sad and painful, a requiem for what has happened in the past; songs that are joyous, that celebrate survival and re-birth; and songs that beat with the rhythm of our hearts in this country” (p. 13). I resonate with this call for singing the friction of the knot as a spatial site. The massacres in Chile. The massacres in Australia. The massacres of non-human animals. The massacre of the oceans.

I think back to the chair. The empty chair. The absent body. Absent presence. Disappeared.

Singing the landscape becomes a creative art of spiritual *conocimiento* that is about marking the spacetime-mattering by embedding personal struggles in a larger ecosystem, connecting them with other organisms’ struggles across the planet, and as Anzaldúa (2015) says, with “the struggles of the Earth itself” (p. 119). Through the practice of quipu-making I notice how the boundaries, personal or individual, become porous to the collective non-human and more-than-human cosmic manifestations of becoming. This experience connects me with Braidotti’s (2010b) affirmative ethics, which recognise that negative effects such as arrest, blockage or rigidification actually diminish our capacity to express our inter-dependence. In that sense, working through fear or pain enables us to transform this negative into positive. Therefore the politics of affirmative ethics are about micro-political activism in everyday life, interventions in and as part of the world we inhabit and which inhabits us. It is about making

visible and caring for sustainable relations. It is a cultivation of the awareness that will augment our capacity to act now for the flourishing of our shared planet.

Can song be part of this action? A call, a prayer, a source of joy, a path to transform or unknot the knots of rigidification, arrest or blockage? To animate relational thought, to animate sustainable relations as part of the world.

Since the beginning of this study I knew I wanted to enact my thinking in movement, and that voice was part of that movement too. Braidotti (2009) writes of “the space of the body as an enfleshed field of actualisation of passions or forces” (p. 246). In her conceptualisation of the body as a quipu, Vicuña (2017) proposes a similar way of understanding the fibrous body to that of Ingold’s (2011) conceptualisation of the meshwork, and of bodies as living tissues of lines. In his SPIDER persona, Ingold (2011) claims “it is as though my body were formed through knotting together threads of life that run out through my many legs into the web and then into the wider environment” (p. 91). The body as quipu always has loose ends that get entangled with others.

But transformation, or change, as Anzaldúa (2015) urges us to, to reclaim body consciousness: *tienes que moverte!* (you have to move! (p. 132); my translation), because moving and sensing differently affect our bodies at a cellular level. Our cells shift, creating new forms of connecting, new pathways, rewriting the body memory. To Ingold (2011), as for Varela et al. (1991), the essence of action is the “close coupling between bodily movement and perception” (p. 94). How we move affects how we perceive, how we perceive affects how we move, and this is related to how we attend to our relationship to others (humans and non-humans), ourselves and the worlds we are part of.

This is probably the most tangible way of connecting our bodies a mode of inhabiting the geopolitics of sensing and knowing otherwise (Anzaldúa, 2015). Until now, I have journeyed to Anzaldúa's (2015) land of Neplantla as a process-oriented embodied experience of desidentification of the (de)colonial selves. I have used Braidotti's (2010b) concepts of the negative effects of trauma, connecting them to Anzaldúa's (1991) historical *susto* and to my own experiences of fear during the dictatorship. Through Varela's (1999a) notions of the self and boundaries, I have explained how fear operated by paralysing Chilean bodies, collective and individual, and how fear produced the conditions for the successful implementation of the free market economy which continues today. But this old narrative is also fertile soil for thinking how Western macro-narratives from left and right are traversed by similar Modern ontology based on separation.

The chair, in this particular geopolitical context, is entangled with a regime of sameness that reinforces individualism, separation from Mother Earth and denial of our historical Indigenous memory. And theorising with Vicuña's (2017) notion of the body as *quipu* I have experimented with possibilities to slowly shed our colonial/colonised/coloniser selves. In this journey I noticed how external technologies become bodily prostheses of the colonial/coloniser/colonised body, as I wondered whether we have to shed the chair-as-exoskeleton as well? Can we shed all of them at once? What are the sites of friction that we need? How do we create conditions for this process to take place? And more importantly, how does this form of thinking enact difference in pedagogical practices?

In the following knots I enter territories that allow me to experiment with some of these questions by exploring geographies of clay, ancestral memory and stories that matter. Before moving into the next knot there are two pendant cords of the present knot that

elaborate on decoloniality as an embodied practice of everyday life and textile becomings as practices of enacting conocimiento.

CHAPTER 8: SHEDDING THE CHAIR, EMBODYING DECOLONIALITY



Marked within the oval is the first subsidiary thread of this quipu. As a reminder, subsidiary threads emerged as extensions of some knots of the quipu. This subsidiary thread speaks the embodied extension of the process of decolonisation as a physical and concrete experimentations with other forms of writing, reading and thinking.

My interest in the embodiment of decoloniality is not an abstract engagement with the discursive body, a practice that not only alienates me but also reinforces the principle of the body as vehicle of the transcendent rational mind (Ingold, 2011). My inquiry follows Anzaldúa's (2015) call *tienes que moverte!* (you have to move!), which acknowledges that the body-as-flesh does not enact itself in passivity, but through embodied experience, through movement (Braidotti, 2010b). Anzaldúa (2015) argued that "A form of spiritual inquiry, *conocimiento* is reached via creative acts—writing, art-making, dancing, healing, teaching, meditation, and spiritual activism—both mental and somatic (the body, too, is a form as well as site of creativity)" (Anzaldúa, 2015, p. 119). In response to Anzaldúa's call, I made a series of photos that challenge the possibilities of the encounter body-chair (Figure 21).

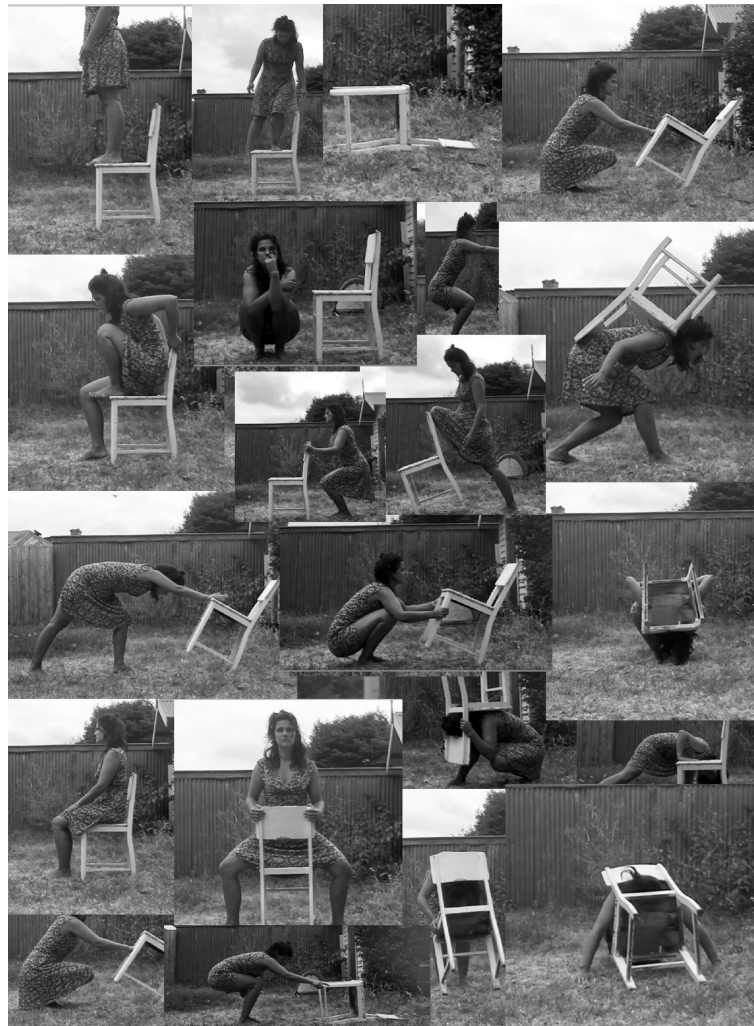


FIGURE 21: POSSIBLE RELATIONS BETWEEN CHAIR, BODY AND SOIL. PERFORMED BY AUTHOR. PHOTOS BY AUTHOR. COBURG, MARCH 2019.

In Western and Westernised societies, we grow up with the chair inscribed in our bodies, we become used to it; it is a familiar and comfortable fit. To speak of this at the beginning of this process I made a drawing of the *girlchair*, the chair fused to the body as an exoskeleton, an extension and reinforcement of the individual self (Figure 22). Human body, body chair. The explanation Barad (2007) provides of how discursive practices not only materialise human bodies but also non-human bodies is relevant here, because it illuminates how boundaries are not pre-given but produced, reconfigured and actualised in each intra-action. In that sense, the hybrid *humanchair* is another manifestation of how Modernity has

materialised bodies (human and non-human), offspring of this racist colonial apparatus (Lugones, 2010).

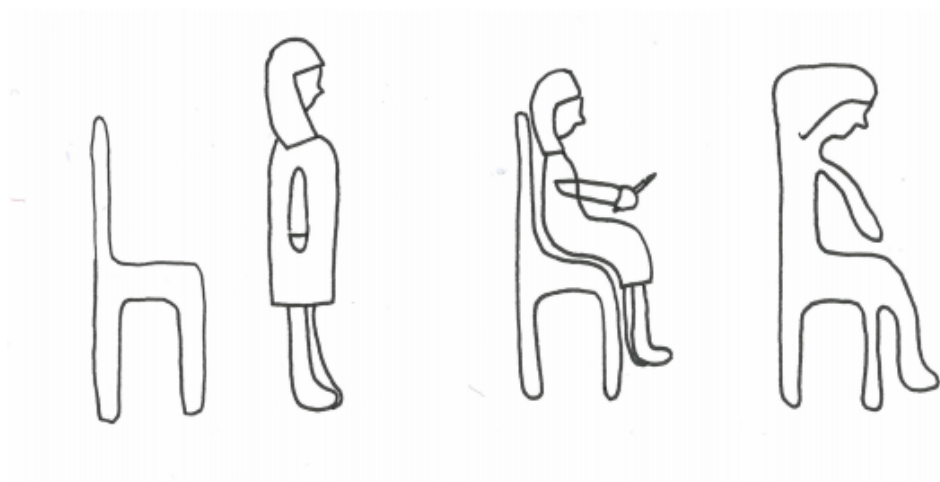


FIGURE 22: "GIRLCHAIR". DRAWING MADE IN MY STUDIO. MELBOURNE, MARCH 2017.

If the main call from relational material feminisms is about paying attention to how matter comes to matter, then perhaps paying attention to these mundane everyday life practices of our postural habits is also an important path in the journey of desidentification (Braidotti, 2011). If we traverse the binary mind and body, then thinking habits are always consistent with moving habits. Can we shed familiar modes of thinking without shedding familiar postural modes? As soon as I began to think with the chair, and in particular to engage with the work of Cranz (1998, 2001) and Ingold (2011, 2014), I began observing and sensing the limitations of my own postural repertoire.

My background in movement studies and observations of how babies learn to move themselves was also informed by post-developmental early childhood scholars such as Duhn (2014), Murris (2016) and Ryan and Grieshaber (2005a, 2005b). I observed how the postural developmental line of progression from ground (babies, animals, Indigenous) towards biped positions was but another way of setting up a linear progression from earth to heaven, from

body to brain-centred mind. What can we learn from babies squatting, kneeling and sitting in hundreds of different ways? If we do not understand a progressive line of transport from ground towards heaven, how can we learn from this movement practice as a present expression of humanity rather than early stages of a progressive teleological line?

As a physiotherapist I understood that the marks intra-actions leave on bodies are woven into the tissues of the body. But they are not fixed, they are in-the-making. In this pendant cord, I wonder about the potential of the body as a site of actualisation of the self through movement. I feel the necessity of shedding the chair not as an act of binary resistance, but as a curious experiment (Haraway, 2015). I got rid of most of the chairs in my house and redesigned my studio with Japanese tatami mats and a low table to be able to write squatting, kneeling and cross-legged, among other variations. I also created a standing work station to be able to take sentences for a walk, but this standing desk did not prosper. I knew from my previous studies of anatomy and physics of the human body that the biped position has never been a stable and comfortable position in static equilibrium.

But the variability of postures and stretching possibilities that ground sitting gave me were abundant. And I could sense how through this practice of movement I was embodying the ideas with which I was experimenting in my thesis. I began to trace the straight lines of chairs back to Modernity, patriarchy, and the complex entanglements within this territory and a form of (k)not thinking came to me. I wonder if the straight lines of the chair are an illusory straightness – actually a tangle? Vicuña (2017) spoke of this process as a more-than-human event where “a knowing of the land tied me to its Knot?” (p. 27). Vicuna suggests to not only suture mind and body, but mind, body, spirit and land as part of our research practice. As Saavedra and Salazar (2017) argued in relation to research methodologies:

Being open to feel and capture the vibrations of wisdom via nature, the land, the Other, ancestors, and our multiple selves is another way to think about knowledge we gain from and share with the material world. For methodology, this means learning anew how to listen without the rational mind. Embracing this way of knowing that is drastically different than what Eurocentric approaches to inquiry have imposed in postconquest times becomes necessary. Perhaps, then, Critical Qualitative Inquiry from a spiritual way of being is about unlearning our colonized embodiment that has been inherited and internalized, even at a cellular level. (p. 459)

My cells resonated with their call, as it condenses the necessity of (un)learning our colonised embodiment at a molecular level. And this is connected to methodologies that speak of learning to listen with(out) the rational mind to achieve a spiritual way of being. Therefore my interest in shedding chairs, (un)doing the knots in my hips after thousands of hours sitting on chairs, (un)learning the effects of Cartesian dualist thinking, (un)doing my connection to land is a response to this call that became a methodological practice of quipus inside~outside. Knot thinking or quipu thinking came to me, as a practice of learning how to listen without the rational mind. How to be an educational researcher differently. A way of listening and responding to entanglements and complexities that speak to me.

In the light of Varela's (1999b) proposition to live the body as a topographical site to experiment with practices of knowing, I expanded this to enact Anzaldúa's (2015) path to *conocimiento* in movement. A *conocimiento* that is alive, lived, and that breaths relationality. Therefore, most of this thesis has been knotted, written and thought experimenting with postures and ways of being in place that practise the embodied enactment of *conocimiento* and that differs from the sameness of chair sitting. Squatting, cross-legged, kneeling and many other forms of becoming with the world as embodied practices have proliferated during the

time of this inquiry. Has it changed how I write? Has it changed how I think? I am not sure, but I think it has deeply affected and effected a transformational cellular shift in my ways of living and sharing worlds. The following subsidiary cord speaks of collective practices of decoloniality.

CHAPTER 9: DECOLONIALITY AS COMMUNAL ACTION



Another subsidiary thread emerged from the knot of decolonising the self as an understanding that we are always becoming-with. In this particular subsidiary thread, I write of decoloniality as a communal practice. The knot at the end of the thread marks complex issues around decoloniality questioning the very existence of the term and its narratives.

Early in 2017 I was experimenting with the quipu as methodology, reading decolonial feminisms and becoming aware of the marks that colonialism, patriarchy and the recent Chilean dictatorship and neoliberalism have left in my body. I was in Coburg, away from Chile, dealing with old stories and trying to heal trauma. During this time, I was invited to attend a feminist event organised by Victoria University in Melbourne to create a network of different feminist collectives and initiatives at community and tertiary level. One by one different collectives went up and explained their practices, visions and methodologies. I looked at the crowd and one woman drew my attention, she seemed familiar, so I moved next to her.

She said hi, and asked almost immediately if I speak Spanish. We laughed. She had arrived recently in Melbourne from Mexico City after completing a Master of Philosophy in gender studies at Universidad Nacional de México and was interested to learn more about the feminist movement in Australia, and also curious about the Eurocentrism still present in Latin American academic feminism. That day we noticed that there were no Latin American decolonial collectives; we looked at each other and decided to set up an open invitation in social media to attend a meeting. We knew we wanted to read Indigenous feminisms from Latin America, experiment with textile methodologies and other technologies such as sound, movement and self-care practices.

Initially almost ten women from different parts of Latin America began circulating from house to house, we cooked each other meals, shared stories of our mothers and female ancestors and began practising arpilleras as we read Francesca Gargallo (2014) *Feminismos de Abya Yala: Ideas y proposiciones de las mujeres de 607 pueblos en Nuestra América*. Later that year we were offered a space in the Victorian Trades Hall, in a Latin American organisation's office. And at the start of last year we moved to Blak Dot Gallery, the first Indigenous contemporary art space in Melbourne, where we continue to hold meetings every Wednesday.

Through the practice of reading, making arpillera (Figure 23) and storytelling together we have learnt how our bodies are woven in histories of oppression and inequality, but also resilience, creativity and resistance. Together we heal, laugh and find possibilities for echoes to be heard and attempt to connect differently to our bodies, memories and thought. The feeling of being held as we discover and re-encounter trauma in our lives and our ancestors' lives encourages us to practise love and hope. With my compañeras from Colectiva Abya Yala I learned that decoloniality is an (im)possible project. Can coloniality be reversed? What does the prefix *de* in decoloniality actually mean? Can the fossil-fuelled political and economic apparatus of systemic violence that sustain the continuity of coloniality be reversed? Is that as simple as the concept sounds? How is decoloniality co-opted by capitalism as a way to continue to operate? How is coloniality different here in Australia than our home countries in Latin America? And we do not have answers. We hold our questions, we loop through them once and again as we chat and make our arpilleras together.

As we read and encounter more radical Latin American feminist thinkers we also question the Latin American fathers of decoloniality (Cabnal, 2006; Galindo, 2017; Gargallo, 2014; Rivera Cusicanqui, 2012, 2016, 2019). With Rivera Cusicanqui (2012, 2019) we learned that Mignolo (2011, 2018) and Quijano (2007) also practiced a form of epistemic mining by extracting Indigenous knowledges from their political context and claiming its originality from their centres of power in the global North. Rather than dismantling systemic apparatuses, we follow Rivera Cusicanqui (2012) as we focus our energies on working at the level of our consciousness, through our bodies, creating community and healing our ways of knowing by remembering together what our patriarchal and colonial cultures and resulting schooling rendered invisible and undervalued.

