

MOVING MEMORIES:
Towards a Cognitive Ecology of the Māori Haka

McArthur Hēnare Robert Mingon

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Master of Research in Cognitive Science
Department of Cognitive Science,
Faculty of Human Sciences,
Macquarie University,
Sydney, Australia

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Abstract

The popular misconception that the Māori haka is *just* a ‘traditional war dance’ is connected with the way that it is commonly performed before sporting contests, for the analogous purpose of ‘intimidating the enemy’ and ‘energizing the performers’. However, this is just one of many ways in which haka have been used by Māori throughout time. This thesis explores these other uses and aspects of haka, and investigates how the coordination dynamics of haka can give rise to different modes of expression and experience.

In the introductory chapter, I develop a platform from which to consider the affective, cognitive and epistemic functions of Māori Haka. The project is positioned in the current landscape of research on cultural systems in the cognitive sciences and against the background of epistemic niche construction. I introduce and discuss the theoretical framework of Cognitive Ecology, and related ideas in the area of embodied, extended and distributed cognition. I also provide an overview of the Māori cultural and historical context and begin to describe and explore haka, in terms of its origins and forms.

In Chapter 2, *Moving and Feeling Together*, I explore the affective aspects of haka and consider how the practice can be fruitfully understood as a material resource and activity used by Māori to express, enhance and regulate emotional experience. I discuss empirical research that is helpful for understanding how the affective aspects of haka may foster and facilitate different forms of ‘emotional bonding’. Further, in conversation with distributed and situated approaches to emotions, I consider how the coordination dynamics of a haka performance contribute to the achievement of affective states and processes that would otherwise be unavailable.

In Chapter 3, *Being Together*, I consider how haka contributes to other forms of cognitive activity. The cognitive role of gestures is examined, along with the attentional, intentional and perceptual processes at play. I then examine how these processes are utilized to express, enhance and preserve tribal identity. I discuss the notion of ‘identity-fusion’ and suggest a way in which it may help us to better understand how Māori epistemology is embodied and enacted through the practice.

In Chapter 4, *Remembering Together*, I examine the commemorative functionality of haka. In conversation with Edward Casey’s phenomenological account of commemoration, I unpack the formal and structural features of haka which contribute to its effectiveness as a commemorative practice, and further consider how this practice may contribute to intergenerational transmission.

Chapter 5 concludes the thesis with a reflection on the account developed. I consider its limitations, along with opportunities for further development and investigation, and briefly discuss the current status of haka within contemporary Māori and New Zealand society.

Author Statement

This thesis has been produced for the degree of Master of Research in the field of Cognitive Science at Macquarie University, Sydney, Australia. I certify that this is an original piece of research and contains no material which has been submitted for award in any other form. This thesis was produced and written by me, and any help or assistance that I have received towards this research has been acknowledged accordingly. All other material, information sources and literature used has been referenced appropriately.

A handwritten signature in black ink, appearing to read 'M. Mignon', with a stylized, cursive script.

McArthur Henare Robert Mignon (44706642)

November 6th, 2017

Preface

This thesis came about through a series of detours, in the way that most theses tend to. It was a combination of academic interests and personal motivations that inspired the idea for the topic and the approach. As a student of the cognitive sciences, I had been immersed in the literature on ‘culture and cognition’ and impressed by the potential of the recently-developed and integrative framework of ‘cognitive ecology’. I was also incredibly fortunate to have had the guidance and supervision of Prof. John Sutton, whose wide-ranging work had encouraged and inspired many of my own thoughts considerably (and continues to do so). At the same time, I had become increasingly compelled to connect with my Māori heritage - as living in Australia has limited my contact with many aspects of Māori culture – and so I sought to align these inspirations and interests during my Master’s research.

Through fortune and luck, I found myself in the somewhat unique position to be able to engage with each of these themes through a project incorporating cognitive ecology in a case study of the most potent practice that I could think of –the Māori haka. I hoped that such a project would help to clarify the widespread misunderstanding of what haka is, and why it is so valuable, by elaborating on its cognitive and epistemic aspects with the perspectives afforded by recent ideas in cognitive theory – perspectives which, I believe, align well with Māori ones.

I had initially set out to conduct a ‘cognitive ethnography’, in the style of Hutchins’ (1995), comprising field work with a kapa haka group in Rūatoki – in the heart of Tūhoe country and the home of my ancestors and whānau. I had all but booked my flights when an unfortunate change in circumstances down the line prevented that particular project from going ahead. In lieu of this, the present work was undertaken as a preliminary theoretical effort towards the goal of clarifying the cognitive and epistemic aspects of haka – through an exploration of haka in its historical contexts and uses.

As it is, the words in these pages and the ideas they reflect are still only a partial account of a much larger story that waits to be told. The discussion presented here is wide-ranging and interdisciplinary, wandering through fields that have only appeared relatively recently and remain rather contested. It is largely an exercise in perspective-taking, using different lenses to look at different aspects of an intrinsically multifaceted practice. In doing so, it is necessarily selective and at times speculative, as a work of this size and kind is limited in what it can say and how it can say it. Above all it is an attempt to engage with an often misrepresented and widely misunderstood Māori practice, in a way that recognises its overlooked dimensions and respects its history and place in the Māori culture. I hope to provide the reader with a view that glimpses the depths of this powerful practice, while pointing towards the many potential areas for further consideration and investigation.

Putting this thesis together during the past few months, through the changes and challenges they threw up, could not have happened without the assistance and support of many people. I would like to express my sincere appreciation and gratitude to all who have supported me throughout this process. In particular, I want to give thanks to John Sutton, my primary supervisor, for his all of his efforts and encouragement, patience and kindness. I would also like to thank Richard Menary (Philosophy) and Greg Downey (Anthropology), for sage advice and support in the early stages. Cheers go to Alex Gillett, and the members of the Culture and Cognition reading group, for the many great discussions and company. Thanks also to my MRes cohort and friends Graham Thomas, Louis Klein, Hannah Rapaport and Andrea Salins.

To my whānau, kia ora, thanks for all of the support, insight and encouragement. In particular, I want to thank my Uncle James, who welcomed me to Sydney with open arms, a home to share and many stories to tell; Aunty Jane, for helpful assistance with contacts; and most of all my mother, Bobby, and grandmother, Riwa.

To all of my parents, thank you for your endless support and belief. To my partner, Christine, my gratitude for you cannot be expressed in words, written or otherwise, so I will just have to show you - Aroha nui

McArthur H.R Mingon

Nov 5th, 2017

From the diary of M. de Sainson¹, March 1826:

One thing that struck us as being very impressive was the dance or rather the rhythmic song of the savages, an exercise in which they seemed to take great delight. One of them gave the recognized signal, and on the instant all his companions ran up taking their places in a single line beside him. Some threw their cloaks on to the deck, others merely arranged them so as to leave the movements of the arms free; then in a silence which was almost a solemn hush, they gave a prelude to their song by stamping their feet, one after the other in perfect time and at the same time striking the top of their thighs with the palm of the hand. After a moment, one man, in a guttural voice and a tone which has a touch of melancholy, begins a sort of chant on one note, all the harmony coming from the rhythm of the words which have a distinct scansion. To begin with, long notes are dominant, then little by little, they grow faster and faster without any change in the rhythm; soon the chorus has become general and the singers put more feeling into their tone. Little by little their bodies are thrown back, their knees strike together, the muscles of their necks swell, and the head is shaken by movements which look like convulsions; their eyes turn up, so that, with horrible effect, their pupils are absolutely hidden under the eyelids, while at the same time they twist their hands with outspread fingers very rapidly before their faces. Now is the time when this strange melody takes on a character that no words can describe, but which fills the whole body with involuntary tremors. Only by hearing it can anyone form an idea of this incredible crescendo, in which each one of the actors appeared to us to be possessed by an evil spirit; and yet what sublime and terrible effects are produced by this savage music! When by a final effort, the delirium of howls and contortions is borne to a climax, suddenly the whole group utters a deep moan and the singers, now overcome by fatigue, all let their hands drop at the same moment back on to their thighs, then breaking the line they had made, they seek the few moments' rest which they desperately need.

Was it a battle song that they performed for us? The solemn, profound character of their music might lead us to think so; yet some of the movements seemed to be appropriate to a rendering of a lovers' contest. Be that as it may, whatever their intention, whether it be victory or love that they celebrate in this manner, the fact remains that they have a music of overwhelming force.

¹ de Sainson was Naval Secretary and artist on board the French voyaging ship the *Astrolabe*. As translated by Olive Wright (1950).

Chapter 1:

Introduction

Haka, the dance of the Māori of Aotearoa New Zealand, has been a defining feature of most first encounters with Māori; from the first arrival of Europeans on the shores of Aotearoa², to the arrival of Māori on the world stage of Rugby³. As an introduction, haka makes an impression unlike any other, inspiring awe and fear and bewilderment in the minds of many unfamiliar audiences. The ‘overwhelming force’ of haka has often led observers to question, just as M. de Sainson, whether they were witnessing a welcome or a war dance. The answer to that question may depend on the circumstances of their arrival.

More than just a ‘traditional’ form of song and dance, haka is a unique activity in which the world-view of the Māori is embodied and instantiated through movement and music. The practice is at once: a powerful and expressive performance; a welcome; a challenge; a ritual of communion; a means of physical, cultural and spiritual education; and, a method of commemoration which brings the past into the present in a visceral way. Haka has many complexities, as it is a reflection of, and is embedded in, the history and mythology of the Māori. It is apparent today, that despite its centrality in Māori cultural life, and its prominence on the world stage, the epistemic value of haka is largely underappreciated and its cognitive dimensions have been widely overlooked. This is perhaps due to the popular misconception that haka is *just* a ‘traditional war-dance’; something performed in battles of former times, to intimidate an enemy and to incite the performing party to violence and victory. This idea is supported through the analogous use of haka in the sporting domain, however it is a partial description at best, as it overlooks and obscures the many other facets of the practice which reflect and reveal its broader socio-cultural significance and functionality in Māori societies of the past and present.

² Abel Tasman and crew first arrived in 1642; Europeans did not return until Capt. Cook in 1769.

³ The 1888-89 New Zealand Native Football team were the first to perform haka prior to a rugby match abroad, performing them during the 1888 tour of Britain.

What is the art of performing haka? The acknowledged haka master, Henare Tiowai of Ngati Porou Iwi⁴ (tribe), responded to that question with ‘kia korero te katoa o te tinana’ – ‘the whole body should speak’ (in Kāretu, 1993, p. 22). In line with this response, haka has been described as “a form of communication which maximizes the corporeality of language” (Tovey, 1998, p. 48). As a cultural practice and performative ritual, haka is a feat of social and interpersonal coordination, which provides a unique mode of collective expression and produces patterns of shared experience among performers that extend across communities and generations. These patterns of practice in haka have historically been augmented and misunderstood by Western accounts. Brendan Hokowhitu (2008, p. 1356) describes in *Authenticating Māori Physicality*, how the accounts from early European writers reveal the incongruence between Māori tribal physical practices and their Western conceptualizations:

if we understand savagery from the perspective of Enlightenment rationalism, then it is apparent that it portends a state of unenlightenment, where reason is ruled by physical impulses and/or superstition. As a consequence (especially because early onlookers had little propensity towards understanding Māori tribal cosmologies), Māori ‘savagery’ was transcribed into physical terms, and thus Māori physical expressions were, at times, tied to the ignoble and abhorrent savage.

The legacy of this kind of conceptualisation has continued through the course of colonisation and has perhaps prevented contemporary audiences from recognising all that is lost in this translation. However, recent perspectives in the philosophy and science of cognition may offer a way of correcting course and approaching haka in a way that identifies the overlooked dimensions, while also benefiting from the insight provided by empirical studies. The multimodal and multifaceted nature of haka makes it inherently interesting and explicitly relevant to many contemporary topics in the cognitive sciences, including research on: coordinated and collaborative joint actions, embodied and musical cognition, the social and relational aspects of emotions, and memory, as well as projects in cultural and cognitive development and evolution. Recent developments in the philosophy and science of cognition and

⁴ The translation of Māori terms presented throughout are in line with the guidelines provided by Te Taura Whiri i te Reo Māori: The Guidelines for Māori Language Orthography (2012). As such, macrons are used to indicate long vowel length, and English translations are provided in brackets after the first mention of the term in each chapter. A glossary of Māori terms and translations is provided in the Appendix.

emotion have reoriented these fields to consider the embodied, distributed and situated nature of affective and cognitive systems. These approaches provide new and productive lines of engagement with otherwise overlooked aspects of psychological phenomena, and draw further attention to the cognitive significance of cultural forms and contexts (Hutchins, 1995; Clark, 2001; Sterelny, 2003; 2012; Sutton and Keene, 2017; Menary, 2007). From these loosely allied approaches the integrative framework of Cognitive Ecology has emerged, which provides a fruitful model for examining cognitive systems within their specific cultural and historical settings (cf. Hutchins 2010; Tribble and Sutton, 2011; Tribble and Keene, 2011). This project is an effort in that direction, providing an interdisciplinary and cross-cultural conversation about haka, in which parts of the Māori epistemological view are made more comprehensible to non-māori and academic audiences, and vice versa – through dialogue with both recent perspectives in cognitive theory and Māori perspectives.

