

Te mana o te kāhui kairaranga: Mai i te tīmatatanga

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Abstract

This research is located in the field of mātauranga Māori (Māori knowledge) within Te Ipukarea, because this study embodies a Māori worldview including te reo me ngā tikanga Māori (Māori language and customary practices), kaupapa Māori indigenous methodologies (Māori specific) and Toi Awe (Māori creative processes and practices). Importantly, it empowers the researcher as a cultural practitioner of raranga to write and create through a Māori cultural lens about te ao Māori (Māori world) and Māori ways of thinking and creating. This is an exegesis. It includes a shared collaborative creative component with two other kairaranga and cultural practitioners namely, Rose Te Ratana and Gloria Taituha.

The purpose of this thesis is to understand the esteemed kāhui kairaranga (Māori female weavers) of the Te Ao Kōhatu (the ancient Māori world) period pre-1860. How did they transmit knowledge of raranga (weaving) from Hawaiki to Aotearoa? What were the tikanga (traditional practices) and pūkenga ā-raranga (weaving techniques) that transpired over this time period? The final question is, how has the transference of this knowledge occurred and how is it implemented today?

Te Ao Kōhatu literally means '*The Stone Age*' however, when a Māori lens is applied, it is best understood as an ancient period when our early ancestors thrived and is seen as the source and essence of mātauranga Māori (Māori knowledge).

My original contribution of substantial significance is twofold. There is a written exegesis which covers the period of Te Ao Kōhatu (pre-1860), documenting the migration of Māori from Hawaiki/Hawaii to Aotearoa (New Zealand), their settlement, the whare pora (the weaving house), the discovery of other new resources and weaving techniques as a result of re/settlement, and a critique of the transference of roles from one land to another. The collation of written literature from both early and present writers and oral traditions are used. There is an individual artefact, which contributes to the collaborative creative component, that is, an exhibition consisting of a series of toi raranga (woven works) that are a contemporary creative response and interpretation of the theoretical research.

My art practice is reflective and reflexive (aro). A visual diary has been used to work through ideas and experiments, show sketches, blueprints and images. Finally, the work embodies visual references of either/or traditional techniques, utilitarian qualities, styles and/or aesthetic principles woven by kāhui kairaranga (weavers collective) of Te Ao Kōhatu. All processes regarding the practical making and installation of woven pieces are underpinned by tikanga Māori practices. This is an acknowledgement to past and present kāhui kairaranga contributing to the pool of mātauranga in Toi Raranga.

Ko koe ki tēnā
Ko ahau ki tēnei
Kiwai o te kete

You have that handle of the basket
I'll have this handle of the basket
Let us together uphold the mana of weaving
(Puketapu-Hetet, 2000, p. 53).

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Tēnei te mihi aroha ki a koutou katoa.

Preface

Whakataukī derive from oral Māori traditions. They are used in whaikōrero (formal discussions) and in pūrākau (traditional history stories). Most whakataukī have been sourced and referenced, but some are not. This is the same in regards to whakapapa.

The primary Māori kupu translations have English translation in brackets. Should the context of the word change, the English translation is also provided in brackets. Included is a Glossary. Each Chapter begins with *Te Rau...* Essentially it is The Principle. The word Rau is given to mean (Leaf) pertaining to the harakeke.

Chapter 1, Te Rau Whakapono Kōrero embodies the approach taken to undertake this literature review. The name for this Chapter came after the fact and only came during the moment when reflecting. It is the what, how and why and all that was considered and implemented.

Chapter 2, Te Rau Mārama employs the cultural tool of whakapapa to map the conceptual framework. The fabric of Māori traditional society was underpinned by a conceptual knowledge framework of whakapapa, pūrākau and whakataukī which explained tikanga practice (Mead, 2003). The origins of whakapapa and knowledge will be explored as the premise to provide a foundation and understanding of knowledge dissemination by the kāhui kairaranga o Te Ao Kōhatu.

Chapter 3, Te Rau Aro focuses on artefacts within the Te Ao Kōhatu period. Specifically, the mamaru (Māori sail) and artefacts that were collected from Cook's first voyage. The mamaru has a history. The themes of Hawaiki, the Great migration, arriving to the shores of Aotearoa and the period in contact of the European all have common associations to the word 'transition'. This word is to be kept in mind and the idea of it is developed at a later stage. The approach to Te Rau Aro is about the artefacts and the thinking that is associated in terms of the making. It is with this in mind, that this Chapter will also contain many visual images. This is particular in the case of the mamaru. What the reader sees, is what I see.

Chapter 4, Te Rau Aroha is a Māori value and talks about having regard for one another. It also about responsibility and that we must take ownership as we are accountable to one another and to those within our communities.

Te Rau Aroha is conceptualised through the Toi Awe model framework. This is a conceptual construct between the research and the individual woven pieces. This chapter will contain a composition of my weaving and practice elements that show alignment to the literature of Chapters 1-3. This is communicated through reflections, imagery, sketches, photographs, ideas and the practice in tikanga and weaving. This is my '*culturally defining artistic*' response to, what I consider, the most pertinent themes in the literature regarding the voice of the kāhui kairaranga of Te Ao Kōhatu.

Chapter 5, Te Rau Hua marks the concluding chapter of this exegesis. It is the culmination of the theoretical and creative components and the final processes of the collaborative exhibition.

Chapter 1: Te Rau Whakapono Kōrero

Introduction

The name 'Te Rau Whakapono Kōrero' embodies what became the approach to this literature review. The name for this Chapter came after the fact and only came during the moment when reflecting on what it took to write this literature review. It is the what, how, why and all that was considered and implemented in the writing of this literature review.

To make sense of what was a tremendous undertaking were the numerous collated sources of literature that spanned from the 1800's onwards. While the literature contained a range of information, what also emerged, and more particularly in regard to early writers, were the varying perceptions surrounding the writing in what and how the author wrote. The focal purpose of this literature review was to locate and articulate all data pertaining to the kāhui kairaranga that took place in her world and time of Te Ao Kōhatu, pre-1860. It became increasingly obvious why there was a lack of early literature pertaining to the kāhui kairaranga. This made apparent that differing worldviews be considered in the approach to this literature review.

Ngugi wa Thiong'o (1986) wrote about the intersections between language, culture and communication. It is these themes and the intersections between them that inform this literature review and provides the underlying thematic approach for this chapter.

The first wāhanga (section) is a critical analysis of the impacts of colonisation from European contact to 1860. The second wāhanga is in chronological order of significance Included are the oral and written accounts of Hawaiki, the great migration, the settlement of Aotearoa, cultural lore and finally, Te Whare Pora (The Ancient House of the Art of Weaving).

It is the intention that the literature review provides insight of the kāhui kairaranga as she was. Examining and articulating the societal framework of which she belonged provides a wider context of the kāhui kairaranga and the role within the community. Te Rau Whakapono Kōrero is the means to position and locate the voice of the kāhui kairaranga of Te Ao Kōhatu.

Impacts from first contact between Māori and Pākehā to 1860

The late 1700s marked the first contact between Māori and Pākehā. Pākehā brought an array of new materials and resources. The simplest tools were paper, ink and soon after the printer machine. These tools were effective in promoting and progressing Western customs, ideals and social behaviours upon Māori, and subsequently Māori as they knew the world to be, changed forevermore. At the onset of European contact, saw the arrival of the missionaries and the introduction of Christianity. The first printed English literature was that of the church and state (McRae, 1997). In 1835, William Colenso commissioned by the Church Missionary Society was tasked with translating parts of the bible. Early missionaries taught Māori to read the bible, only allowing literature that promoted civilised Christian practices (Clayworth, 2014). This was the initial stage of the printed word that instituted a new belief system and set of values upon Māori.

Grey (1853), an advocate of the missionaries' work, described the early missionaries as "a class of men...fertile in labors, rich in love, apostolic of manner...sense of duty...have occupied themselves in preaching the doctrines of Christianity in barbarous and heathen lands...champions of the Christian faith..." (p.5). Grey's statements expressed Western thinking of that time.

The Bible was a tool of colonisation and used as a language device of communication between Māori and early Missionaries by transcribing Māori language into written form. Early missionaries brought with them their own culturally specific understandings of the role and status of women (Jenkins, 1988). A European patriarchal view had negative implications for all women more-so for Māori women.

Western civilisation when it arrived on Aotearoa's shore, did not allow its womenfolk any power at all - they were merely chattels in some cases less worthy than the men's horses. What the colonizer found was a land of noble savages narrating ... stories of the wonder of women. Their myths and beliefs had to be reshaped and retold. The missionaries were hell-bent (heaven-bent) on destroying their pagan ways. Hence, in the re-telling of our myths, by Maori male informants to Pakeha male writers who lacked the understanding and significance of Maori cultural beliefs, Maori women find their mana wahine destroyed (Mikaere, 1994 cited in Jenkins, 1988, p. 161).

Furthermore, in the attempt to socialise Māori women, Jenkins and Morris Matthews (1998) contends,

In the period 1815-47, it was the ‘Christianising’ policies of the missionaries which impacted on Maori attending the Mission schools. The churches shared a monogenesist view of race, believing that all human beings were linked to a common origin through their being children of God. Between 1847 and 1867, the state joined with the Church in the provision of Maori education to hasten what it believed to be a necessary ‘civilising’ process (p.86).

In the preface of Grey’s (1853) book, *‘Ko nga moteatea, me nga hakimara o nga Maori’*, he praises the early missionaries as Christian heroes who throughout the world converted most to Christianity and it was “...rarely that anything remains to show what they overthrew...: (Grey, 1853, p. vi). Christianity was so well executed historically, that time was a factor for these early writers and is this what generated a high level of interest among those who studied the history of the human race (Grey, 1853). Particularly the appositions of genealogy, incantation, sayings, songs, narratives of which engaged scholars of fine literature (Grey, 1853; McRae, 2000). Grey began working with Māori to retrieve these oratory traditions to write the Māori manuscripts and English translations. Grey (1853) remarks that, that collection ‘...whilst they contain so much that is wild and terrible, yet at the same time present many passages of the most singularly original poetic beauty” (p.viii). Ingold (2017) states, “...to study anthropology is to study with people, not to make studies of them” (p, 21). He highlights the stance of most early writers at the time, who perceived Māori and other indigenous peoples as oddities and that the preferred audience was not Māori but for others like-minded as Grey.

However, these early writings became unsettling for Māori and are still today. Pākehā translations did not equate to what was written in te reo (Māori language) and its true intent and meaning. Nor was the literature of writers that observed Māori life. Pākehā writers began reinterpreting, misinterpreting and interpreting through their own lens and worldviews.

...European cultural misinterpretations and assumptions, poor research and editing and/or deliberate invention. Many of these mistakes became widely accepted within both the Maori and European communities, mainly through repeated publication. Where this occurred, these new traditions constitute ‘false orthodoxies’ or ‘hybrids’...Many of the false orthodoxies began with originally authentic traditions, which were altered in publication through complex interactions between colonising Europeans and colonised Maori (Taonui, 2005a, p.2).

As McRae (1997) outlines, “Pākehā published the first books of oral traditions in the 19th century from manuscripts written by Māori” (p.17). Thus, began the era of the printed book and the “transition of Māori oral tradition to the published book” (McRae, 2000, p.1). Wiremu

Maihi Te Rangikāheke of Te Arawa, was a well renowned expert in oral traditions and prolific writer (Curnow, 2008). Working with Te Rangikāheke who wrote the Māori manuscripts, Grey published four books that comprised Māori songs, narratives and sayings, with both Māori and English translations. Grey (1853) did not acknowledge Te Rangikāheke by name in any of those published books (McRae, 2000; Simmons, 1966). Furthermore, there is evidence that Grey's English translations of Te Rangikāheke Māori version made changes which greatly affected the true context. McRae (2000) states, "ko nga mahinga, for instance, reveals that Grey greatly edited Te Rangikaheke's and others' writing. He changed words, names, grammar, the order of events; he obscured and excised — especially sexual references" (p.70).

Unfortunately, many Māori contributors that assisted these early writers were treated in a similar manner (McRae, 2000). As a result, Māori narratives changed in context. In today's standards of authorship, this is plagiarism. Most early 19th century literature depicting Māori culture were written or re-written through the Western lens in Pākehā for Pākehā and idealised the oral traditions to suit their wider audiences. Māori oral traditions became idealised; printed words were inclined to be lost in translation through misinterpretation and/or preconceived assumptions of early writers.

Alluding to the early literature with Pākehā translations of Māori narratives, "some scholars of oral traditions suggest that the way in which narratives are printed may alter how they are understood" (McRae, 1997, p.17). Taonui (2005a) alludes to the gravity, that the essence and meaning within Māori reo, becomes lost once transcribed into written word. To give context word for word, Taonui (2005a) states, "the transition from orality to literacy and from memory to publication converted oral tradition into a different, written form. When written, traditions became more fixed, less dynamic and lost their cultural context" (p.2). Whakataukī on paper can be perceived literally if you are unfamiliar with the terms in the reo. King (2003) suggests the meanings in kupu (words) can have a double meaning and prompt thought and action, this is evident in the use of metaphor of whakataukī. King (2003) further states, "...metaphors not only reflect our ideas but also shape the way we think. Accordingly, metaphors have an important role in shaping our epistemological framework" (p.2).