The practice of the arpillera as storytelling, singing with the caja chayera and reading feminisms alongside other Latin American women also opened spaces for thinking about animist ontologies and collectively enact situated conocimiento. We animate the stories of our Indigenous ancestors that were denied over the years (Waldman Mitnick, 2004) and slowly we re-turn to forms of intuitive, visceral and more-than-human connectivity (Rose, 2017). We struggle along the way noticing how we were conditioned in particular ways of thinking and living. The practice of desidentification, as Braidotti (2011) proposed, becomes a practice of healing and revitalisation of thought.



FIGURE 23: ARPILLERA MADE BY COLECTIVA ABYA YALA IN 2017–2018 WHILE READING, DISCUSSING AND STORYING *FEMINISMOS DE ABYA YALA: IDEAS Y PROPOSICIONES DE LAS MUJERES DE 607 PUEBLOS EN NUESTRA AMÉRICA*. PHOTO BY LILIANA CAÑIZARES USED WITH PERMISSION.

In light of Varela's (2000) understanding of consciousness as a stream that is embodied in every cell of the body, but it is also extensive and communal I wonder about the relevance of coming together to imagine how to dismantle the continuity of colonial forces in how we experience thinking and learning in education. I notice how crafting communal textiles can enact a non-teleological practice that has potential for profound transformation. There is no plan, no expected outcome but a rich process of coming together, making, stitching, knotting and sharing our concerns and dreams. Resisting decoloniality as metaphor (Tuck & Yang, 2012), I continue to exercise Anzaldúa's (2015) *conocimiento* and her call that connects the transformation of the self with the social and the notion of "inner work, public acts" (p. 39).

The quipu and the arpillera speak the language of the thread, of textile storytelling. They both render each other capable of creating multidimensional stitched, woven worlds, amplifying the force of textile practices everywhere. As we make together we transform how we think, act and live. This process is slow and oriented to our lives, the lives of our ancestors and our contradictions as immigrant uninvited guests in unceded Aboriginal lands. That is the understanding that our healing is also a bridge for collective transformation in our present (Cabnal, 2016). To decolonial scholars in education Williams, Bunda, Claxton, & MacKinnon (2018, p. 51) "we will have a better chance of honouring reached and shared ontological–epistemological understandings (the nature of reality and how we come to know it and enact it), both interculturally and intergenerationally, if we are able to be conscious of and bring reflexivity to the diverse cultural, political and geographical terrains and related agency imperatives in which we are daily anchored." Which I understand as an imperative to embrace the incommensurability of decoloniality between settlers and Indigenous peoples committed to imagine together different order of the world (Tuck & Yang, 2012).

CHAPTER 10: KNOT OF INTERFERING MINIATURE SCULPTURES



I move sideways from the subsidiary threads that emerged from the knot of decolosing myself to this knot in the thread of material encounters in Chile. This knot materialises the first intensity of my material encounters in Chile: miniature chair, clay and the memories of the land collide creating an intricate landscape of productive interferences and terrestrial events.

I hold the quipu in my hands, sensing the threads that take my curious fingers into the territory of Chile and the material encounters I had during my research trip. The quipu is a tensile, ductile and tactile art. I feel it and it feels me. As I think the quipu through touch I wonder about the concept of *conocimiento* in its embodied (touch, multisensory), emotional and spiritual dimensions (Anzaldúa, 1991; Osorio & Weinstein, 2013; Rossholt, 2018; Schaeffer, 2018). In the previous knot I delved into the complex turns, twists and tensions of the process of decolonisation as a manifestation of desidentification (Braidotti, 2010a, 2010b) and becoming *Neplantera* (Anzaldúa, 2015), using Varela's (1991) conceptualisations of the selfless self. With Vicuña (2017) I understand how my body is a living quipu.

In the quipu the threads are not a mere connection from knot to knot. The quipu, in that sense, more than a network that connect dots, is a meshwork (Ingold, 2011), where the threads are expressions of lines of life, they are "flows of material substance" (p. 64). The thread thus speaks and materialises relationalities and creates intensities in the form of knots. In the quipu, my hands move along two intertwined threads, an ochre one and an indigo one. The colours of the earth and water, that are not earth and water. Within the quipu, colour beyond representation is an enactment, a quality that emerges in intra-action between multisensory bodies, pigments and memory (Varela et al., 1991). I wanted water and earth to guide my hands into the material encounters in Chile, I remember I dyed some thread with Australian ochre. A transnational thread? I wonder now. I knew that pigment was a powerful force. We used it for a performance called "Why listen to animals?" that we did with Vicuña, when she came to Melbourne a year after my material encounters trip to Chile (Figure 24).



FIGURE 24: CECILIA VICUÑA, CAMILA MARAMBIO, BRYAN PHILLIPS AND MYSELF PERFORMING “WHY LISTEN TO ANIMALS?” LIQUID ARCHITECTURE, 7 OCTOBER 2016, WEST SPACE, MELBOURNE. PHOTO BY LIQUID ARCHITECTURE. USED WITH PERMISSION.

In this knot I let temporalities and places hop, collide and resist interpretation to create different patterns and enact *conocimiento*. I notice how two affective material encounters that I had in Chile speak through this knot: a miniature chair and a miniature clay sculpture. In this knot I use Barad’s (2014) mode of writing diffraction to pay careful attention to the moments where clay, wood, land and water interfere, creating patterns of difference that guide me into unexpected connections and new relations that materialise particular power dynamics (Barad, 2007).

The force of the earth embedded in the quipu traverses this knot, enacting *conocimiento* that connects the river banks of Elqui River in Chile with Merri Creek in Australia in surprising ways, enacting a form of riparian *conocimiento* (Figure 25). The ecological notion of the riparian refers to the geography of the banks of the river or other body of water. Riparian zones are liminal areas between aquatic and dry land ecosystems. Among their many functions are enabling the formation of various sediments, one of which is clay (Gregory, Swanson, McKee & Cummins, 1991).



FIGURE 25: MY HANDS HOLDING AUSTRALIAN OCHRE PIGMENT, QUIPU WITH DYED AUSTRALIAN OCHRE AND RIPARIAN ZONE OF THE ELQUI RIVER FROM THE TRAVERSAL VALLEYS OF CHILE BELOW. PHOTOS BY AUTHOR.

This knot brings to the fore Barad's (2003) notion that "all bodies, not merely human bodies, come to matter through the world's iterative intra-activity" (p. 823). What the knot does is similar to Clough's (2009) description of engaging with affective encounters, where we produce "affective resonance, attunement, that is, the intensifying or the dampening of affect" (p. 49). I decentre myself as researcher-in-control to let affective forces materialise through these knotted material encounters. Water, clay, wood, chair-as-trophy, ghosts from Pinochet's dictatorship, la Pampa, they all made themselves sensitive in different moments, at different intensities. Many other forces passed unrecorded; these are those which lingered in time and space. The ones that have drawn my attention over the years and to which I have returned over and over, looping back, looping forth, making knots. Through this process of enacting

conocimiento by quipu-making and the quipu-animating of these particular material encounters, I have transformed the way I understand the world.

The specific moments where these humans, non-humans and more than human encounters are spliced/cut/together/apart are marked by the presence of knotations (poetic notes as knots) in italics within the text (Vicuña, 2010a). Knotations provide a material poetic bridge between textile and text, letting poetry account for moments where the possibility of meaning making is not necessarily achievable or desirable or even apparent; when matter refuses to be categorised, when events of a different quality take place, too slimy or ephemeral to be grasped, or even fully sensed (Somerville, 2016; MacLure, 2013).

The miniature chair found me

My relationship to the Chilean miniature chair began in Melbourne in 2014. This miniature chair worked as an affective force for this thinking-with-chairs process. A force that crossed the Pacific Ocean through the virtual web of the Internet and animated my thinking in unpredictable ways. As soon as I entered into an intimate relationship with this knot, multiple knots began to form. I have told this story before, but I feel I can repeat and extend it differently. A repetition with difference. I loop back to the first paragraph of my introduction to this thesis.

Parkville Library, spring 2014. I'm reading Barad's (2007) article "Meeting the universe halfway" and a *sleeping* story is animated by this reading. I use the notion of a sleeping story in Vicuña's (2016) terms as she speaks of relational Andean onto-epistemologies and the resistance of colonial fatalist discourses of extinction or disappearance. To Vicuña (2016, 2018) ancient knowledge sometimes *sleeps* until the conditions for its awakening are just right for it to reawaken. I like this phenomenon: it makes me think of the flowers in the Atacama

Desert, bulbs that sleep for decades until the amount of water that crosses the Andes via the “Bolivian winter” create the conditions for them to bloom. Perhaps some stories are like these bulbs waiting for the right conditions.

This particular story was told to me in Chile, in 2011, by an early childhood educator who worked at Fundación Integra, a private not-for-profit institution founded as FUNACO in 1979 by Pinochet’s wife Lucia Hiriart. I do not remember her name, but I do remember she was a yoga teacher as well as an educator, with a very gentle and humble presence. When we talked about movement, in a common friend’s kitchen in La Serena, she looked at me and laughing she said something that I heard as “This is such a paradox! In Fundación Integra we are given a chair as an award for innovative pedagogical practices, a chair! Can you imagine? Such a static symbol!” I could not believe when the story hit me again three years later in Melbourne. Thinking how matter comes to matter (Barad, 2007), the idea of a chair as a trophy in early childhood education was, to say the least, intriguing. For the first time I decided to try and find out more about it. I found it on the web, and then it physically found me.

As soon as I searched Google and YouTube the miniature chair emerged from cyberspace. During the first right-wing presidency of Chile after Pinochet’s dictatorship, with the same president who currently governs Chile for his second term, a miniature chair was widely used by Fundación Integra as a trophy (Integra, 2014). They used it to acknowledge financial donations by corporate private donors, innovative educators, supporting celebrities and even as a prop in online campaigns to promote early childhood education in Chile (Figure 26). My only direct contact to Fundación Integra was Tere, who was director of a regional branch of the institution in La Serena for twenty years after the transition to democracy. She and I met years ago in La Serena. We worked together for a short time in a program to promote

freedom of movement in young children in Fundación Integra. From Coburg, Australia, I organised a Skype meeting with her to ask about this intriguing miniature chair.



FIGURE 26: VIDEO STILL OF FUNDACIÓN INTEGRA'S VIDEO *EN EL JARDÍN APRENDÍ* ("AT PRESCHOOL I LEARNED"), A CHILEAN CELEBRITY HOLDING A MINIATURE CHAIR, 2014. RETRIEVED MARCH, 2015.

Coburg, autumn 2014. Tere and I met on Skype. She was 11,000 kilometres away at her home in La Serena. We could see each other in realtime through the screen. Nighttime in La Serena, morning in Coburg. She surprised me by showing me the miniature chair straight away. That was her first gesture, she showed me the miniature chair in front of her face. I did not know she had one of those chairs when I contacted her. I was in awe. The idea of doing a research trip to Chile to learn more about chairs, education and memory began to take shape after this conversation. The synchronicity of the presence of the miniature chair in that space resonated with me. Tere told me she had received the chair two years before, as recognition when she retired from Fundación Integra. She mentioned that she does not like the small

chair, she did not want the chair and that she specifically asked her colleagues please not to give her the chair. Later they told her that they could not do much, because the chair was already there for her, with a plate with her name on it.

An unwanted

(yet conserved) chair-as-trophy.

Allen (2016) explains the role of handmade miniature artefacts in the Andes from pre-Columbian times. Handmade miniatures such as llamas and vicuñas were not understood as small-scale representations of their animal counterparts, but a performative artefact that enacts a world of cosmic relationality, and a desire for prosperity and wellbeing for the animals, the community and the world. That is why the care in the making by hand and during the “life” of the miniature artefact was crucial for the whole human, non-human and more-than-human community (Allen, 2016). Through the practices of care with the miniature, the relations with the animals the makers cared for flourished. I wonder about this miniature chair. It was made by hand, I notice in the imperfections of the cuts, the way it has been assembled. What relations does this miniature chair sustain?

La Serena, spring 2015. It was the afternoon and we walked down the hill to meet Tere. She lives in *La Pampa* (flat lands closer to the Pacific Ocean). I took my research journal, Tamara took her camera, and Yanira came with us. We walked in the sun from the hill of the coastal Andes where my parent’s house is. We enjoyed the effortless rhythm of walking downhill. Tere was waiting for us; I noticed she had set up the space for our encounter. As soon as I traversed her doorway I observed that she had placed the miniature chair next to a clay sculpture on top of a closed trunk/table. I remember how I was drawn by her spatial composition. Wooden chair next to clay sculpture on top of a closed trunk, I repeat. I noticed in

my body a vibrational response to this juxtaposition of material objects (Bennett, 2010). We all sat in a circle and began a conversation about chairs and early childhood education, bodies and democracy, dictatorship and memory.

CONTEXT AND HISTORY OF *FUNDACIÓN INTEGRA*

The miniature chair emerges in a particular historical institutional context. Founded as FUNACO, Fundación Integra is a not-for-profit private organisation, funded mainly by the Chilean State, was initially run by volunteers (most of them wives of military officers) that began as a paternalistic institution to provide clothing, food and education (basically habits and manners) to poor children, who were the most affected by the internal and global economic crisis (Letelier, 1976; Pardo & Woodrow, 2014).

Almost every waged worker at FUNACO was employed through emergency employability programs. During the early 1980s the dictatorship created programs to increase the rates of employment, dramatically low due to a massive internal crisis. These emergency programs were called PEM (*Programa de Empleo Mínimo*, or program of minimal work) and POJH (*Programa de Ocupación para Jefes de Hogar*, or occupational program for heads of household). These workers received wages below the legal , and many people describe it as a humiliating way of masking the precarious conditions most Chileans were enduring. Ninety per cent of the waged workers of FUNACO worked for these minimum wage programs and all of them were women who had not finished primary school education.

Fundación Integra, like every institution, is a matter-real knot where ideologies, discourses, history, human bodies, law, papers, buildings, policies, economies, uniforms, women's and children's rights are all entangled in what Barad (2007) refers as an "intra-acting multiplicity of material-discursive apparatuses of bodily production" (p. 237). How bodies are

produced through ongoing intra-actions is at the core of Barad's reworking of power dynamics beyond the social through her agential realism framework. Contingent materialisations are enacted by forces that produce not only humans, but also non-human bodies. Similarly, human bodies are not only produced by humans and their societal structures such as class, race, ethnicity or gender), but also by non-human bodies, such as chairs, geographies, technology, etc.

In that sense, within Barad's (2007) quantum reworking of the notions of space and temporality, the materialising forces that produce human bodies, and non-human bodies such as the chair-as-trophy, are not forces of the past. In her words "the past is never left behind, never finished once and for all" (p. 234). The reconfiguration and reiterations of these material relations, which are political, cultural, social, economic, materialise through bodies that are not determined but constrained by these particular apparatuses. Using Barad's framework here one could argue that Fundación Integra can be understood as a site where dynamic power relationships produce particular meanings, bodies and boundaries.

Thinking of the bodies (not only humans) who materialised Fundación Integra in its first years as FUNACO, one could argue that it is probably not a coincidence this institution was founded in 1975, the same year Milton Friedman visited Chile. That year, 'Chile: The Neoliberal lab' was born, but Friedman coined a different term, "Miracle of Chile" (Klein, 2010; Letelier, 1976). To Friedman (2013), the miracle of Chile was not the apparent success of the economic reform, which he took for granted, but the resolution of a paradox of power, where a down-up system, as he conceptualised his radical free-market economic program, worked so well within an up-down military dictatorship.

Within this paradox of clashing freedoms, ideologies and bodies, I listen to this miniature chair, sensing how a thread of neoliberal stories traverses the quipu from the fibres of the chair to the fibres of the body to. This tissue of human and more-than-human existence sustains a relationality that (dis)continually produces us as humans. I go back to Allen's (2016) explanation of the performative force of Andean miniature artefacts to wonder again about the relations that this miniature chair-as-trophy sustains?

KNOTATION: WOOD AND CLAY INTERFERING

Tere is holding the miniature chair,

This is why you came here, she told me.

I sensed her resisting the chair. She looked at it. She smiled awkwardly. She placed it again on the trunk.

The chair is so static, so rigid, she said.

This miniature chair-as-trophy was given for many years in many occasions, even to acknowledge educators who were innovating in their pedagogical practices. "Those chairs were a little bit bigger, and painted by the children, but still chairs ... it was a symbol," Tere said.

How does the symbol work? I think. Imagining children painting chairs for their educators.

Tere then holds the clay sculpture.

She holds it carefully. She looks proud.

That clay sculpture was made by a local artist, Daniel Palominos.

He has continued an ancient tradition of pottery of these valleys,

pre-Inca tradition of pottery and clay sculptures.

Tere asked him to make these figures to acknowledge outstanding educators of this region. She was also given one of those in 1999.

I do not want her to stay with the clay,

And want her to talk to me about the chair.

I dismiss the clay. I resist the clay. I do not understand why it is here. I do not ask about it.

Clay is interfering with wood. Her desires interfering with mine.

She and I and the clay and the wood and the chair are interfering with each other.

The clay sculpture portrays an early childhood educator wearing a green apron,

She is an Indigenous woman; she is with three children, also Indigenous, playing on the floor.

One of the boys is making a tower out of blocks.

Tere says the chair was imposed by Santiago's central organisation.

Tere says that the chair was the symbol of Fundación Integra during President Sebastián Piñera's government (first right-wing elected president in Chile after transition to democracy). She said that during those four years (2010–2014) the institution regressed to its paternalistic roots in dictatorship. She blamed the right wing's policies and practices for the chair as symbol of the institution.