In this thesis, I present, discuss and analyse the affective, cognitive and epistemic aspects of the Māori haka, with a focus on its role in the cultural-cognitive ecology of traditional Māori society⁵. In conversation with historical records and accounts, as well as Māori perspectives, I take a cognitive ecological approach to examine how haka was utilised to (1) express, enhance and regulate emotions, (2) express, enhance and preserve tribal identity, (3) coordinate, transmit and maintain cultural knowledge and (4) commemorate the past and facilitate collective remembering. These aspects of haka, while recognized in various ways by Māori, have not been addressed or studied by the wider western and academic world. In approaching these aspects of haka as a study in cognitive history and material culture (cf. Sutton and Keene, 2017), and by drawing from interdisciplinary sources of research in ethnography, sociology, phenomenology and psychology, I aim to provide an expanded, descriptive account of Māori haka.

⁵ For discussion of the term ‘tradition’ in a Māori context, see Hanson (1989) *The Making of the Māori: Cultural invention and its Logic* and also Linnekin (1992) *On the theory and politics of cultural construction in the Pacific*. ‘Traditional’ is used here to refer the time period before European colonisation of Aotearoa in the 19th Century. Māori ‘tradition’ is not conceived as ‘static’ or ‘fixed’, but as ‘fluid’ and ‘dynamic’ – its usage here provides a helpful distinction between a time defined as a Māori ecology and a time defined by a mixture of Māori and European elements.

In this introductory chapter, I develop a platform from which to consider the affective, cognitive and epistemic functions of Māori Haka. To begin, I position the project in the current landscape of research on cultural systems in the cognitive sciences. I then present and discuss the theoretical framework of Cognitive Ecology, and related ideas in the area of embodied, extended and distributed cognition. I also provide an overview of the Māori cultural and historical context and begin to describe and explore haka, in terms of its origins and forms⁶.

The Cultural-Cognitive Niche

Cultural learning has been recognised as a key factor in our species evolutionary success (Donald, 1991; Tomasello, 1999; Sterelny, 2003, 2012). The extent of our cognitive capacity to adapt and intervene in our local environments in complex and novel ways is seemingly what differentiates humans from all other species. What makes us even more distinct, indeed the *secret* to our species' success according to Henrich (2015), is the ability to transmit and distribute this knowledge and know-how across communities and over generations via an elaborated processes of cultural adaptation and transmission. We use various techniques and technologies to alter and manipulate the environment and overcome the inherent limitations of our physical bodies and circumstances. We build order into the world and structure our lives and minds and societies around it, with structures that are then passed over generations through cultural inheritance, structures that seemingly vary in every conceivable way, according to the specifics of their time and place. Kim Sterelny has described this process as 'epistemic engineering', the "organizing of our physical environment in ways that enhance our information-processing capacities" (Sterelny, 2012, p. xii). The ecological conditions and specific circumstances of a given population have a crucial role in 'scaffolding' the cognitive activities of its members, leading

⁶ Disclaimer: This thesis is primarily a theoretical investigation and interdisciplinary discussion about the Māori haka, which aims to align recent perspectives in cognitive science with overlooked and underappreciated aspects of haka. This, I intend, will be useful for both Māori and Western academics – as it provides a conceptual landscape which upholds the integrity of the Māori perspective while also introducing alternate views in cognitive philosophy in to the conversation. It is, however, beyond the scope of this thesis to provide detailed histories and accounts of all of the introduced theories and perspectives. It is also not intended to be a comprehensive and authoritative account of Māori history and cultural concepts. Rather, this thesis is offered as the beginning of a conversation and academic enquiry, which has potential to be mutually beneficial to both Māori and the sciences of cognition.

to the ability to perform cognitive work that could otherwise not occur (if directed by purely biological inheritance).

Such views are aligned with recent developments in evolutionary theory and the notion of niche construction (see Laland, Odling-Smee and Feldman, 2000). The niche construction perspective explicitly recognizes that organisms modify their environments in ways that modify their own selection pressures and those of subsequent generations. On this view, offspring inherit more than just genes; they also inherit a modified and structured environment, replete with epistemic resources that contribute to their survival and flourishing within it. The niche construction perspective has inspired a number of recent approaches in the philosophy of cognition, which emphasise the epistemic and cognitive role that cultural structures have in scaffolding, and in some accounts constituting part of, the cognitive processes of people in any given culture (Wilson and Clark, 2009; Hutchins, 2014). These views take seriously the fact that humans are embedded in cultural ecosystems that support and augment our biological and cognitive abilities in distinct ways. According to Andy Clark (2003, p. 10) it is this “capacity to continually restructure and rebuild our own mental circuitry, courtesy of an empowering web of culture, education, technology, and artifacts” that makes us distinctively effective adaptors. This aligns with the notion that the brain is “our most cultural organ”, as Daniel Lende and Greg Downey put it (2012, p. 28):

the human nervous system is especially adept at projecting mental constructs onto the world, transforming the environment into a socio-cognitive niche that scaffolds and extends the brain’s abilities. This niche is constructed through social relationships; accumulating material culture and technology; and the physical environments, ritual patterns, and symbolic constructs that shape behavior and ideas, create divisions, and pattern lives. Thus, our brains become encultured through reciprocal processes of externalization and internalization, where we use the material world to think and act, even as that world shapes our cognitive capacities, sensory systems and response patterns.

These streams of thought and research draw attention to the active and dynamic role of cultural patterns in neurological and cognitive development and activity, and to the significance of specific cultural

practices in achieving specific cognitive outcomes. This situation has had significant implications for the way that cognition is conceived of. Overlooking the cultural nature of human activities, as Henrich (2015) points out, can lead to misattributing evolutionary and societal ‘success’ to the intelligence of individual brains that better belongs to the process of cumulative culture. Moreover, neglecting cultural forms when investigating cognitive acts, as Hutchins (1995) points out, can result in the misattribution of cognitive properties and processes to individual brains alone that actually belong to distributed cognitive systems.

Cognitive Ecology

Recent and productive approaches to cognition have re-considered the contributions of the body and the environment in cognitive processes. The resulting view is an “image of mind as inextricably interwoven with body, world, and action” (Clark, 1997). These views have been variously characterized as embodied, embedded, extended, or distributed (see for an overview of the conceptual geography, Menary, 2010). As a developing field there are of course differences across these perspectives, however they are united in their rejection of an individualist approach, as in the ‘classical sandwich model’ (Hurley, 2001) which views ‘cognition’ as segregated from processing in low-level systems, where perception is ‘input’ and action is ‘output’, and cognition is ‘embreaded’ in-between.

Distributed Cognition and the Extended Mind theory are two influential accounts within this literature, which each posit that the mind spreads across or extends into its local environments (Clark and Chalmers, 1998; Hutchins, 1995). Instead of ‘cognition’ being an activity that is confined to the inner workings of individual brains, these models present an integrative and ‘hybrid’ view of cognition, in which cognitive systems extend into physical and social systems. The principles of Distributed Cognition were laid out in Edwin Hutchins’ book, *Cognition in the Wild* (1995), which presents a cross-cultural ethnographic study of navigation as an example of naturally situated and distributed cognitive systems. Distributed Cognition redefines the boundaries of the cognitive unit of analysis to include all of the functional relationships that exist among agents and artifacts that contribute to a cognitive task being performed (Hollan, Kirsh and Hutchins, 2000). Fundamental to this approach is that claim that cognition is not separable from culture, because agents exist in complex cultural environments. By

altering assumptions to do with the location and acquisition of ‘cognitive practices’ a more flexible and inclusive way of investigating such processes is achieved. This approach directs empirical investigations into specific cognitive systems, wherever they occur, to examine the unique coordination dynamics among the components of the distributed cognitive system (be they within the head, or spread out across multiple agents and artifacts).

Cognitive Ecology is an integrative framework which has emerged out of these approaches (see, Hutchins, 2010; Tribble and Sutton, 2011). Understanding cognitive ecology, as advocated by Hutchins (2008), is ‘an anti-reductionist move’ – as rather than attempting to decompose “the person/culture/environment system into smaller and smaller structural pieces”, we instead “attempt to examine functional constellations”. This leads to the crossing of many traditional disciplinary and analytic boundaries. Tribble and Sutton (2011) describe how the cognitive ecological approach enriches the engagement of cognitive science with early modern studies, particularly in the context of material history and performance studies. They demonstrate how the cognitive ecology approach helps to develop ‘theoretically and historically informed accounts of skill, within a genuinely embodied and extended model of cognition’. The benefit of using such an account is that it does not privilege the operations of individual brains in the achievement of cognitive aims, and more aptly accounts for the spread of processing achieved in collaboration with other agents, artifacts and environments. Within these views, the material dimensions of culture, like tools, clothing and infrastructure, and all manner of artefacts, take on a new significance. The implications of this are beginning to be realized and implemented across a wide variety of fields, (including within archaeology and historical studies cf. Material Engagement Theory, Malafouris, 2013).

In recent and relevant work, Evelyn Tribble and Nicholas Keene, in *Cognitive Ecologies and the History of Remembering* (2011), utilize the cognitive ecological approach to examine aspects of religious practice in early modern England. They present a number of case studies which consider the ways in which changes in ecologies, such as the availability of cognitive artefacts and shifts in social systems, alters the availability of certain ways of remembering. This pioneering work is valuable precedent for this current investigation of the Māori haka. Further, and more specific, precedent has been set by David

Murphy (2013), in a PhD dissertation on *Māori Orality and Extended Cognition*, who used a cognitive ecological approach to examine memory in the context of oral traditions in the Pacific. Murphy presents a case study looking at how the organisation of geographical locations in Māori myths serve cognitive functions by structuring narratives in certain ways. The dissertation also addresses mechanisms for transmitting knowledge across generations, and the role of these ecologies in supporting the stability and fidelity of the transmission of Māori knowledge; haka, however, was not considered in that project. Murphy (2013) demonstrates the productive potential of the cognitive ecological approach in a Māori context – as it does not try to force Māori cultural concepts into preconceived categories, but follows the directives of the practices as they occur in their natural socio-cultural settings and uses. Both works demonstrate the utility of the ecological approach to cognition for understanding the cognitive aspects of cultural practices, particularly in their historical contexts. The current project is complementary to these efforts, towards further describing the cognitive ecology of the Māori.

A (Very) Brief History of Māori

The Māori⁷ are the indigenous peoples of Aotearoa (The Land of the Long White Cloud), now also known as New Zealand. The first Māori arrived on the large islands in the south-west of the Pacific Ocean around 800 - 1000 years ago by canoe, travelling from their ancestral homelands of Hawai'i⁸. For over 600 years the Māori lived and flourished in these isolated islands at the southern end of the earth, during which they developed a unique and creative culture. Māori define themselves by Iwi (tribes), which are based on the waka (canoe) by which their ancestors came to Aotearoa, or named after an illustrious tipuna (ancestor). Over the centuries, the Māori developed harmonious relationships with the diverse landscapes and natural features of Aotearoa, managed by a holistic and ecologically minded natural philosophy (Patterson, 2000). They also developed an elaborate artistic and oral culture,

⁷ The term Māori only came to be applied as an identity marker after the arrival of Europeans. The term itself simply means 'native' or 'indigenous'. Māori are not a homogenous group, but a collection of nation tribes which each have their own identity and histories. There are large overlaps among the beliefs and practices of the different tribes, and haka is a common practice among them.

⁸ The location of Hawai'i and the origins of the Māori remain a disputed topic, although most accounts posit an Eastern Polynesian origin. For brief overview see: K. R. Howe, 'Ideas of Māori origins - 1920s–2000: new understanding', Te Ara - the Encyclopedia of New Zealand, <http://www.TeAra.govt.nz/en/ideas-of-Māori-origins/page-5>).

replete with sophisticated practices for maintaining cultural knowledge through structured story-telling, carving, tattoo, weaving and a host of musical arts (Rewi, 2010).

Māori history⁹ is generally considered in terms of pre- and post- contact and colonisation by Europeans, which began after 1769 and the expeditions of Captain James Cook, followed by a large number of European settlers and missionaries. The structure of Māori society was, and is, based around Iwi (tribes), which are further subdivided into hapū (clans or subtribes), that are further made up of whānau (extended families). At the time of the arrival of the Europeans, the Māori population is estimated to have been between 100, 000 and 200,000 (Pool, 1991). Over the following century, and the course of European colonisation, the Māori population declined to reach a low point of 42,000 in 1896; primarily due to introduced diseases and warring (both inter-tribal and with colonists). With the influx of European settlers during the period of 1840 – 1900, the Māori came to comprise less than 1% of the New Zealand population, causing many to speculate that the Māori may die out altogether (King, 2003). However, after the turn of the 20th century the Māori population began to recuperate as health practices improved and tribes adapted to the changing ecology of their homelands. As with all colonised populations, Māori suffered devastating losses of culture and history. As an oral culture, the loss of language has had particularly insidious consequences for Māori. Since the 1970s, a concerted effort has been made to revive Māori culture, with an emphasis being placed on the rejuvenation of Māori performing arts and language (Williams, 2006). Among these efforts, the performance of haka has been a key feature.

The Māori Haka

‘Haka’ means ‘dance’ in the Māori language, and is a “generic term for a range of performances involving movement and chanting or song” (Gardiner, 2007). Haka have been described generally as “a posture dance accompanied by chanted or shouted song”, however the complexity of ‘what haka actually is’ is very difficult to capture and translate in words (Matthews, 2004). A Māori perspective, provided by Valence Smith (2003; 2017, p. 12), explains that haka is a genre of waiata (song or chant),

⁹ For further information, see 'History of New Zealand, 1769-1914 ' at: <https://nzhistory.govt.nz/culture/history-of-new-zealand-1769-1914>.

which conveys a kaupapa, (a message) that is ignited by the *kā* (the spark) and fuelled by the *hā* (the breath) which is the actualization of *mauri*, (the life force, the life principle).