Firth (1929) states that, "...language must be regarded as one of the most powerful factors of culture change, for the acquisition of new words leads to the formation of new concepts, the building up of new systems of emotional values..." (p. 445). Pākehā language, the words and

the meanings were certainly different to Māori reo. A language is a worldview and strongly linked to one's culture. The assimilation of Māori was a hegemonic process and language was the first initial influence of colonisation through the missionary.

Pākehā early literature was very much part of the revolving process that demonstrated Edward Wakefield's geopolitical economic 'theory of systematic colonisation' (Steer, 2017, p. 1). Steer (2017) alludes to the stance of Britain, that it was their God given right to ensure British settlement upon indigenous lands and peoples, promoting European settlement on indigenous lands to "remake the world in their own image" (Steer, 2017, p. 2). Early literature by Pākehā regarding Māori history was not solely for Māori sake (Grey, 1853), but was for their own curiosity and study. Early literature perception highlighted a Māori way of being overall an antithesis of their Eurocentric worldview and belief system. Pākehā qualifying colonisation, was a means to ensure 'a better world' and were enacted by Christianity, Pākehā literature and the many others ploys that are evident of Wakefield's systematic colonisation.

Mā wai anō e whai ngā tini raweke a te Pākehā
Who can follow the many devices of the Pākehā?
(Mead & Grove, 2001, p. 291).

According to Gemmell (2013), "while colonisation impacted upon Maori collectively, Maori women were further marginalised through sexism and patriarchy" (pp. 3-4). Furthermore, Ralston (1993) notes "the early foreign accounts by explorers, missionaries, beachcombers, traders, and settlers do not reflect Maori [sic] reality directly, but are male Pakeha [sic] representations of Maori [sic] women's lives and motivations..." (p. 24). This is evident in tribal narratives reinterpreted in literature accounts by early Pākehā writers regarding the roles of Māori women. Else (2011) states, "...European settlers brought with them ideas about gender differences and women's place that shaped laws, property rights, education and employment" (p.1). Many early writers depreciated Māori women particularly of high status. However, Gordon-Burns & Taonui (2011) contend that early literature, "were recorded from, scribed by, collected and published by Māori and Pākehā men" (p. 11). The example provided by Gordon-Burns & Taonui (2011) is of Whakaotirangi, the wife of Hoturoa. Gordon-Burns & Taonui (2011) cites Graham translations of Aoterangi's manuscripts in 1860 and 1923 and Graham's own interpretation again in 1952 and provides an example of Whakaotirangi's diminishing role by author George Graham.

Whakaotirangi was noted as a chieftainess by Aoterangi. Her importance was never again the same as the Aoterangi narration. For instance, Aoterangi wrote that the Tainui canoe belonged to Whakaotirangi and Hoturoa, "Ngä tängata nö räua tēnei waka ko Whakaotirangi raua ko Hoturoa" (c1860: 1). Many years later, Graham, who translated and published Aoterangi's manuscript in 1923, changed the order of names in Aoterangi's Māori narrative from "Ngä tängata nö räua tēnei waka ko Whakaotirangi raua ko Hoturoa" (the canoe belonged to Whakaotirangi and Hoturoa) to say in English "the canoe belonged to Hoturoa and Whakaotirangi." Then when he published his own version in 1951 denigrated her status by referring to her simply as Hoturoa's "senior wife" (p. 82) (Gordon-Burns & Taonui, 2011, pp. 18-19).

In traditional Māori society, being wāhine (women) was not a submissive role (Ralston, 1993). Mikaere (2011) states that the "very survival of the collective is dependent upon everyone who makes it up, and therefore each and every person within the group has his or her own intrinsic value" (p. 187). Wāhine and tāne (men) of all status were equals, complimenting the other's role to support and contribute as a wider collective of whānau/hapū. Ralston (1993) provides an informative view of *Māori women and the politics of tradition*, in particular, Māori women of the early 1800s, she comments, "...Europeans voiced surprise, even shock, that Polynesian chiefs, both men and women, worked with their people in almost all major activities" (p.27). The role of wāhine was nurturing and powerful in narratives of Māori cosmology, such as Hine-ahu-one (Earth maiden), Hine-nui-te-pō (great woman of night), Mahuika (fire goddess), Hine-te-iwaiwa (patroness of women) and Papatūānuku (Mother Earth). The vital role of wāhine is reflected in the following whakataukī,

He wāhine, he whenua, e ngaro ai te tangata
Through women and land, men perish
(Sykes, 2015, p. 1).

Sykes (2015) alludes to this whakataukī as part of her conference presentation, *Te miina o Papatūānuku-te mana o te wahine* and interprets this as the 'purifying and sustaining fluids of Papatūānuku' (Sykes, 2015, p. 1). Pere (1994) expresses both women and land nourish, without which, humanity would be lost. Gordon-Burns & Taonui (2011) state, Māori women were traditionally the composers of mōteatea, waiata aroha and oriori, whilst Māori men kept the traditions of karakia and oral prose, wāhine were seldom involved in the publications of early literature.

This fits the pattern of the oral texts of recorded tradition, that is, for the most part prose accounts are ascribed to Māori men and mōteatea to Māori women. However, during the colonial period when Europeans collected traditions from the 1840s

onwards they were almost exclusively either collected from or written by Māori men, thus, while Māori women were recognised as the composers of songs they were marginalised as informants and scribes (Gordon-Burns & Taonui, 2011, p. 11).

Gordon-Burns (2014) “...reclaims the power and realisation that Māori women were and are powerful and are redefining our involvement in our world for ourselves” (p. 272). Linda Smith (1999) has historically condemned views that relegate Māori history and traditions to the realm of myths, legends and fairytales. Further examination provides a historical background of colonisation and goes right back to the initial approach and the adjustments of te ao Māori (Māori world and being), adds context to Linda Smith’s (1999) strong viewpoint.

This begins with the Doctrine of Discovery that became a legal justification for conquest of indigenous people. Precipitated during the Columbian voyagers where European emissaries encountered other European powers during their travels. They recognized a need to establish a formal code of judicial standards of engagement with Indigenous peoples (Churchill, 1993, p.35).

An understanding of how knowledge construction and transmission shaped the Eurocentric world-view has its historical foundations. The connection between Christianity and European settlement that eventuated of Māori land loss is evident in the bible. Genesis states, “be fruitful and multiply and fill the earth and subdue it and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth” (Chapter 1: verse 28). Attwood (2011) states, whilst the promotion of settlement increased in New Zealand so was the progression in managing opposition of Māori.

Prior to 1945, New Zealand historians narrated a story of progress around the themes of settler exploration, pioneering, self-government, and economic growth. Yet the co-option of the indigenous people was a cornerstone of this historiography (Attwood, 2011, p. 595).

Attwood (2011) statement coincides with Edward Wakefield’s geopolitical economic “theory of systematic colonisation” (Steer, 2017, p.1). Steer (2017) describes the perception of Britain, a nation being of the opinion of having every right in ensuring British settlement of indigenous lands and every right to enforce assimilation upon an indigenous people to “remake the world in their own image” (Steer, 2017, p. 2). As the enactment of colonisation progressed, so did the misplaced trust of Māori, this being reflected in the following whakataukī,

Mā wai anō e whai ngā tini raweke a te Pākehā

Who can follow the many devices of the Pākehā?
(Mead & Grove, 2001, p. 291).

Colonisation was the means to secure British settlers on fertile, productive land and to build and maintain an economy. This is directly “linked to the capitalistic mode of production that expropriates and commodifies the land” (Marsden & Henare, 1992, p.19). Since Māori settlement of Aotearoa, the land was the productive provider that sustained traditional Māori society. From initial contact of the European to 1860 was “the most significant and long-lasting decline in economic circumstances for Māori had begun...” (Consedine, 2007, p.5) and 1840 the year when and why the Treaty of Waitangi was signed, was because of “...the demand for land by settlers had increased exponentially” (Consedine, 2007, p.5). A major and constant topic of discussion for Māori rights as tāngata whenua (people of the land) has been of colonisation, the subject of land has and will always have historical relevance for Māori as the implication was the impact on the socio-economy of Māori (Consedine, 2007). The Māori relationship with the land is quite different as it is an inter-relationship with places and systems (Barlow, 1991; Marsden, 2003; Mead, 2003) such as maunga (mountain), awa (river), wāhi tapu (sacred places) and urupā (burial grounds). According to Gemmell (2013), “this connection is reinforced in pepeha” (p.81). This knowledge was passed on, and specific to boundary points of each hapū, known as waewae kapiti (hills and streams), pokapoka (pits), and poupaenga (carved posts) (Firth, 1929). Land was a resource for kai (nourishment) for the people and each boundary or land portion was to work for the cultivation, farming, fishing and fowling (Firth, 1929).

Early written accounts about kairaranga wāhine (weavers), toi raranga (weaving arts) and te whare pora (the weaving house) were seldom, with exceptions of books such as, *The art of te whare pora* in 1898 from author Elsdon Best and accounts such as, *The evolution of Māori clothing* in 1924 by Te Rangi Hīroa. Both authors have published works recording detailed accounts of Te Whare Pora pre-1860. Firth’s 1929 publication, *Primitive economics of the New Zealand Maori* also gives an overall description of traditional Māori economy and an insight of Te Whare Pora and kāhui kairaranga pre-1860’s. Ling Roth’s, *The Maori Mantle* first published in 1923 with Bankfield Museum was largely about the processes of textile weaving. Other publications included *Reports from the Flax Commission* that contained pockets of information regarding the processes of muka extraction by the ‘natives’ (a term frequently used in many early accounts). The flax trade demanded skilled weavers to extract muka (fibre) for the export

of ropes. The flax machines that extracted muka produced poor quality and unacceptable for trade. The demand for fibre and amount paid to weavers, far outweighed the amount of mahi (work) needed to extract the fibre and so, the flax trade failed.

Kawharau (2009) refers to these places as ancestral landscape. Kawharau (2009) further states, “for Māori, landscapes are imbued with metaphysical values as well, not least when tribal groups’ stories tell of gods, ...heroes or ancestors carving or shaping the environment” (p.319). Traditions have retold the great deeds of ancestors regarding the land are remembered because they tell of protocols, practical and ethical ways to care for places and people. The use of pūrākau (myths, ancient legend, story) such as the separation of Rangi and Papatūānuku, Te Ika a Māui and Te Wāo ā Tāne. The land has huge significance for Māori and are reflected in the many mediums used in toi raranga.

Nōku te whenua o oku [sic] tupuna
Mine is the land, the land of my ancestors
(Firth, 1929, p.361).

Oral and Written Accounts of Hawaiki

Ngugi wa Thiong’o’s works deal with the cultural and political legacy of colonialism in contemporary Africa and is an acclaimed and published writer of African literature. wa Thiong’o’s book, *Decolonising the mind: the politics of language in African literature* can also apply to any indigenous culture that has been assimilated and impacted by colonisation. wa Thiong’o (1986) states, “language, any language, has a dual character: it is both a means of communication and a carrier of culture” (p. 13). This statement by wa Thiong’o is a gentle reminder of the importance of holding steadfast to one’s native language, he taonga tuku iho (a treasure handed by the ancestors).

Lovesey (2000) further elaborates on wa Thiong’o’s previous statement,

Language as communication and as culture are products of each other. Communication creates culture: culture is a means of communication. Language carries culture, and culture carries, particularly through orature and literature, the entire body of values by which we come to perceive ourselves and our place in the world (p. 108).

Lovesey's (2000) statement has a clear correlation to Māori oral traditions. Oral traditions were the cornerstone of traditional Māori society. Boyd (2010) comments that within traditional Māori society and oral traditions, "memory was crucial, language and mnemonic devices" (p. 44) such as the patterns used in raranga (Māori weaving) "were used to record and transmit information and knowledge" (p. 44). Oral traditions articulated Māori origins through creation and cosmological narratives, underpinned by whakapapa (genealogy; knowledge of the holistic, interconnected and inter-related nature of entities), were transmitted through aphorisms of whakataukī (proverbial sayings), pūrākau (narratives) and waiata (song) and whaikōrero (formal oratory) (McRae, 1997; Mead & Grove, 2001). These are knowledge transmissions that inform tikanga (custom, customary practice, protocols and principles) and serve as signposts of morals, values and expressions of Māori beliefs, that guided, monitored and controlled Māori social relationships for centuries (Jackson, 1987; Wilson, 1906). Paul, Kahu, Te Kani, and Ataera (2001) further state,

The term for Māori custom is tikanga, which is derived from the word tika. Tika can cover a whole range of meanings, from right and proper, true, honest, just, personally and culturally correct, to upright. Tikanga does not denote a static set of rules. The whole Māori legal system was based on values, and being a values-based system, Māori adhered to principles rather than a set of rules (p. v).