I feel uneasy, as if this was a way not to talk about it, to place the chair in a specific frame of time with a different ideology she did not share. As if anything was different during the years of La Concertación.

Tere repeats she did not want the chair.

Her requirement was not fulfilled; those were the instructions. Chairs were bought in advance.

Tere received the chair, an empty chair, she says sadly.

Does she refer to the empty chairs of dictatorship? Those chairs that remained empty, waiting for those who were made to disappear by Pinochet? Enforced disappearance. A practice that Pinochet and many other Latin American dictatorships borrowed from the Nazis. It was described as an effective method to spread uncertainty, terror in the direct families of the victims, as well as in the wider population.

Is her sadness speaking of this terror?

PAST/PRESENT HISTORICAL INTERFERENCES

The memorial of “Las tres sillas” (the three chairs, Figure 27) of “Caso degollados” (slit-throat case) was made in 2006 in Chile to commemorate the death of Manuel Guerrero Ceballos, Jose Manuel Parada and Santiago Nattino, all members of the Communist Party, at the hands of Pinochet’s secret services in 1985. The magnitude of the difference in scale between these massive ten metre school chairs and the miniature chair is dramatic. But they are here as well. Now. With us. These are some of the empty chairs of Chile.

Who called them into being?

Does Tere know that I contacted Manuel Guerrero, the son of Manuel Guerrero Ceballos, to ask him about the chairs?

Does Tere know that I accidentally ran into Manuel in Melbourne a few years after this encounter when he presented his documentary “Guerrero” (Warrior)?

He did not reply, and I accepted his refusal.

The authors of this memorial decided to use chairs because two of the three bodies found belonged to former teachers and school workers; furthermore, both were arrested by the secret police at the front door of their children’s school one morning in 1985.



FIGURE 27: LAS TRES SILLAS (THE THREE CHAIRS) MEMORIAL TO MEMBERS OF THE COMMUNIST PARTY ASSASSINATED DURING PINOCHET’S DICTATORSHIP IN CHILE. SANTIAGO DE CHILE. PHOTOGRAPHY UNDER COMMONS RIGHTS.

Back to the miniature scale. Tere suggests that the chair is not what we want in early childhood education, she says, we want children to be active citizens. This chair is the embodiment of passivity, I hear her saying. Or was it I?

There is friction between the clay and the wood still,

Between the chair imposed by the central institution of Santiago

And the indigenous educator made in clay by the local artist (Figure 28).



FIGURE 28: TERE, CHAIR AND CLAY SCULPTURE. PHOTOS BY TAMARA DUPRÉ. OCTOBER 2015.

The Indigenous presence in the room is a link to a denied presence in Chile (Sepulveda et al., 2015; Vicuña, 2010b; Waldman Mitnick, 2004). Somehow the Indigenous educator interferes with the neoliberal ideas that Tere was sharing, as she argued that the professionalisation of early childhood education was bringing prosperity and flexibility to the curriculum, improving the outcomes. The Indigenous educator diffracts her discourse of neoliberal professionalism from the Chilean market-driven economy.

The female Indigenous educator standing up reminds me of the strike Fundación Integra led in 2013, when five educators went on a hunger strike to demand better wages. I think back to the arpillera with the protest of the POJH. The continuity of social discontent as a result of a deeply unjust economic system is the force that animates social mobilisation in

Chile today (Guzmán, 2019). And women continue to protest on the streets, such as the women of the POJH during the dictatorship, and the educators of Fundación Integra who have been violently repressed in the past years (Figure 29). Figure 29 depicts a still of a video shared in social media in 2018 of how early childhood educators' protests are managed by the police.



FIGURE 29: POLICE MISTREATS EDUCATORS FROM FUNDACIÓN INTEGRA. PUBLISHED DEC 12, 2018. RETRIEVED FROM YOUTUBE [HTTPS://WWW.YOUTUBE.COM/WATCH?V=9M32XGE8ODQ](https://www.youtube.com/watch?v=9M32XGE8ODQ).

“But this is not a topic we can discuss as if it was independent from other big issues we are facing as a country: education is tied to geopolitics, economics, health, colonisation, etc. It is a ‘tema país’ (whole country’s topic),” Tere asserted.

According to Chilean historians Gabriel Salazar & Julio Pinto (2002), the narratives of *tema país* or *proyecto país* (whole country’s topic, or country’s project) are a capitalist construct that is tied to the American and Eurocentric, Modernist nation-state project of global development and progress according to the norms of the global North. This is understood as the implementation of a social order that cements the idea of a “Western official memory”.

Salazar & Pinto (2002) argued that this creates a *centrifugal* model that from colonisation onwards has allowed the extraction of resources in all forms by foreign powers, immobilising local values and making invisible other forms of knowing and living. Furthermore, they asserted that it is through education that the “Western official memory” based in static forces comes alive, in the alienating practice of learning the official memory (Salazar & Pinto, 2002).

But Salazar and Pinto (2002) in their masculine militaristic narrative continued to reinforce that the “enemy” to fight is global capitalism, and the “real conflict” continues to be class struggle. Although I agree that class distinctions are pervasive in Latin America and specifically in contemporary Chile, and acknowledge their clear and sound historical analysis, I do not see generative forces within their propositions to continue fighting. Nonetheless when I diffract Salazar & Pinto’s (2002) propositions through clay, something different happens, an earthy memory comes alive. A riparian force decentres the human in his discourse. According to Indigenous scholar Styres (2012), “Land as first teacher is a contemporary engagement with Indigenous philosophies derived from a land-centred culture and based on very old pedagogies” (p. 717). Styres (2012) explains that it is *grounding* ourselves in embodied practices that connects us to the lines/tracks we make as we move on land as educators, as students, as inhabitants of a particular country, and which we can connect to the stories, experiences and ancient tracks that land *remembers*.

Through land, earth and clay memory becomes something else than only human memory, less of a cognitive force and more a molecular and evocative sediment. Thinking with clay, even the name Tere becomes something different and sounds like terra, tierra, earth.

Clay has spoken through us. I played a podcast by Melbourne-based DJ LAPKAT (2017) called *Chile: Lengua de la tierra* (Chile: Tongue of the earth). DJ LAPKAT plays us poets Violeta Parra, Cecilia Vicuña, Pablo Neruda, Vicente Huidobro and contemporary electronic tunes from Chile. When listening I constantly had goosebumps in my whole body. Through sound I began attuning with a presence that came to me which remains ineffable, as if that presence was in itself an event not to be analysed, not to be manipulated, but sensed. That is *greda*, or clay. How does clay make itself sensitive? What comes with clay? Whose hands? Whose stories? Has the clay memory of the river banks from which it was dug?

Elqui river, pre-Columbian time. Human beings are squatting next to the ground moulding plates, jars, and ceremonial devices with hands, tools and water on the banks of what are now called Copiapó, Huasco, Elqui, Limari and Choapa rivers, in the traversal valleys of the “Norte Chico” (Small North or Green North) in Chile. Archaeology has demonstrated that this territory has been inhabited for more than 12,000 years (Gonzalez Carvajal, 2006; Gonzalez, 2017). And a main feature from their culture is refined pottery: as some authors maintain, probably some of the most sophisticated ceramics from the Andes (Gonzalez Carvajal, 2006).

Elqui rivermouth, Winter, 2015. An unprecedented archaeological finding in Chile was an ancient settlement and burial site named El Olivar from the Animas and Diaguitas cultures. The site was found when Spanish construction company *Sacyr S.A.* was building a road. There in the rivermouth of the Elqui river were hundreds of bodies, human and not human, *abrazados con animales*, humans snuggled up with llamas, guanacos and vicuñas. Archaeologist Paola González (2016) suggests that these findings also tell stories of the shamanic practices developed in this territory, and how these connect to the artistic, intellectual and

contemplative way of living of the humans who for thousands of years inhabited this territory. What is interesting is the proximity between living areas and mortuarial ones, as if life and death shared a common ground. Even though González (2017) asserts that more study is needed to make those assumptions, I read her texts poetically. I dream with them. What they did notice is that the necropolis functioned in that same place for more than 700 years.

Knotation: past/present/future entanglements

Through these encounters I noticed that the past is not past

Clay emerged not only in our material encounters,

But in thousands of forms and creations from under the earth,

An archive. A refusal to be forgotten. Another layer in the complexity.

In her land-based pedagogies, Noelani Goodyear-Ka'ōpua (2018) speaks of Indigenous futures and the force of the land that manifests and becomes a site of knowledge.

It seems that clay speaks of water, mud, hands, art. But mostly it speaks of knowledge, tradition, sophisticated technology and craft., a spiritual connection to the practices of making and relating. Clay is ritual, caring, learning, skill and sacred mud.

After colonisation La Serena was burned by Indigenous people. Burned.

The invader's city melted in fire.

After massacres, the city was rebuilt by the colonisers. A colonial city, La Serena.

I like how Quechua scholar Sandy Granda (2004) speaks of colonisation as a “multidimensional force underwritten by Western Christianity, defined by white supremacy, and fuelled by global capitalism” (p. 88).

Colonisation, therefore, is not a historical apparatus that is “external” to us.

La Serena, Spring, 2015. Tere placed a clay sculpture next to the miniature chair. I ignored the clay. But the clay was in the photos, in the hands, in the stories, shaking everything with its earthy vibration (Figure 30). The sculpture is painted, but the bodies are not. The human skin is dark, is clay. It seems as if clay traversed the pores of those bodies, decentering the human to *humanclay*. Now there is no Indigenous educator: through clay she becomes earth. Earth as educator. River as educator. Perhaps the educator is not the Indigenous woman, not the earth, not the river, but the force that relates them all. The relation in the form of story. A recent publication on decolonial pedagogies begins with two phrases: “Water is life, land is our first teacher” (Tuhiwai Smith, Tuck & Yang, 2019, p. 1). I wonder about riparian *conocimiento*.



FIGURE 30: TERE HOLDING CLAY SCULPTURE. SNAPSHOT OF OUR CONVERSATION. STILL FROM VIDEO BY TAMARA DUPRÉ.

Parkville, Autuum, 2018. For the past few years I had been thinking about how situated decolonial pedagogies could look. Perhaps the clay came to tell a story of a riparian curriculum, riparian thinking, a riparian mode of being. If “water is life, and land our first teacher” (Smith et al., 2019, p. 1), then I think of this educator standing on her feet, with her feet on the ground sustaining her body. I remember the origin of the word pedagogy from the Greek *paidagogo*, who was the slave who walked the noble children to school. *Paída*, pie, foot. Indigenous people in this land were also considered slaves, servants, less-than-human.

Knotation: feet on the ground

The chair embodies the passivity of the body, nothing new in that.

But with earth, water and clay – something else happens.

To Sandy Granda (2004), a particular enactment of the coloniser education is the obstruction of direct experience of land and water. It is a desirable cut for the Imperialist project to break with sacredness of land and water, to render them as resources that according to the capitalist nation-state are inert goods for extraction, consumption and production of wealth.

In that room in La Pampa (boundaryless land in Quechua), all of us are sitting talking while the clay Indigenous educator is the only one standing up. All of us are sitting on couches in the lounge. I wonder about her standing on her feet. Sharing a story without words.

Her feet on the ground. Her body sustaining herself.

Coburg, Winter, 2016. I emailed archaeologist Paola González to wonder whether they found any quipus in El Olivar. I have been following the El Olivar event since I came back from Chile. As I was wondering about chairs that Spring, archaeologists were carefully digging for our ancestors. La Chimuchina (sound collective from Central Chile) with local chinos

performed a ritual in 2016 as a ceremony to the ancestors; they played the dissonant sounds of chino flutes, danced and chanted. I realised that Paola González, the main archaeologist, was my school friend's aunty (La Serena has always been a small town). I contacted her asking for quipus (perhaps still resisting the force of clay). She emailed back explaining that textiles were not found in the area: the humidity did not allow textiles to be preserved.

Knotation

Textiles becoming dust

Weather intra-acting with textiles is dust

The humidity of the mouth

The mouth of the river ate them.

They dissolve in her riparian being,

Textiles are an ephemeral act.

They only leave traces,

Becoming wind.

Clay is conserved through spacetimes.

El Olivar is a knot,

A crossroads,

An encounter of

Molles, Animas, Diaguitas, Inkas.

Clay, bones, metals, textiles as dust,

Practices, ancient practices

Dead humans snuggled up with llamas

A sympoetic hug into death.

Barro, greda spoke to me, but I was not sure how. I wanted to know more about how people used to make clay in that territory. Where did they find it? What makes a particular territory more prolific in engaging with some matter than other? I learned that the

composition of the soil, the minerals that live in the soil, make a difference for pottery making. Perhaps it was the particular composition of soil that made clay such a strong presence in this land. I watched a short documentary of an elder *alfarera* (pottery maker) called Elena Tito, who in 2016 was acknowledged as a *tesoro humano vivo* (human living treasure) by the Chilean cultural ministry (Figure 31). She lives in the Atacama Desert and still uses ancient practices for her pottery.



FIGURE 31: SNAPSHOTS OF ELENA TITO'S POTTERY IN *TESOROS HUMANOS VIVOS* (2016). RETRIEVED FROM YOUTUBE, MARCH 2018.

One of the stories she shared was that she learned to work with clay with her aunty. Children used to collect the rocks and at the end of the day, with minimal water (in the driest desert in the world) her aunty washed their feet and treasured all the mud from the children's feet. Not wasting anything. "Mud was sacred for her," Elena said, to explain how her aunty cared for every drop of mud coming from their feet. Caring for water in the desert, caring for humidity, caring for soil, caring for the making. Elena talks about experimentation, how she *experimenta con la tierra*, experiments-with-the-earth.

Knotation

Barro

greda

arcilla

de las orillas de ríos.
Visitada por aguas y manos
Creación mágica.
Te apareces,
Brotas en el spacetime mattering
Vibrando memorias de tierra
Vibrando memorias antiguas presentes
Past present are knotted
In clay.

THINKING-WITH CLAY IN THE LANDS OF MERRI CREEK

Coburg, Spring, 2017. It has been two years since the unexpected appearance of mud, clay, *greda* in this research. I do not try to “make sense” of why clay appeared, but I do pay attention to what clay has done as a force in this living quipu. The vibrancy of clay in these past years made me think about living next to a creek, the Merri Creek. I also sense here the force of clay. With Singaporean artist Pixin Weng, I collaborated doing a workshop with children making clay offerings to the living forces of our local creek (Figure 32). We met at East Coburg Community House and headed in a listening walk to the creek to make offerings with locally sourced clay. The idea was to explore, with children, the idea of offerings, of making something with love that you know you will leave and not take with you.



FIGURE 32: MAP OF THE ROUTE TO THE CREEK FROM EAST COBURG COMMUNITY HOUSE, AND CLAY OFFERINGS MADE BY PARTICIPANTS YOUNG AND OLD TO THE LIVING FORCES OF THE CREEK. AUTHOR'S PHOTO.

Through this research I became attuned to clay, mud, terrestrial knowledges. I do not walk the same on land, and my attention to the creek banks has changed. I dug and found clay in my backyard. Clay, as a living sediment, calls for a particular curious perceptive mode of thinking-with in its local intimate relation to a particular land (Haraway, 2016). Thinking-with clay in Wurundjeri land makes visible denied stories of clay knowledges and demands an ethical response-ability (Barad, 2007). Barad (2007) challenges us to pay attention to the particular possibilities for intra-actions that exist at every moment. In this challenge, she explains that the possibilities of change “entail an ethical obligation to intra-act responsibly in the world’s becoming, to contest and rework what matters and what is excluded from mattering” (p. 235).

The *humanclay* of the river banks of the Elqui river in Chile becomes something else on the banks of the Merri, enacts different *conocimiento*. Thinking-with clay, I walked the creek and searched the web, navigating the cyberspace through the Merri Creek Management Committee’s website (2018), and I found an oral story of creation told by Wurundjeri-willam Elder William Barak:

Bunjil the great creative spirit, having formed the earth and carved its features, decided to bring humanity into existence. Bunjil gathered up a quantity of clay from a river bed, divided it into two and placed both portions on large sheets of bark cut from a gum tree. He worked the clay into the shape of two men and took stringy bark from the trees to use as hair.

Bunjil was pleased with his work and danced around the figures he had made. He blew air into their mouths, nostrils and navels and filled them with life. Pallian, the brother of Bunjil, had been given control of all the rivers, creeks and billabongs.

Pallian began to thump the water with his hands in the same manner as Wurundjeri women would beat possum skin rugs when their men danced a corroboree. The water became thicker and thicker and took on the shape and appearance of two women. Bunjil gave each man a spear and provided each woman with a digging stick.

This story of creation, man from clay and woman from water, stays with me. The pull of the creek makes me wonder about sensuous response-ability, about my present presence, my children and Australian education. The story repeats differently, here in our public school next to the Merri; riparian *conocimiento* in the forms of sustenance of living, healing plants, creation stories, songlines, animals are also absent. After genocide and ongoing colonisation, local Indigenous knowledge of the Merri that developed from thousands of years of sustaining life is not easily accessible for children and families living next to the creek. Similarly to when I grew up in Chile, Diaguita knowledge of the banks of the Elqui River was also absent from our learning curriculum. Nothing new in that. What is novel is to pay attention to the particular ways that this *conocimiento* can be enacted, resisting colonial narratives of extinction.

Taking the decolonial option by desidentifying from old habits of thought and movement, the process described in chapter 7, produces a perceptual shift at a cellular level, beyond rational logic. Understanding Barad's (2007) insistence that not all the bodies that materialise are human, and not all the bodies produced are human, allows me to pay attention to how matter comes to matter. In this knot, the miniature chair became a site of interference through the clay could manifest. Through clay, which desires presence and vibrates with existence, I enact *conocimiento* that invites me to dream riparian pedagogies with my feet on the earth (Ingold, 2011).