The ethnographer Elsdon Best, in *The Māori as he was* (1924), provides an account of haka formed in contrast with European culture and customs:

Of all forms of amusement indulged in by the Māori in former times perhaps none were so much appreciated as the haka, or posture dance. The haka may be described as a series of rhythmical movements of limbs and body accompanied by a song, or at least by a series of short refrains. This recreation was indulged in frequently and by both sexes. Public feeling often found expression in the form of a haka, and they were organized in connection with a multitude of subjects. Where we write to the papers to ventilate or right some wrong or grievance, the Māori composes a haka directed against his detractor or opponent. Where we sedately shake hands with a party of guests on their arrival, the Māori chanted rhythmic refrains to them, accompanied by vigorous and equally rhythmical action: this as a welcome. These effusions were composed in connection with many matters. In some cases the arms alone were brought into play in time to the words; in others the legs and the whole body were violently exercised. The war-dance itself is really a haka performed with arms in hand...

This account provides an indication of the variety of social functions that haka were directed towards, although the descriptions and translations of this kind, as ‘amusements’ or ‘pastimes’¹⁰, fail to capture the full significance of the practice. As the late Hamana Mahuika of Ngati Porou has said¹¹, haka was “...not merely a pastime, but it was also a custom of high social importance in the welcoming and entertainment of visitors. Tribal reputation often rose or fell on their ability to perform the haka” (as quoted in Kāretu, 1993, p. 25). That is because the performance of haka communicates and reveals much more than may be gleaned from an outside view, looking down. The most apt description of

¹⁰ Best, E. (1925). Games and pastimes of the Māori: an account of various exercises, games and pastimes of the natives of New Zealand, as practised in former times; including some information concerning their vocal and instrumental music: Printed by Whitcombe and Tombs limited.

haka, according to Māori cultural exponent Timoti Kāretu (1993), comes from Alan Armstrong (1964, p. 119), in his book *Māori Games and Haka*, which has it defined and described as:

The haka is a composition played by many instruments. Hands, feet, legs, body, voice, tongue and eyes all play their part in blending together to convey in their fullness the challenge, welcome, exultation, defiance or contempt of the words.

It is disciplined, yet emotional. More than any other aspect of Māori culture, this complex dance is an expression of the passion, vigour and identity of the race. It is at its best, truly, a message of the soul expressed by words and posture...

All of these descriptions speak to the complexity of haka and its centrality to Māori life, both in terms of expressing and reaffirming tribal identity, as well as the social and emotional functions it serves.

The origins of haka extend as far back in time as Māori history goes, and beyond that further, into myth and legend. According to the most common origin story: Tamanuitera, the sun god, had two wives: Hineraumati the summer maid, and Hinetakurua the winter maid. Tamanuitera and Hineraumati had a son called Tanerore. During the hot days of summer, when Hineraumati returns to visit the earth, a quivering of the air can be seen just above the ground. This is Tanerore dancing for his mother, Te haka a Tanerore (The dance of Tanerore), and is said to be the origin of all haka. Tanerore's dancing is represented in the quivering motion of the hands (wiriwiri), still seen in haka today.

The western and wider world is most familiar with haka through its usage by the New Zealand Rugby team, the All Blacks. The team have performed the haka 'Ka mate, ka mate', as part of their pre-game ritual for over 100 years (see Sullivan, 2005). The All-Blacks have dominated world rugby for much of the past century, and the intensity, strength and coordination that the team displays on the field has often been associated with their performance of haka before the match. As a result, for much of the world this haka has become emblematic of all Māori culture. However, due to its appropriation, commodification and debasement of words and forms, Timoti Kāretu (1993) suggests that it has also "become the most performed, the most maligned, and the most abused of all haka". The use of haka in the context of a competitive contact sport has further contributed to the hyper masculine imagery attached to modern

Māori culture and the common misconception that haka is purely a ‘traditional war dance’ (Hokowhitu 2014). Haka were not, as commonly thought, performed only by men. In fact, some haka were performed by only women, others by both sexes. The travelling artist, Augustus Earle (1827) was “astonished to find that their women mixed in the dance indiscriminately with the men and went through all those horrid gestures with seemingly as much pleasure as the warriors themselves” (in Armstrong, 1964, p. 124).

The notion that haka is simply a ‘war-dance’ obscures the reality of the practice and its many varieties. In fact, many different kinds of haka are performed for different purposes and occasions – “haka run the whole gamut of human experience” (Kāretu, 1993, p. 33). As Māori writer Arapeta Awatere (1975, p. 513) writes, each has “its own convention: its own style of actions, postures, accoutrements, and presentation, and fulfils a social function in a social situation, be that situation physically actual and factual or be it, in the mytho-poetic mind, there and then, or an imagined, symbolic one.” Māori scholar Nathan Matthews (2004) provides an account of the different classes of haka based on their functions, and distinguishes between haka performed for warfare, ceremony and multi-purpose¹²: *Peruperu*, is the true war-dance, which was performed by warriors, with weapons, on the battlefield. *Puha*, is a kind of peruperu, but it can also be used outside of battle and without weapons, as a call to arms and to raise the alarm. *Ngeri*, is an ‘exhortation’ used to rouse a group to achieve its purpose or goal, whatever it may be, although not used in battle or war. There are generally no set actions to Ngeri, as the performers are free to express themselves with whatever actions they deem appropriate. The popular haka ‘Ka mate, Ka mate’ was originally composed as a Ngeri, however it is generally performed as a haka taparahi today. *Haka taparahi*, are ceremonial dances, performed without weapons, and are often utilised for the transmission of social and political messages. Most haka performed today are haka taparahi. *Haka powhiri*, or haka of welcome, are composed and performed specifically for welcoming guests onto a marae (meeting grounds). *Tuutuungaraahu* – also known as *ngaarahu*, *whakatuu-waewae*, and *whakare warewa*, is a divinatory dance that would be performed by a war-party prior to leaving for

¹² There are more, and different, terms for other types of haka, from different tribal regions. However, the haka presented here capture the main and most common kinds described.

battle. Elders and experienced warriors would watch the performance and judge whether the performers were in shape or not, looking for weak spots and performers that were out of time or dragging their feet and not performing well as part of the group. From these observations they would predict how the group would fare in the battle, or take actions to intervene.

Haka are context and function specific, although they are also somewhat flexible and adaptable within these categories. The same haka, when performed in different circumstances, takes on different significance and has a different effect. The descriptions also speak to the instrumental value that haka can have, as in the case of *tuutuungaraahu*, the divinatory haka, where the performance of the group reveals practical information about how prepared and unified they are before a battle; a circumstance in which the warriors must coordinate and cooperate among themselves under threat of grave consequence.

As a collective form of musical ritual haka are specific patterns of practice that have developmental, educational, societal and historical significance for Māori people. Multiple layers of meaning are embedded into the actions and content of each haka, from specific genealogies and historical episodes to the representation of local environmental features. The way in which these meanings are imbued, embodied and transmitted through haka performance is a primary interest of this investigation. As part of the cumulative cultural inheritance of the Māori people haka is a practice which confers cognitive and epistemic benefits. Each haka composition is part of the material culture of Māori *iwi*, and a vehicle for the transgenerational preservation of knowledge (history, genealogy, cosmogony, worldview). It is also a practice which educates the body and the social coordination of a group in very specific ways (training cooperation, motor skills, joint actions – these topics will be taken up in Chapters 2 and 3). Haka provides an avenue for the expression of certain emotional qualities in performers and groups (joy and sorrow, grief and pride, anger and protest) – these features are maintained by its formalised function as a commemorative practice, performed to invoke a connection to ancestry and present *whānau* (extended family) (This will be examined in Chapter 4). As traditionally an oral culture, all of the performing art forms are valued as oral literature, with haka being considered to be a preeminent form (Kāretu, 1993). As such, haka from the past contain historically relevant and insightful information,

making them an essential source of information, akin to an archive of Māori political and sociocultural history (see Ka’Mahuta, 2010). In contemporary times, haka is recognised as an important practice for the intergenerational continuity of cultural knowledge, and it is considered highly significant for building and maintaining relationships, connectedness, and community resilience (Nga Hua a Tanerore, 2014). Its importance, however, is primarily understood in terms of its ‘traditional cultural value’, as an important part of a cultural history that is supportive of a modern ‘Māori identity’, as opposed to an understanding of how the practice of haka itself can facilitate these processes.

Haka performance

Haka may be performed in a variety of formations; however, it was common for a performing group to be arranged in a wedge shape or a hollow square¹³. Groups may consist of anywhere from a few people, to a dozen or so, to upwards of a hundred; however, the standard group consists of around 20 people. Prior to the performance, the performers adopt a stance of ‘relaxed readiness’, waiting for the leader to commence the haka. The haka leader (called, Kaea or Kaitataki), has been likened to the conductor of an orchestra (Armstrong, 1964) or an army drill sergeant (Tovey, 1998); as it is the leader who sets the rhythm and mood for the performance, and provides punctuation and guidance for the group. There are few restrictions on the leader, who is free to move among the rows of performers. They do not, however, move in front of the performing group at any time. A typical haka will begin with the Kaea providing the order “Kia mau!” (Be ready!) and instructions for the group to prepare the body and mind for the performance. The leader may say something like¹⁴:

Ringa Pakia	Slap the hands against the thighs
Uma tiraha	Puff out the chest
Turi whatia	Bend the knees
Hope whai ake	Let the hips follow
Waewae takahia kia kino	Stamp the feet as hard as you can

¹³ Variations existed between tribes, and types of haka. This overview is a general picture, constructed mainly from Armstrong (1964), Karetu (1993), Matthews (2004), Best (1924).

¹⁴ This is a haka from Te Arawa, as appears in Kāretu (1993).

With each instruction called by the Kaea, the group commences with the action. They find and settle into a common rhythm with one another, and then commence the haka performance. A haka generally lasts around 3-5 minutes, and depending on the setting of the performance, may be repeated or followed by other formal features of ceremony – such as during haka powhiri (welcome).

Haka are notoriously difficult to translate into English, particularly older haka – as the language is highly metaphorical and contains locally contingent references and aphorisms with many layers (Armstrong, 1964; Ka’-ai-Mahuta, 2010). For an example of a haka, which has been translated by its composer, see ‘Te Haka Tanerore’ on the following page. In a demonstration of the kind of content which haka can reflect, this particular haka describes ‘haka’ itself, its origins and features, and significance.

‘Te Haka Tanerore’ - composed by Timoti Kāretu¹⁵

Kaitataki:	Whakaronga rua aku taringa nga kupu a te hunga mate e hakiri ake ana	Leader:	I hearken to the words of my ancestors resounding in my ears.
Katoa:	Ko te haka he tohu whenua rangatira Ko te whakatinanatanga o nga ihi o te ra I nga wa o te raumati E tau ana ki runga I a Papa-tu-a-nuku e takoto nei	All:	The haka is a symbol of a noble land, It is the embodiment of the rays of the sun In the days of summer, Settling on Mother Earth lying beneath me.
Kaitataki:	E ai ki nga korero, tokorua nga wahine a Tama-nui-te-ra	Leader:	According to legend, Tama-nui-te-ra had two wives
Katoa:	Aue! Ko Hine-raimati, ko Hine-takurua Ka puta ki waho ko ta Hine-raumati Ko Taner-rore, ko Tane-rore e	All:	Aye! Hine-raumati and Hine-takurua And it was Hine-raumati Who gave birth to Tane-rore
Kaitataki:	He aha te koha mai a Tane-rore kit e ao Māori?	Leader:	What was Tane-rore’s gift to the world of the Māori?
Katoa:	Ko te haka, e ko te haka I puta ait e korero ‘E tu I te tu a Tane-ror, e haka I te haka a Tane-rore Kaua I te tu, I te haka a te keretao	All:	The haka! Aye, the haka! Hence the saying, ‘Adopt a stance of tane-rore And haka as tane-rore does, Do not adopt a puppet’s stance Nor perform as one!’
Kaitataki:	Ko te taonga nui o te haka?	Leader:	What are the essential features of the haka?
Katoa:	Ko te whakaioio o te tinana Ko te pukana o te karu Ko te whetero o te arero kia tapapa tonu ki waho, ha! Koinei ra hoki te ara E puta ai nga whakaaro o te hinengaro A, ha! ha!	All:	That the body be virile and sinewy, The eyes be expressive, And the tongue protrude full length, For this is the avenue, Whereby the thoughts of the mind are expressed. A! ha! ha!
Kaitataki:	Ki o tatoe tipuna, kaore he huna o te kupu e	Leader:	Our elders were never afraid to say what they meant!
Katoa:	He tika ra! He ika ra! I nehera, kaore he haka tatakimori Hou tonu atu ki nga wahi tapu o te tane, o te wahine Nga kupu horetiti, nga kupu nohunohu, e Puritia te haka kie mau, kia ita Ko te haka hoki he kupu korero He mea whakairo e te ngakau He mea whakapuaki e te mangai He mea whakatu e te tinana Aue, aue, aue taukuri e!	All:	That is so true! In days gone by, no haka was meaningless, No human activity sacrosanct, Descriptions were explicit and graphic A! ha! ha! Therefore let us treasure the haka, For the haka is a message, Born of the soul, Spoken by the mouth, And expressed by the body, So be it!