Durie (2003) describes Māori thinking pertaining to whenua (land), and states, "people are the land and the land is the people and the tradition is reflected in song, custom, subsistence, work, approaches to healing and birthing, and the rituals associated with death" (p. 298). Māori oral traditions are intergenerational transmissions intended to ensure the holistic wellbeing of the people and to preserve Māori history, culture, and ways of being.

The Māori oral tradition makes reference to tīpuna Māori using navigation to reach Aotearoa/New Zealand from their Polynesian homeland. The oral tradition also notes the strong link that Māori feel to that homeland which is commonly referred to as 'Hawaiki'. Hawaiki is regarded both as an ancestral homeland and a spiritual homeland to which those who have died return (Ka'ai-Mahuta, 2010, p.8).

References to Hawaiki are reflected in whakataukī. These messages convey and encourage an affinity with Hawaiki as the place where Māori originated from, belong to and return to.

Ko Hawaiki te pū o ngā mea katoa.
Hawaiki was the origin of all things.
(Mead & Grove, 2001, p. 227).

For Māori, the name Hawaiki is typically associated as being the physical location and origin of Māori. Hawaiki is deeply associated with the cycle of birth, life and death and is evident in whakataukī within Māori orature.

E taku pōtiki, kua puta mai rā koe i te toi i Hawaiki.
My child, you are born from the source, which is at Hawaiki.
(Royal, 2005, p. 1).

Kohere (1920) alludes to Hawaiki nui, Hawaiki roa, Hawaiki pamamao (great Hawaiki, long Hawaiki, far-distant Hawaiki). This phrase is well known and recited often in whaikōrero (formal speeches) particularly during tangihanga (funeral) in a farewell speech to the tūpāpaku (the departed) and homage to the ancestors that have passed on and returned to Hawaiki.

E ngā mate, haere ki Hawaiki,
Ki Hawaiki nui, ki Hawaiki roa, ki Hawaiki pāmamao.
To the dead, depart to Hawaiki,
To great Hawaiki, to long Hawaiki, to distant Hawaiki
(Ihimaera, 1982, p. 1).

The name Hawaiki is synonymous throughout Polynesian. This commonality affirms a shared Polynesian ancestry. Waka (canoe) knowledge and skills supported the concept of transportation and settlement from island to island, further supporting the idea that all Polynesians have an affinity to Hawaiki. Smith (1921) alludes to this factor by saying, “the Polynesians have carried this great name Hawaiki in their wanderings” (p. 42). The name Hawaiki is recognised and used throughout the Pacific and “named in memory of it, or where a knowledge of it exists” (Smith, 1921, p. 43).

Figure 1 below depicts the different dialectal names of Hawaiki through the Pacific.

Figure 1: Traditions of place-names associated with Hawaiki used by islands through Pacific and Polynesia

Jawa	Bugis name of the Moluccas.
Sava-i	Place in the Island of Seran, Indonesia.
Hawaiki Kowaiki	West end of New Guinea
Savai'i	Principal island of the Samoan group.
Havai'i	Ancient name of Rahatea, Society group.
Havai'i	Original home or Fatherland of the Tahitians.
Havaiki	Ancient name of one of the Paumotu group
Avaiki-raro	The Fiji Samoan and Tonga groups according to Rarotongan traditions.
Avaiki-runga	Tahiti and neighbouring groups according to Rarotongan traditions.

Hawaiki	Old name of Tahiti, according to the Pau-motu Islanders.
Avaiki	Mentioned in Mangareva traditions.
Savaiki	Place known to the Tongareva Islanders.
Avaiki	Place known to the Aitutaki Islanders.
Avaiki-tautau	Ancient Rarotongan name for New Zealand.
Hawaiki	Place known to Marquesan traditions.
Hawaiki	Place known to Easter Island traditions.
Sawai	Place in Gilolo Island, Indonesia.
Hawai'i	Name of the largest of the Sandwich Islands.
Hawaiki	Place on Niue Island.
Hawaiki-runga Hawaiki-raro	Known to the Manihiki Islanders and the Heaven and Earth.
Hawaiki	Place known to Moriori traditions, and a place so named on their island.

Note. Adapted from *Hawaiki: The original home of the Maori, with a sketch of Polynesian history* (pp.45-46), by P. Smith, 1904, Christchurch, New Zealand: Whitcombe & Tombs Limited. Copyright CC BY-SA.

The association of Māori place names to those throughout the Pacific provides further evidence of a shared Polynesian ancestry (Crowe, 2014; Irwin, 1992). However, early writers had varying perspectives regarding Hawaiki. Smith (1921) refers to Hawaiki as being the “Fatherland” (p.35). Best (1918) conversely states, “...Hawaiki was not the name of the Fatherland but of a sacred place there to which all spirits of dead proceed...” (p.172). Additionally, there are differing views by iwi (tribes). For example, descendants of the ancestral Tainui waka refer to ‘Hawaiki’ as ‘Rangiātea’ (Nixon, 2007). This reference to Rangiātea is further accredited by the following whakataukī,

E kore au e ngaro; te kākano i ruia mai i Rangiātea
I shall never be lost; the seed which was sown from Rangiātea
(Mead & Grove, 2001, pp. 30-31).

Another translation for this whakataukī,

...suggests to Māori especially that ‘you can never be lost; you are a seed sown at Rangiātea’. It speaks of a belief that we are directly descended from the Heavens and trace our whakapapa back to the beginning of time. Underlying views and principles such as these are articulated within a wide variety of kōrero tawhito... (Mahuika, 2008, p. 3).

Kaumātua (elders) provided an account and reasons for the departure of Hawaiki as recorded by Wilson (1906),

The story of the immigration from Hawaiki as told fifty years ago and more by old natives was that their ancestors had left that country in consequence of disputes chiefly about land; that the land available for cultivation was not extensive, and increasing population had created a pressure that resulted in wars for the possession of it these troubles lasted more or less a long time, during which their party was gradually weakened and overpowered that terms had then been proposed to them, namely, that they must leave Hawaiki, and seek another home across the sea, and that ample time to build a flotilla and make all necessary preparations for departure would be allowed to them. They accepted these terms in the spirit in which they were offered, and preparations were made in a careful and methodical manner (p. 159).

The implications of human impact on an ecosystem in this account of over population and lack of natural resources affected adversely the wellbeing of the people and impeded their economic development causing social division of the people. The need to depart from Hawaiki to counteract surplus population numbers was a necessary component of the “structural adjustments of the economy” (Whitehead & Annesley, 2005, p.2) toward relief and progression.

Wilson’s (1906) account not only provided the reasons for an inevitable departure, but also depicts the acceptance, good conduct and organised manner, and gives an indication of an established political and social structure of an organised society. According to Wilson (1906), the Elders account also informs the framework of tikanga (practices, institutions) and takepū (Māori values, ethics and principles) that existed. This is further supported by Firth (1929) in regard to the society’s lore of tapu (be sacred, prohibited, restricted, set apart, forbidden, under atua protection) and mana (having great authority and respect, prestige or presence, can derive from the atua) of the rangatira (chief) were the institutions used “in helping to sustain the whole fabric of social organisation” (Firth, 1929, p. 237). This is corroborated by Cumberland (1949) that the accomplishments of Māori were due “...to his cultural characteristics and especially to his communal discipline, cooperative industry, and tribal organization and leadership” (p. 404).

Early anthropologists, ethnographers and scholars published numerous records of Māori historical origins and arrival to Aotearoa. Early ethnographer Best (1918), purports a Melanesian projection into Polynesia. Percy Smith (1921) an early ethnographer wrote extensively about the migration of Māori in his book, *Hawaiki, the original homeland of the Māori* and presented his findings as historical and literal accounts concluding that the entry to Polynesia was via the Micronesian route. Howe’s (2003) review of Edward Tregear and Abraham Fornander theories remarked that both writers “...independently and simultaneously

concluded that Polynesians shared an Aryan ancestry with Europeans” (p. 67). Early writers and the methods they used to collect data to draw conclusions were limited, in comparison to more recent writers and researchers who have the technology and means to access a variety of methods for data collection. There is evidence demonstrating the link between Polynesia and Southeast Asia by more recent writers and researchers such as Eccles (2008); Howe (2003); Anderson (2000); Davidson (1996), and Irwin (1992). Furthermore, research conducted by Māori evidencing this link is also detailed. Nomana Anaru who completed his PhD thesis in 2011, *A Critical Analysis of the Impact of Colonisation on the Māori Language through an Examination of Political Theory*, provides compelling information through a critical Māori lens.

Margaret Orbell (1991) differs with Percy Smith’s accounts as being actual events, but events mythical in nature. Her book *Hawaiki: a new approach to Māori tradition* gives new interpretation of the voyages from Hawaiki, utilising kōrero (discussion), waiata (song), whakataukī and karakia (prayer, incantation). Curnow’s (1986) review found that Orbell’s first publication of the book in 1985 provided “a correlated, documented and lucid argument” (p. 278). Though Orbell’s (1991) written approach seems Māori positioned, her view of Māori oral traditions as mythical, in effect, nullifies Māori the world-view and traditional knowledge. Mythical implies imaginary, fictitious and to romanticise and retold in a fantastical way. There is potential that public perception of acceptance and normalising Māori traditions as fictional implies a level of risk. Conversely, Taonui (2005b) states, “all canoe traditions are religious-poetic narratives composed simply for reasons of tribal identity” (p. 1). However, it should also be noted that the difference is whakapapa and belonging versus the ‘outsider looking in’ concept who visits with no affiliation.

The Great Migration- Voyaging across the Pacific

There are many tribal narratives regarding the Polynesian ancestor Kupe of Mātā(w)haorua waka as being the very first to navigate from Hawaiki to Aotearoa. The Great Migration have also been significantly retold in Māori lore and tribal oral traditions. D.R Simmons opposed this idea with his book, *The Great New Zealand Myth* edition that had ensued from his M.A thesis in 1963. Simmonds argued that Kupe, Toi, Whatonga and the great fleet of 1350 which was a commonly held belief, was in fact, according to Simmonds, untrue (Orbell, 1978, pp.79-81). However, Simmonds argument has been time and time again disputed, not only by Māori oral and whakapapa traditions but has been scientifically proven too. Akin to this is the

argument that there were multiple trips backwards and forwards between the Pacific Islands and Aotearoa New Zealand by Māori across a vast time period.

Grudgeon (1892) has recorded the waka whakapapa and states that, "...at the present time there is but one tribe who claim him as their ancestor, and that is the Muaupoko of Horowhenua" (p.224). According to Orbell (1995), "Kupe established landmarks and prepared the way for those who were to follow" (p.92). Grudgen (1892), states "...in each tradition, evidence to show [sic] that the early Polynesian sea rovers knew perfectly well, not only where they were going, but also how to get there" (p.216). As Nixon (2007) outlines, "the Pacific Ocean covers at least one third of the globe's surface, where many Pacific Islands form part of what is known as Polynesia" (p.12). With such a vast area of ocean, Māori had developed a sophisticated science in navigation. The level of skill of those great seafarers was highly specialised and they were expert navigators (Best, 1918; Firth, 1929; Nixon, 2007; Narbey, 2012). Furthermore, "The first people in Aotearoa, New Zealand brought the knowledge of weaving with them" (Hakiwai & Smith, 2008, p. 157).

The knowledge continuum that originated in the Pacific was based on mātauranga accumulated and refined during their centuries in their previous homes. They came to a land with seasons, flora, fauna, fish and other features that were different from their previous habitats. Among their important possessions was an accumulation of knowledge and experience and intellectual powers of observation and analysis (Winiata, 2006, p.200).

Winiata's (2006) view is particularly relevant when considering the time of migration and the kairaranga. Her heightened sense of obligation to the people would have prepared her to observe, experiment and learn. As such, her expertise and migratory influences evident and ascertained through the types of plants, weaving traditions, techniques, and oral traditions were ubiquitous (McRae-Tarei, 2013). According to the great migration traditions, the paper mulberry tree known as aute was transported on board of the Tainui waka (Hiroa, 1949; Smith, 1896). Preparation and the manufacture of aute (also known as tapa), is still practiced today throughout the Pacific. The following whakataukī offers a cue in history of Hawaiki and the aute.

Nga kahu o to matou kainga i rere mai ai i tawahi, he aute nei, he rakau aute, mahia ai te peha o taua rakau, a, ko te tinana o te rakau hei poito kupenga. The garments of our home from where we sailed from the other side, was aute, an aute tree, the bark of that tree being manufactured, whilst, the wood of the tree was used for fishing net floats (Hiroa, 1949, p.63; Smith, 1896, pp.4-7).