CHAPTER 11: TEXTILE BECOMINGS



Another subsidiary thread emerged from the previous knot. An unexpected thread that connects the quipu as a form of storytelling to other textiles, the arpilleras. Observing arpilleras as a young girl I understood the potential of textiles to carry stories, this subsidiary thread speaks of how the quipu also animates the arpilleras to tell more stories that produce conocimiento.

Early in this thesis, in chapter 2 when I introduced the history of the quipu, I explored the story of Guamán Poma de Ayala (1978), an Inca noble, who during the early colonial period (probably between 1567 and 1615) wrote and drew an extensive picture-letter to the Spanish king to inform him about the cruel treatment the Indigenous people were suffering during colonial times. In this letter that was lost for centuries, with his Quechua infused Spanish, Poma de Ayala (1978) explains to the king that he has used quipus as his archive to tell stories of his people before the arrival of Spaniards. The quipu, as a textile archive that contained more than numeric codes, was already visible in his manuscript, which was lost for centuries until it was found in a library in Denmark (Brokaw, 2003).

This pendant thread that falls from the previous knot tells a similar story, where textiles, this time in the form of an arpillera made in Pinochet's years, also become an archive, a reference for this study. The arpillera movement was an important dissident group of women who began to tell their stories of hunger, resistance and oppression during Pinochet's dictatorship in the form of patchwork tapestries that were sold to increase the family income, particularly in families where men were tortured, disappeared or imprisoned (Bryan-Wilson, 2017).

Knotation: textile interference

I did not expect an interference in this section.

But it happened. Completely unexpectedly.

A textile interfering with the text.

(challenging what counts as literacy, as document)

As I was writing this text yesterday,

N, a mum from our local school, came to visit,

We've been connecting through a project of riparian pedagogies I've been working on at school, as a way to practise my thinking in everyday life and collaborate with my children and our local community.

And we shared life stories of migration, education and current Australian politics.

When I talked to her about my life, I talked about politics and textiles and social justice.

I told her I learned about social justice when I was very young, learning the stories of the arpilleras as I detailed at the beginning of chapter 1, threads of life and protest.

I showed her an arpillera (storied textile) that B, another mum from school, lent me to have another textile companion in my writing process. B grew up with this arpillera at her place because her aunty visited Chile during the dictatorship and brought some back to Australia.

When N came to visit me at my place I animated the stories of the arpillera for her. She has a Turkish background and loves textiles too. Her mother was a weaver. She was excited by the idea of a textile telling us stories.

Yesterday, when N came, she said "I have a present for you."

I opened it, and there it was, another Chilean arpillera in Australia.

She found it at the local op-shop.

"Please tell me the stories," she said.

We looked at it together. "Is this the police?" she asks pointing to the black cars with a big cross on them.

"Yes, they are," I replied.

Water came to my eyes, because it is hard to believe how close text and textile are in the arpillera. How effective they are to tell their stories, the bodies are so animated. It is a protest in movement. Police are there, people are running. Banners are thrown in the air (Figure 33).

"It is an arpillera about the POJH. I was just writing about this today!" I said to her.



FIGURE 33: ARPILLERA OF A POJH PROTEST IN CHILE ASKING FOR BETTER WAGES. BLACK CARS ARE PINOCHET'S POLICE. AT THE RIGHT IS THE DETAIL "POJH PROTESTA" (PROTEST BANNER). AUTHOR UNKNOWN. PHOTO BY AUTHOR.

Quite amazingly, when I wrote the sentence, "These workers received wages below the legal minimum, many people describe it as a humiliating way of masking the really precarious conditions most Chileans were enduring," I thought that I needed a reference.

Now the reference interfered with the text – a textile reference.

I turned the arpillera around, and my heartbeat rose when I found the "secret pocket" (Figure 34).

(the pocket was stitched with red thread)

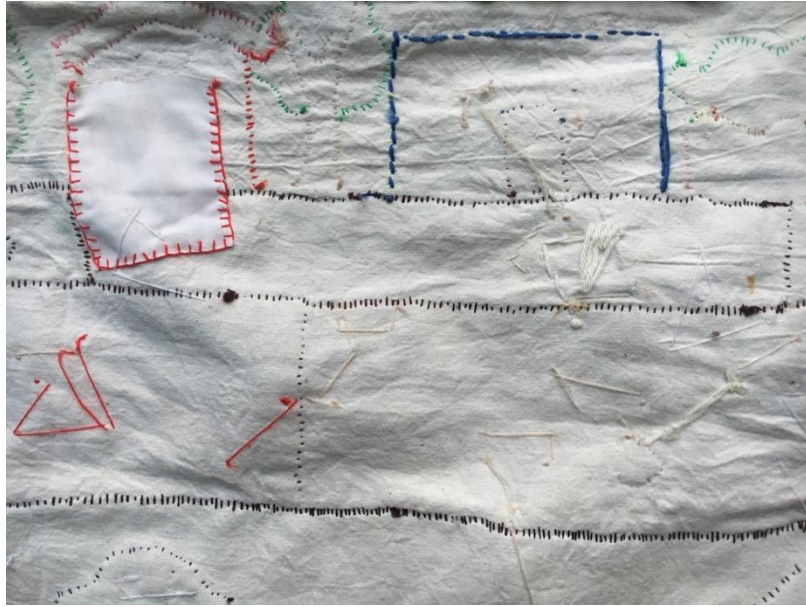


FIGURE 34: REVERSE OF THE ARPILLERA. DETAIL OF HANDMADE STICHES AND POCKET STITCHED WITH RED THREAD. AUTHOR UNKNOWN. PHOTO BY AUTHOR.

Sometimes arpilleras have a pocket in the back to send a written message.

Anxiously, I introduced my searching fingers into the pocket. I felt a different texture, but somehow it seemed like nothing was there.

Now the whole family was around the arpillera, Bryan, Samik, and Nawel. Expectantly, my children looked at the arpillera, as I looked at them when I was a young girl.

Slowly and carefully, Nawel, introduced his little fingers and instantly took out a tiny piece of paper from the secret pocket (Figure 35). We were all speechless. How long had this paper been in this pocket?

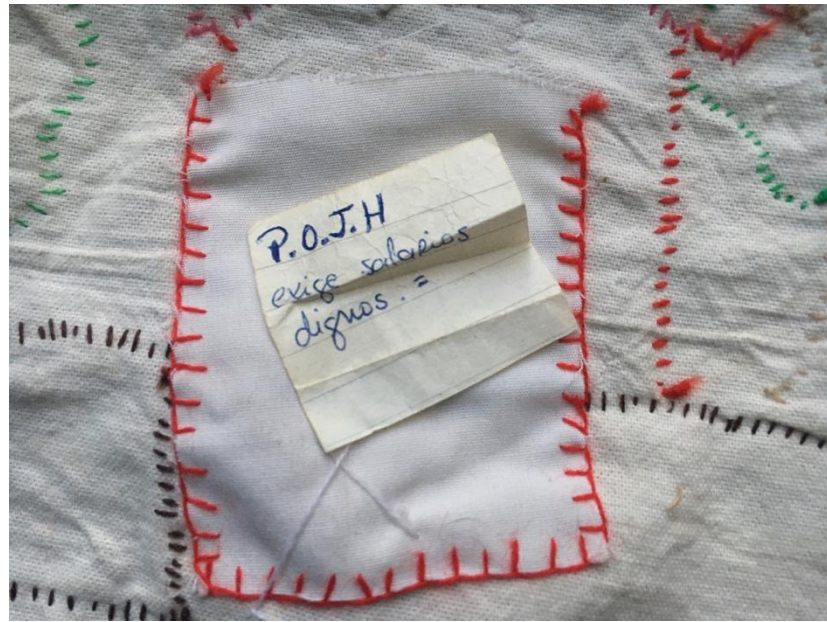


FIGURE 35: MESSAGE FOUND IN THE ARPILLERA'S POCKET "P.O.J.H EXIGE SALARIES DIGNOS. =" THAT TRANSLATES AS "P.O.J.H DEMANDS DECENT WAGES. =". AUTHOR UNKNOWN. PHOTO BY AUTHOR.

This subsidiary cord of the quipu connects us back to the beginning of this thesis where I shared my experiences as a young girl learning Chilean history from the stories stitched in the arpilleras during Pinochet's dictatorship (Bryan-Wilson, 2017). And also to the previous subsidiary cord of decolonising myself as a collective feminist practice of making-with women of Latin American background using textiles as a methodology of sharing space, stories and texts. This connects to practices that attune to the quipu as a methodology of enactive *conocimiento* and how textiles animate textiles (Vicuña, 2017). I explained above that the manifestation of the arpillera in the quipu rather than eclipse the force of the quipu continues to make possible the understanding of the performative archive as part of a tangible multiverse of textile based knowledge production and an expression of how the quipu becomes a participant of this research.

To me the arpilleras are profoundly significant because what I learned from them would otherwise have been hidden from me. Spending time with the stories stitched in the arpilleras was a life-changing experience, awakening a thirst for social justice by becoming part of the stories of hunger, repression and displacement. The animated bodies of the arpilleras also animated mine; I was inseparable from the stitched story presented to me, and which stayed with me until today. It was this early pedagogical encounter with textiles as form of storytelling what enabled me to engage with the quipu as archive in the first place, and now making my own quipu made possible for the arpillera to come back to my life and my children. To me, this is an expression of how the quipu works as an archive that enacts *conocimiento*.

The reappearance of the arpilleras now in Coburg, Victoria, Australia, created the conditions for a new process of sharing to begin. We sat together with my children and friends in Australia around the arpillera to let the stories that wanted to be heard emerge. I animated for them the history of the arpilleras in Chile, a textile archive of the most brutal years of Pinochet's dictatorship. To encounter an arpillera in Melbourne reminded me that archives are migrant and in flux, that borders are porous and stories tie experiences together. We were enacting *conocimiento*. In the following, last knot of this quipu, I tie together threads that end the notion of storytelling to the experience of telling but also listening to oral stories, situating this knot as a celebration of the liveliness of Latin American radical pedagogies and the possibilities of their transformative force.

CHAPTER 12: SOUTHERN CURRENTS, COASTAL PEDAGOGIES



This knot is intimately connected to the previous knot of clay, miniature chair and land that emerged in my conversation with Tere. Knotted in the same thread of the quipu, this knot marks a continuity with my conversation with Tere, but also a difference because I also tied some theoretical threads from my conversation with Carlos Calvo and through Calvo the influence of Paulo Freire in Latin American radical pedagogies.

Pacha threads

We have arrived at the last knot of this textual quipu: a knot that has been knotted and unknotted many times over the course of this research. The earthy colours of the threads that make this knot connect me to ground, land or *pacha* in Quechua. And I find this particularly useful because I re-turn to the so-called socialist years of Chilean history: the years of Salvador Allende's Popular Unity and a silenced pedagogical story of that time. And I struggle in thinking about why it is relevant to continue telling stories of the late sixties and early seventies? And perhaps more importantly, how to do it without falling into a nostalgic trap of a romantic past that I did not experience.

Reading about 'Socialist pedagogies' early in my research process opened my eyes to understand Chile in a global context. For instance, all the visual imaginary of the Chilean revolution that I always admired and thought unique was actually a local adaptation of a global trend from the Eastern Bloc (Tesar, 2013, 2018). But most importantly I learned that those pedagogies and practices that sounded so admirable to me because of their communality and accessibility to all classes in society were also part of a repressive and totalitarian state apparatus that aimed to control bodies and minds for a nation-state project (Silova, Piattoeva, & Millei, 2017). In that sense, the Socialist context at the time in Chile was permeated by the Western macro-narrative of communism from the USSR and its bloc.

But there was also something else that Vicuña (2012; 2017b) has poetically brought forth before. A local distinction that was more attuned to the awakening of Latin American Indigenous consciousness, to its local poetics and ecological connectivity. To make space for the forces of *pacha* to speak through the threads of this knot I use Mignolo's (2011b) and the conceptualisations of the collective modernity/coloniality/decoloniality (Espinosa-Miñoso, 2014, 2016; Lugones, 2010; Mignolo, 2017) and an unpublished talk by Paulo Freire in Chile

(Freire, 2018; Osorio, 2018) to offer an alternative that allows me momentarily to unknot this story from the two major Western macro-narratives that are capitalism (US) or communism (USSR), to make space for a third underlying force to speak of the lively potential of Latin American pedagogies for the process of decoloniality (Curiel, 2017; Escobar, 2016; Mignolo, 2011b, 2018; Osorio, 2018; Rubio, 2018).

Rather than denying the political context and the socialist ideologies that pervaded the Chilean way to Socialism, I offer a practice of listening that reads the story in its own terms, as 'Socialist pedagogies', yet engages with it by paying careful attention to the geopolitics of this thinking/sensing/doing through decoloniality as a third option (Mignolo, 2011b). The propositions of decoloniality emerged from the Third World and specifically from the Southern Andes, and challenge the visions for the future that are constrained by Western philosophies (Curiel, 2017; Lugones, 2010; Mignolo, 2018). Yet the concept of decoloniality has also been co-opted by capitalist narratives and depoliticised within the educational research context (Tuck & Yang, K, 2012). Drawing on Anzaldúa's conceptualisations, Mignolo (2011a) proposes a mode of thinking/living/sensing by paying close attention to the geopolitics of knowledge, paying attention to the particular contexts, histories and bodies where knowledge emerged and how it is related to the colonial matrix of power.

Mignolo (2018) also weaves in Maturana's and Varela's (1987) theorisations of the corporeal, sensual and emotional practices of knowing as living organisms to argue that "your sensing changes with your knowing; and your knowing reifies or modifies your sensing" (Mignolo, 2018, p. 362). The transformative force of the Varelian~Anzaldúan mother thread of the quipu continues to carry its possibilities to extend the practice of enacting *conocimiento* as an ethical response-ability to the times we are living. In other words, what the conceptualisations of the collective modernity/coloniality/decoloniality offers my argument is

synchronically framed within the theories already elaborated in the mother thread of the quipu, providing an alternative grounded in Latin American and global South scholarship to engage with the stories that emerge in this knot (Espinosa-Miñoso, 2014, 2016; Escobar, 2016; Lugones, 2010; Mignolo, 2017).

Aware of the Indigenous and feminist critiques to Mignolo (2011, 2018) and the collective modernity/coloniality/decoloniality for claiming conceptual originality over ideas already developed in South America (Rivera Cusicanqui, 2012; Zapata, 2018), I consciously avoid reinforcing Mignolo's masculine dominance within the collective modernity/coloniality/decoloniality while at the same time engage with the main propositions as an alternative that I have found useful for this particular theoretical knot. I practice response-ability to this critique by engaging in an ethical citing practice and, when possible, I acknowledge and trace Mignolo's (2011, 2018) ideas to less known Latin American scholars such as feminists Maria Lugones (2010) and Espinosa-Miñoso (2014, 2016) and also Anzaldúa (1999) and Maturana and Varela (1987).

A spiral drawn in space,

An upside-down map of Latin America on the wall,

The story of the Saltamontes inspired by Freire's popular pedagogy,

Where is North from the cosmos?

Amereida,

the poem emerged.

disoñando

Southern pedagogies

Because this knot tells a story, I turn to postcolonial feminist Trinh Minh-Ha (1989) and her theories of storytelling to create the conditions to tell the story of the Saltamontes that emerged in a conversation with Tere. With the saltamontes I turn to Freire (1972, 2018), Calvo (2005, 2014, 2017) and post-Freirean Latin American scholars (Osorio, 2018; Osorio & Weinstein, 2013; Rubio, 2018) to bring forth the liveliness and some key aspects of Latin American pedagogies today. Attending to the current times of environmental crisis and climate change, I claim that paying attention to Latin American pedagogies as a decolonial option provides rich opportunities to overcome the paralysis or “game over” attitude that prevails in times of agitation, environmental devastation and global injustice.

At the end of this knot I explain how this story animated two parallel pedagogical and artistic stories in Sao Paulo, Brazil and in Coburg, Australia. Rather than perish in romantic narratives of impossible dreams, the story of the Saltamontes became a generative source for imagining and practising *conocimiento*.

STORIES THAT MATTER

Storytelling has long been considered a lower form of knowledge (Minh-Ha, 1989). Western binaries set apart orality and textuality, where the latter occupies the superior and advanced pole, alongside rationality, civilisation, modernity and colonialism, linking once again the production of knowledge to a universal form of truth. In a different direction, orality, together with floor sitting, have been considered by the West as primitive and connected to superstition and belief. Therefore storytelling has been reduced in the West to a practice limited to childhood, moral indoctrination and socialisation (de Sousa Santos, 2014; Minh-Ha, 1989).

Minh-Ha (1989) argues that to be alive the story “needs us all, needs our remembering, understanding, and creating what we have heard together to keep on coming into being” (p. 119). She goes further to explain that to understand a story is to create. In other words, according to Minh-Ha (1989) understanding is about creating the conditions for the rebirth and possibilities for the (dis)continuity of the story. I emphasise the (dis)continuity because Minh-Ha (1989) is referring to stories that are not written but travel in breath and therefore have nuances and differences every time they are told. In Baradian (2007) terms one could argue that somehow the story acts by splicing/cutting/together/apart, in other words the story once emerged performs within the reconfiguration of the boundaries of those who listen, are listened to and the story itself.

The quipu next to my computer is a bundle of stories, encounters, intensities and events that I have experienced in these years of thinking with the Chilean chair. Knots becoming threads, threads becoming knots. The quipu (un)doing itself, the chair becoming something else (Vicuña, 2005). In my previous knots I have shared stories that have emerged in-the-(un)making of this research, many of them from the site of interference between the Chilean chair and all sorts of matter, such as clay and living fibres. But in this knot I share a story of a Southern pedagogy that was silenced during the dictatorship in Chile. In that sense, this knot enacts *conocimiento* through storytelling, where the quipu becomes both an archive of memory and a past/present reconfiguration (Vicuña, 2010a, 2012).