¹⁵ Appears in Kāretu (1993, p. 22-24)

Chapter 2:

Moving and Feeling Together

This chapter examines the affective aspects of haka - a dance that is ‘disciplined, yet emotional’ and a ‘music of overwhelming force’ (Armstrong, 1964; de Sainson, 1826). In particular, it explores how the coordination dynamics of a haka ensemble and performance help to express, enhance and regulate the emotional experiences of performers; while also affecting the audience in interesting ways. To begin, I present further details and historic accounts of haka which provide insight into some of the mechanisms at work. I review some relevant literature on collective and coordinated group actions, focusing on recent research on the socio-affective effects of synchrony. I then follow recent trends in the philosophy of emotion and consider how a distributed and situated approach to understanding affective phenomena can help us to better parse the emotional dynamics of haka.

Movement and Affect in Haka

Haka is “the supreme expression of the Māori sense of rhythm and timing”, according to Armstrong (1964, p. 124). This claim is supported by numerous historical mentions of haka compiled by ethnomusicologist Mervin McLean, in his book *Māori Music* (1996), which reveal that the rhythm and coordination displayed in haka impressed many early explorers and missionaries, who variously described the synchronised movements as being ‘correct’, ‘exact’, ‘excellent’, ‘marvellous’, ‘perfect’ or ‘proper’ (McLean, 1996, p. 82). Captain Richard A. Cruise, in his *Journal of 10 Months Residence in New Zealand* (1824) writes of a haka performance he witnessed in 1820:

It is singular how simultaneous even the slightest motion of the fingers is, with all the individuals in the group, be their number what it may; no irregularity is perceptible in the time and manner of their movements.

Other writers observed that the dancers perform ‘as if they are one person’ (Thomson, 1859), as if ‘actuated by one impulse’ (Polack, 1832) or ‘moved by one wire’ (St. John, 1873; in McLean, 1996, p. 81). The precision and uniformity of actions in haka is just one aspect of the practice that impressed early western audiences, however, the most immediate reaction was often one of fear and confusion.

On this, Augustus Earle (1827), a draughtsman on the renowned surveying ship 'The Beagle' remarks (in Best, 1905):

The dances of all savage nations are beautiful, but those of the New Zealanders partake also of the horrible. The regularity of their movements is truly astonishing, and the song, which always accompanies a dance, is most harmonious. They soon work themselves up to a pitch of phrensy; the distortions of their face and body are truly dreadful, and fill the mind with horror.

Such descriptions give substance and colour to the impressive effect of haka, on both the performers and audience; the affective arousal achieving a state of 'phrensy' in the performers and 'horror' in the unfamiliar audience. With the assumption that haka is primarily a 'war-dance', performed to intimidate enemy audiences and motivate the performing warriors before battle, it is a small leap to interpret the intensity and fierceness expressed in haka performed in other contexts to be merely symbolic of, or referent to, these 'war-dance' origins. As it was, the early Europeans were at a loss to understand how a 'war-dance' could be performed as a 'welcome', as they could not understand, or differentiate, what was being communicated through different haka. The reality is that haka were composed and performed about all manner of topics, both sacred and profane, though all versions share in high levels of physical and affective intensity. Māori scholar Nathan Matthews (2004, p. 14), tells us:

Haka are composed in a way that ensures that performers understand the meaning contained in the composition and, subsequently, allows the performers to resonate this meaning through physical performance. Complete understanding of the message contained in the haka can only be obtained by understanding the significance of the words and culture, and by having appropriate actions arranged and performed to reinforce those words. There should be a fierceness of action in the haka, punctuated by appropriate actions by the individual performer to express his own personality.

A number of things are apparent from this account. In haka composition, the words and actions, are mutually reinforcing, such that the message may be conveyed in a fullness beyond mere verbal expression. There is a common vocabulary of physical actions which embody cultural concepts and are

understood by all performers and culturally informed audiences – those with shared language and history. Although the driving force behind haka is the rhythmic unison of the performing group, there is also room for individual expression within this process. The multimodal nature of haka allows multiple ways of self-expression within the exercise of collective expression. For example, the beat may be kept constant by all performers through the stamping of the feet, just as the arms may slap the chest in perfect synchrony. But within these constant actions an individual performer may depart from the group for a moment, perhaps breaking from chanting every word, and express their own personality through their actions, for example by pukana (wild staring/roll the eyes), whetero (protruding of the tongue). Such actions are performed as complementary to the message of the composition and the actions of the rest of the group. Also apparent is that although the actions in haka are always strong and fierce, they may actually have a friendly intent, depending on the circumstances of the performance and the message of the specific haka composition. This is less of a contradiction between message and method than it may seem, and more of a difference in cultural forms and norms of expression.

In haka, full effort and energy are expected of all performers in every instance, as further emphasised by Armstrong (1964, p. 123), who writes: “in haka the sentiment expressed may well be peaceful, but the actions must still be vehement to convey the requisite heartiness and sincerity. They must be crisp, decisive and purposeful. Above all, the performers must perform in perfect unison... this was indispensable in olden times”. These features of haka are fostered by socio-cultural expectations of active participation by all performers and an acknowledged criterion for an effective performance which leaves no room for lacklustre efforts. An effective performance requires so much energy, both physical and psychological, that after it is finished the performers are expected to be completely exhausted.

These descriptions point to the significance of synchronous actions and affective arousal achieved through the highly physical performance of haka; in order to better understand these features, I now consider recent research into coordinated group actions.

Collective Movements and Affect

Culturally evolved forms of collective behaviours and rituals, such as dancing, singing and chanting, often unfold through coordinated actions in synchronized forms. The ubiquity and prominence of these kinds of collective rituals and actions has prompted many anthropologists and sociologists to posit that they must facilitate certain social functions, perhaps serving as a kind of social-glue that binds groups together (Durkheim, 1995/1912; Collins, 2004). One of the more palpable effects of these rhythmic actions in rituals, particularly apparent in haka, is the affective arousal that is produced. Dancing, singing and generally moving in time together have been known to give rise to emotional experiences that are seemingly unavailable to individuals in other settings, experiences of ecstatic joy and even altered states of consciousness (Ehrenreich, 2007). ‘Collective effervescence’ was the term Emile Durkheim used to describe the immersive emotional phenomenon that occurs when groups of individuals gather together in ritual, a phenomenon in which “a sort of electricity is generated from their closeness and quickly launches them to an extraordinary height of exaltation” (1995/1912, p. 217). Shared emotional arousal is a key ingredient in this scenario, which is experienced both “mentally and physically” and further “binds people to the ideals valued by their social group” (Shilling and Mellor, 1998, p. 196). The shared passion or ecstasy induced by such rituals has been claimed to result in a kind of emotional bonding, the effects of which spill over into the everyday functioning of the society in the form of enhanced social cohesion and increased cooperation.

Further work on this topic was presented by William McNeill, in *Keeping Together in Time: Dance and Drill in Human History* (1995), which considered the significance of activities involving moving and feeling together in unison to the maintenance of social bonds. Through an examination of a diverse set of cultural rituals and practices throughout history, McNeill proposed that “moving our muscles rhythmically and giving voice consolidate group solidarity by altering human feelings” (1995, p. viii). Recalling his personal experience marching in military drills, McNeill writes (1995, pg. 2):

Words are inadequate to describe the emotion aroused by the prolonged movement in unison that drilling involved. A sense of pervasive well-being is what I recall; more specifically, a strange sense of personal enlargement; a sort of swelling out, becoming bigger than life, thanks

to participation in collective ritual. But such phrases are far too analytical to do justice to the experience.

The ‘strange sense of personal enlargement’ noted by McNeill is a hallmark feature of the collective ritual experience; the phenomenological experience of which has been described as a kind of weakening in the boundaries between the personal, individual self, and the agency of the collective (Hove, 2008; Tarr, Launay and Dunbar, 2014). Recent empirical studies have produced converging evidence in support of the solidarity-enhancing effects of synchronous actions, in addition to a range of other interesting effects.

Studies of Synchronous Actions

An increasing number of investigations have examined the socio-affective dimensions of group behaviours that involve synchrony¹⁶. In the context of collective behaviours, ‘synchrony’ refers to the matching of actions in time with others, as in the interpersonal matching of rhythmic behaviour (Hove and Risen, 2009; Reddish et al., 2016). Synchronous action has been cited as an important mechanism in social bonding (Wiltermuth and Heath, 2009; Valdesolo and DeSteno, 2011; Launay et al., 2013).

In presenting their empirical work on the effects of verbal synchrony on cooperation and cognition in large groups, von Zimmermann and Richardson (2016) make the connection between the synchronised actions performed by the New Zealand All Blacks in their pre-match haka and their success on the rugby field; they speculate that “the haka might scare the enemy on the battlefield or rugby pitch, but it might also strengthen intragroup bonds and have a significant impact on the group’s performance” (von Zimmermann and Richardson, 2016, p. 1). This suggestion is in line with their study, which found that verbal synchrony (chanting words together in a group) increased affiliation among participants, enhanced memory performance (recall of words), and increased participants’ coordinative efforts in a subsequent joint action task (video game). These findings join a growing set of studies which have

¹⁶ ‘Synchrony’, refers to a kind of coordination among components of a system in which activity occurs simultaneously. In interpersonal coordination, synchrony has been conceived in a number of ways, primarily as ‘behavioural matching’ (same action, same time) but also as ‘interactional synchrony’ which is movement matched in time, though not necessarily type. Here, I focus on the ‘behavioural matching’ kind.

begun to unpack the socio-affective and cognitive dimensions of synchronous actions. Synchrony has been linked to higher levels of pro-sociality – defined as helpfulness, compassion, liking and cooperation - towards co-performers (Hove and Risen, 2009; Valdesolo et al., 2010; Reddish, Fischer and Bulbulia, 2013; Launay, Dean and Bailes, 2014); increases perceived social connectedness (Lumsden, Miles and Macrae, 2014); improves memory recall of words (Macrae, Duffy, Miles and Lawrence, 2008); and a host of other effects.

In a helpful effort to get a handle on the general situation in synchrony studies, Mogan, Fischer and Bulbulia (2017) present a meta-analysis of synchrony's effects on behaviour, cognition, perception and affect. Utilising 42 independent studies (N = 4327) they performed a systematic analysis of synchrony experiments and found that, in comparison with non-synchronous conditions, synchronous movements and vocalisations (1) increase prosocial behaviours, (2) enhance perceived social bonding, (3) improve social cognition, and (4) increase positive affect. They found “clear support that synchrony as exact behavioural matching increases social bonding behaviours, perceptions and social cognition over and above generally socially coordinated behaviour” (Mogan et al., 2017, p. 19). In addition, it was observed that group size appears to moderate the relationship between synchrony and both pro-social behaviours and positive affect; which increase as group size increases. These findings are taken to imply that distinct mechanisms may be operating to achieve synchrony's effects in different sized groups; Mogan et al. suggest that the impacts on social behaviour, perception and social cognition may be due to attentional processes in small group settings and affective processes in large group settings. This is an interesting dynamic to consider in haka, as standardly the performance would consist of around 20 performers – however there were also instances in which multiple hapū would perform together, in which there may be hundreds of performers¹⁷.

Activities that feature synchrony vary in crucial ways depending on the form and function of the exercise. Some activities are more physical and demanding than others, requiring more effort and

¹⁷ This flexibility of group compositions – in which members can come join in spontaneous performances – is an interesting feature of the practice, which speaks to its normative qualities i.e. common enskilment and education of all members of a culture, such that it was common place for every member to know how to perform a wide repertoire of haka, and could join in performances as the occurred.

training to perform effectively. Haka, through its intensity, is a more physically demanding activity than others and it also requires a high degree of cultural learning and social coordination - as everyone must know the words and the actions before participating. Multi-modal complexity is a defining characteristic of haka, in that multiple layers of activity occur at once: verbal synchrony in chanting the words, movement synchrony in stomping the feet in rhythm and also in the choreographed actions. Further, in haka, the performing group have the express intention of communicating a message through collective expression – which introduces further elements into the mix, as the synchronous actions are not just performed for the effect they have on the performers, but for the effect they have on the audience.

Movement rhythms have been demonstrated to be an important source of information that observers use to infer the extent to which individuals are a social unit – known as ‘perceived entitativity’ (Lakens, 2010). From the perspective of an audience, observing synchronous movements has been shown to increase perceived rapport and judgements about the interpersonal connectedness of the observed group (Miles et al., 2009; Lakens and Stel, 2011). Just listening to audio recording of footsteps marching in synchrony increased assessments of the formidability and cohesion of the perceived group (Fessler and Holbrook, 2016). For Māori, observing a haka performance (within their own tribal groups or watching other groups perform) was a way of assessing the dynamics of the group. If the group performed in tight coordinated synchrony, with intensity and vigour, then they were acknowledged to be a cohesive and formidable group. However, if a group demonstrated poor coordination during haka performance, lacking in energy, then it was taken as an evidence of the groups lack of cohesion and indicative of weakness in their social coordination. These kinds of judgements would have been highly significant and instrumental, not only in the context of warfare, but also in everyday intertribal relations.