Furey's (2006) archaeological study has identified that "Polynesian settlers to New Zealand brought with them tropical cultigens, but the temperate climate-imposed restrictions on where crops could be grown. The adaptations Maori [sic] gardeners made to the landscape in order to grow their vegetables can be seen archaeologically" (p.5). Furthermore, Furey (2006) states that "within the New Zealand landscape, there is ample and varied evidence of the continuation of those gardening practices, and of the changes and adaptations that were made over time to accommodate local circumstances and environmental conditions" (p.6). The plant cultivars that were transported during the migration were the kūmara (sweet potato), taro, yam (uwahi), aute, hue (bottle gourd) and the tī pore (Pacific Island cabbage tree, introduced species of cabbage tree) (Furey, 2008).

There are many traditions of the kūmara and origins in Hawaiki. It was said that in Hawaiki the kūmara grew effortless and plentiful as indicated by Mead & Grove (2001).

Hawaiki te whenua e tupu noa mai te kumara i roto i te raruhe
Hawaiki is the land where the kumara grows spontaneously amongst the fernroot
(Mead & Grove, 2001, p.61)

The kūmara is also been depicted in Pōpō, an oriori (lullaby), composed by Enoke Te Pakaru of Te Aitanga-a-Māhaki. Pōpō was sung to soothe the child reciting history and preserving tribal lore of the magic bird Pouahaokai and the atua Uenuku and how the tūpuna (ancestors) returned far across the sea to "Parinui-terā in Hawaiki" (White, 1887) in order to fetch the kūmara are depicted in the first verse (Te Ao Hou, 1965a).

Pōpō
E tangi ana tama ki te kai mana
Waiho me tiki ake ki te Pouakai
Hei homai te pakeke ki uta ra
Hei waiu mo tama
Kia homai e to tipuna, Uenuku-whakaronga
Ko te kumara, ko Parinui-te-ra
Ka hikimata te tapuae o Tangaroa
Ka whaimata te tapuae o Tangaroa,
Tangaroa! Ka haruru!
Ka noho Uru, ka noho i a Ngangana
Putā mai ki waho rā ko Te Aotū, ko Te Aohore,
Ko Hinetūāhōanga, ko Tangaroa
Ko Te Whatu o Poutini ei!
(Toa Takitini, 1929, p.11).

According to Aotea tradition regarding the kūmara, was that the waka ancestors “...brought nine seed potatoes in the double belt of Rongorongo, hence the honorific name given to the *kumara* in the Aotea area was the *Tatua o Rongorongo* (Belt of Rongorongo)” (Hiroa, 1949, p. 62). The name Rongorongo derived from the kūmara God Rongomaraeroa (Hiroa, 1949; White, 1887). Because of this association, the kūmara was tapu (sacred) (White, 1887). The narrative of Niwareka, a very skilled weaver that lived in the underworld, refers to a cloak and “...a belt named *Te Ruruku-o-te-rangi* are prototypes of all such garments woven by women” (Te Ao Hou (b), 1965, p.19; Schafer, 1965).

The generic term for belts is “*tatua*,” but they are of different kinds...formed of many plaited strands are known as “*tu*” worn by women, whereas men wore the *tatua pupara*, which comes under the heading of “*tatua whara*” (Best, 1898, p. 647).

Figure 2 below depicts the *Tatua Hume* (belt) woven between pre-1840. It was woven with fine harakeke and adorned with tufts of dog hair. It is part of the taonga Māori collection. The name *Hume* was generally known as a war belt (Lambert, 2007).

Figure 2: Tatua Hume (belt)



Note. From an Unknown weaver, 1800-1840, (<https://collections.tepapa.govt.nz/object/53958>). Copyright Museum of New Zealand Te Papa Tongarewa.

Narratives of the kurī (dog) and kahu kurī (dog cloak) have been mentioned. The explorer Kupe, often credited with discovering New Zealand, brought kurī with him on his canoe Matawhaorua and that he left one dog waiting so long in Hokianga Harbour that it turned

to stone (Basil, 2008). Te Kurī a Paoa (now named Young Nick's Head), was named by Paoa the captain of the Horouta waka after his lost kurī (Basil, 2008). The *Tokomaru* canoe, captained by Manaia, had a dog that jumped overboard as they neared Aotearoa, guiding the waka to land during the night by the dog's noise (Basil, 2008). There are many traditions regarding the kahukurī (general name for dog cloak). These valuable cloaks were transported during the migration and is affirmed by Mead (1968) stating, "...that the early Maoris [sic] brought with them to the new land...the dog" (p. 28). Turi procured the Aotea waka from his father-in-law Hetaraka Tautahi, through his wife Rongorongo, who made the exchange giving a valuable dogskin cloak named *Potaka-tawhiti* (Firth, 1929). Another known name was *Pukeki-whatawhata-o-rangi* (Te Kanawa & Turi-Tiakitai, 2011, p. 24). Colenso (1891) remarks how Māori valued the Polynesian kurī, "...dog with white flowing tail was greatly prize" (p. 454). Cloaks made from the pelt or tail were generally called kahu kurī (dog cloak) other names used were according to the style and placement of the pelts and tails, such as kahu waero (dogtail cloak). Other names were "puahi, topuni, mawhiti or mahiti, ihupuni, ihupukupuku" (Wallace, 2002, p. 143).

Figure 3 below is an image of a kahu kurī woven in the early 1800s. This kahu kurī is part of the Māori collection in the Museum of New Zealand Te Papa.

Figure 3: Kahu kurī (dog skin cloak)



Note. From an Unknown weaver 1800-1840. (<https://collections.tepapa.govt.nz/object/64635>). Copyright Museum of New Zealand Te Papa Tongarewa.

The weaving traditions are evident that the knowledge of weaving and skills of the kāhui kairaranga were an essential component for the wellbeing of the people in Hawaiki and during the migration throughout the Pacific and Polynesia. As Schafer (1965) acknowledges, “weaving a most tapu activity, was one of the most, important of women’s tasks” (1965, p. 45).

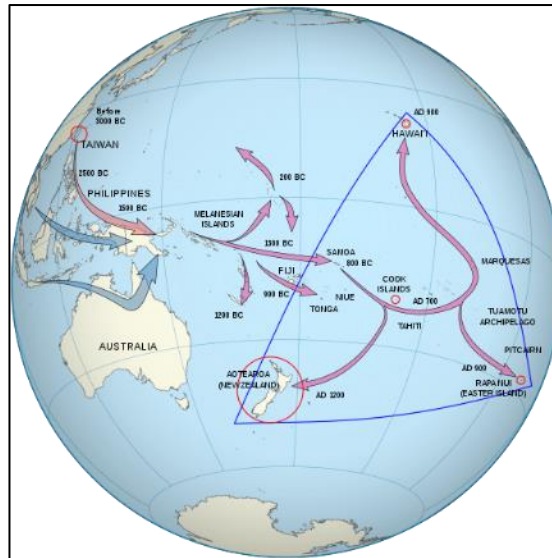
Raranga Māori is a unique art form through the techniques, native materials and creative outputs that are recognisable as indigenous to Aotearoa, but “there are elements within rāranga that clearly reflect the Pacific migratory past of the ancestors” (McRae-Tarei, 2013, p. 11).

The migratory influences can be traced in relation to types of plants used in weaving, geometric designs, weaving techniques and spiritual traditions. This in turn reflects the multi-faceted or holistic approach to weaving that is characteristic of South East Asian and Polynesian cultures and their holistic worldviews. It is this holism (environmental, spiritual, economic, social and cultural components) that also frames the art of weaving and knowledge associated with this toi. This complex philosophical approach or world view has its genesis in South East Asia (McRae-Tarei, 2013, p. 11).

Furthermore, “in terms of Māori origins there is compelling scientific evidence to the connection between Polynesians and their South-east Asian ancestry” (Anderson, 2000; Davidson, 1998; Howe, 2003; Irwin, 1992) (McRae-Tarei, 2013, p. 11).

Figure 4 below is Eccles (2008) own work, depicting his research tracing the Māori migration route from Taiwan, through Melanesia to Polynesia. David Eccles interests involves human genetics (or more generally, biology) with the particular interest in studying the genetic variation of the Māori population.

Figure 4: The Polynesian spread of colonisation in the Pacific.



Note. From Eccles, D (gringer). An orthographic projection of Polynesia [Computer software]. Creative Commons Attribution 4.0. https://upload.wikimedia.org/wikipedia/commons/4/4b/Polynesian_Migration.svg

David Eccles research finding was supported by other scientists including, Wilmschurst, Hunt, Lipo and Anderson (2011) who together submitted the research paper, *High precision radiocarbon dating shows recent and rapid initial human colonization of East Polynesia*. Their findings using high precision carbon dating revealed that in the 13th century, the Polynesian expansion came in from West Polynesia, Samoa to the central Society Islands. Wilmschurst et al (2011) state “...the Polynesian seafarers discovered nearly every other island of the eastern Pacific within about one century, a rate of dispersal unprecedented in oceanic pre-history” (p. 1818). Due to the rapid human colonisation and Polynesian settlement, consideration of (Māori) human impact on the ecosystem was also indicated in their research.

According to Moodley, Linz, Yamaoka, Windsor, Breurec, Wu, Ayas, Bernhöft, Thiberge, Phuanukoonnon, Jobb, Siba, Graham, Marshall, Achtman (2009), the collaborative scientific research paper, ‘*Peopling of the Pacific from a Bacterial Perspective*’ tests the bacterial parasite of humans of which has existed since the very first human migration out of Africa. As such, the research identified two human pathogens with one dating back 32,000 years ago to New Guinea, Australia and interestingly, the Polynesian pathogen was tracked to 5,000 years ago and genetically linked to Taiwan (Moodley et al., 2009).

While raranga Māori is a unique art form that is easily recognisable as indigenous to Aotearoa there are elements within raranga that clearly reflect the Pacific

migratory past of the ancestors. The migratory influences can be traced in relation to types of plants used in weaving, geometric designs, weaving techniques and spiritual traditions (McRae-Tarei, 2013, p.11).

The practice and knowledge of weaving during the migration is clearly evident and was maintained by the kāhui kairaranga. In 2019, a collaboration between Kawerau weavers and Taiwan weavers of the Ulay district was forged as a cross-cultural sharing of knowledge and creative practices exchange. The outputs of this exchange consisted of presentations by all weavers and an online book '*Knot+ed*' edited by Anastazja Harding. This exchange presented opportunity into insights of the practices of the Taiwanese weaving traditions of the loom. This further emphasises the evolution during the migration period concerning the use of the loom dissipating and the development of the finger twinning technique. This technique was expertly refined more so after settlement in Aotearoa.

Figure 5 below is the Taiwanese foot brace loom and shows that this weaving practice in Taiwan is still predominantly used to this day (Sayun, personal communication, September 10, 2019). This locates the evolution of Māori raranga practices from Taiwan to Aotearoa.

Figure 5: Taiwanese foot-brace loom



Note. From Nomin, S. & Isnanguan, A., 2019a, p. 19.

(https://www.academia.edu/40340512/KNOT_ED_Connecting_Weavers_Of_Taiwan_and_Kawerau), Ulay Weaving Association. Reprinted with Permission.

Figure 6 below shows a loom woven rhombus shaped pattern and is similar to patterns used in Māori weaving. This pattern is used in tāniko, tukutuku (lattice work) and kete whakairo (patterned bag) with diamond motifs. The pattern shown in Figure 6 is very similar to the

pātikitiki (flounder) pattern in tukutuku. The Tayal tribe in Taiwan refer to this diamond motif as the Rhombus pattern (see Figure 6) (Sayun, personal communication, September 10, 2019).

Figure 6: Common rhombus shaped pattern



Note. From Nomin, S. & Isnanguan, A., 2019b, p.17 (https://www.academia.edu/40340512/KNOT_ED_Connecting_Weavers_Of_Taiwan_and_Kawerau). From Ulay Weaving Association. Reprinted with permission.

Figure 7 shows a kete woven in the pattern known as Karu Hapuku, similar to that of the rhombus shaped pattern in Figure 6.

Figure 7: Kete whakairo: Karu hapuku whakairo/pattern



Note. Kete whakairo: Karu hapuku whakairo / pattern. From McRae-Tarei, J. (2 August, 2012). Kete whakairo; Karu Hapuku whakairo/pattern [photograph of kete].

The 100 years prior to the settlement of Aotearoa was a period of expansion and occupation of lands scattered throughout the Pacific (Wilmschurst et al., 2011). During this time, Winiata

(2006) infers that before the Māori settler arrived in Aotearoa, he had a wealth of knowledge and had accumulated an adeptness of ability and inquiring prowess, knowing that this traditional knowledge be continued and progressed throughout the generations.

Our people came to those shores with views of the world that their descendants continue to maintain, expand, enhance, enrich and refine. The knowledge continuum that originated in the Pacific was based on mātauranga accumulated and refined during their centuries in their previous homes. They came to a land with seasons, flora, fauna, fish and other features that were different from their previous habitats. Among their important possessions was an accumulation of knowledge and experience and intellectual powers of observation and analysis (Winiata, 2006, p. 200).