Experimenting with the quipu and with storytelling as a form of sharing and producing *conocimiento* is to me a practical manifestation of de Santos Sousa’s (2014) call for epistemic justice. In this particular knot, a pedagogical story that is not in the books, because of political censorship during the dictatorship, connects to the quipu’s own censorship during colonial times. By knotting silenced stories, I pay close attention to the geopolitics of sensing and

knowing that speak of specific ways of knowing, learning and living in the Andes. I attempt to create dissonance in the way we understand the practice of knowledge production and propose decolonial alternatives that amplify this dissonance into forms of creation (de Sousa Santos, 2014; Haraway, 1988; Vicuña, 2012).

THE STORY WITHIN THIS KNOT

In this quipu, the story called Saltamontes (grasshoppers) lives in a knot tied in a pendant thread that emerges from the ochre thread at the previous knot of interference between miniature sculptures. A series of smaller, almost miniscule knots follow this, and some words are also threaded: radical pedagogies, Freire, and straightification lead my fingers through this thread to a knot of the indigo thread, force of water, that says “Carlos Calvo.” I smiled when I noticed how the relationship between the saltamontes and Freirean educator Carlos Calvo was already there in the quipu, but I only noticed it now that I was writing and speaking to it (Figure 36). Writing becomes another way to animate the quipu, blurring momentarily the boundaries between orality and textuality (Vicuña, 2010a, 2012).



FIGURE 36: PACHA AND INDIGO THREADS WITH SALTAMONTES, FREIRE, CALVO, RADICAL PEDAGOGIES AND STRAIGHTIFICATION

As the thread continues from the previous knot, this story emerged in my encounter with Tere, clay and the miniature chair and with a line of words, as thread, in my notes. And it is about a pedagogical program of the Popular Unity in Chile called Saltamontes (translated as grasshoppers in English), a collective dreaming that hopped time from coastal pedagogies inspired by Paulo Freire's popular education in Chile in 1970 to La Serena in 2015. I tie this story to another encounter in Chile with educator Carlos Calvo (2005, 2015, 2017), who in the late sixties, as a young student of the pedagogy of philosophy, was mentored by Paulo Freire when he was living in Chile in exile from Brazil (Holst, 2006).

SALTAMONTES (GRASSHOPPERS) HOPPING OUT OF SILENCE

I am back in Tere's house in La Pampa, La Serena, in 2015.

Our conversation was arriving at a place of exhaustion; after more than 20 years in a government institution Tere's words were well crafted, politically correct and filled with the rhetoric of *La Concertación* (the centre and left-wing coalition that ruled Chile for thirty years after the orchestrated transition to democracy). *La Concertación's* rhetoric of optimism began with the 1988 plebiscite slogan *Chile, la alegría ya viene* (Chile, happiness is coming, from their campaign to vote 'No' to Pinochet's dictatorship) and worked as a sleeping pill for us (Yanira, Tamara and myself). As daughters of neoliberal Chile, we never experienced the promised happiness, nor trusted their optimism.

In our lifetime we only saw the entrepreneurs, oligarchs and politicians alike becoming rich and richer, while working class people became poor and poorer; and an emergent aspirational middle class of entrepreneurs trying hard to become rich through loans and more loans, and erasing their working class origin and Indigenous heritage (Waldman Mitnick, 2004). I remember that I wanted to run away and bury the records of this conversation. Tere was still a believer, she was optimistic about social change through this depleted discourse. I resisted.

In January, 2016 after my trip to Chile I wrote a poem dedicated to Chile's "Jaguar of Latin America," an expression coined by *El Mercurio* (Chile's main right-wing newspaper, which collaborated with Pinochet's dictatorship) to praise the neoliberal Chilean economy (Relea, 1998).

Vestida de jaguar, la angosta franja
(menos mal que es flaquita)
que le cupo el vestido de la ropa Americana.
Vestido que llegó del Norte,
medio hediondo y deshilachado,
pero recibido con bombo y platillo
(se nos ve tan extasiados)
y con ese nombre nos seduce,
Milagro,
tan requecontra Católico,
tan Judeo-cristiano
tan anhelado, ¡el milagro!

Dressed as a Jaguar
our thin and long piece of land,
Fitting into this foreign dress
Outfits that came from the North
Frayed and a bit stinky
Yet warmly welcomed
(and we all look so satisfied)
Wearing such a seductive name,
The Miracle,
So Catholic,
So Judaeo-Christian
So desired, The Miracle!

y Jaguar- suspira- tan poderoso
tan grandes los colmillos
El Jaguar
un predador de la plana mayor,
ganador, por excelencia.
¡Qué paradoja!

And Jaguar – sighs – so powerful
with big teeth
The Jaguar
A predator through and through,
A winner, par excellence
What a paradox!

que en los Andes chilenos el Nawel está extinto. In Chilean Andes the jaguar is
extinct,
está muerto el jaguar, tan desangrado como el otro. The jaguar is dead,
drained off, just like the other.

Before wrapping up our conversation with Tere I had a last look of my notes, and I
noticed a line of words of my notes that stood out for me,

‘more than 18 years of experience as early childhood educator working in classroom’

I wondered about her experience being an early childhood educator during the dictatorship in Chile. How she negotiated her way with the totalitarian and authoritarian discourses during this period. I asked.

It is hard to tell what happened after the sound of that question resonated in the room, perhaps Tere evoked an image, I remember that she looked at me with her sparkling eyes. I sensed her glowing when she said, “I didn’t begin my professional experience with Pinochet, I began teaching in the government of ‘la Unidad Popular’ with Salvador Allende” (Popular Unity was the coalition of left-wing and centre parties that supported the first Socialist government democratically elected in the world).

(s i l e n c e)

Silences taught me that they do not exist in opposition to speech, but are a different way of speaking. Silences also mark the timespacemattering with their intensity (Barad, 2007). And this was the first silent knot I knotted. This silence restored wonder in the room and animated our curiosity.

Our postures changed, we were all somehow captivated by her refreshed presence.

I sat even closer to the edge of the couch, as if I was drawn to Tere’s glow, goosebumps on my arms.

And the grasshopper spoke.

“I worked in Operación Saltamontes (Grasshopper operation),” said Tere.

We all looked at her with big eyes; none of us had heard about that *operación* before.

The word *operación* sounded like something surgical, urgent, and serious, but mixed with a grasshopper became something playful and creative. Instead of grass, in Spanish, the insect hops over hills. It is an adequate image for Chilean hilly geography.

She was not surprised we did not know. She told us that she always added it in her résumé, yet she knew no one knew about it. She did it as an act of resistance, I thought. This project was one of the many silenced projects from Allende's Popular Unity. The project *fue tapado* (was covered, ignored, made to disappear) she said.

Life during Salvador Allende's period has always been a mystery for me.

In my father's family my grandfather's land was expropriated, and he suffered severe depression until he died the year I was born. Allende's figure was evil. My mum was young and her memories were limited. At school our Chilean history books finished at 1970 with his election, and that was usually the last page of the book until I finished school in 2002. The history of our own country proved not to be accessible to us. This was not new: the same was true of the history of the Indigenous people before the Spanish colonisers. So many layers of history, so many stories were suppressed in a heavy and dense silence. In that sense Barad (2018) speaks of this "historical erasure and political a-void-ance, to hear the silent cries, the murmuring silence of the void in its materiality and potentiality?" (p. 215).

I wonder about the response-ability of listening to a silenced story.

In what follows I turn to the history and context of the Saltamontes and then think through it with decolonial thought and Freirean (1972, 2005, 2018) radical pedagogies.

OPERACIÓN SALTAMONTES: HISTORY AND CONTEXT

After my conversation with Tere, I realised what she meant about Operación Saltamontes being “tapada” (covered, made to disappear), as it proved to be extremely hard to find archival information about this project. After many hours of intense research, I found an undergraduate research project about “Villa Francia” (one of the shanty towns where the Saltamontes worked and a site emblematic of resistance during dictatorship), where a few paragraphs were dedicated to exploring the influence of “los Saltamontes” in the community organisation, and a propaganda documentary of the Socialist times called *Un verano feliz* (A happy summer) that survived (hidden in a sack of potatoes) the burning of the whole archive of Chile Films after the coup d’état by the military (Mouesca, 2014; Segovia, 1972).

This turn to history and context of the Saltamontes is limited then to Tere’s oral stories, an undergraduate research project and a propaganda documentary. Operación Saltamontes (Grasshopper operation) was a program of Salvador Allende’s Secretaría de Desarrollo Social (Secretary of Social Development) that began with Popular Unity’s balnearios populares (resorts for the people). Balnearios populares were founded at the end of 1970 as part of Allende’s government program “las cuarenta medidas de la Unidad Popular” (the forty steps of the Popular Unity: my translation) (Segovia, 1972). The program was expected to be accomplished during the first year of Allende’s presidency.

Operación Saltamontes was an interdisciplinary collective inspired by Paulo Freire’s popular education and Latin American’s theology of liberation (Cabaluz-Ducasse, 2016). The collective consisted of two early childhood educators, two visual artists, two actors, two journalists, two social workers, two physical education teachers and two photographers, who aimed to engage with the community in artistic collaboration, political creation, pedagogical

possibilities and social organisation. These collectives existed all across Chile in the same formation that began at Balnearios Populares, and which then moved into different communities.

After their coastal program in Balnearios populares, dozens of Saltamontes collectives travelled around Chile working with a specific community for twenty-one days, and then they hopped to another one, that is why they were named Saltamontes. During those twenty-one days they lived with the community. Operación Saltamontes' aim was to support the process of political awakening, so people would be able to diagnose their common problems, and find potential solutions to overcome them creatively through cultural engagement, cooperation and collaborative action. Engaged members of the community received wages from the Secretary of Social Development to continue the Saltamontes' work (Segovia, 1972).

This collective, intergenerational and interdisciplinary approach to education, embedded in the socialist ideology, also has textures of the local context. I draw on Freire (2018) to attune to these becomings. A vital practice of the Saltamontes was to enact what Freire (2018) describes metaphorically as “swimming in the waters of the learner” (p. 169) to learn with the learner where she is and to enable through the process of learning/teaching both learner and educator to move creatively along lines of wonder. Wonder in both learner and educator is vital to remain curious as part of a non-teleological process. Without knowing where are they going (a predetermined learning outcome), the educator is required to know (as part of her ethics) not only her present as educator/learner, but also the present of the learner/educator. That is why spending time in the cultural context of the learner/educator is a vital pedagogical practice.

In that sense the Saltamontes were enacting the Freirean principle of an open-ended, uncertain yet ethical and aesthetical communal engagement as educators/learners. One thing that struck me about the Saltamontes was the artistic force that led their practice. In that sense Freire (2018) explains that the ethics of pedagogical practices are also aesthetic, emphasising that there is beauty when humans aim for the creation of the right relations with the world. By conceptualising pedagogies as an art form, Freire's (2018) aesthetic conceptualisation brings me back to Haraway's (2016) theorisation of Navajo weaving and the concept of *Hòzho*.

Similarly to Freire's (2018) expression of beauty when referring to the aesthetic dimension of pedagogical work, Haraway (2016), drawing on the practice of Navajo weavers, explained how in the Americas the creation of beauty was understood within an animist ontology where humans participated in the creation and sustenance of right relations with the world's land, water and air. For Navajo weavers, weaving is therefore a cosmological performance that brings beauty into the world and by doing so animates the forces of creation at a cosmic level (M'Closkey, 2011; McLerran, 2006).

LISTENING TO STORIES

The Saltamontes story changed the atmosphere in the room. We all felt it. Suddenly Tere became an elder telling us stories and we welcomed her renewed presence, practising our listening. The story, once told, wasn't hers or ours any more, the story was a doing, affecting our bodies, our thinking, our lives. An ancestral practice of oral tradition, of sharing life stories was taking place between us, whereby an older woman was sharing part of herself with a younger generation. Min-ha (1989) suggests: "The world's earliest archives or libraries were the memories of women. Patiently transmitted from mouth to ear, body to body, hand to

hand. In the process of storytelling, speaking and listening refer to realities that do not involve just imagination. The speech is seen, heard, smelled, tasted, and touched. It destroys, brings to life, nurtures” (p.121).

Min-ha (1989) is sensitive to a listening that is a multi-sensorial bodily experience of presence and openness. This idea connects to Vicuña’s (2015) poetic etymology of the verb to hear, *oír* in Spanish, that comes from the Latin *oz*, which means opening. But also to Varela’s (2001) radical embodiment, where being present in our bodies is about being open to the unfolding of the present (dis)continuum.

Knotation

Now, I was listening. Listening with my whole body, feeling the openness of my listening as an expression of a desire for memory. My body as an empty thread of a cosmic quipu. And I continued to listen to these grasshoppers, carrying unknown memories of that land. How to do this without romanticising the past? Tere’s stories created contradictory feelings that I experienced through my body. Feeling awakened and energised, and also sleepy and cynical with desire to run away from her exhausted optimism.

Somehow there is this good story – of her being a revolutionary woman. And her bad story of her being a believer in Chilean transition to democracy that made her a recipient of the miniature chair.

I notice how I cling to her revolutionary memories. But feminism allows me to engage critically with too-easy celebration of a time that was equally patriarchal and exclusionary of women’s voice and creative force. I am reminded that these were the times of the new man (el hombre nuevo) (Gunkel, Nigianni & Söderbäck, 2012; Largo & Qüense, 2005; Niccolini et al., 2018)

I became aware of the conditions for the emergence of these multiple stories. Not only at that moment with Tere, but afterwards as well, when some stories became insistent, some presences more sensitive. The miniature chair that brought me to Tere became less the centre of attention and more a site of interference for diffractive patterns to emerge (Barad, 2007). Through the miniature chair, clay, textiles and the story of the Saltamontes materialised. In that sense “the diffraction pattern indicates that each history coexists with the others” (Barad, 2018, p. 220). These diffraction patterns bring forms of knowing and living from before colonisation, Allende’s reforms and Freire’s pedagogies to a present that is affecting us at a cellular level. Somehow, these encounters rendered each other capable of imagining new possible histories (Barad, 2018; Haraway, 2015).

How to do justice to the devastating effects of colonial and fascist practices of erasure of memory in Chile? Drawing on African onto-epistemologies, Minh-ha (1989) speaks of the materialising force of stories, and in particular the practice of listening. I noticed how this story makes me think creatively about pedagogies. There are some elements of it that are particularly interesting for me: the interdisciplinary collaboration, intergenerational community-based practice, and the creative potential of their pedagogical practice that was attuned to local issues (Dahlberg & Moss, 2005).

In our conversation Tere described a pilgrimage with children, artists, educators, paper and paint through the dunes of the coastal Andes to witness the sunset together and express through drawing their memories of the day. What I listened for was the absence of the pre-given, how open-ended and situated their pedagogical practice was. Nothing new in this in the light of more experimental pedagogies such as Reggio Emilia (Olsson, 2009). So where is the decolonial force in this story? Why is it relevant? Risking falling into the trap of painting a

picture of a lost paradise I notice that I need to turn (as in the making of a knot) if I want to provide an alternative reading of this story. And I decided to turn to another material encounter with Carlos Calvo in La Serena. As a young student of pedagogy in philosophy, Carlos was mentored by Paulo Freire when he was living his exile in Chile (Holst, 2006).

CHAOTIC PEDAGOGIES

I met Carlos many years ago when I went back to La Serena after finishing my degree in physiotherapy in the chaotic and vibrant city of Valparaíso. With him I learned that pedagogies are a political form of art and even though at the time I was not familiar with Freire's (1972) work, when I read him I noticed how Carlos had introduced me to his ideas through examples from his ethnographical and philosophical writings (Calvo, 2005). What always captivated me from Calvo's (2014) ideas was the distinction he made between education and schooling. This distinction is not new for the field of education. What is novel is that Calvo (2005, 2017) engages with chaos theory to suggest that schooling is about repeating pre-given relationships and education is the creation of new possible relationships.

The apparent paradox between the poor results of the Chilean educational system, and the trust people still had in its function, continues to be the source of his curious ethnography and scholarship (Calvo, 2017). Drawing on quantum field theory, Calvo (2017) is interested in chaos and self-organising community-based pedagogies, and I was curious to read the Saltamontes through his recent work. Until now, I have shared the story of the Saltamontes as a practice of storytelling, and I have wondered about how the materialisation of diffractive patterns creates difference and disrupts temporalities. I see how in diffractive patterns multiple temporalities co-exist and co-create each other, and how stories that have remained silenced resurface again. In Barad's (2018) words "attempts at erasure always leave material

traces: what is erased is preserved in the entanglements, in the diffraction patterns of being/becoming” (p. 229).

In our conversation with Carlos, there was a particular moment where we discussed the temporalities of the body politic, a metaphor in Western political theory where the state is understood in similar terms to a biological body (Rollo-Koster, 2010). Post-Freirean scholar Jorge Osorio (2013, 2018) explains that the relevance of Calvo’s (2017) contribution to Latin American pedagogies is based on how he creatively engages with the issue of authoritarian lines of order, discipline and stillness present in Chilean education through chaos and complex theories. In the cayte of this quipu, borrowing a concept from queer theory, I conceptualise this as the straightification of education (Ahmed, 2008).

Knotation: By sitting children in schools, educators try to stop time.

“Movement is still punished in Chilean schools”, Carlos said.

There is no awareness that we learn through our bodies. Bodies are still an appendix of the head, and the only ways of accepted communication in schools are verbal and written communication. Body language is absent or punished.

“So yes, our education is one hundred per cent Cartesian”, Carlos added.

The chair is therefore an anchor, a prison of the body in the classroom. Of course, the chair is also for balancing and teasing our classmate when the teacher wants her to be still. But yes, in general, it is control.

“There is something about temporalities that I think is relevant here”, Carlos said.

“What we have observed in our fieldwork both in early childhood centres and schools is that educators try to break movement, as if by stopping movement one could stop time. Fixed realities are produced. Timeless. Movement is somehow subversive: producing difference in space/time mattering”, Carlos added (Calvo Muñoz, 2015).