Another line of research on synchrony has examined the role of physical exertion in realising the social bonding and cooperation enhancing effects of synchronous activity. Engaging in rhythmic and repetitive behaviours that require a high degree of physical exertion has been known to produce mild euphoric effects, which have been associated with the release of endorphins (commonly measured by changes in pain thresholds). In experiments with college rowers, Cohen, Ejsmond-Frey, Knight, and Dunbar (2009) demonstrated that rowing as part of a group significantly increased participants’ pain

thresholds in comparison to solo rowers. The individual and group conditions were matched for levels of physical exertion (monitored via power output), and experiential effects were well controlled for, which led the authors to claim that “the heightened effect in the group condition appears to have been owing in some way to the effect of working together as a highly coordinated team” (Cohen et al., 2009, p. 107). These findings have been replicated and extended by Tarr, Launay, Cohen and Dunbar (2015) in a group dance context; and in further studies by Philip Sullivan and colleagues (Sullivan, Rickers, Gagnon, Gammage and Peters, 2011; Sullivan, Gagnon, Gammage and Peters, 2015). What these studies indicate is that both synchrony and exertion have independent positive effects on social bonding and pain thresholds (Tarr et al., 2015), and that activities which incorporate both features may have an amplified effect.

Emotions in Context

With the empirical research on the effects of synchrony still in view, I now want to consider how recent positions in the philosophy of emotion can help further unpack the affective aspects of haka. Affect has increasingly been approached and studied as a social and/or group-level phenomenon (Tamminen et al., 2016; Barsade and Gibson, 2012). Further, recent and innovative work has approached the domain of affective phenomena (including feelings, emotions and moods) in a manner consistent with the extended or ‘externalist’ approaches in the philosophy of cognition. The approach naturally follows from the idea of the extended mind and distributed cognition, as Sutton (In press) considers that “if the processes of believing, remembering, and decision-making in certain circumstances spread across neural, bodily, and environmental resources, the same may hold for grieving, loving, and other kinds of feeling.” The details of this approach have been developed in work by Griffiths and Scarantino (2009), and by Joel Krueger, Giovanna Colombetti and colleagues (Krueger, 2014b; 2015a; Krueger and Szanto, 2016; Colombetti and Krueger, 2015; Colombetti and Roberts, 2015; Slaby, 2016). These perspectives stand in contrast to traditions which view affective phenomena as wholly internal individual processes. On these views, generally speaking, our affective experiences arise in coordination with the details of our complex socio-cultural environments, replete with artifacts and other agents, that enable and amplify, as well as shape and constrain, the realisation of affective states in unique ways.

Affective phenomena, as Jan Slaby (2016, p. 2) describes, are “crucially supported and enabled by technology and other kinds of material arrangement” in ways that “are *prior to* and *formative of* individual emotion repertoires and affective-bodily styles”. Similarly, the material dimensions of the social context are acknowledged to “play an ongoing role in scaffolding the real-time performance and experience of emotions” (Krueger, 2014, p. 248). These approaches emphasise the facts of our being embedded in specific and structured socio-cultural environments which mould our minds in unique and adaptive ways, throughout development and across the lifespan, incorporating all kinds of available materials and resources.

These distributed approaches¹⁸ may be seen as a natural development from already popular perspectives, such as the instrumental approach to emotion regulation (Gross, 1998), which considers “the processes by which individuals try to influence the type or amount of emotion they (or others) experience, when they (or others) have them, and how they (or others) experience and express these emotions” (Porat, Halperin, Mannheim and Tamir, 2016, p. 67). However, the distributed perspective does not assume that emotions are bodily bound internal states, stored in our neural tissues, waiting to be drawn out or activated by the right inputs. Instead, emotions are perceived as occurring in coordination with the material and social dimensions of the environments which pattern our lives. Further insight, relevant to the discussion of haka at hand, comes from Colombetti and Roberts (2015, p. 1260) who write:

Occurrent moods and emotional episodes, unfolding over time, can be realized and structured through acts of musical or written expression, for example, in such a way that it does not make sense to single out the neural constituents as the privileged locus of the episode in question. The agent’s capacities for emotional feeling are enhanced in such an encounter; emotional experiences of hitherto-unattainable forms, depths, and clarity are made possible by an individual’s world engaging performances.

¹⁸ There is currently no consensus term which captures all of these views yet, as they are still developing and are subtly different in terms of their emphasis on ‘extended’ or ‘distributed’ aspects. I refer to them all as ‘distributed approaches’ with this caveat in mind.

This account suggests that examining the dynamics of specific situations can lead to a more detailed understanding of the emotional processes that arise through them. This is the task of this section, with regards to the analysis of haka as a distributed cognitive ecology which expresses, enhances and enables affective experiences that are otherwise unavailable to individuals. In approaching this task, I want to look at how features of haka form a situation in which certain affective engagements are possible. Early work by Griffiths and Scarantino (2009) emphasised the role of the social context in “the production and management of an emotion”, and further highlights the reciprocal influence that produced emotions have on an on-going social context. From this perspective emotions are understood as being (Griffiths and Scarantino, 2009):

- (1) Designed to function in a *social context*;
- (2) Forms of *skillful engagement* with the world which need not be mediated by conceptual thought;
- (3) *Scaffolded by the environment*, both synchronically in the unfolding of a particular emotional performance and diachronically, in the acquisition of an emotional repertoire;
- (4) *Dynamically coupled* to an environment which both influences and is influenced by the unfolding of the emotion.

This approach draws attention to the procedural aspects of emotions, as practices which are learned and developed over time, in concert with our social worlds and practices. By considering the situated and distributed aspects of affective engagements in the dynamics of the practice, a more elaborate and nuanced picture may emerge. We may learn more from an affectively engaging practice than we do by merely ascribing social motivations and emotion labels to otherwise ambiguous contexts (i.e – the claim that all haka express anger and aggression in order to intimidate audiences, though also, somehow, express pride and joy and a whole host of other emotions). To begin this account, let’s consider haka – a social situation in which emotions are expressed and experienced - in light of the statements about the situated nature of emotions proposed by Griffiths and Scarantino (2009):

- (1) Emotions are designed to function in a *social context*

Haka are composed and performed for specific and social purposes, whether in general celebrations or in demonstrating defiance to local affairs. In the act of performance, a social context is created in which appropriate emotional expression and experience is not just socially accepted, but is expected, and socially enhanced, collectively supported and meaningfully directed.

- (2) Emotions are forms of *skillful engagement* with the world which need not be mediated by conceptual thought

Bodily and socially coordinated skilful engagement through haka arouses affective responses which in themselves do not require conceptual (or symbolic) thought. In the bodily performance and expression of affect, there need not be a formalised or categorised conception of the emotion being expressed. For example, haka performed during tangihanga (funerals) – as a collective expression of, and communion with, the grief and sorrow associated with loss of a tribe member, and the more complicated and ineffable feelings associated with it, find experience and expression in haka.

- (3) Emotions are *scaffolded by the environment*

Haka itself serves as an environmental scaffold for the ‘unfolding’ of emotions in both of the forms described by Griffiths and Scarantino. Synchronically, throughout the performance of haka, emotions ‘unfold’ in the moment-to-moment activity of the activity as directed by the social circumstances of the performance. Diachronically, the practice itself is a socio-cultural resource, which provides emotional scaffolding for a range of different affective phenomena – that are utilised at different times throughout the daily, weekly, yearly calendar, towards different ends. Further, specific haka are transmitted through the culture and over generations, as a means to express and regulate particular emotional experiences via the translation and elaboration of social sentiment through haka performance.

- (4) Emotions are *dynamically coupled* to an environment which both influences and is influenced by the unfolding of the emotion

The dynamic coupling of emotion and environment is an important element of the approach I want to take to haka. Joel Krueger’s work on the ‘musical scaffolds’ and ‘emotional niche construction’ is helpful in making this case. Krueger (2015c) explains that one of the central ways we use music is to

‘actively manipulate social space’: “by selectively engineering our environments with music, it becomes part of a self-stimulating feedback loop that drives, structures, and regulates the development of various embodied processes responsible for emotional action and experience” (Krueger, 2015c, p. 49). Krueger draws our attention to the ‘materiality’ of music, as something that we use and do things with, that is also mediated by artifacts and environments that afford different uses. In this way, music is a material resource for constructing an emotional niche: “a soundworld deliberately used to modify, regulate, and sustain (i.e. scaffold) particular emotional episodes”. (2015c, p. 46). This position and description resonate with the work and words of Tia DeNora (2000, p. 63) who has said that “music is a device or resource to which people turn in order to regulate themselves as aesthetic agents, as feeling, thinking and acting beings in their day-to-day lives”.

Krueger (2015c) is primarily concerned with the active ways in which we *listen* to music, and the various ways music-playing technologies allow for the ‘personalisation of public space’. This, I suggest, is a useful way of approaching haka - even though it is an altogether different and unique kind of music.

Haka is a genre of song (waiata) (Smith, 2003), and to recall Armstrong’s (1964) description, *it is a composition played with many instruments: hands, feet, legs, body, voice, tongue and eyes...* and so the material dimensions of the Māori haka are the composed haka themselves (the choreographed songs) along with the embodied skills and coordinated activity of the performers themselves. As it has been, for the vast majority of human history, music listening has been inextricably connected with music playing, and music playing has been an inherently social and participatory practice. So, if a culture’s musical scaffolds are inherently participatory and social then the affective dimensions they afford would also tend to be, as they rely upon the coordination of the group for it to remain available and effective. For Māori, the performance of haka plays a crucial role in setting the emotional scene of social engagements, but it is also maintained by appropriate protocols for performance in each setting, ensuring that they are carried out consistently and in accordance with cultural beliefs. The practice of haka is therefore mutually supportive of both situated emotional engagements and the ongoing maintenance of the cultural forms and protocols which allow their expression. The flipside of this

picture is that when aspects of material culture are lost, or destroyed by culture stripping forces, the associated repertoire of emotional and cognitive functions are also impacted.

Haka exists only in its active performance, which is achieved through an inherently social interface. As discussed, each haka is a composition, comparable to an annotated song, although it is stored in cultural memory and custom instead of in print. As a composition it is a cultural artefact, and each performance is an engagement with, and realisation of, the function of the composition as it applies to the particular setting of each new performance. Just like material culture, it is transmitted over communities and across generations, which leads to the transmission of a practice that prescribes particular kinds of bodily engagements in a shared social space. Following Krueger (2016), we can see how musical practices, such as haka, may be viewed as forms of ‘intergenerational scaffolding’ which can result in the inhabiting of inherited ‘soundworlds’, along with the kinds of affective states they entail. Inheriting the scaffolds that provide access to specific forms of experience and expression, is an underappreciated area of cultural and cognitive evolution and our understanding of the mechanisms of cultural inheritance and transmission. Furthermore, it is not just the material dimensions of music through haka that are significant for affective engagements and experience, but also the material dimensions of the physical language of the performance itself – as gestures, facial expressions and postures may also play a similar ‘self-stimulating role’ as the musical features (Krueger, 2015c; Clark, 2013). The role of gestures will be considered in the next chapter, while exploring the cognitive aspects of haka.

Chapter 3:

Being Together

In this chapter, I explore some of the cognitive and epistemic aspects of haka¹⁹. First, I discuss the attentional, intentional and perceptual processes at work in the practice and consider further relevant research on collaborative actions. I also discuss how gesture, when considered as a ‘dimension of thinking’ (McNeil, 2005), can further inform our approach to the cognitive aspects of haka. This foregrounding discussion will allow us to then consider one of the more essential functions of haka, which is the expression of group/tribal identity. The connection between identity and haka is a foundational element of the practice, and it is also one of the most difficult to approach or understand on the basis of traditional western views of identity and the self. In approaching this topic, I first present and consult Māori epistemologies, and how they translate in haka performance. With these perspectives in play, I then consider how the recent literature on ‘identity fusion’ may help to navigate this tricky conversation.

Attention and Intentions in haka

When performing haka, each member in the group actively and intentionally coordinates their actions to be in rhythm with the others. The sharing of psychological states which enables these kinds of coordinated and collaborative behaviours has been termed ‘Shared intentionality’ (Tomasello, Carpenter, Call, Behne and Moll, 2005; Tomasello and Carpenter, 2007), which has been associated with the cooperation enhancing effects of synchronous actions (Reddish, Fischer and Bulbulia, 2013). Shared intentionality is considered to be as key aspect of cultural learning, as it requires not only an “understanding of the goals, intentions, and perceptions of other persons”, but also the “motivation to share these things in interaction with others” (Tomasello et al., 2005, p. 676). These are useful ideas to keep in mind as we examine the coordination dynamics in haka performance.

¹⁹ On cognitive/epistemic – I use these terms in line with the position that performing cognitive acts in certain ways has certain epistemic payoffs – where cognitive activity is process and practices, ways of thinking/feeling/doing, and ‘epistemic’ is the kinds of knowing that is produced/revealed through it. For example, reciting Whakapapa (genealogy) is a cognitive process, which utilises a formalised structures and sometimes artifacts to assist, and the way of knowing genealogy afforded by this method is an epistemic product.