Māori oral history retells when Kupe and his wife, Kuramārōtini (also known as Hine-te-aparangi) were exploring the seas they spotted a large land-mass shrouded in white cloud in the distance, Kurumārōtini cried out,

He ao! He ao! He aotea! He aotearoa!
A cloud, a cloud! A white cloud! A long white cloud!

Upon their return to Hawaiki, Kupe had shared his navigation knowledge of the ocean currents, winds and stars and location of Aotearoa with Turi (Hiroa, 1949). There are tukutuku patterns that depict stars.

Settlement of Aotearoa

The seven waka that are reported arriving at various times to Aotearoa were Tainui, Mātaatua, Kurahaupō, Tokomaru, Aotea, Te Arawa and Takitimu. The new waka ancestors encountered a major difference in temperate conditions and unlike to what they were accustomed to in tropical Polynesia (Furey, 2006). However, the landscape bountiful and abundant with native flora, sea of lavish green trees and plants and fauna, birds, fish and animals. Though the waka ancestors had a wealth of knowledge, there was still very much to learn about their new environment and what the new land would potentially provide.

Mā te whenua ka whai oranga ai.
Land alone gives man his sustenance.

The importance of acquiring knowledge and disseminating that knowledge was crucial for all the people and future generation.

Whāia te mātauranga hei oranga mō koutou.
Seek after learning for the sake of your well-being.

Māori observance of nature and natural conditions was referred to as Te Wao Nui ā Tāne (the Great Forests of Tāne) and is reiterated by Firth (1929),

...Māori, much more directly dependant for life on the forest, sea food, and the cultivation of the soil, followed closely determined sequence of operations in accordance with seasonal change and the movements of the animal and plant life around him (p. 55).

The aute tree transported during the migration to Aotearoa had previously been utilised throughout Polynesia to make cloth for clothing as its primary function and manufactured for items such as body wraps and loincloth (Furey, 2006; Hiroa, 1924). However, with the cooler climate of Aotearoa it became very difficult to grow the aute and due to the scarcity, it was used as wrapping for rākau atua (god sticks), and ear ornaments (rolled cloth) (Mead, 1968). Colenso (1880) reported that the aute had become extinct by 1870.

Mead (1968) asserts “the fact that the paper mulberry tree failed to flourish...led to an easy adoption of flax as a substitute” (p. 17). The need for another fibre source suitable for clothing in the new environment was imperative.

The settlers set about adapting to the new environment and exploring the properties and uses of the natural resources that were now available to them. The need for clothing to provide warmth and protection became a high priority. Experimentation with the native plants eventually led the immigrant weavers to the harakeke (*Phormium tenax*) plant (McRae-Tarei, Lentfer, Te Pou & Taituha, 2013, p.151).

Hiroa (1924) states that a “different environment with different material stimulated entirely new inventions and led to the adaptation or a known technique to new requirements or to a combination of both” (p.25). Trialing different harakeke (New Zealand flax, *Phormium tenax*), led to the discovery of muka/whitau (fibre-threads of flax). Muka is found in specific types of harakeke and was the primary weaving plant used. Other native weaving plants over time came to be used (Smith & Hakiwai, 2008). The production of textile weaving, tāniko (figure weave/twinning) led to the construction and refining of kākahu (a general term for cloak, to put on clothes, dress), such as tuapora or pora (rough rain capes), kaitaka (a highly prized cloak made of flax fibre with tāniko ornamental border), kākahu and kahukurī providing protection and warmth. Cloaks identified (by type) the status of the wearer (Firth, 1929; Jacomb, Walter,

Easdale, Johns, O’Connell, Witter, & Witter, 2004; Mead, 1968). Prestigious certain cloaks imbued the mana, transferred by the wearer or chief and were given names. Colenso (1891) remarked the importance of harakeke by Māori chiefs,

On my arrival in this country the Maoris ... would often inquire after the vegetable productions of England; and nothing astonished them more than to be told there was no harakeke growing there. On more than one occasion I have heard chiefs say, “How is it possible to live there without it?” also “I would not dwell in such a land as that” (p. 464).

Against this background, it is argued that the kāhui kairaranga was critical and hugely significant to their communities (hapū) to provide clothing and as components contributing to the economic and social aspects of the people.

The adept weaver became integral to the community ensuring the continued existence of the people in a new land. Not only could the weaver provide utensils and clothing for the people, but also held bargaining power, bartering with other tribes acquiring their tribal resources. One such case was a beautifully made cloak given the name of *Karamaene* which was exchanged for a great carved war canoe (Pendergrast, 1987). This exchange would not be possible if it were not for the skilfulness of the weaver. She was a major component in ensuring the economic wellbeing of the community. The weaver was indeed essential to the people and held in great esteem (Firth, 1959) (McRae-Tarei, 2013, pp. 20-21).

The value placed on the knowledge and expertise of the traditional weaver aligns to the following whakataukī (Brougham, Kāretu & Reed, 2004),

Aitia te wahine i roto i te pā harakeke.
Marry the woman in the flax bush (p. 162).

If a woman is frequently seen gathering flax, it is an indication that she is a weaver. As such she is eminently eligible and should be preferred as a spouse (Brougham, Kāretu & Reed, 2004, p. 162).

Figure 8 is a fine example of the kaitaka huaki within the Te Ao Kōhatu period.

Figure 8: Kaitaka huaki (cloak with double tāniko borders)



Note. Unknown; weaver; 1840 / 1860. From Museum of New Zealand Te Papa Tongarewa. Registration number: ME000763.

There is a kōrero from Te Āti Awa and Ngāti Hāmua/Te Matchou regarding this kaitaka huaki. This kaitaka had much mana and belonged to Ruhia Pōrutu, who was a great chieftainess. It is said, that in 1840, two young Pākeha boys looking for somewhere to sleep, found an empty whare of which belonged to the rangatira, Te Rīrā. Te Rīrā was Ruhia's father in law, and both were chiefs. Te Rīrā's whare was located on a hill of Pipitea. The boys knew nothing about tikanga or the tapu of this whare but entered nonetheless and fell asleep in the whare. Ruhia, Te Rīrā and his war party returned and found the young boys asleep. Because they were found in Te Rīrā's whare, Te Rīrā rose his mere named Horokiwi ready to strike the boys dead. But Ruhia quickly covered these boys with her kaitaka and this saved their lives (Brechin-Smith, 2019).

The Museum of New Zealand Te Papa Tongarewa is New Zealand's national museum located in Wellington. Known simply as Te Papa in Wellington, fine examples of cloaks made in the 1800s can be found including kahu huruhuru (feathered cloaks) (Figure 8), kaitaka (Figure 7), kahu toi (rain cape made of toi) and korirangi (cloak adorned with twined muka). According to Nixon (2007), “an integral part of traditional Māori society was recording the history, significant occurrences and what made one haapu or whaanau different from the rest was through waiata, karakia, carvings and weavings” (p.17).

Lore

Lore is a body of knowledge derived from the inception of social circumstance. Little (2017) explains, when examining the nature of historical knowledge these reflections, as a body of work are a “philosophy of history” (para. 1).

The concept of history plays a fundamental role in human thought. It invokes notions of human agency, change, the role of material circumstances in human affairs, and the putative meaning of historical events. It raises the possibility of “learning from history.” And it suggests the possibility of better understanding ourselves in the present, by understanding the forces, choices, and circumstances that brought us to our current situation (Little, 2017, para 1).

The origins of Māori lore transpired through oral intergenerational transmission. Variations of creation and knowledge narratives are distinct to tribal histories (Graham, 2009) that conveyed messages of values and exemplars of behaviour. These are depicted through narratives of origin, whakapapa, karakia, waiata and whakataukī (McRae, 1997; Mead & Grove, 2001). As such, these were conveyed to provide Māori society with a cognitive understanding of te ao Māori and Māori philosophy. Precedents set down by the deeds of the ancestors were embedded in these narratives that provided authoritative models for correct or tika behaviour that depicted the virtues and ideals of Māori (Patterson, 1992) and referred to by Marsden (2003) as ethics.

The significance of oral tradition as more than merely myth have been noted by a number of scholars who assert the need for researchers to consider not only their viability as historical documents but also the deeper insights they reveal about people, their cultural practices and epistemological frameworks (Mahuika, 2009, p.133).

Tamati Kruger, a kaumātua (elder) of Tūhoe, describes the connection between Māori philosophy and tikanga saying, “if light was our tikanga, then the sun must be our philosophy” (as cited in Temara, 1999, p.5). Philosophy meaning Māori beliefs are the heart of everything. He explains that everything does not start from tikanga, but tikanga originates from philosophy. Tikanga is how and why things are done, it is thus also a practice, a verb, a doing word. Edwards (2013) further elaborates, that mātauranga Māori, Māori values and systems are inextricably linked “...value systems are linked in organized and coherent ways” and are “timelessly tested philosophical and theoretical positions that provide for Maori ways of knowing and being” (p. 3).

Figure 9 depicts the whakapapa of Io relating to the creation and origins of the Earth and Sky causing into existence the Universe, suspending the Heavens above, while below lay Papatūānuku. Then Io, caused other beings to exist and Papa and Rangi conceived the Atua (god/s), with their respective domains and knowledge (Best, 1976). The complexity of mātauranga Māori (Māori knowledge) emerges from the interconnected and inter-related nature of all entities of the Io whakapapa from which the nature and deeds of the Atua narratives derive and where tikanga, values and principles originate. Mead (2003) believes that whakapapa is the most sacred of Māori knowledge. The whakapapa and origins of knowledge will be further explored in Chapter 2 Te Rau Mārama.

Figure 9: Whakapapa of Io and universe

	Io
	A-io-nuku
	A-io-rangi
	A-io-papa
	A-io-matua
	The Primeval darkness
	The Continuous darkness
	The Groping darkness
	Sleep-impelling-Hine
	The great Firmament-skyroof
	The Night
	The Day
	Rangi
	Papa,
No. 1	Tama-rangi-tau-ke
No. 2	Aitua, fate, destiny
No. 3	Rongo and Tane
No. 4	Tane-mahuta
No. 5.	Tawhiri-matea
No. 6	Rua-ai-moko
No. 7	Ngana
No. 8	Haumia-tiketike
No. 9	Tu-mata-uenga
No. 10	Tangaroa

Note. Adapted from “A Maori cosmogony” by T. Paraone, 1907, *The Journal of the Polynesian*, 16(3), p. 115. Copyright (1994) by the University of Auckland. CC BY-SA

Te Whare Pora-The Ancient House of the Art of Weaving

Te Whare Pora in its transliteration is ‘the Ancient house of the Art of Weaving’ of formal learning where a potential weaver would be observed and tested. This knowledge pertained to the specialised body of knowledge of weaving that pertained only to the kāhui kairaranga including tikanga, karakia and whakapapa. It did not include the ‘everyday’ practical weaving articles. To the kāhui kairaranga, woven specialised items embodied history and whakapapa

and reflected mana of the wearer and/or owner. This space was kauae runga (celestial knowledge) connecting you to the Atua, a space to aspire to as a recipient of the Atua (Rose Te Ratana, personal communication, 20 July 2021). Karakia were used to initiate the weaver/kairaranga into Te Whare Pora. The initiation ceremonies were based on tikanga Māori binding the kairaranga by the lore of tapu (Mead, 2003; Te Kanawa & Turi-Tiakitai, 2011). Once the rituals were completed, she became “a beneficiary of divine strength and support” (Mead, 2003, p. 258). The following is a karakia for baby girls provided by Taylor (1870),

Tohia te tama [hine] nei
He aha, he hau ora
He hau rangatira
Kei runga hei te rangi
Ka puha te rangi
E iri iria koe ki te iri iri
Hahau kai mau, tangaengae
Haere ki te wahie mau, tangaengae
(p.186).

This incantation advocates the idea that the skill of weaving was a quality that females were looked upon to achieve and master, giving emphasis to the importance of the skill she would acquire in life (Hiroa, 1949; Pendergrast, 1987; Puketapu-Hetet, 2000; Te Kanawa & Turi-Tiakitai, 2011). There is also another account through the Rangitāne oriori called, ‘Whakaewe-i-te-rangi’ during her naming ceremony “...outlines how weaving skills and knowledge were passed down through the generations” (Boyd, 2010, p. 15).

Young girls were observed to see whether she had the ‘gift’ in learning the skills of raranga. She would learn basic raranga work quite naturally but later in life she might be tested to see if she held a strong interest in raranga. Once this interest was established the learner would undergo the initiation process into te whare pora. For Māori, these ceremonies involved ritual of tikanga. Tikanga not only ensures that correct behaviour is followed but also displays what the whānau, hapū and iwi expected of the weaver in relation to her characteristics (McRae-Tarei, 2013, p. 21; Mead, 2003).