Going beyond a discursive analysis of this desire for order, Calvo (2017) turns his attention to the chaotic richness of what is already there, what is happening between emergent living systems, randomness and lively territories. By bringing chaos forth he proposes that pedagogies emerge and synchronise themselves as part of the “vital chaos of the territory” (Osorio, 2018, p. 124). For him learning and educating emerge in the happenings of becoming and attuning with the self-organising and non-teleological forces of our cosmos. Situating his pedagogical theorisations in the Southern Andes, Calvo (2017) engages with a less known aspect of Freire’s work in the Anglo-Saxon context that is ethnopedagogies.

I noticed that until now I have experimented with the Saltamontes within a reductive humanist perspective. But does the story change if I pay attention, with Calvo (2017), to the vital chaos of the territory where these pedagogies happened? To the clash of the waves of the wild Pacific where the Saltamontes began their practice in the Balnearios populares? Or the calm bays of the coast where humans young and old sang ring-a-roses in the water? (as seen in Figure 37).



FIGURE 37: STILL FROM *UN VERANO FELIZ* (1972): RONDAS IN THE OCEAN. RETRIEVED FROM YOUTUBE, JULY 2017.

The hopping of the Saltamontes disrupts narratives of critical stasis (Braidotti, 2010b). The pilgrimage in the dunes, the hopping from community to community starting from the coast. Somehow, rather than create a sense of nostalgia for a past I did not experience, the Saltamontes heal me by creating new/old memories of the land. Minh-Ha (1989) argues that in storytelling “Words set into motion the forces that lie dormant in things and beings” (p. 148). This responds to Vicuña and Livon-Grosman (2009) theorisations of sleeping knowledges, an awareness of the conditions for the practices of re-membering, understanding this as a bodily practice of re-turning (Barad, 2018).

Re-turning to the story of the Saltamontes I cannot ignore the force of the coast in its materiality. It makes me think of the line made with feet on the ground, the circle, the tapping of feet on the ground, as if massaging the earth. I go back to Freire’s (2018) aesthetics and practices that animate life on earth (Haraway, 2016). In that sense, the Saltamontes are entangled in the Chilean coastal landscape. Barad (2018) has argued: “Landscape is not merely visually akin to a body; it is the skin of the earth. Land is not property or territory; it is a time-being marked by its own wounds and vitality, a layered material geo-neuro-bio-graphy of bones

and bodies, ashes and earth, where death and life meet” (p. 238). I tie this to Mignolo’s (2011) geopolitics of sensing and knowing and Latin American feminisms (Gargallo, 2014), which explain that continuity between land and bodies.

KNOTATION: WATER

Tere explained how they worked collaboratively, and the active participation of children in the process. Tere told us that water was always the most relevant issue for children.

C l e a n w a t e r w a t e r f l o w i n g

Water has always been sacred in the Andes, and children knew their communities would only survive by having access to clean water.

What else is this story telling us today when water is becoming scarce due to climate change?

On our way back from Tere’s house, walking uphill towards my parent’s house in La Serena, Tamara, Yanira and I were speechless, sharing mixed feelings of profound inspiration, but also feeling defeated by the fact that none of us had known anything about this project. Three women born during Pinochet’s dictatorship, from diverse disciplines, socioeconomic and political backgrounds, and geographical locations, we all shared the pervasive effects of a generation born to silence, without memory.

Recently I also learned that the coastal cabins built during Allende’s government were used as concentration camps and torture sites by Pinochet’s regime. In 2017, Chilean architect Miguel Lawner did an exhibition in the Museum of Memory and Human Rights in Santiago de Chile called “La medida 29” (step number 29) where he shared stories and drawings of his experiences, as one of the architects who planned *Balnearios populares*, but also as a prisoner in one of them during Pinochet’s regime (Lawner, 2017).

That is somehow the other Western macro-narrative of capitalism (US bloc) at play in Chile. It is not a secret today that the US-backed Chilean coup d'état was orchestrated between Chilean elites and the CIA because of the threat that Chile posed to the uprising of Socialism within Latin America during the Cold War (Errazuriz, 2009; Guzmán, 2016). It is not a coincidence that most of these concentration camps were actually designed by Nazis such as Walter Rauff. I feel the oppressive effects of these narratives materialising through the Chilean past and present. Always subjected to a global apparatus. I am knotted again.

The idealised coast, the urgency of water, are also a coffin of bodies made to disappear in the Pacific Ocean during the dictatorship (Guzmán, 2016). I wonder about these ineliminable traces of memory, their ghostly and insistent presence (Barad, 2018). How do we listen to stories that have been avoided for so long? What songs of mourning can be remembered or created? How can new forms of knotting and unknotting create different paths? From where to where? As I write this I am reminded that perhaps the song of mourning is not only from the silenced pedagogies and human bodies. Perhaps instead of thinking of the Saltamontes only as a metaphor used to express a human endeavour, there is a song of the insects wanting to be heard in this story.

I go for a walk and listen to the buzzing of insects. If I listen carefully, within the humming of what seems an electric sonic cloud, I can hear some variations. I instantly remember that what I loved about this story was that for the first time in my life I encountered a pedagogical program that invited me to think of an insect. Today many insects are under serious threat because of pesticides, habitat loss and climate change (Carrington, 2019). Insects traverse the Western macro-narratives of capitalism and communism. Although to particular humans in specific geopolitical locations one narrative could have provided a better fit than the other, what is certain is that to insects they both brought devastation. Both are

framed in a similar paradigm that reinforces separation between human and non-human (Rose, 2017). Neither of them serve *us* any more.

LISTENING AS CREATION

Thinking with water, insects and silences, and pedagogies, I go back to Minh-Ha's (1989) proposition that to comprehend a story is to create. What does she mean by this? Her language is even more cryptic as she describes that after being understood the story is burnt. Without trying to understand Minh-Ha's (1989) metaphors rationally, I let the materiality of the story stay with me. Once back in Australia, after listening to this story I felt an urge to learn more about this program, but the impossibility of accessing physical archives in Chile and the extremely limited resources on the web about that particular program prevented this. What I did find was a comment made by a Brazilian saltamontes with his email address, and I contacted him.

After a few email exchanges, Tere from La Serena, Chile, and Paulo from Sao Paulo, Brazil, asked me to put them in contact with one another. A living knot in the quipu of life. For both of them this was the first time they had got in contact with another saltamonte. That was not unusual; stories of torture, exile, disappearance and distrust wove their life histories after the coup d'état. A few months later, Paulo wrote to me to share big news. He felt the call to bring the saltamontes back to life through a program he organised with an interdisciplinary group of community-based educators to work with refugee communities in Sao Paulo. I was in awe. Another living knot in the quipu of life. A pedagogical revival, a repetition with difference. Early this year, 2019, he emailed me to share with me the first report of their saltamontes program after one year working with children and youth of refugee families that are occupying a state building in Sao Paulo.

The story of the saltamontes helps me to see how things are done differently in Latin America, the power of the collective and social mobilisation. But most importantly, it allows me to acknowledge the legacy of Latin American critical or radical pedagogies. The rising voice of the feminist movement today in Chile is an echo of this force, a call for the importance of remembering that possibilities do not sit still (Barad, 2007), that past/present/future are entangled, and that bringing forth dissonance and memory are important work today (Figure 38).



FIGURE 38: FEMINIST MOVEMENT IN CHILE: “A MACHO IS NOT BORN, CHILEAN EDUCATION MADE HIM” AND “WE ARE THE GRANDDAUGHTERS OF THE WITCHES YOU COULD NOT BURN”, SANTIAGO DE CHILE, 2018. CREATIVE COMMONS LICENCE.

Furthermore, by decentring the human of the saltamontes story it is possible to notice how the ancient force of water in this territory, and the sacred position it had for thousands of years in the Andes as well as the mourning call of the insects, allow me to practise a more-than-human listening. The force of the coast and water in the saltamontes pedagogies is also a call infused with the current urgency to attend and care for water (Somerville, 2014). Both

Australia and Chile are coastal territories, where water-based pedagogies become a practice of situated response-ability (Tuhiwai Smith et al., 2019).

My situated response to this story is the manifestation of the *creekulum* in Coburg, Australia. The creekulum is a pedagogical and artistic program created with parents and children at our local school that brings together local Indigenous knowledge, experimental arts and sustainability to weave a passage between the school, the community house and Merri Creek and Melbourne waterways. This program aims to enact the ancient practice of Caring for Country as a practice of response-ability for non-Indigenous settlers in this land. In the following and last section of this thesis I move to the end of this quipu where I explain how the quipu created unexpected paths in the lands and waters of Merri Creek of the Kulin Nations, and how through this process of decolonising methodologies by quipu making I became more present in my body and responsive to a myriad of human and non-human bodies, and to more stories to come.

CHAPTER 13: SYMPOETIC PEDAGOGIES.



*Traversal threads connect the knots of the quipu to the end of the mother thread in a gesture that makes interconnections visible and tangible. Connecting consciousness, land and water. In this last chapter the threads of this quipu become tracks on the lands of the Merri Creek as a pedagogical materialisation of the methodology of quipu making as a poetic practice that enacts *conocimiento*.*

Where in the quipu? or the PhD becoming alive

I am touching and being touched by the end of the mother thread of this quipu. Until this point we have travelled through the intricate territory of the quipu together: from the history of quipu, as an Andean technology to tell stories, that goes back as far as thousands of years before the beginning of Western colonisation in the Southern Andes, to the manifestation of a textile form of thinking in the margins of contemporary forms of feminist Latin American thought. I explained how I work with the quipu as a postqualitative methodology, specifically as a performative archive of memory that is non-exhaustive, partial and transitory.

I argued that to think education differently we have to begin by understanding ourselves as complex living systems. I spun the mother thread of this quipu exploring the propositions from Varela et al. (1991) and Varela (1999a, 2001) and his concept of enactive cognition. Challenging notions of brain-centredness, representationalism and rationalism, his proposition is that knowledge production is situated, enacted, embedded, emotional and embodied (Reichle, 2007; Evan Thompson, 2004; Varela & Flores, 1999). Adding a feminist twist to Varela's (1999a) approach I refused the continuation of the use of cognition and proposed to read him alongside Anzaldúa's (2015) concept of *conocimiento* that she had already introduced to Anglo-Saxon academia as an alternative to knowledge production that expands into the intuitive and spiritual realm.

Using enactive *conocimiento* we entered the convoluted knotted territory of stories archived in the quipu. I proposed a cayte or main knot that explains how the chair came to be the loop of my thinking in this PhD. Many stories of chairs, Chile, politics, economics and fibres passed through this loop, creating a dense knot marking the journey where the chair became a site of interferences for the manifestation of other forces and forms. I began noticing

that this process of thinking was transformational and that through thought and method I initiated my own decolonial practice. Enacting *conocimiento* through quipu making challenged me to think otherwise and unlearn old habits of thought with which I grew up, being Western dualisms, the most familiar and reductive grid. In continuum still, this process has been a laborious and many times painful journey.

Using Braidotti's (2011) notion of desidentification and Anzaldúa's (2015) notion of *Neplantera* as my navigational tools, I went back to a conversation held in 2016 with poet Cecilia Vicuña and theorised about how the body becomes a site of actualisation, a living quipu. Two subsidiary cords emerged from this knot, shedding the chair where I explained how the process of this thesis has a movement component that is about experimenting with different postures to write otherwise. And decoloniality as a communal practice where I explained the roles of collective thinking and sisterhood in the process of decoloniality through storytelling, textile making and solidarity amongst Latin American immigrant women.

Then I continued with a knot where the interferences between a miniature chair and a sculpture of clay allowed for the forces of the land to speak of ancient ways of living and knowing in the Southern Andes: in particular, the territorial force of the Diaguita people in the river mouth of the Elqui Valley in La Serena. The tension between these cultural expressions opened a generative space for theorising and imagining possible futures that resonate with decolonial land and water-based pedagogies from Indigenous ways of living and knowing (Tuhiwai Smith et al., 2019). Which connected to the last knot of the quipu, that speaks of another interference between the chair and a story of interdisciplinary communal pedagogies in the late sixties in Chile. Read through Mignolo's (2018) notion of decoloniality, which enabled me to unlink this story from the two Western macro-narratives of capitalism and communism, this story brings forth the liveliness of Latin American radical pedagogies and

how relevant Freire's notions of hope and utopian thinking are in the context of the Anthropocene (Freire, 1972; Holst, 2006; Osorio, 2018; Rubio, 2018; Walsh, 2015).

Now we are at the end of this thread and I notice how this research has transformed how I think, live and enact pedagogies. I remember when two years ago I decided to wrap my quipu in a piece of cotton I dyed using bark and leaves collected in my walks along Merri Creek. I liked the idea of my present place contributing to the weight, lightness and energy of the PhD quipu. In my final review, I became a quipukamayuk and animated the PhD quipu by telling the knotted stories. I used the fabric that I dyed with bark and leaves from the Merri Creek to lay my quipu, bringing the colours of the creek alongside the quipu. Somehow the very textile organisation of my work enacted the cut/together/apart of my present life expressed in the Merri Creek infused fabric and the quipu archiving stories of Chile (Barad, 2014). Somehow I noticed that I was touching this land lightly, preparing myself to bring this quipu back to Chile. I thought of the quipu as an offering to the Andes, but also an anchor of nostalgia.

THE THREADS OF THE QUIPU BECOMING TRACKS

Nonetheless, over the last months of the thesis project I noticed that the relationship between the quipu and my present life close to Merri Creek began flourishing in ways I did not anticipate. Life on the lands and waters of the Kulin Nations, the Merri Creek as our local body of water, my children, our local public school, Joe's garden, the Murnong patch, East Coburg Community House, Bryan's art practice and my own artistic practice, all these forces bringing forth a thick presence of ethical commitments and historical response-abilities (Anzaldúa, 2015; Haraway, 2016). To Freire (2005) it is the coherence between living and thinking that is at the core of the concept of praxis, a proposition that resonates with Varela's (1999a, 1999b) process of inhabiting ideas, letting them be part of your life. The quipu is alive and situated, it

is a materialising transnational force. To me, this is a materialisation of Anzaldúa's (2015, p. 117) path of *conocimiento*:

Often nature provokes un "aja," or "conocimiento," one that guides your feet along the path, gives you el ánimo to dedicate yourself to transforming perceptions of reality, and thus the conditions of life. Llevas la presencia de éste conocimiento contigo. You experience nature as ensouled, as sacred. Éste saber, this knowledge, urges you to cast una ofrenda of images and words across the page como granos de maize, like kernels of corn. By redeeming your most painful experiences, you transform them into something valuable, algo para "compartir" or share with others so they, too, may be empowered. You stop in the middle of the field and, under your breath, ask the spirits to help you string together a bridge of words. What follows is your attempt to give back to nature, los espíritus, and others a gift wrested from the events in your life, a bridge home to the self.

As a relational force to enact *conocimiento*, the quipu transformed the events, pedagogies and painful experiences of the quipu into something valuable to be shared. As a force I experienced how the threads of the quipu became the walking tracks of my everyday family life. Ingold (2015) wondered "Is the path, then, a trace or a thread?" (p. 64). Rather than choosing an option from that binary, Ingold followed Indigenous knowledges that express the notion of track to argue that surfaces are continually "forming and dissolving" (p. 65) and therefore tracks are "thread becoming trace" or "trace becoming thread" (p. 65). In this chapter I stay with the notion of the threads of the quipu becoming traces on the surface of this land. And attend to the response-ability that emerges through this process of becoming aware of this profound yet superficial (in the sense of surface) dimension of the quipu.

My conclusions speak of this process of becoming aware of the liveliness of the quipu and how pedagogical response-abilities cross the borders of nation-states, being attuned to planetary concerns and the notion of the “commons” as the world we are part of moves into new levels of unsustainability and social injustice (Iorio, Hamm, Parnell & Quintero, 2017; Osorio, 2018; Osorio & Weinstein, 2013; Vicuña, 2012). In that sense, the end of the thread of this quipu speaks of the ethics of being present as part of the world. I noticed how the Latin American thread of knowledge that traverses this quipu with Varela (2003; 1999a; 1991), Anzaldúa (1999, 2015), Vicuña (2016; 2010a, 2010b) and Freire (1972, 2005, 2018) permeates my life with immanent hope, radical embodiment and a refusal to accept the new binary set of macro-narratives to engage with the times we are living, so well described by Haraway (2016) as the heroic narrative on one hand and the game over attitude on the other.

What the process of enacting *conocimiento* gave me is a poetical awareness to be present in every fibre of my body to understand that inner work manifests as public acts (Anzaldúa, 2015). With Anzaldúa (2015), Freire (2018) invited me to enact a practice of care and hope that is embedded in everyday life but visionary. The last year of this PhD has been about cultivating a feminist situated practice of response-ability (Anzaldúa, 2015; Barad, 2010, 2018; Haraway, 2016; Haraway & Braidotti, 2017). I split my time between writing, mothering and what Minh-Ha (1989) describes as practices of listening to stories as creation. After knotting the stories of this quipu I began noticing how they affected my ways of dreaming interdisciplinary poetic pedagogies in the here and now.

With my feet on the ground, I hold the end of the threads of the quipu in my hands. In this final piece, I speak of how an artistic ‘*creekulum*’ (a pedagogical curriculum that emerges from our relationship with the creek) emerged as an offering from the liveliness of this transnational quipu. Bringing to life the elemental connection so well understood by Vicuña

(2010b) between the quipu and streams of water such as Merri Creek, I propose a creekulum (a curriculum whose subjects emerge as we move along with the creek with local Elders, children, artists and scientists) to enact sympoetic pedagogies: that is, pedagogies of making-with poetically, as multispecies becomings of enacting *conocimiento* (Haraway, 2016). Inspired by the riparian thinking and Saltamontes, the creekulum is about making-with the creek as an intergenerational and interdisciplinary process of practising together the principle of caring for the land and waters we are part of. Emerging from an animist ontology in the Andes, the quipu connects the liveliness of our watery biosphere with human ontologies of connectivity (Neimanis, 2017; Rose, 2017).