In haka performance, the rhythm is first set by the verbal instructions of the haka leader, which is adopted and carried by the group through the temporally matched stamping of feet, and further still by the singing or chanting that is accompanied by actions. Slapping the thighs in time, striking a posture, enacting a gesture, all happens in concert with the words of each haka. It is noteworthy that, throughout haka performance, the performers' eyes remain fixed on the audience, and only move from that direction when following a specific directive action; such as pūkana (dilatating the eyes, performed by both sexes) and pōtētē (the closing of the eyes at different point in the dance, by women only) (Kāretu, 1993). This means that performers must rely on peripheral vision and on spatio-temporal and auditory cues to maintain rhythm and synchrony with the group. The sensorimotor coordination required to perform these rhythmic, percussive actions in time with a large group of people, while also chanting or shouting a poem, must be refined through practice and instruction. These behaviours and abilities are developed throughout childhood, mostly by observation and imitation, and further trained and rehearsed in practice with the group (Armstrong, 1964; Best, 1925). As such, a great deal of effort is put in to make sure that each word is enunciated properly, and in time with the group, and to achieve this properly, breathing (nga), phrasing (kama), and rhythm (rangi) are of highly important and are therefore trained accordingly.

Haka, though often perceived as 'wild' and 'primitive', are actually highly structured and disciplined. Haka performers demonstrate highly developed sensorimotor and cooperative skills expressed and coordinated through activities dependent on the sharing of psychological states and intentions. These skills are developed within localised contexts and reflect local features of each (sub)culture and history - and in their very development inculcate an expression of identity that reflects this situation.

Gesture and Epistemic Actions

Recent and influential positions in psychology have drawn attention to the active role that gestures have in language, learning and other kinds of cognition. David McNeill, in *Gesture and Thought* (2005), provides an illuminating account of language as an 'imagery-language dialectic', and identifies gesture as an integral component in a language system, whose role is to "fuel and propel thought and speech" (McNeill, 2007, p. 20). Gestures, on this view, are not mere accompaniments or 'ornamental' to speech,

instead “*the actual motion of the gesture itself*, is a dimension of meaning” (McNeill, 2005, p. 98. italics in original). In related work, Susan Goldin-Meadow (2003, p. 186) describes how gesture “expands the set of representational tools available to speakers and listeners” in the way that it can “redundantly reflect information represented through verbal formats or it can augment that information, adding nuances possible only through visual or motor formats”. A large body of empirical research has demonstrated that gesturing can promote and enhance learning in children and adults (Cook, Mitchell and Goldin-Meadow, 2008; Goldin-Meadow, 2014).

Much of this research focuses on the spontaneous gestures that occur during speaking and learning tasks. In the case of formalised systems of cultural gestures – that is, culturally prescribed and organised patterns of gesturing - we may approach these actions as part of material resources – that function for both speakers and listeners. McNeill (2005) introduced the concept of a ‘material carrier’ as the “embodiment of meaning in a concrete enactment or material experience”.

Kirsh and Maglio (1994, p. 513) introduced the term ‘epistemic action’ as “physical actions that make mental computation easier, faster, or more reliable”. More precisely, Kirsh and Maglio offer the term to refer to a physical action whose primary function is to improve cognition in one or more of these ways:

1. Reducing the memory involved in mental computation (space complexity)
2. Reducing the number of steps involved in mental computation (time complexity)
3. Reducing the probability of error of mental computation (unreliability)

Epistemic actions are distinguished from ‘pragmatic actions’, whose primary functions are to bring the agent closer to their physical goal. This approach treats the agent as having a more “cooperative and interactional relation with the world”, as the agent both “adapts to the world as found and changes the world, not just pragmatically, which is a first order change, but epistemically, so that the world becomes a place that is easier to adapt to” (Kirsh and Maglio, 1994, p. 546). The concept of an epistemic action, as applied to the context of a collective ritual in dance, may help us to consider some further aspects of the cognitive significance of the actions and gestures in haka.

Gesture in haka is a potent area for investigation, as it involves an extensive and sophisticated repertoire of gestures of various kinds. Haka complicates a straight-forward analysis of gesture, as it involves both spontaneous gestures from individuals, along with the performance of choreographed gestures and actions, as well as actions that are musical devices (e.g. foot-stomping). However, by pointing out the ways in which we can view gestures and actions as material dimensions of thinking, which perform, stimulate and amplify cognitive processing, we can begin to see how the physical aspects of haka – gestures, facial expressions and actions – may contain and contribute more than is currently understood.

Before considering how these processes factor in to haka composition and performance, it is necessary to first discuss some key aspects of Māori epistemology which inform the approach that Māori take to knowing and expressing group identity.

Expressing Group Identity

In Te Ao Māori (the Māori world), a great deal of emphasis is placed on tribal and familial identity. ‘Māori identity’ is an extraordinarily complicated topic to approach, in both contemporary and traditional contexts (Houkamau and Sibley, 2010). Rather than attempt any kind of critical exposition of the literature on Māori identity (see, Mead 2016; Murton, 2012), instead I focus on some important aspects of Māori identity and epistemology that are relevant for understanding how group identity is expressed through haka²⁰.

Traditionally, the identity of the Māori people was established in an ‘ecology devoid of contact with people who were not Māori’ (Moeke-Pickering, 1996). Thus, Māori identified themselves by their tribal structures: primarily by whānau (extended family), then hapū (sub-tribe), Iwi (tribe), waka (ancestral canoe) (Barlow, 1991). Identity was conceived through these tribal structures, and the cultural practices that designate them – language, customs, kinship obligations and traditions - through which identities could be formed and developed in these nested contexts of socialisation (Moeke-Pickering, 1996; Barlow, 1991). These structures and practices are also intimately connected with the geography of tribal regions, connections which have been cultivated over many generations, and contain epistemic and

²⁰ For in depth discussion of Māori epistemology see: Roberts and Wills (1998); Salmond (1985).

spiritual significance to Māori (Walker, 1989). As such, tribal locations and territory markers like mountains and rivers are an intrinsic part of Māori identity (Moeke-Pickering, 1996; Houkamau and Sibley, 2010).

Roberts and Wills (1998, p. 45) explain, that “for Māori, ‘to know’ something is to locate it in time and space”. This process is facilitated by the concept and practice of *Whakapapa* (to place in layers/genealogy). In its genealogical sense, whakapapa provides a formula or framework for understanding historical descent and links, in which everything that exists, animate and inanimate, is connected together in a single ‘family tree’ or ‘taxonomy of the universe’ (Roberts and Wills, 1998). Mere Roberts, in *Mind Maps of the Māori* (2010), describes whakapapa as a kind of cognitive template: “a genealogical framework upon which spiritual, spatial, temporal and biophysical information about a particular place is located”. In practice, whakapapa is used to structure and recall genealogy, and is an area in which the impressive memory feats of Māori have been demonstrated. For example, Elsdon Best (1923, p. 5) describes the appearance of Tamarau Waiari (Ngāi Tūhoe iwi) before a Land Commission tribunal in Rūatoki, where he demonstrated his tribe’s claim to a section of land by recounting their whakapapa. This process took over 3 days, during which Tamarau Waiari provided an oral testimony that included extra-tribal histories and relationships, and contained over 1400 names, going back over 34 generations. Whakapapa is also reflected in pepeha (tribal sayings/formulaic expressions) that are commonly used in introductions²¹, which are “identity axioms linking land and people into a whole in such a way as to make them inseparable” (Murton, 2012, p. 96). Pepeha provide information about the persons tribal identity and ancestry, which may even be given before the person’s name. This is an example from the author’s connection with the Te Urewera region:

Ko Taiarahia te Maunga

Taiarahia is the mountain

Ko Ohinemataroa te Awa

Ohinemataroa is the river

Ko Mataatua te Waka

Mataatua is the ancestral canoe

Ko Tūhoe te Iwi

The people are Tūhoe

²¹ These kinds of references also feature in haka, as they are fundamental structures for thinking about identity.

This enables the listener “to know” the speaker, in terms of origin, ancestry and place (Roberts and Wills, 1998). The reference to place, the mountain and river, identifies the person as a part of this region. The reference to the ancestral canoe, the Mataatua (one of the several voyaging canoes that brought Māori pioneers to Aotearoa), and the tribe, identifies their ancestry and origin. The holistic emphasis of Māori epistemologies (Salmond, 1985), has deep-rooted commitments to the unity of the natural world and its forms, in which elements of nature, including animals and aspects of the environment, like mountains and rivers, are identified as relations - they are literally kin. We can gain further insight into the connection with the land experienced and expressed in haka through the words of a contemporary cultural leader and esteemed haka composer and teacher, Kuini Moehau Reedy (of Ngati Porou Iwi) - from an interview with Horsley (2007):

It is the dance form that is connecting us with the environment; it is trying to keep in sync with everything that's been created. It's that kind of relationship. So, we learn through that.

This relation with the land is reflected in many Māori practices and customs, which are performed in service of it. The connection is further emphasised and enacted when performing haka, in which there is often an invocation of place and history and reference to landmarks and particular whakapapa. As further detailed by Kuini Moehau Reedy:

Being a keeper of those treasures is important for me because this is the language of the soul; it is not just the spoken language, but the body language and it is really important for me to express this through dance and song and chants. That's how it is kept – by just doing it. This is who I am – communicating with the environment and the environment communicating with me. I feel connected and as one with the universe.

Our haka speaks to us through that expression. As a child we had these wonderful songs and chants being sung – ‘we are that mountain (Mt Hikurangi), we are in sync with that mountain – and that mountain speaks to us’. We heard our elders saying to the mountain first thing in morning: ‘He aha te reo o te koroua ra?’ – ‘what is the old man saying today?’ They would

talk to the mountain. It is very metaphorical but it's real for us because we personify so much. It goes back to our traditional beliefs and ethos.

Each Iwi and Hapū have haka that are specific to their history, and ancestors and landscapes²². These specifics are reflected in both the lyrics and style of actions, as the different landscapes of Aotearoa make for different haka styles. Actions and gestures may refer to, or mimic, local features of the environment, which serve to incorporate their defining landmarks into the performance and in this way express the identity of the performing group. For example²³, Ngai Tūhoe, an Iwi from the heavily forested Te Uruwera region of the North Island, would perform haka that reflect, and also complement, that environment – arm actions would be performed tight to the body, as performers would be closer together, as the trees were. Teeth would be shown, as the whites would show through in the dark, misty undergrowth of the forest. Expressive breathing is also used to signify the land, and therefore the identity, of the groups –for example, tribes in the colder climates of the south, use short, sharp breaths, as expressive actions, whereas tribes in windy coastal regions use long, gusty breaths. Stances and postures would represent mountains and other natural phenomena. The different regions also lent distinctive styles of dress, provided by variations in available resources, fauna and flora, which further went to expressing the identity of tribes. By incorporating elements of the environment in to their haka performances, the performance is not only a collective expression of that identity, but also a way of communing with the environment that supports it.

From a Māori perspective, humans are not considered as separate from the natural world, but are essentially a part of it - they are “made *of* nature and live *in* nature” (Clément, 2017, p. 322). Within this framing, haka is revealed to be a “performative, lived experience of the relationship between Māori and the natural world (ao tūroa, taiao)” (Clément, 2017, p.319). The world is not passive in this view, but alive and active, with mountains and rivers acknowledged to be distinct entities with their own identities²⁴. This brief look into Māori epistemology and identity is instructive, as it reveals the essential

²² there are also haka that are considered common across tribes

²³ As provided in an oral history told by Author's relative.

²⁴ Some of these identities have been recognised in NZ law in recent times, such as the Te Uruwera Act 2014, which recognises Te Uruwera (a forest region) as an identity and a legal person in its own right.

orientations that are enacted through haka - which are perhaps the most difficult to comprehend from the perspective of someone outside the culture. In the next section, I introduce and discuss the idea of ‘identity fusion’ and consider how it may be adapted to look at the identity dynamics in haka from another angle.

Identity Fusion

In the previous chapter we briefly considered how collective rituals involving synchronous actions, such as dance, can evoke a feeling of connectedness among performers in which the boundaries between the personal self and the collective become blurred – potentially leading to ‘self-other’ merging (Tarr, Launay and Dunbar, 2014). This feeling and phenomenon is associated with the concept of ‘identity fusion’, which is described as “a unique form of alignment with a group” that entails a “visceral feeling of oneness” (Swann., Jetten, Gomez, Whitehouse and Bastian, 2012, p. 441). The state of identity fusion refers to “a powerful union of the personal and social self, wherein the borders between the two become porous without diminishing the integrity of either construct”. The result of this process is a powerful feeling of connectedness, which in turn, fosters stronger relational ties among group members. As Swann et al., (2010, p. 825) explain, “these sentiments toward the group do not cause fused persons to lose sight of their personal selves or subjugate the personal self to the group. Instead, the fusion process merely adds group-related action as a potential mode of personal self-expression”. This mode of expression extends beyond the bounds of the fusion forming activity, and into the daily operations of the members of the community.

The identity fusion theory is a useful perspective from which to approach the identity dynamics occurring in haka. The highly coordinated, intensely physical and affectively-charged activities of haka, are features which may result in ‘identity fusion’. The ‘visceral feeling of oneness’ is indeed a reported experience during haka, although this feeling is not limited to the boundaries of the group members, but stretches to include nature. So, to take the identity fusion approach a little further, consider how fusion may be extended to include not only the performers in the group, but also between the performers and the land - specifically, their taurangawaewae (place to stand/belonging place). Māori have said that they do not ‘own the land’, but rather, the ‘land owns us’, or even further ‘we are the land’. As discussed in

the previous section, this is not a confusion of language, or a turn of phrase. In a world in which mountains and rivers, trees and seas, have agency and are known to be relatives and ancestors, there is something to be said for the status of these relationships and the role of identity processes in maintaining them. If your identity is fused with your familial group and your local environment, then your actions performed in service of this relationship may be considered as familial action – as indeed it is with Māori – and so the bonds take on an epistemic significance, as do the practices that maintain them.