Puketapu-Hetet (2000) states, “the ancient Polynesian belief is that the artist is a vehicle through whom the Gods create. Art is sacred and interrelated with concepts of mana, mauri and tapu” (p. 2). Knowledge and learning of the whare pora was to maintain excellence and ensure that this continues for future generations (Te Kanawa & Turi-Tiakitai, 2011). Te Ratana (2012) renders the ancient house of the art of weaving and the rituals associated as being fundamental in terms of preserving this art form. Puketapu-Hetet (2000) also describes

the whare pora as not just a house of learning but alludes to a “state of being” (p.24). Te Whare Pora is not only a physical house of learning but also can refer to the actual weaver as embodying the wairua and mauri of Te Whare Pora.

Best (1898) further implies, that there were specially built houses of learning devoted to an area of study that was importance for Māori, one of which was, Te Whare Pora. These houses were created to conserve the knowledge and ancient practices (Best, 1898).

In such initiations, whether of the whare pora, the whare maire or whare mata the first task of the priest was to recite an incantation to render the pupil clear headed and quick to grasp the new knowledge, to endow him or her with a receptive mind and retentive memory (Best, 1898, p.629).

The rite was named moremore pūwhā (Lambert, 2007). A correlation of the ritual processes regarding knowledge are made between the initiation process for the weaver of Te Whare Pora to the traditional narrative of Tane’s ascension to Io and retrieving ngā kete mātauranga e toru. Both involve the ancient teachings of ritual and processes of karakia, ritual of tapu and noa and that participants lived an awareness of values and respect that corresponded to the level of discipline and expectation to learn. The kairaranga and level of expertise reflected her self-discipline and learned manner acquired in the whare pora, which accorded to the level of perceived mana of woven works produced, that contributed to the economic wellbeing and mana of the community, of kotahitanga (unity) and whakawhanaungatanga (connection).

Kia heke iho rā i ngā tūpuna, kātahi ka tika.
If handed down by the ancestors, then it would be correct
(Mead & Groove, 2001, p.201).

The knowledge of whakapapa regarding pūtaiao which are the natural resources such as flora, and fauna and knowing which resources and properties should best be used was knowledge that the kāhui kairaranga possessed. These natural resources are identified in Figure 21. All whakapapa knowledge directly links to Atua; this is part of the kauae runga of Te Whare Pora. Hence, the knowledge of Pacific-based weaving plants such as pandanus would have assisted the kāhui kairaranga in identifying suitable weaving plants in Aotearoa, New Zealand. Their prior knowledge of Pacific flora and fauna would have stood them in good stead in continuing raranga in Aotearoa, New Zealand.

Conclusion

The period from European contact to 1860, was the beginning of a rapid major transition for Māori society. However, it was wāhine Māori that were further marginalised in early literature by non-Māori authors whose world saw women as chattel. The kāhui kairaranga voice may have been seldom heard in the pages of this corpus of early writings, but evidence regarding her skills and knowledge of weaving in te ao Māori was clear. This period featured the appropriation of reo Māori, traditional narratives and cultural practices through a Eurocentric lens. The assimilation process ensured Māori adapted to a new language, exposure to a new belief system, patriarchy views and gender inequity, socio-economy impacts, political socialising and finally the declining loss of lands and Māori experiencing the effects of becoming the minority population.

It serves to reaffirm, that despite all that Māori had to contend with, the knowledge narratives of whakapapa connecting to one another, to the land, is taonga tuku iho (heirloom, something handed down, cultural property, heritage) passed on by tīpuna (ancestors) and was intended to always remind us of who we are. Therefore, reflecting back on wa Thiong'o's (1986) statement about how language is communication and a carrier of culture, it is important for Māori knowledge bearers and disseminators of mātauranga Māori to remember to ensure the intergenerational transmission of knowledge continues.

Written accounts of the kāhui kairaranga were scarce and locating her voice through early written accounts were almost non-existent. However, the exception of the few early anthropologists who recorded the rituals and making of Māori weaving, such as Elsdon Best authored the practices and rituals, techniques and processes and composition of woven artefacts of Te Whare Pora. The other reason could also be that the knowledge within Te Whare Pora was specialised knowledge that was not open to just any person, thus this knowledge was not available to just any early writer of the time.

Despite the significant major societal changes of the migration, settlement and assimilation, the kāhui kairaranga of Te Ao Kōhatu contributed to the wellbeing of her community; the knowledge of weaving and the practices of Te Whare Pora was maintained in traditional Māori society, through the period of Te Ao Kōhatu.

Chapter 2, Te Rau Mārama articulates the methodologies of kaupapa Māori ideology and employs the analytical tool of whakapapa to explore and understand the origins of knowledge pertaining to Te Whare Pora. The following whakataukī alludes to the how and why.

Kia ū ki tōu kāwai tūpuna, kia mātauria ai, i ahu mai koe i hea, e anga ana koe ko hea,
Trace out your ancestral stem, so that it may be known where you come from and where you are going.

Chapter 2: Te Rau Mārama

Introduction

Te Rau Mārama employs kaupapa Māori ideology and the cultural tool of whakapapa to map the conceptual framework of this work. The fabric of Māori traditional society was underpinned by a conceptual knowledge framework of whakapapa, pūrākau and whakataukī because they explained tikanga practice (Mead, 2003). The origins of whakapapa and knowledge will be explored as the premise to provide a foundation and understanding of knowledge dissemination by the kāhui kairaranga o Te Ao Kōhatu.

Ka'ai & Higgins (2004) state the, "...traditional way of constructing, organising and using knowledge is yet another feature of a Māori world-view" (p.22). All pursuits of learning involved rituals. The act of learning and teaching was not ordinary or common (Mead, 2003). Mead (2003) further states, "The importance of the act of acquiring knowledge was emphasized by surrounding the event with rituals... Learning was elevated high above the ordinary pursuits of a community" (p.307). Furthermore, Mead (2003) goes on to explain that there are two aspects of tikanga, "First is a set of ideas and beliefs..." (p.14) and the "...second aspect is the operation and performance of the idea of tikanga by a group or individual" (p.14). There were very strict processes in ritual and should the ritual not be performed properly, misfortune would visit upon the individual or group (Mead, 2003) that involved principles of tapu and noa. These were ways to regulate and ensure order and wellbeing in traditional Māori society.

The exploration of patterns and symbols as mnemonic tools give insight of the environment of which the kairaranga lived. This recognises that the dissemination of knowledge through woven patterns other than oral traditions also transmitted knowledge of the world as they knew it. The role of the kāhui kairaranga acquired that her knowledge of Te Whare Pora was equated to and on the premise of, the overall collective wellbeing of her people. The name of this chapter, Te Rau Mārama is written in the attempt to understand knowledge dissemination of the Kāhui Kairaranga in her world and time of Te Ao Kōhatu and the relevancy of today.

Kaupapa Māori Ideology

This research is located in a kaupapa Māori ideological framework that allows for the analysis of Māori knowledge from a Māori world-view and allows the analysis in the ...“way in which

dominant groups construct ‘common sense’ and ‘facts’ to provide justification for maintaining inequalities and oppression for Maori people” (Kiro, 2000, p. 31). Kaupapa Māori research has emerged from the wider kaupapa of the Māori education movement that seeks solutions from within Māori cultural understandings. It is a culturally safe and a relevant research approach that is located within the Māori world-view and recognises the importance of te reo me ngā tikanga Māori (Māori language and culture) (Irwin, 1994).

Graham Smith, 1993 (as cited in Mahuika, 2008) maintains that kaupapa Māori;

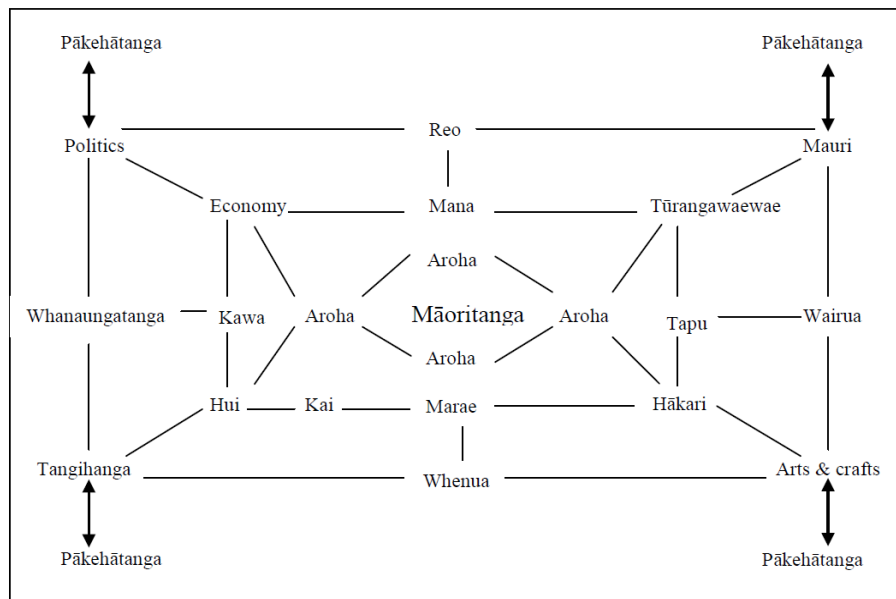
... is not a rejection of Pākehā knowledge and or culture, however it does understand the critical factor of how knowledge can be controlled to the benefit of particular interest groups. Kaupapa Māori advocates excellence within Māori culture as well as Pākehā culture. It is not an either or choice... (Mahuika, 2008, p.4).

Kaupapa relates to notions of foundation, plan philosophy and strategies. Kaupapa Māori, therefore, indicates a Māori view of those things. It relates to Māori philosophies of the world, to Māori understandings on which our beliefs and values are based and Māori world-views and ways of operating in the world.

The kaupapa Māori models that follow are Māori philosophies or ideologies and contain Māori tikanga, practice, values and traditions that will guide the researcher and frame the research within a mātauranga Māori construct.

Figure 10 is the Rangihau conceptual model. Rangihau locates Māoritanga at the centre of the model, a term which was coined in the 1970s to describe the Māori world-view. Ka'ai & Higgins (2004) explain that by locating the Māori world in the heart of the model and Pākehātanga on the periphery, it portrays contact with the Pākehā world and reflects a culturally specific framework that will assist Pākehā to understand a Māori world-view. With the Māori world situated at the heart of Rangihau's model, the researcher can position their research within the model as everything is inter-linked and based on a Māori world-view. Furthermore, the Māori values contained within the model, shape the backbone of the research (Ka'ai & Higgins, 2004). Rangihau's model will inform this research by providing an ideological framework and methodology framework in which to anchor the research.

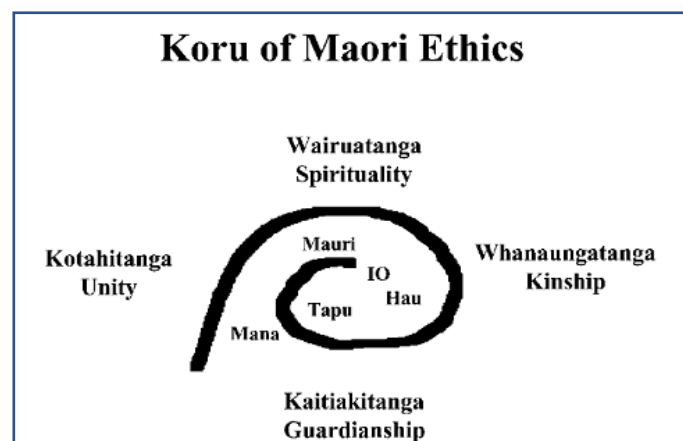
Figure 10: The Rangihau Conceptual Model



Note. From *Ki te whaiiao: An introduction to culture and society* (p.16), by Ka'ai & Higgins, 2004, Auckland, New Zealand: Pearson Education New Zealand.

The *Koru of Māori Ethics* model shown in Figure 11 prescribes the concepts and values of which is a small part of a larger system that is complex and dynamic. The elements within this model are all connected and provides a guide of ethical responsibility for the researcher to observe throughout this research.

Figure 11: Koru of Māori Ethics



Note. Henare, M. (1998). *Koru of Maori ethics*.

In this model, the traditions in society dictate ethical and moral behaviour. Traditional society for Māori involves connection to all things, which are intrinsically sacred, through genealogical

links to the gods and Io (the supreme being, the source of life) and all other living things (National Ethics Advisory Committee – Kāhui Matatika o te Motu, 2012, p. 25).

Whakapapa: An Analytical Tool

Graham (2009) states “Māori traditions have their foundations in the creation of the universe that have been maintained and retold through narrative discourse for centuries and therefore have played an important function in mātauranga Māori transmission” (p. 1). Graham (2009) describes the lens in which the lore of whakapapa has survived, “...the creation of the universe that have been maintained and retold through narrative discourse for centuries and therefore have played an important function in mātauranga Māori transmission” (p.2).