Rather than a perfect solution to all problems, the creekulum is a modest proposition to enact *conocimiento*. And it is risky because while attempting to offer a decolonial option it also falls in the pitfalls of reinforcing the very logics that tries to dismantle (Tuck & Yang, 2012). The creekulum is not pure, but it is my modest offering to partial healing for more liveable futures.

LIVING IN THE LANDS OF THE MERRI CREEK

The first time I was welcomed to Country by Wurundjeri Elder Uncle Bill Nicholson at a Liquid Architecture event in Melbourne, I was moved by his call. As a non-invited guest to these lands and waters I always felt unsure to what extent I should feel part of this Country. But Uncle Bill's message was emphatic: he said something that I heard as "It doesn't matter if you came here to live twenty years ago, if you were born here but you are not Indigenous to this land. It doesn't matter if you are planning to leave soon. If you are living in this Country, then you are living under this Country's law and that means you *have* to care for Country." The

way he spoke about Country as a living entity caught my attention, I do not know if I understood it, but I *felt* it.

Drawing on feminist ecological philosopher Deborah Bird Rose, Somerville (2014) explains that the Aboriginal notion of Country (spell here with capital C to note the difference) is an exemplary manifestation of an Aboriginal twist to the English word country, transforming it into a complex, intricate, animated concept that includes waters, feelings and non-human animals. Country yearns, suffers, remembers. Humans care and look after Country in the same ways Country looks after humans. The liveliness of Country spoke with the quipu in a language I am yet to learn, enacting together an animist principle that precedes us and revitalises how I think and embody my connection to land and water. I learned from that Welcome to Country that the practice of caring for Country was not an option but a pedagogical imperative.

With my friend and colleague Katie West (2018) I learned that to care for Country, it is important to attune to the rhythms, seasons, landscapes and mourning of that particular Country where you are living. She speaks of seasonal makings and the process of art making as a form of healing trauma to live well. How do I navigate this space as a non-Indigenous but also non-white uninvited guest to this land? West's (2018) proposition enacts a shift in how one learns place by attention and care rather than transmission of historical, geographical, hydrological, botanical and ecological knowledge (Ingold, 2018). West (2018) explained it as a practice of attuning and caring as we affect and are affected by the rhythms of Country, understanding the protocols and practices specific to each territory.

SEASONS AND RHYTHMS OF THE LANDS OF THE MERRI MERRI

It is *Iuk* eel season of warm weather on the lands of the Merri Creek where I am finishing writing this quipu. Adult short-finned eels are preparing to travel back to their origins in the Coral Sea to lay their eggs, an odyssey of more than 3000 kilometres, moving from freshwater to seawater again. Kookaburras and tawny frogmouths perch on the gumtree branches at Merri Creek. Gumtrees shed their skin, and the water level in the creek is low after *biderap* or the dry summer season. This water flows from the creek to the sacred Birrarung, to Narm, the bay. High-tension electrical towers hum with the moist air, and mowed lawns connect the Merri Creek's history to the turbulent stories of colonisation. Fraying plastic bags hang from branches that sieve waters which come from the streets of the Northern suburbs. Thanks to community efforts this creek looks much better than thirty years ago. I wonder how it looked 250 years ago before colonisation?

Today, the Merri Creek is a site of negotiation and mutation. Introduced species are slowly being removed to give space back to native grasslands. Sites of partial recuperation such as the "Murnong patch" are welcoming back the murnong (or yam daisy), a staple food of the peoples of the Kulin nations. It is in this land, that I also negotiate with my memories, where I think about my own stories of land, bodies and education. Immersed in this PhD process, I noticed how I am constantly moved to think *how* we think, as if a tremor of the earth was subtly yet effectively destabilising what I thought were the only modes of thinking. This tremor invites me into the risky and unstable territory of connecting to a form of knowledge that I never learned during my formal years of schooling.

This different way of thinking has only become available to me here, studying away from my homeland. Becoming *other* as an immigrant to a white-dominated society in Australia,

but also welcomed in a multicultural suburb such as Coburg, a melting pot of working-class migration waves, refugees and the contemporary forces of gentrification. Perhaps this is the immigration consciousness described by Mignolo (2018) as one of the important sources of decolonial thought. Third World immigrants in the so-called global North. But Australia, South geographically, also resists the colonial narratives, as a sensitive Country that nourishes and feeds thinking other-wise (Somerville & Hickey, 2017; Srinivasan, 2018).

Walking along the creek, thinking with Varela's (2000) post-anthropocentric understanding of knowing practices, I become aware of awareness. I am, at the same time, one and many within this meshwork of entangled *worlding* worlds in continuum. As Haraway says, we are always becoming-with (Haraway, 2016). Can the creek sense me thinking? How do I think-with the creek as I move along these walking trails? I remember how Vicuña described the moment when she sensed that the sea could feel her (Vicuña, 2010b). To Vicuña, the sea is a living entity that could feel, and she responded to this relation with her precarious art. Practices of knowing as part of the world, are therefore always a more than human performativity (Amich, 2013).

Walking with my children along the creek I wonder how long humans have inhabited this land, learning with this creek. For nearly four years since Samuel started school and at the same time I began my PhD, I have wondered why the creek is not integrated into their school curriculum. Why if it is located at a walking distance does it feel so removed from their formal education? Why is the curriculum sealed off from its presence? I remember that in that first year of school I wrote an email and discussed this with his teacher, but was quickly discouraged by her as she explained that they are overwhelmed with the curriculum. I was also so immersed in philosophical studies discovering feminist theory for the first time that the very mention of the word curriculum triggered my avoidance. The curriculum became a wall, a net.

But time passed and the relational force of the quipu manifests pedagogically through the making-with of the creekulum as an offering that have emerged of this process of quipu making.

THE (IM)POSSIBILITIES OF THE CURRICULUM

It was not my idea to think with the curriculum, to think philosophically with the curriculum. But one day my colleague Camila Marambio dreamt about a possibility for us to collaborate, imagining and practising together a coastal curriculum, a call that resonated with the nomadic research program of Ensayos and our life in Chile, which is an entirely coastal country (Marambio & Galvez, 2017). I began to read more about curriculum theory and study the Australian primary education curriculum to get an idea of how curricula are enacted, the same ones that closed the doors to me at my children's school. According to Calvo (2017) the curriculum is complex, woven through power relations and embedded in forces of schooling rather than education. He provides a crude diagnosis of the current Chilean (and Latin American) educational system, in which he argues that it is in schools that children learn *not* to learn (Calvo, 2017). Following Calvo (2017), it could be argued that schools, similarly to our planet, are in decay and that what prevails in schooling is a Modern teleological line of progress and certainty. According to Calvo (2017) this linearity reinforces the very form of humanity that alienates us, more and more, from the ancient lines of sustenance that wove territories and correspondent sustainable practices for thousands of years, resonating with Ingold's (2018) recent work in education.

The forces of *potestas* of the curriculum that reduced the capacities of what bodies can do as explained by Braidotti (2005, 2012) were evident in Calvo's (2017) explanations, and I felt the urge to find more poetical entrances to curriculum studies, wondering whether there are any

potentia within the (im)possibilities of the curriculum? For Canadian poet Rishma Dunlop (2009), “curriculum is found in human eyes, in rivers, in animals, in the language of music, in poetry, art, science, history, anthropology, in what is public, intimate, beloved” (p. 16). Dunlop’s words on curriculum remind me of the watery poetics of its etymology, *currere*, a *current* that runs through, permeates bodies and traverses membranes, nourishing and also toxifying.

Educational scholar Marla Morris (2018) argues that if educational curriculum is deaf to the call of the death of ecosystems, then what kind of current, curriculum, could awaken our *bodyminds* into awareness of death and life? How do we create the conditions for a different kind of current to flourish? Traversing binaries and bringing back the vibrant vitality of matter, the material relational turn in feminist academia has manifested strongly in educational research and practice to bring forth the force of matter in pedagogical encounters (Duhn, 2012, 2014; Iorio et al., 2017; Pacini-Ketchabaw & Taylor, 2015; Rautio, 2013; Taylor & Pacini-Ketchabaw, 2015). So I wonder how the coastal curriculum could be a more-than-human curriculum attuned to the health of the waters. And how waters become the site where the quipu connect knowledges South-South.

THE URGENCY OF WATER KNOWLEDGES

Somerville (2014) suggests that “the element of water is the literal and metaphysical site of our ‘mutual entanglement’ because of its capacity to cross boundaries of difference and of economic, political, spiritual and environment domains of practice and thought” (p. 404). Weaving Western with Aboriginal knowledge, Somerville (2014) argues in a similar direction to Vicuña (2010a). Both of them bring our attention to the connection between the missing languages, dances and the ancient knowledge of water, and the death of waterways and the ocean. Vicuña (2010a) makes evident in *Kon Kon* how the project of colonisation that began in

the sixteenth century has been brutally perpetuated until today, neoliberalism and consumer culture being its latest expressions. Vicuña (2010a) argues that the wellbeing of the waters depends upon our reconnection to these forms of knowledge; we cannot continue to be deaf to the death of the waters on the planet that we are also part of (Lippard, 2017; Neimanis, 2017; Somerville, 2014). The death of the oceans is also the death of all our bodily juices, and there are so many of them, from synovial liquid to marrow inside the bones. How do we care for waters inside-outside?

The Saltamontes that hopped from the previous knot provide some clues into what is possible when pedagogies are focussed in interdisciplinary and intergenerational attention rather than transmission (Ingold, 2018). Decentring the humanism and social consciousness aims that were the main concern of the Saltamontes forty years ago, I pay attention to their coastal origins and the force of water in their pedagogies to imagine more-than-human possibilities for today. Dunes, seawater and access to clean fresh water were simultaneously the context and matters of concern to these communal pedagogies. Nonetheless, the absence of attending to the erasure of water knowledges and relationality were beyond their scope at the time.

How do we enact *conocimiento* that allows us to repair the damaged relations with ourselves and the watery ecosystems we are part of? What ways of perceiving, living and learning do we need to cultivate to live well? Or in other words, how do we re-member as a political practice so that our present living responds to a damaged planet where colonial practices are ongoing (Ma Rhea, 2015, 2018; Pacini-Ketchabaw & Taylor, 2015; Walsh, 2015). Barad (2018) provides some options to think beyond critical stasis about the past to the production of new possible histories,

Colonialist histories, violent erasures, and avoidances as an integral part of a sacred practice of re-membering—which is not a going back to what was, but rather a material reconfiguring of spacetime-mattering in ways that attempt to do justice to account for the devastation wrought and to produce openings, new possible histories, reconfigurings of spacetime-mattering through which time-beings might find a way to endure. (p. 230)

Walking along the Merri Creek, Nawel asked me why he was born a human. What happened that he was a human and not a bird, a snake or a donkey? His wonder about what makes us human intrigues me, and I cannot provide an answer, but hold the question with him. His question questions us. He invites me to think about what makes us human. In her decolonial inquiry, early childhood scholar Karin Murris (2016) proposed the notion of posthuman child to disrupt the ageism, individualism and humanism at the core of modern and neoliberal conceptualisations of childhood. The project of the posthuman child is relational and enfolded in non-human and more-than-human historical naturecultures that challenge not only the bounded individual but also the power relations that have positioned children as a governable domain (Duhn, 2006).

Drawing on Barad (2018), we could speculate that perhaps what makes us human “is not our alleged distinctiveness from – the nonhuman, the inhuman, the subhuman, the more-than-human, those who do not matter – but rather our relationship with and responsibility to the dead, to the ghosts of the past and the future” (p. 240). With Barad (2018), I loop back to Vicuña’s (2010b) call to move beyond mourning, to an embodied awareness of our present ecologies. I wonder how to make our bodies porous to the forces of the historicity and ecologies of the territories where we are, to local creeks, sea shores, lagoons and wetlands (Duhn, 2012;

Green, 2016; Nxumalo & Cedillo, 2017; Saint-Orens & Nxumalo, 2018; Somerville, 2014, 2018; Somerville & Hickey, 2017; Pacini-Ketchabaw & Taylor, 2015).

Can waters be sung into (well)being?

In what follows I animate what I have theoretically discussed, thinking with curriculum and watery knowledges through sharing my curiosities, experiences and dreaming as a mother and researcher in education at my children's local public school in Victoria, Australia. This quipu ends with stories of what I have experienced with my children, as we collectively struggle with contemporary education, finding ways to work within the local school to open spaces for diverse watery curriculums to manifest. This is an interdisciplinary, intergenerational and decolonial program that is in the making and that we call "creekulum." As with all decolonial options, the creekulum is not conceived as a universal good.

CREEKULUM

But the coast is too far,

How do you connect to it?

I sing to the creek, I say.

The water here in the creek

will go to the ocean.

The eels told me that.

They bring the ocean to the creek.

And the creek back to the ocean.

Drawing on Haraway (2016), my inquiry is about staying with the trouble, a site of friction that requires risk, experimentation and certainty in uncertainty (Freire, 2018). As a family, we inhabit what Anzaldúa (2015) conceptualised as land in-between, or Neplantla (in

Nahuatl). We are not Indigenous, but also not white. As the majority of Chileans, *mestizos y mestizas*, we both carry in us ancient Indigenous memory from the Andes but grew up in denial of our Indigenous ancestors (Waldman Mitnick, 2004). With my partner Bryan we noticed how education played a significant role in enacting these colonial practices of denial and avoidance (Barad, 2010, 2018). As parents of two boys of school age, we noticed how thirty years after and in a different latitude, the story was repeated, as Indigenous practices of knowing and living continued to be erased. I could not remain silent. As Anzaldúa suggested “these conocimientos challenge official and conventional ways of looking at the world” (p. 120).

As I became familiar with the Australian primary years curricula I noticed the possibilities to enact the principle of Caring for Country that Uncle Bill Nicholson manifested as the story of responsibility of living in this Country (Figure 39). And, as a non-Indigenous Australian this became an imperative to me, we need to learn *with* the Country we live in. And I wonder: can the curriculum become sensitive to the pull of the creek?

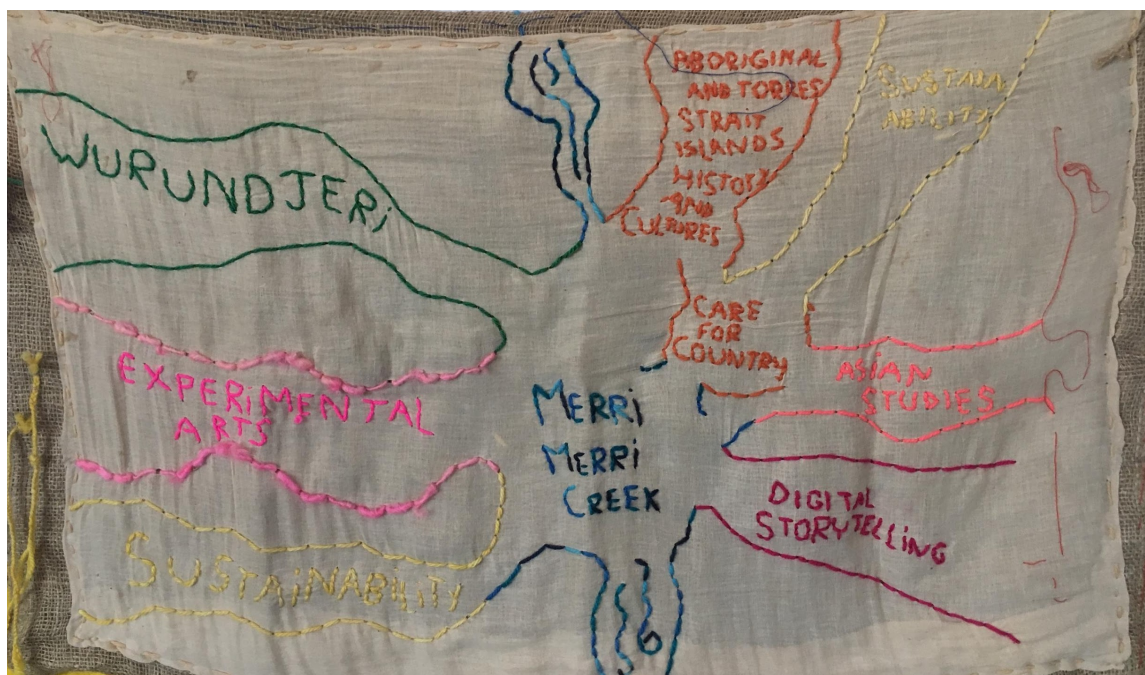


FIGURE 39: THE TEXTILE MAP OF THE CREEKULUM IN ARPILLERA. MADE BY AUTHOR, OCTOBER, 2018. PHOTO BY AUTHOR.

I loop again to Anzaldúa (2015) call to “inner work, public act” (p. 118) to understand this practice as a situated offering of *conocimiento*. The urgency of watery existences, local geographies, ancient knowledge and embodied intergenerational learning has manifested through a program we created with some parents and students at our school, which we submitted for a community-based grant from the Victorian Government. I call it *creekulum*; others call it “Learning for the Future: Children and the Merri Creek”. It is a year-long program that will run in parallel at our school and the local community house, and connects the community to the creek through a passage woven with three threads: Indigenous knowledges, experimental art and science of sustainability. I borrowed the idea of “an ecology of knowledges” from de Souza Santos (2014) so as not to privilege one form of knowledge over another, but enact instead the possibility for difference to emerge and materialise more difference in relation to learning-with the Merri Creek.