This admittedly speculative suggestion and conceptual play, provides a way of approaching the bonding dynamic conceived through haka and the relationship with the land, as something operating on a level beyond just an emotional attachment to a particular place, and up on to the level of self and identity. Music has, after all, been described as a ‘technology of the self’ due to the way that musical materials “provide terms and templates for elaborating self-identity” (DeNora, 2000, p. 68). The musical materials in the case of haka are bodies imbued with their environment. On a related note, Krueger (2016) suggests that “if we accept (the Extended Mind Thesis), we should be inclined to accept a similar picture of the self as spread out into the world, partially constituted by the environmental resources that scaffold its thinking, experience and action” (Krueger, 2016, p. 251). It is interesting to point out that this general picture aligns with the way that Mika (2012, p. 1086) describes how the Māori conceive of the self as being “part of the environment, and hence the self’s uptake of anything - emotion, feeling, cognition, even physical attribute - is dependent on the interplay of whakapapa with the natural world”.

The discussion so far has portrayed haka as an epistemic resource, used by Māori to scaffold and coordinate emotional and cooperative actions in service of local socio-cultural goals. These goals include the communication of specific social messages and the expression of collective sentiment towards a variety of matters. In addition, they may also serve intragroup processes and enhance group cohesion and cooperation. which fill out and form the epistemic/cognitive niche of a culture and community, affecting the ongoing development of subsequent generations by patterning their activities in ways that give access to experiences and expressions that are contiguous with those of the past – particularly when the performed in the same environments, using the same parts of material culture that predecessors used. These patterns in haka are not entirely ‘content’ dependent, but are fluid and

adaptable to the time – meaning that it is not so much a matter of recalling the same information as previous generations, as it is about recalling information in the same way. Various forms of memory, in its embodied, affective, distributed and situated dimensions, have been inherently implicated in all of the discussion so far, and will be further considered in the next chapter on commemoration.

Chapter 4:

Remembering Together

Durkheim conceived of ritual as an effective means of putting ‘myth into action’ and considered regular commemorative practices to be a key ingredient in achieving social solidarity. In Te Ao Māori, myth is not so distinguished from history, rather it is seen as being continuous with it - therefore it is fitting that Hemoperiki Hoani Simon (2015) has called haka “cultural and collective memory in action”, as we may understand haka as “a mode that both retains and contains the history” of the Māori people (Hyland, 2014, p. 69). Furthermore, this ‘action’ in commemorating is an essentially interpersonal action - “It is undertaken not only in relation to others and for them but also with them in a common action of communalizing” (Casey, 2000, p. 225). In this chapter, I examine haka as a commemorative ritual, in conversation with Edward Casey’s phenomenological approach to the topic.

Māori Memory

The past is ever-present in Māori culture, which features a range of practices devised to serve the memory of the ancestral past and the knowledge it entails. From routine reflections in the passage of everyday events, as in *karakia* (incantations/prayers) said before many daily activities, to the immersive power of mass re-enactments of historic battles and migrations - the past plays an active role in nearly all areas of Māori social life. The immense value which Māori place on memory is fostered through a host of practices devised to orient attention to episodes in the past, and maintain that information in the unfolding of the future – as captured by the *whakatauki* (proverb) - *Kia whakatōmuri te haere whakamua*²⁵ - which translates as ‘I walk backwards into the future with my eyes fixed on my past’, and is taken to mean, in essence, ‘my past is my present is my future’ (Palmer, 2017).

It is instructive to consider the ways in which the accumulated knowledge of a culture is documented and transmitted over time, particularly in the context of indigenous cultures and oral traditions, which

²⁵ Another version of this proverb is: *Ka mua, ka muri* - ‘We walk backwards into the future’ which reveals the Māori view of time as being cyclic. The Māori word for the ‘past’ or ‘before’ is *mua*, which is also the word for ‘front’. The Māori word for ‘future’ or ‘time to come’ is *muri*, which is also the word for ‘behind’. Therefore, time ‘past’ is the time that came ‘before’. Thus, according to a Māori world-view, the past lies before us (see, Rameka, 2016).

make up the vast majority of human history. The Māori oral tradition contains many mnemonic strategies for learning and recalling knowledge, and passing it down over the generations. The various memory practices within the Māori ecology are mutually reinforcing, with each contributing to the maintenance of the other, and the goal of preserving the Māori way of life and the lessons of history. The practice of whakapapa, as previously discussed, is an essential unifying construct in the Māori cultural/cognitive toolkit – which provides structure for the recounting of multiple layers (genealogies) of information of many kinds. Along with whakapapa, a range of narrative forms are utilised, such as formal oratory, structured myths and origin stories, prayers and blessings that each impart the cumulative wisdom of the preceding generations (Rewi, 2010). Each of these practices remind us, as Booth (2006, p. xi) does, that “memory can reside in places, not mere empty spaces but ones that are intermingled with the inhabited time of human relationships”. The maintenance of these memories, is therefore the conservation of a way of being in communion with these places. These practices, and the importance of memory in Te Ao Māori in general, are also attached to conceptions of identity (as discussed in chapter 3) and the way in which knowledge relates to the landscape itself; knowing your social and physical origins, the connections with history and the activity of other family members across generations, are all of central importance to Māori education and enculturation – allowing many Māori to trace their ancestry back to the arrival of the first canoes in Aotearoa New Zealand around 1000 years ago (King, 2003).

Whakapapa, as noted, is a central concept which provides a unifying framework for approaching knowledge and understanding the history of the world and its contents. According to Hyland (2015, p. 69) haka itself can be seen as “a kind of physical manifestation of whakapapa, or genealogy, reviving and affirming through the narrative, as well as in the distinctive body language of the performance, the mana (status, prestige, charisma) of those who create it”. Haka unites the collective in a performance of ‘tradition’ which few other practices achieve. One of the most affective forms of remembering, in service through haka, is commemoration; which will be examined in detail in the remainder of this chapter.

Haka feature, and themselves function as, commemorative vehicles. Although the specific message of a given haka may be directed at a local, political event or context, the practice itself, through its physicality and forms, re-capitulate the Māori forms of the past and commemorate their place in the present. They are performed to resume the ancestral past and maintain established connections with land and ancestry. Through the re-enactment of ancestral events and the retelling of stories of creation and loss, the bonds with lands and waters are maintained, the interdependence of these relationships are reinforced, along with tribal and personal identity – as tangata whenua, people of the land, and the responsibilities that these relations entail.

Commemoration

‘Commemoration’, as Edward Casey (2000) tells us, is a term that has been used to refer to a kind of ‘intensified remembering’. What makes it ‘intense’ are the formalised structures which support its process, the social services that it facilitates, and the emotional depth of the activity; as Casey writes - “in acts of commemoration remembering is intensified by taking place *through* the interposed agency of a text... and *in* the setting of a social ritual... The remembering is intensified still further by the fact that both ritual and text become efficacious only in the presence of others, *with* whom we commemorate together in a public ceremony.” (Casey, 2000, p. 218). This approach suggests that commemoration is ‘a highly mediated affair’ as it involves the coordination and collaboration of multiple people, artifacts and aspects of the environment. We commemorate by “remembering-through” specific vehicles, such as rituals or texts, as it is through these ritual actions and readings that we gain access to the traditions they incorporate and transmit (Casey, 1984). These vehicles of commemoration have been called ‘Commemorabilia’ - which, in contrast to mere ‘reminders’ are “never wholly private, but are always trans-individual in their scope and function” (Casey, 2000). Through these vehicles the non-personal past becomes available to those who are commemorating, or as Casey puts it (2000, p. 219):

Through the appropriate memorabilia I overcome the effects of anonymity and spatio-temporal distance and pay homage to people and events I have never known and will never know face-to-face. The mystery of the matter – but also an insight into its inner working – resides in the way I remember the commemorated past through various memoratively effective media in the present. It is as if this past were presenting itself translucently in such media – as if I were viewing the past in them, albeit darkly: as somehow set within their materiality.

The anonymity and distance that is overcome is the crucial effect of commemoration. The aim is to keep particular past(s) alive through ceremonial observance, precisely because the increasing remoteness of the event, and the interference of intervening events, threatens its existence in the present – along with the knowledge and connective functions it serves.

Consider for example the role of memorial services in contemporary settings – in Australia and New Zealand we commemorate the ANZAC's (Australian and New Zealand Army Corps) each year on the 25th of April – the day which marked the first major military action by the Anzac's during World War 1 in 1915. This 'national day of remembrance' is achieved through a combination of ceremonial observances and rituals, which each commemorate the lives and efforts of those who served in the war. The ceremonies are formal occasions and are held at specific memorial sites around the country. Services are held at dawn, because that is the time of the original landing at Gallipoli. Poems and letters are read, hymns are sung, 'The Last Post' is played and a moment of silence is observed. All of which contributes to the remembering of this episode in our cultural history, from over 100 years ago – 'Lest we forget'. This example is useful, as Māori were also present in WW1, and their memory is commemorated in additional ways today – including through haka. Recently, the performance of haka during Anzac day memorial services has been received with controversy, and even banned from being performed at Gallipoli (Simon, 2015).

In commemoration, the full complexity of remembering is exposed and exhibited. Consequently, it has been said to be one of "the most recalcitrant to being understood on the model of straightforward recollecting" (Casey, 2000, p. 217). By straightforward recollecting, Casey means that form of

remembering most commonly considered - in which 'recollecting' is a purely private mental activity in which events and/or information previously experienced by an individual are recalled by them at a later time and re-viewed in the internal space of their minds-eye. This kind of memory is conceived as an individual enterprise, whereas commemorating is a rather more collective endeavour.

The social and collaborative aspects of memory have been studied from a range of approaches. From Casey's account, along with Hirst and Manier (2008), we understand commemoration to be a highly mediated form of memory, reliant on artifacts and the collective efforts of a group of participants, and a practice which reiterates the inherited memories of our forebears. Given this account, the procedures constituting a commemorative process may be beneficially understood from the perspective of distributed cognitive ecology. By approaching the practice of commemoration in haka from the perspective of distributed cognition/ecology, I aim to better capture this form of remembering as it is featured in haka. The benefit to this perspective is that it already accepts cognition as a highly mediated affair, and acknowledges the constructive, performative and constitutive role that coordinated group actions can have, along with role of the environment.

Haka as a Commemorative Ritual

A number of elements involved in haka make it a particularly effective commemorative vehicle. Ritual, as it contributes to commemoration, involves at least four formal features according to Casey (2000) - all of which are prominent in haka. First, it is an act of reflection or an occasion for such an act; there is an allusion to the commemorated event or person that precedes or sanctions the ritual itself; it incorporates bodily action; and it involves collective participation in the ritualistic action (Casey, 2000, p. 223). Each of these features is evident in most haka, in multiple ways, although the first two features are context dependent and feature most prominently in ceremonial haka, haka taprahi and welcome haka powhiri. Further to these formal features there are at least three structural features of commemorative rituals, which include: solemnization, memorialization and perdurance. Consideration of these structural features as they appear in haka will allow us to unpack the commemorative functionality of haka:

Solemnization refers to the action of celebrating in a ceremonial manner and the special observances or formality that characterize ceremony; it is a special signifying quality of ceremony, achieved through the procedures that enact it. In the case of haka, solemnization is achieved through the adherence to Māori ceremonial procedures and protocols. Māori sociocultural life is replete with protocols for solemnizing, which are connected with the concepts of tapu (sacred/restricted) and noa (unrestricted/ordinary) (Bowden, 1979). Solemnisation can be further unpacked by considering three additional features:

1.) Re-enactment or Re-actualization of some former circumstances or primordial events

This is demonstrated in haka at many levels. In the actions themselves, such as the wiriwiri (fast quivering action of the hands) which represents the quivering of the air which can be seen above the ground on humid summer days – the natural phenomenon that is identified as the original haka (the haka of tanerore) who is dancing for his mother, the summer maid. Other actions and postures also represent environmental phenomena, elements or landmarks, which are localised and contingent upon tribal origins.

2.) Social sanction of ceremony.

Social sanctioning is done by a subtle mixture of inculcated tradition (“this is the way it’s always done”) and contemporary pressure (“this is how you must do it now”), with the result that there need not be any further justification, to themselves or others, for the place of the ceremonial observances. In the case of haka, Timoti Kāretu, an acknowledged authority on Māori cultural affairs, has said that no Māori ceremony is complete without it (Kāretu, 1993). The practice itself plays a role in formalising the procedures of Māori cultural events. The practice is also adaptable, and can be updated to reflect the concerns of the modern day – however these are balanced against conserving the features which maintain the tradition, and the connections to the past. As Hyland (2014, p. 71) tells us: “a haka is not set or complete; it is constantly evolving, with the creation of new dances replete with innovative actions and messages. Thus haka is a means of divining the tipuna (ancestors) as well as signifying the flexibility or hybridity of Te Ao Māori – both past and present, for the living and the passed”.

3.) Formality.

Formality serves to express and specify the emotional tone of the ceremony or event, while channelling any tendency to excess. The formality of ritual solemnizes the expression of emotion on the occasion. This social context and the established conventions for behaviour and expression are crucial determinants of this feature. For Māori, the occasion for haka is at once ceremonial and unbridled. It is a sanctioned avenue for the expression of emotion, as called for by the occasion. For example, during a tangihanga (funeral) the performance of haka is an opportunity for the collective expression of mourning, inclusive of the emotional complexity inherent in responses to loss, and of commemorating the person's life, but also, a culturally significant moment to give an appropriate 'send-off' to the person who has passed.