Graham (2009) also elaborates this further as a ‘way of being’,

It is through whakapapa that the organisation of knowledge in respect of the creation and development of all things legitimates a Māori world-view, which is at the heart of Māori knowledge, Māori ways of knowing and Māori ways of acquiring new knowledge. Accordingly, a research methodology framed by whakapapa not only authenticates Māori epistemology and its rightful place among research traditions, it also supports the notion of whakapapa research methodology throughout the indigenous world; indigenous peoples researching among their indigenous communities worldwide. Indigenous identity is strengthened, as is the contribution of the notion of whakapapa to Indigenous research paradigms worldwide (p.1).

A whakapapa methodology serves as a historical anchor that contextualises and organises knowledge and philosophy.

...was the beginning of all things that moved through three states of conception, formation, and creation, which in turn descended from an energetic time and place called Te Kore. From Te Kore came Te Pō, symbolising a time when the earth came into being (Walker, 1990, p. 10). Māori cosmogony explains the origins of the Universe, in chronological order through the “personification of natural phenomena” (Williams, 2001, p.101).

According to Paki and Peters (2015), “the meaning of whakapapa is ‘to lay one thing upon another’ as, for example, to lay one generation upon another” (p. 50). Whakapapa is fundamental knowledge and an evolving process.

From Te Pō came the emergence of light. This was called Te Ao Mārama, the time where the earth and the skies came into being. In synchronicity with the sky father, Ranginui and Papa-tū-ā-nuku, the earth mother, Te Ao Mārama would eventually become “the dwelling place of

humans” (Walker, 1990, p. 11) through the creation of te Ira Tangata, the human principal. This unification from te Ira Tangata to the human principal moved to a spiritual and physical connection between people and the universe as the “genealogical descent of all living things from the gods to the present time” (Barlow, 1991, p. 173) (as cited Paki, & Peters, 2015, pp. 49-50). Whakapapa begins with Io and the stages or epochs toward the origins of the World of Light.

Royal (1998) states that whakapapa as an analytical tool is a means to understand the following points;

- the nature of phenomena
- the origin of phenomena
- the connections and relationships to other phenomena
- describing trends in phenomena
- locating phenomena
- extrapolating and predicting future phenomena (Royal, 1998, p. 3).

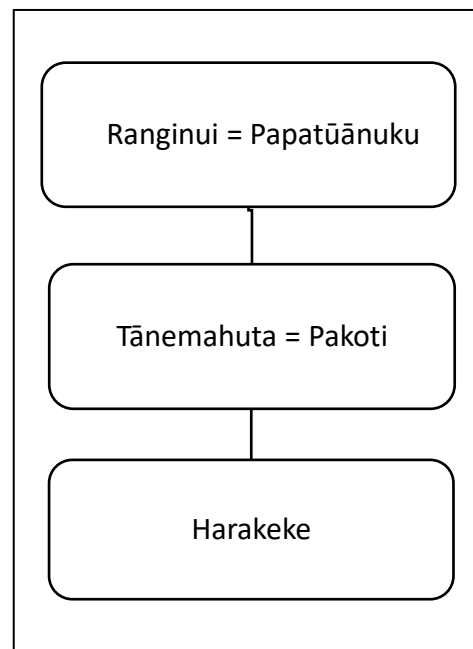
Te Wao Nui ā Tāne

Barlow (1991) explains that whakapapa acts as the foundation for the organisation of knowledge. According to a Māori world-view, Te Wāo Nui ā-Tāne is the domain of Tāne, the Atua of the forest, the birds and the insects. Tāne set out to find the female element to mother the human race and produced the ira tangata (human life, human genes). However unsuccessful, he procured from those female beings, trees and plants. Best (1907) provides a whakapapa of the origin of trees and plants including those related to the art of weaving, Hinemahanga the parent of the tutu, kākaho of the toetoe, Huna the origin of the harakeke and Tawhara-nui of the kiekie. There are variations of the whakapapa for the native plants and trees. Pakoti and Tānemahuta, both produced a superior species of harakeke (Higgins & Loader, 2014; Huata, 2000; Turi-Tiakitai, 2015).

Tāne-nui-a-rangi was given this name after retrieving nga kete o te wānanga (three vessels of knowledge) from the heavens, sought the female element to procreate the earth with mankind. He engaged in numerous procreation acts with supernatural female deities producing offspring of various plants and trees. One female deity was Pākoki also known as Pākoti and from this union begat Harakeke. Tāne then assumed the name Tāne Māhuta, God of the Forest (McRae-Tarei, 2013, p.7).

Figure 12, shows the whakapapa from Tānemahuta and Pakoki as being the parents of all the species of harakeke.

Figure 12: Whakapapa of the Harakeke



Note. By J McRae-Tarei, 2013, Auckland, New Zealand.

The connection between whakapapa and narratives is offered by Marsden, 1988 (as cited by Royal, 1998),

... whatever symbolic representation was chosen the methodology was to recite first the actual genealogy and then to embed it in narrative form. The genealogy was learned by rote and provided the frame or skeleton, and the narrative form clothed it in flesh (p. 53).

Exploring Māori oral traditions is to bring understanding of the connection between whakapapa and narratives. Furthermore, according to Pihama, Smith, Taki & Lee (2004), “whakapapa is regarded as an analytical tool that has been employed as a means by which to understand the Maori world and relationships” (p.24). Whakapapa is also associated with the tikanga principles of tika/pono (honesty), manaakitanga (cultural and social responsibility) and māhaki (respectful conduct) when taking in consideration of relationships (Hudson, Milne, Reynolds, Russell & Smith, 2010). Therefore, whakapapa as an ethical principle ensures that all relationships of engagement observe these principles to ensure mutually beneficial outcomes.

Thus, the Te Wao Nui-ā-Tāne Model provides a framework utilising tikanga and value-based practices that safeguards and assists ethical decision-making.

In conclusion, the Kaupapa Māori ideology framework and corresponding models of a Māori worldview entails the positioning of the Kairangahau within the rangahau, ethical behaviour that ensures the correct behaviour that is engaged throughout the rangahau and whakapapa as knowledge to understand the conduct and engagement through all aspects of this rangahau.

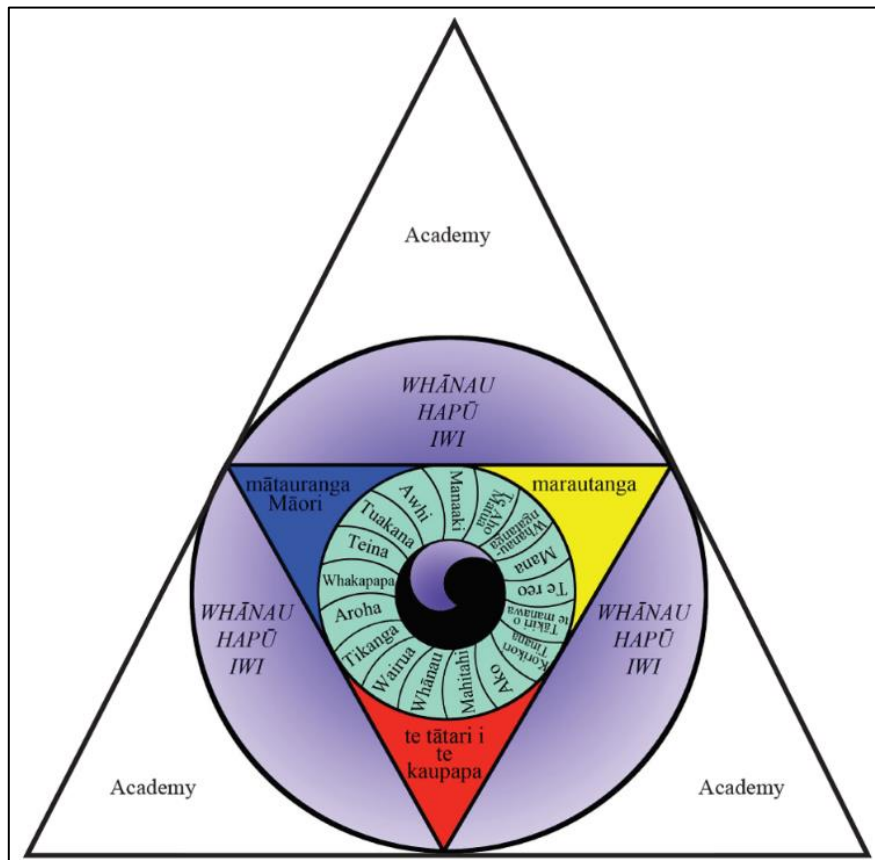
Smith (1992) identifies six elements that form part of the culturally specific framework of which underpins the kaupapa Māori approach with this research that includes the theoretical and practical components of this exegesis.

“*Tino Rangatiratanga*: the relative autonomy principle” (p.19) as a Māori wahine and kairaranga working collaboratively alongside fellow weavers as the kāhui kairaranga. “*Taonga tuku iho*: the cultural aspirations principle (p.19)”, reflecting on the past and giving voice to the future and legacy for descendants. “*Ako Māori*: culturally preferred pedagogy” (p.19), ensuring the tikanga practice and the principles are adhered to always. “*Kia piki ake i ngā raruraru o te kainga*: the mediation of historical socio-economic factors” (p.20) are an acknowledgement of past and present hurts and mediated through understanding. “*Whānau*: the extended family management principle” (p.20), respecting the knowledge of whakapapa and ensuring wellbeing of all whānau and extended whakapapa thereby enabling and maintaining the “*Kaupapa* or the collective vision principle” (p.20). (Smith, 1992, pp.19-20).

Mahitahi is also implemented within this exegesis explained within the written component and in the practice of the creative component. The model below explains the collaborative aspect with fellow PhD kairangahau/kairaranga and the relationship with our Supervisor Professor Tania Ka'ai and Te Ipukarea Research Institute.

The Mahitahi Model below (see Figure 13) features a multi-level interrelated connections and elements that are central to Māori and Pacific postgraduate students' educational success and development of their research capabilities and skills required for working within their communities. The Mahitahi Model is grounded firmly in te ao Māori; and there are twenty foundational pou (pillars) that underpin the model (Ka'ai, T., Smith-Henderson, T., McRae-Tarei, J., Taituha, G., Te Ratana, R., Abraham, H, 2021, p.15).

Figure 13: The Mahitahi Model



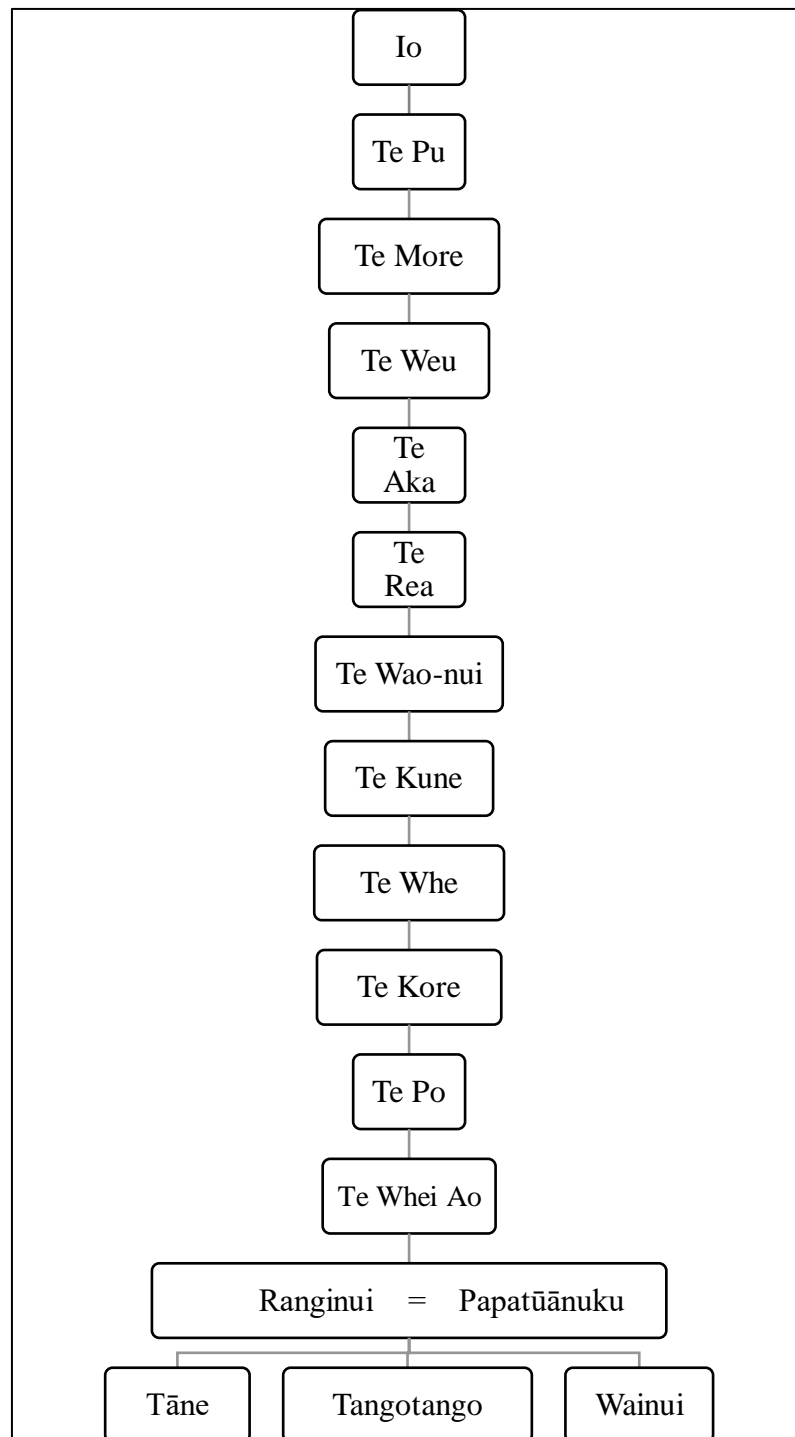
Note. Ka'ai, 2020

Mahitahi is underpinned by Māori philosophies, worldviews and values and is a unique Māori approach to supporting successful completion of studies by the Māori learner. It also supports teaching expertise and development of skills for the supervisor/s in their teaching and learning practice. Mahitahi adopts strategies such as tuakana-teina methods, whanaungatanga methods, culturally responsive methods that encourage cultural identity, sense of place and belonging and establishes the relevance of mātauranga Māori in postgraduate research supervision, and the teaching and learning environment. Central are Māori concepts and cultural practices, for example, whanaungatanga (building of respectful relationships, creating a sense of belonging), manaakitanga (the caring process entwined within building respectful relationships required to build self-belief and confidence in learners) which are important elements of the Mahitahi Model. The use of these Māori concepts and cultural practices set up and enable a safe environment for teaching and learning. It also strengthens the relationship between student, supervisor, the institution and the community (Ka'ai, T., Smith-Henderson, T., McRae-Tarei, J., Taituha, G., Te Ratana, R., Abraham, H, 2021, p.15).