I go back to Anzaldúa’s (2015, p. 138) as if I am in an intimate conversation with her as I write this final chapter and I think of this *creekulum* as an offering that emerged from enacting *conocimiento* using the quipu as methodology that becomes a bridge to connect Southern concerns,

With awe and wonder you look around, recognizing the preciousness of the earth, the sanctity of every human being on the planet, the ultimate unity and interdependence of all beings—*somos todos un país*. Love swells in your chest and shoots out of your heart chakra, linking you to everyone/everything—the aboriginal in Australia, the crow in the forest, the vast Pacific Ocean. You share a category of identity wider than any social position or racial label. This *conocimiento* motivates you to work actively to see that no harm comes to people, animals, ocean—to take up spiritual activism and the work of

healing. Te entregas a tu promesa to help your various cultures create new paradigms, new narratives.

Today in the lands of the Merri Creek, in collaboration with primary school students, parents, teachers, the Wurundjeri Tribe Land Council, art and science collective Scale Free Network; Angela Foley, an educator from the Merri Creek Management Committee (MCMC); East Coburg Community House, local artists, scientists and geographers from the parent community, we are dreaming and practising together the pedagogical possibilities of this program. Wondering how, by spending time along the Merri Creek, learning with invisible forces, stories, language, botany, sustenance, genocides and sites of partial recuperation we can enact the principle of Caring for Country between Indigenous and non-Indigenous peoples. I dream of this thread of the curriculum as an electric current that traverses and enlivens the tissues of our bodies, and the bodies of the basaltic rock, golden wattle, plastic, short finned eels, rain moths, waters, chemical pollution, wallaby grass, growling grass frogs as we move along Merri Creek enacting *conocimiento* (Williams et al., 2018).

SYMPOETIC PEDAGOGIES, ENACTIVE CONOCIMIENTO

In the mother thread of this quipu the notion of sympoiesis was presented as a contemporary feminist extension of autopoiesis (Dempster, 2000; Haraway, 2016; Maturana & Varela, 1994). Haraway (2017) challenges the reinforcement of an individual narrative of a self-sufficient, self-organising entity. Drawing on Dempster (2000), Haraway (2016) makes evident that bounded individuals do not sustain themselves in independent relations but always make each other up in relations that are always-with. Thinking-with the creekulum as an artistic, interdisciplinary, intergenerationally and more-than-human curriculum, I make a movement

from the notion of sympoiesis or making-with to sympoesis (note the spelling difference) that is about making-with poetically.

The relational force of the quipu and how it manifests pedagogically as an extension of Calvo's (2017) notion of education as the creation of new relations or the actualisation of relations through a practice of attention. I wonder whether the subjects of the creekulum will emerge in the form of dances, songs, storytelling and scientific experimentation? By connecting the quipu with local bodies of water I weave a passage from my present territory in the lands of the Merri Creek of the Kulin Nations to the Southern Andes, where water has always been sacred and alive, to care for the wellbeing of waters inside-outside as a local micro-political act of ancient and present response-ability (Haraway, 2016).

Connecting stories, places, humans, non-human, atmospheres and history, in order to create sites of partial recuperation that animate the forces of regeneration, restoration and revitalisation of local ecosystems, is the poetical motivation of the creekulum (Gargallo, 2014; Haraway, 2015; Stengel, 2019). I say poetical because it is how I understand poetry, as a vital force that animates life on earth beyond the human. In that sense, my engagement with Vicuña's (2017a) and Anzaldúa's (2015) poetry in this quipu is but a manifestation of how poetry is a materialising force of imagining otherwise (Barad, 2012).

The poetics open this practice towards a non-teleological space, an absence of a telos or end in pedagogical practice. This is how education and complex living systems theory come together as a practice of enactive *conocimiento*. In the mother thread of this quipu I explained how one of the main concepts of the autopoietic theory is that living organisms are non-teleological but live on drift, a path that is not pre-given but in the making. In other words, organisms make their environment as their environments make them in a dance that does not

have a plan but is contingent, creative and improvisational (Depraz & Cosmelli, 2003; Maturana & Varela, 1994; Varela, 1999a; Varela et al., 1991).

Paradoxically, education is embedded in linear narratives and teleological outputs (Galdames, 2017; Ingold, 2018; Lopez, 2019; Riddle, 2014; Salter & Maxwell, 2016). In that sense, Snaza (2013, 2016) explained how education (from its Greek conceptions) is driven by a humanist teleological approach that has a determined end-goal, the creation of a fully formed human. Drawing on posthuman feminist and postcolonial theory, Snaza (2013) troubled this ontological assumption of (in)humanity and suggests a practice he calls 'Bewildering education' that situates children, teachers, and schools within a non-teleological, more-than-human meshwork of relations where the very idea of human is put into question. The driving force of this kind of education is that it does not know where it is going, it is experimental at its core, but also accountable. After critiquing the dialectic humanism that traverses Freire's work, Snaza (2013) goes back to Freire to bring to the fore immanent love as the moving force of this kind of pedagogical endeavour.

I am curious about this recent re-turning to Freire that repeats in the work of so many scholars in education who critiqued Freire's humanism, anthropocentrism and Marxist commitment, but who nonetheless re-turn to his writing in search of "something" else that is hope, love and praxis (Calvo, 2017; Osorio, 2018; Snaza, 2013; Walsh, 2015). How are love and hope embedded in the process of decoloniality? Love and hope as guiding emotions that reject the rigidity of reason in favour of compassionate practices that attempt partial recoveries as acts of care. In that sense, multispecies scholar Deborah Bird Rose (2017) illuminates the relevance of this praxis today as she argues that "to desire the well-being of others is to enter into the community of living, open multiplicities, connectivities, and responsibilities" (p. 507).

I resonate with Bird Rose (2017) because her call is to understand connectivity as a material phenomenon, which in my work could be understood as the link from bodily cells, to quipu, to creek. The flux of her theory that emerges from her long-time engagement with Aboriginal Australia is somehow condensed in her words about multi-scale connectivity: “at all scales, life on Earth is made up of interdependencies, interactions, and communication; this is so all the way ‘up’ to the biosphere and ‘down’ to the single cell” (p. 499). Her engagement with cellular becomings allows me to come back to the body as a site of actualisation and knowledge production (Anzaldúa, 1991; Braidotti, 2012; Keating, 2006; Saavedra & Salazar, 2017; Varela et al., 1991).

DE CUERPO PRESENTE

With the quipu in my hands I notice how engaging with the quipu as postqualitative methodology has been a transformation that has invited me to be more present in my body. In the mid-nineties Freire (2018) visited Chile for the first time after he left in the late sixties, and gave a talk where he looked simultaneously back and forth over his praxis and the relevance of his thinking and propositions after the end of the Socialist project in Latin America. In this talk he stressed how he lives knowledge as an embodied practice of becoming present in his whole body; when I read it I marvelled at the resonances of his comments with Varela’s (1999a) ideas of embodiment, and how his book in Spanish translates as *de cuerpo presente* (Varela et al., 1991) or “bodily present,” as I explained in Chapter 4: The mother thread of the quipu. Or in Anzaldúa’s (2015) words “es tu cuerpo que busca conocimiento; along with dreams your body is the royal road to consciousness” (p. 138), the body as the path of conocimiento.

In June 2018, the Victorian Parliament became the first in Australia to pass legislation to commence a historical treaty with the traditional custodians of this land. Engaging in the process of reconciliation, healing of historic wounds, truth telling in schools, and caring for Country will from now on be an imperative for all of us who have arrived in this territory. Aboriginal scholar Mary Graham (2014) argues that “place is a living, Spiritual thing again whether place is geographically located or an event in time. Place does not hamper, confuse or attenuate Inquiry, rather Place both enhances and clarifies Inquiry” (p.7). To listen attentively to my own stories has enabled me to listen broadly and I feel *completa en mi cuerpo* attuned to my local place (Schaeffer, 2018).

This feeling of being *completa en mi cuerpo, de cuerpo presente*, enacting worlds as I follow old trails, or creating new ones as I move through this land. The transnational quipu invited me to resist categorisations into expansive cosmic understand, Anzaldúa (2015) explained “your identity has roots you share with all people and other beings—spirit, feeling, and body constitute a greater identity category. The body is rooted in the earth, la tierra itself” (p. 140). Knowing as a concrete experience of moving along, being moved, enacting worlds. Not to move into abstraction, but to stay here with the feet on the ground. Braidotti (2010b) suggests that to activate our bodies is the political task of making sustainable presents, or making the present sustainable. According to Braidotti (2013b) thinking through forces of life is a more empathetic and intense experience that exceeds the rationalistic paradigm by being the “conceptual counterpart of the ability to enter modes of relation, to affect and be affected, sustaining qualitative shifts and creative tensions” (p. 40).

By noticing my *cuerpo presente* I also notice and acknowledge the quipu as a participatory force in this process of consciousness shift. Can the quipu be considered as a co-author of this thesis? With Vicuña (2016) I learnt that the quipu *does* things in the world, it is a

performatic archive that lives in a relational continuum. Working with the quipu as methodology *conocimiento* in the form of textiles, riparian forces and ancient and not so ancient pedagogies that animate my present as possibilities to be differently with the world (Williams et al., 2018). Practices of care for the human, non-human and more-than human forces that go beyond categories of nation-state, race and culture become the latest expression of this quipu that taught me so much over the years.

THE (IM)PERMANENCE OF THE CHAIR

After nearly five years of this process of thinking and making quipus I am still amazed by the effects of unexpected events. Unplanned situations that create an intensity in the path. Funnily enough, it was a chair (again) that made me aware of some South-South connections that I have noticed but somehow not acknowledged in depth. At school I only learned about vertical lines of migration. We were constantly told that the first inhabitants of Chile came down from the North, and originally from Asia, crossing the Bering Strait. But the traversal South-South lines of movement were always missing from the migration picture. Today we know that the territory of the Pacific was once all together as part of the supercontinent Gondwana, and the crusts of earth continue to move. Will Chile be closer to Australia again? The potential is there.

Recently I felt writing to be quite hard and decided to take a day off. I jumped on the tram 1 in Coburg towards the city and down to Federation Square. “Colony,” the exhibition at the National Gallery of Victoria (NGV) was open and I felt an urge to visit it. I went into the NGV to realise that there were two exhibitions: “Colony” on the first level, and “Colony: Frontiers of War” on level 3, the latter being a contemporary Aboriginal response to “Colony. Goosebumps on my arms. I decided to do “Colony” first. As I went through the exhibition, my

body felt cold and shaky. New Holland's maps to my right, unfinished lines, apparent uncompleted territories. Those territories are abundant in songlines, stories, healing plants, conflict, and inhabitants already, but for this cartographer it is only space between the lines.

I sensed how stories of colonisation, appropriation, displacement, erasing of histories and ways of living are so alive in Australia. I began to draw. I drew from drawings, I drew ways of moving, I drew lines of maps, I drew poems. As I moved along the section that overviewed the material culture colonisers brought with them, I noticed how in colonisation the coloniser tries to replicate the familiar architecture of his previous material living. And there it is, the chair. And not any chair. The first chair you meet as you walk through "Colony" is a very particular chair, the Macquarie Chair. Built during the early colonial period in Australia, this chair is a condensation of power. It is so intense how the chair entangles stories of oppression, patriarchy and imperialism that I stay with it for a long time.

Another chair came to me, they make themselves felt.

Made from Dysoxylum fraserianum, rosewood, Australian rose mahogany.

A tree that for thousands of years lived in the territory we now call New South Wales.

Everything is New. A new something. A place to replicate the old.

Convicts' hands crafted this chair,

Convicts' hands became free after this crafting.

Thanks to this chair, that is not one. There is one for him, and one for her.

This chair meant freedom for that joiner and that carpenter.

Power relations are infused in every material-semiotic layer of the chair.

It is the knight's fist holding a knife on the very top of the backrest that struck me.

I look in detail. The chair is covered in kangaroo fur.

Trees becoming timber for the colonial project,

Animals' fur becoming upholstery

Convicts' hands knotting wood.

The chair as enunciation

Of death.

I always thought about when chairs arrived in Chile. There are records of many different pre-colonial seating devices in South America, such as the beautiful Tiana Inca to support squatting sitting. But nothing like the chair-as-we-know it. I am grateful to have a glimpse here in Australia. Did Australian First Peoples feel the urge to design a sitting device? There is such a wide and gracious movement repertoire within these Western drawings. And the question of the chair persists. But the proliferative effects of the chair as loop in this quipu have materialised transformative shifts in the way I understand bodies, ways of knowing and living, and how I conceptualise pedagogies of learning/educating for flourishing futures. Perhaps this speaks of the possibility for the chair to be impermanent? To be something else.

Over these years of reading, thinking and experimenting with this quipu I have noticed that it is the proliferative force that traverses the quipu for the creations of new relations that has created the conditions for this creekulum to flourish in this particular land, at this particular time. But the creekulum is not *the* answer, but a proposition that exists only as a

partial and situated experience of place. An offering of *conocimiento* (Anzaldúa, 2015). As Bird Rose (2017) put it “connectivity entails interdependence and brings us into domains of responsibility, accountability, proximity, ethics, and community. These are domains in which many Indigenous people have been living for millennia. There is much to learn, much to be shared” (p. 495). Our lives are *always* lived in relationship with other lives past, present and emerging. In that sense I offer this quipu as my gesture towards the partial healing, restoration and cultivation of other ways of being human to attend and care for waters, lands, plants, mountains and climates that make us who we are.

In the Andes, and specifically in Aymara language, there is an aphorism that says *Quipnayra uñtasis sarnaqapxañani*, this translates to English as “attending to the past in front of us, we can walk through the present that is future”. For the Andeans, as for many Indigenous cultures around the world, the past is in front of us because is that that we can see, it is what we know. To Rivera Cusicanqui (2019) this is a reminder of a temporal shift where re-turning to the past is a gesture that sustains our present and how we move into the future. By resurging in time/space, the quipu as methodology, creates a tunnel from different temporalities and latitudes bringing with it stories and memories from the past for us to contemplate, learn and practice how to be humans – once again.

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APPENDICES

1. Explanatory statements
2. Consent forms

EXPLANATORY STATEMENT

Living memories

Project: Bodypolitics of chair(ing) children in post-Pinochet Chile.

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You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspects of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

This research involves multiple encounters in the form of conversations with Chilean scholars that are related with the field of Education and have relevant experience as living memories in contemporary Chile. All of the participants have lived through the turbulent times Chile has experienced in the past 40 years. Specially relevant to this study are the changes that Chilean society and the educational field have gone through in response to the civic-military dictatorship that ruled Chile for 17 years and the imposition of substantial neoliberal economical reforms since the mid '70s. The artefact that will anchor our conversations is "the chair", because the material/discursive practice of chairing children is habitual in many ECE centres, but especially relevant in an Institution that depends on the Government (founded in dictatorship) and has been using the "chair" as a symbol of their pedagogical endeavour. The research involves conversations between 30-60 min with each participant.

Why were you chosen for this research?

You were chosen to participate in this research because of your relevant experience and knowledge in this specific area of research. Your contact details have been obtained through my personal contacts and/or the public domain.

Consenting to participate in the project and withdrawing from the research

The participation in this project involves the signing and returning of the consent form that has been previously sent to you. You have the right to withdraw from further

participation at any state. There is a possibility to withdraw data once the interview has been transcribed and sent to you, once you have submitted the interview back it will not be possible to withdraw data. If you would like to participate in an anonymous interview, it is also possible.

Possible benefits and risks to participants

There are minimal risks to participate in this project, as the interviews will consist in topics that are familiar to your specific field of knowledge. Nevertheless if at any stage of the conversation you feel uncomfortable with any questions, please let me know and I will move to a different topic.

There are no tangible benefits for participating in this research for individual participants. There are potential benefits for the Chilean society in general, an ECE community in specific as this research deals with topics that have not been widely investigated, enabling both the researcher and participants to collaborate in opening spaces for new ways of thinking.

Confidentiality

The data collected will be managed following the recommendations of Monash University, all the data will be confidential and only shared with the supervisors of this research during the study. If you prefer to do an anonymous interview, your personal contacts will be maintained in strict confidentiality only known by the researcher.

Also, this data will be published and reported in conferences, thesis and academic journals.

In the case that you prefer an anonymous interview you will be given a pseudonym.

Storage of data

The data will be stored following the requirements for responsible ethical research of Monash University. A cloud storage protected by password and licensed to Monash University will be activated for this research, all information will be backed up there and no data will remain in lap tops, hardwares, etc. During the data gathering trip the data will be accessed exclusively by the researcher and will be shared only with the supervisors of this project.

After 5 years of the publication of the Phd thesis, this data will be destroyed if it is no longer required.

Use of data for other purposes

Considering that this thesis will be published in English in Australia, it is relevant to me to ask for your permission to make these conversations available for a wider Spanish-speaking audience in the public domain once the thesis has been submit. I have organised the collaboration of documentary makers to help the video recording of the conversations. I trust that sharing them with a wider audience could open spaces for others to work with these ideas in different contexts.

Therefore, my aim is to develop a website in Spanish, where the interviews, and video recordings could be available to a wider audience. Nevertheless, the content will be protected under the license the participants choose. Data may be used for other projects where ethics approval has been granted.

Results

After the interviews, the transcription will be sent to every participant allowing modifications to the original texts. The translations will be sent via e-mail. Also, a copy of the finished thesis will be sent to every participant. Furthermore, the researcher will be available to share with the participants the data at any stage if asked.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer Monash University Human Research Ethics Committee (MUHREC)
Room 111, Building 3e Research Office Monash University VIC 3800

Tel: +61 3 9905 2052 Email: muhrec@monash.edu Fax: +61 3 9905 3831

Thank you,

Dr. Iris Duhn

Ms. Maria Sarita Galvez

CONSENT FORM

Group: Living Memories

Project: Bodypolitics of chair(ing) children in post-Pinochet Chile.

Chief Investigator: Dr. Iris Duhn, Ms. Sarita Gálvez

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

I consent to the following:

Audio recording during the interview and/or focus group.

Video recording during the interview.

The data that I provide during this research may be used by Sarita Gálvez in future research projects.

The data that I provide during this research may be shared in the public domain after the thesis has been submitted.

Name of Participant

Participant Signature Date