Memorialization is about paying fitting tribute and honouring in an appropriate way; not only with the right words, gestures, or other symbolic expressions, but more importantly in the proper proportion, that is, without either exaggeration or diminution (Casey, 2000). It is the fittingness of the manner of conduct in a given activity. In haka, there are expectations of performance that relate to the quality of the effort displayed by the performers. Matthews (2004, p. 13) emphasises that "while the notion of haka as a translator of meaning is key, it is the actual quality of the physical performance of haka that determines the effectiveness of message transmission." This is reflected in the directives of haka performance for intensity and vigour in all actions. As such, the effectiveness of a given performance is determined by the expressiveness of a performers actions – this is guided by a number of Māori concepts: *Ihi* (charisma, authority, awe-inspiring, power), *wehi* (awe, respect, fear) and *wana* (excitement, thrill, awe-inspired, fear), as detailed by Matthews (2004):

Ihi is a psychic power that elicits a positive psychic and emotional response from the audience. The response is referred to as *wehi*; a reaction to the power of the performance. *Wana* is the condition created by the combination of the elicitation of *ihi* and the reaction of *wehi* during performance; it is the aura that occurs during the performance and which encompasses both the performers and the audience.

These three concepts relate to Māori performance ideals and aesthetic judgement, as each must be present for a performance to be considered worthwhile. Only an active performance, comprising of full and intentional bodily performance, can have wana, provided it has ihi and wehi. A carving, for example, cannot possess wana because it is inanimate.

As opposed to other forms of commemorative acts that involve texts, such as in most memorial and liturgy services (scriptural readings, commemorative speeches etc), the action-oriented nature of haka calls for direct participation, with the involvement of the whole body and all of the senses. Thus, there is a distinction to be drawn between active and passive constituents of commemoration. Monuments and memorials, in the form of statues and buildings for example, may endure through time, however they are passive, in that they require consistent interpretation, which in turn relies on other systems (customs, services, stories etc.). In contrast, the physicality of haka is conducive to a level of intensity and immersion that is not available in other forms of commemoration - as the performer is at once the physical manifestation of a memorial and a participant in its representation and interpretation. Unlike other forms, of which “some memories lie mute and need a narrator, for example, to turn the pages and tell the story from the images.” (Booth, 2006, p. Xi), in haka the story is remembered-through the actions and setting of the practice itself.

The final key structural feature of commemoration provided by Casey is perdurance - a philosophical term that is concerned with the way that things persist in time. According to Casey, perdurance is the *enduring-through* an encounter, which is “the most characteristic temporal form of ritual transmitting a tradition” (Casey, 2000, p. 228). Perdurance itself is a somewhat neglected temporal mode within western thought, where it is prone to extended metaphysical debate, however it provides a useful temporal reference to consider the persistence of processes (such as ritualized activity) through time. Casey emphasizes that ritual and text are not merely a ‘means of commemoration’, meaning that they are not just devices which *prompt* individual remembering, but instead, the ritual “is itself a commemoration of the tradition it celebrates”, such that a tradition ‘perdures’ through the media which effects its active remembrance (Casey, 1984, p. 398). It is through perdurance that the past, present and future dimensions of commemorative ritual are at once affirmed and made compatible with each other

(2000, p. 229). Similarly, Booth (2006) has described how in ‘communities of memory’, such as families and tribes, the members “share in a certain habit-like memory, that is, the non-explicit, nearly invisible values, behaviors, and beliefs that are the geological deposit of enduring relationships. This habit-memory is itself a form of the persistence of the past; it is memory, but quite different from the active, deliberate work of recollection” (Booth, 2006, p. Xi). Through haka, this shared form of habit-memory may be seen to operate underneath, or in addition to, the deliberate work of remembering that also takes place in commemoration, as well as in the recital of the learned composition.

The Māori past is embodied in haka, and in this way it persists; in the performers and their refined abilities, in the physical and lyrical forms of the practice, and in the recursive exhibition of cultural concepts, genealogy and philosophy, as embedded in the formal and structural features of the practice. As a practice of memory, that is interdependent with and mutually supportive of the rest of the Māori cognitive ecology, haka unifies the collective and reifies cultural concepts, in an elaborated process of physical, spiritual and cultural education that is then translated into practice, put to service in the wide variety of socio-cultural occurrences in everyday life.

Importantly, Casey’s account of perdurance does not require ‘exact same-ness’ over time in order to be effective, as a ritual need not be performed in exactly the same way in every form and moment of each new occurrence. Tradition-based ritual is compatible with modification and innovation within its formal structures, what matters in the performance of rites is the manner in which they are conducted; it is conduct that “makes manifest the spirit of ritualized activity which, without this spirit, falls into the emptiness of bare repetition.” (Casey, 2000, p. 228). This is evident in haka, as described above, in the directives of an effective performance and the cultural concepts surrounding its proper practice. The directive to ‘make the whole body speak’, cannot be achieved through lack lustre efforts, just as the coordination required to be in unison with the group demands great intentional effort, leaving little room for divided attention or mindless participation. The practice does not persist through hollow repetition, but through the intentional use and re-use of the practice and the benefits it affords. As a performative practice it may be applied to new problems, and updated to suit new settings, while maintaining the essential, unifying features of the underlying orientation and actions, as sanctioned by the culture.

This preliminary analysis suggests that the key structural features of solemnisation, memorialisation and perdurance are very much present in haka, contributing to its effectiveness as a commemorative vehicle.

Chapter 5.

Conclusion

In this thesis, I have tried to develop new ways of looking at some neglected features of the Māori haka. I aimed to complicate and expand upon the common account of haka as only a ‘traditional war dance’. I described how haka was used in ‘traditional’ times for multiple purposes, from formal ceremonies to spontaneous celebrations, noting how haka’s flexibility and adaptability makes it such a potent activity. I then referred to different bodies of research to explore the coordination dynamics of a haka performance, its physicality and synchronous rhythms, musical features, actions and gestures, and how it expresses identity and connects performers with their environments.

In Chapter 2, I discussed the affective aspects of haka and considered how the performance group dynamics, including the social, physical and musical dimensions, may scaffold and amplify affective engagements as appropriate for the situation of the performance. For context and comparison, I considered research on synchronous actions which has demonstrated that moving and chanting in synchrony can enhance social bonding, increase prosocial behaviours, improve social cognition and increase positive affect (Mogan, et al. 2017). While these effects may also be true of haka, it is a vastly more complex activity than the kinds that appear in the experimental literature. In its inherently multimodal and multifaceted nature, haka would complicate and confound most kinds of controlled experimental investigations. There is, however, a potential and productive line of enquiry may be found in integrating ethnographic and experimental methods.

In Chapter 3, I considered how gestures and actions in haka may constitute a corporeal dimension of cognitive processing. They are expressive acts that communicate, in synchrony with, and complementary to, the words of the haka. In line with Goldin-Meadow’s (2003) research, I suggested that gestures in haka may increase the amount of information that can be communicated at once, and may potentially enhance learning and instruction processes. Again, these studies and suggestions cannot be applied to haka in a straightforward way, as gestures in haka are varied and complex. This would be a worthwhile area to examine further through empirical study.

In chapter 4, I explored some of the formal and structural features of haka as an effective commemorative vehicle. Through a combination of socially sanctioned and coordinated activities, an occasion for social and collective remembering is created in which the performance of haka is a vehicle for multiple kinds of memory; many of these things coalesce in haka – inculcated in bodily memory, infused with cultural memory, united in coordinated action, and carried in to the present in a way that is contiguous with the Māori past.

This thesis focused on the traditional ecology of haka, in the time before the arrival of the Europeans, in an effort to expand the understanding of the ‘traditional’ role of haka and also to avoid the confounding and complicating factors that colonisation introduced. As detailed by Brandon Hokowhitu (2014, p 280) “the incomprehensibility of haka to early colonists led to the outright banning of haka by missionaries and later by the colonial state”, which led to instances of haka being discontinued by some tribes. From the perspective of cognitive ecology and epistemic niche construction, the consequences of ‘cultural assimilation’ take on a cognitive significance. Social policies and practices that seek to subdue or remove specific cultural practices and languages, such as those imposed in colonial New Zealand, are in effect removing the scaffolds of experience – experiences that have been crafted through a process of cultural evolution to confer both instrumental and epistemic benefits to the societies in which they have emerged (Campbell, 2014). This is perhaps an underappreciated, or at least an unarticulated, part of the conversation about haka – and would benefit from a much closer examination.

Haka in Modern Times

Haka is still used in many of the same ways as it was in the past; for welcoming guests on to the marae, to honour achievements, to express a collective sentiment, to protest. However, it has also been adapted and adopted for other uses – such as in sporting events.

As Timoti Kāretu (1993, p. 62) tells us “pre-contact haka are still included in the repertoire of many tribes but the occasions on which they are performed are fewer because the reasons for their having been composed are no longer appropriate in today’s context. While not performed as often, they are still remembered”.

Reflecting on the status of haka at the end of the 20th century, Kāretu (1993, p. 87) writes:

Haka will survive well into the next millennium because it still continues to provide a platform for the composer to vent his spleen, to sing someone's praises, to welcome his guests, to open his new meeting house or dining hall, to pay his respects to his dead, to honour his ancestors, to teach his traditions to the succeeding generations. While the language continues to survive so will haka continue to be composed.

This suggests that haka survives because of the things that it *does*. As an avenue of expression and experience, haka's effectiveness is the reason it remains relevant and valuable.

Recently, a team from HIT Lab NZ at the University of Canterbury has developed and programmed a set of Nao robots²⁶ to 'perform' a haka in an effort to "preserve New Zealand's most traditional war dance, the haka" (Rudhru, Ser and Sandoval, 2016). By programming these robots to act out the popular haka 'Ka mate, ka mate', they propose that these robots can be "cultural preservationists", and "a tool for the narration and diffusion of legends and oral expressions in risk of disappearance", further suggesting that these robots can preserve the "intangible cultural heritage" that is haka (Montalvo and Callie-Ortiz, 2017). Although their project has a principled intention, these robots miss the mark in a number of crucial ways – which reflect the extent of the misconceptions about what haka is and what is 'intangible' about it.

History is not just factual or semantic information about events and people of the past; just like the present it is multidimensional. When we read a particular account of a particular past, we conceive in collaboration and coordination with the text. We imagine what it must have been like to live in those times, before this and without that. However, there are other ways of engaging with history, through coordination with different material resources, which may be experienced in different ways than imagining. Sutton and Williamson (2014) discuss the diversity of embodied remembering, noting that: "Human beings are unusual in the variety of ways we relate to our history. Past events can be explicitly and consciously recollected, or can have more implicit influences on body, mind, and action. As well

²⁶ See video: "Robot Māori Haka: Robots as cultural preservationists HRI2016" <https://youtu.be/taNHgpyxYWW>

as the many respects in which the cumulative effects of the past drive our biology and our behaviour, we also have the peculiar capacity to think *about* our histories.” In addition, we can *engage with* our histories in a range of embodied ways, that each afford different experiential qualities and characteristics.

Areas for further investigation

I am in agreement with Tia DeNora (2000, p. 76) that “the exploration of body-culture interaction cannot proceed hypothetically”, but instead must entail “a slower kind of work...built up case by case, through empirical attention to the explicitly temporal matter of bodies in action (in real time)”. This, I think, is crucial in the case of haka. This thesis has aimed to indicate that there is much more to learn about the affective, cognitive and epistemic aspects of haka. Converging methods through ethnography and experimental research in natural settings, perhaps informed by some of the literature introduced here, would be of huge benefit to the better understanding of these complex processes at work in haka.

The words of Mary Gordon, regarding the virtues of writing by hand, provide a fitting sentiment to end this clearly incomplete thesis:

Writing by hand is laborious, and that is why typewriters were invented. But I believe that the labor has virtue, because of its very physicality. For one thing it involves flesh, blood and the thingness of pen and paper, those anchors that remind us that, however thoroughly we lose ourselves in the vortex of our invention, we inhabit a corporeal world.

Glossary of Māori Terms

Aroha – kindness, affection, love, compassion

Atua – gods, deities

Awa – river, channel, gully

Haka – vigorous dance with actions and rhythmically shouted words

Haka powhiri – a ceremonial dance of welcome

Hapū – sub-tribe(s) that share a common ancestor

Hawaiki – traditional homeland of the Māori

Kapa haka – a row/team/group performing haka/waitata/poi

Karakia – prayer(s), chant(s) and incantation(s)

Korero – speak, talk, discuss, discussion

Mana – prestige, status, authority, influence, integrity, honour, respect

Marae – tribal meeting grounds, village common

Maunga – mountain

Noa – not sacrosanct, having no restrictions/prohibitions, free from tapu

Pakeha – a person of predominantly European descent

Rohe – area, region, boundary

Tangata whenua – indigenous people of the land, first people of the land

Tapu – sacrosanct, prohibited, protected, restricted

Te Ao Māori – Māori worldview

Tikanga – customs and practices

Tinana – body

Tipuna – ancestor

Turangawaewae – a permanent place to stand, a place where one has the right to stand and be heard

Waiata – sing, song, chant

Waka – canoe

Whakapapa – genealogy, ancestry, familial relationships

Whakatauki – proverb

Whānau – family; nuclear/extended family

Whenua – land/placenta

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