Figure 14 depicts the Te Ao Marama whakapapa and how the world came into light from darkness as retold through the pūrākau of Te Wehenga o Rangi me Papatūānuku (the separation

of Rangi and Papatūānuku).

Figure 14: Te Ao Mārama Whakapapa



Note. Adapted from T. C. Royal, 1998, *He Pukenga Korero*, 4(1), pp.1-8; T. C Royal, 2007; Paki & Peters, 2015.

This whakapapa contains elements of time and growth through stages from night to day, dark to light. It also has the added element, that connects the pūrākau which recalls the separation

of Rangi and Papatūānuku to this whakapapa, but in essence, it is the origin of the world. This is an example of whakapapa knowledge and how one aspect of knowledge connects to the other. This begins an understanding of how intricate the network of whakapapa knowledge is.

Mātauranga Māori

There are many aspects or elements of mātauranga Māori. An aspect of mātauranga is tikanga. Mead (2003) explains that tikanga is a set of ideas and beliefs, and derives from the “...accumulated knowledge of generations of Māori...” (p.13). This implies that tikanga can change and adapt and be relevant, over time when change occurs.

Paul, Kahu, Te Kani, and Ataera (2001) state,

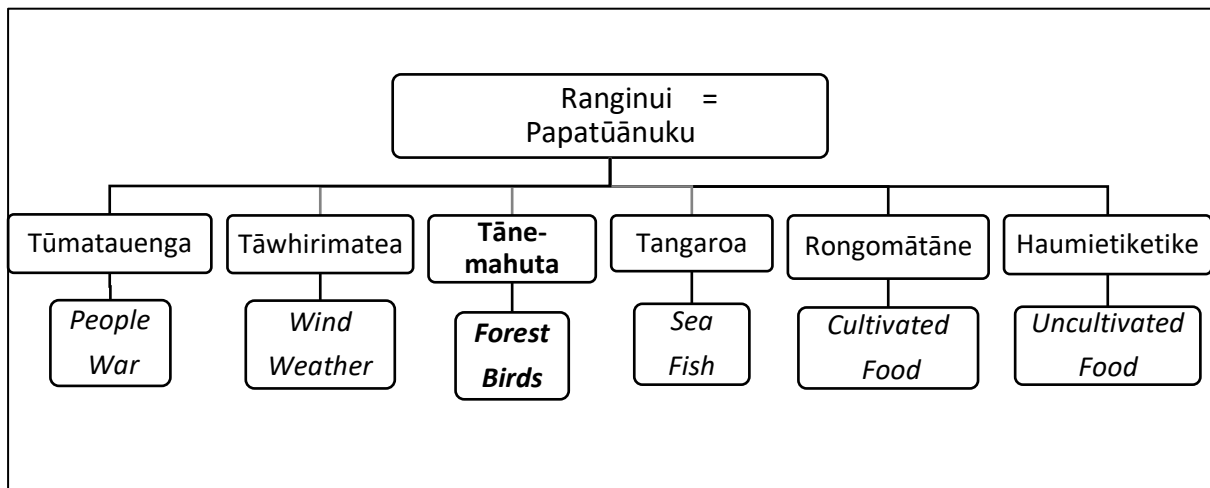
The term for Māori custom is tikanga, which is derived from the word tika. Tika can cover a whole range of meanings, from right and proper, true, honest, just, personally and culturally correct, to upright. Tikanga does not denote a static set of rules...but is... a values-based system. Māori adhere to principles rather than a set of rules (p. v).

This further implies, that tikanga is implemented for the betterment of the individual or people. Durie (1998) talks more about the value oral traditions, “...its worth is in the essential messages it imparts” (p. 20). The origins of tikanga as values are expressed as precedents of correct behaviour within pūrākau (Māori origin narratives). Pūrākau consist of origins and derives from whakapapa. All aspects of knowledge including tikanga and pūrākau is the fundamental knowledge of what began and passed on by the Māori ancestors and thus is whakapapa knowledge. Tikanga changed accordingly but was done so for the betterment and wellbeing of Māori society.

Tāne Mahuta

The whakapapa of Ranginui and Papatūānuku shows the descent line to Tāne Mahuta and his domain (see Figure 15). This whakapapa highlights the relationship between humankind and the natural world. There is a cultural significance in the customary use of the natural resources and as such ritual surrounded the working with natural materials.

Figure 15: Whakapapa of Ranginui and Papatūānuku pertaining to Tāne mahuta



The narrative of Tāwhirimatea's wrath to destroy his brothers over the separation of his parents confronts Tūmatauenga, who stood alone. Tūmatauenga defeats Tāwhirimatea and is resentful by the desertion of his brothers, Tūmatauenga sought to punish them for their cowardly act. He punished Tane by snaring the birds of the forest and consuming them. He fashioned (hinaki) nets to harvest the descendants of Tangaroa for food. Tūmatauenga made (kete) baskets out of Tane's trees and plants and dug up the descendants of Rongomātāne and Haumietiketike for food (Alpers, 1996; Grey, 1953, 1961) (McRae-Tarei, 2013, pp. 14-15).

Figure 16 portrays Tāne-mahuta in the pursuit of the human element. In doing so, his search leads to the origins of the different rākau and weaving plants of his domain. Traditional cloaks ranged from the rain cape which was worn by most in traditional Māori society to the cloaks of kahukuri, kaitaka and kahu huruhuru. As the whakapapa of Tāne and his domain and connection to birds and native plants may have influenced the mana of certain traditional cloaks.

Figure 16: Tāne-mahuta Domain

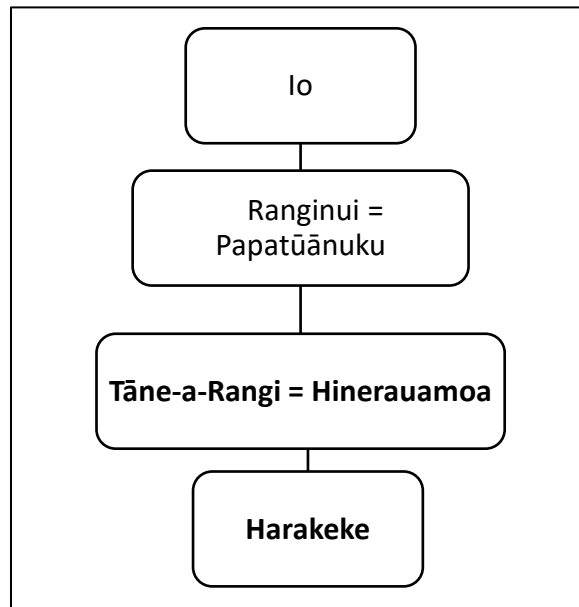
Ka moe a Tane ki a Apunga ka puta ko nga rakau iti katoa o te ngahere, me etahi o nga ngarara o te whenua, me nga manu o te ngahere, nga rakau iti katoa, ko Manono, ko Koromiko, ko Hanehane, ko Karamuramu, ko Ramarama, ko Putaweeta me etahi atu o nga rakau iti o te ngahere.	Tane married Apunga and begat all the small trees, the insects and birds of the forest. Among the small trees were included the Manono, the Koromiko, the Hangehange, the Karamuramu, the Ramarama, the Putaweeta and a number of other shrubs of the forest.
Ka moe ano a Tane i a Mumuhanga kia puta ko Totara nui, ko Totara poriro, ko Totara torowhenua, ko Tawini. Ka moe ano a Tane i a Tukapua ka puta ko Tawai, ko Kahikawaka, ko Mangeao, me etahi atu o nga rakau nunui o te ngahere. Ka moe a Tane i a Mangonui kia puta ko Hinau, ko Tawa, ko Pokere, ko Kararaka, ko Miro, ko Taraire.	Tane married Mumuhanga and begat Totara nui, Totara poriro, Totara torowhenua and Tawini. Then Tane married Tukapua and begat Tawai, Kahikawaka, Mangeao and others of the larger trees of the forest. Then Tane married Hine wao riki and begat Kahikatea, Matai, Rimu, Pukatea, Kauri and Tanekaha. These are the conifers with small rough foliage. Then Tane married Mangonui and begat Hinau, Tawa, Pokere, Kararaka, Miro and Taraire. These are the large broadleaf forest trees with edible berries.
Ka moe ano a Tane i a Ruru-tangi-akau kia puta ko Kahikatoa, ko Kanuka, Ko te Kahikatoa te rakau e kia nei e te korero whakatauki “he tao huata te karo, he na aitua, tu tonu e kore e taea te karo”.	Then Tane married Ruru-tangi-akau and begat Kahikatoa and Kanuka. It is from the Kahikatoa comes the proverb “the thrust of a spear can be parried, but that of death stands forever”.
Ka moe ano a Tane i a Rerenoa, kia puta ko Rata, ko Tataramoa, ko Kareao, ko Akaaka, ko Poananga, ko Piki-arero and Kaweaka. Ka moe ano a Tane i a Puwhakahara kia puta ko Maire, ko Puriri.	Tane then married Rerenoa and begat Rata, Tataramoa, Kareao, Akaaka, Poananga, Piki-arero and Kaweaka. These are the climbing plants that scramble for life on the trunks of other plants. Tane then married Puwhakahara and begat Maire and Puriri.
Ka moe ano a Tane i a Punga kia puta ko Kaponga, ko Mamaku, ko Punui, ko Wheki, ko Kotukutuku, ko Patate me etahi ano o nga ngarara. Ka moe ano a Tane i a Tutoro-whenua kia puta ko Raruhe (ko te aruhe tenei e kainga nei e o tatou maatua. Ko nga putake rahuruahu e kainga ana e o tatou maatua, engari ko nga mea e tupu ana i nga whenua tahoata anake.	Tane then married Punga and begat Kaponga, Mamaku, Punui, Wheki, Kotukutuku, Patate and a further number of ferns and insects. Again, Tane married Tutoro-whenua and begat Raruhe. (These are the edible fern roots consumed by our ancestor but restricted to those that grew in the pumice lands).
Ka moe ano a Tane i a Hine-mahanga kia puta ko Tupaatiki, ko Kakaho, ko Toetoe, ko Wiwi, ko Raupo, ko Parapara me etahi atu o nga tamariki a Tane kei te repo e tupu ana.	Then Tane married Hine-mahanga and begat Tupaatiki, Kakaho, Wiwi, Raupo, Parapara and others of Tane’s children that grew in the swamp.
Ka moe ano a Tane i a Tawake-toro kia puta ko Manuka.	Then Tane married Tawake-toro and begat Manuka.
Ka moe ano a Tane i a Huna kia puta ko Harakeke, ko Kouka, ko Tikapu, ko Toi.	Then Tane married Huna and begat Harakeke, Kouka, Tikapu and Toi. The flax and cabbage trees
Ka moe ano a Tane i a Tawhara-nui kia puta ko Kiekie, ko Tuawhiti, ko Patanga, ko Mokomoko, ko Kiekie-papa-toro.	Then Tane married Tawhara-nui and begat Kiekie, Tuawhiti, Patanga, Mokomoko and Kiekie-papa-toro.
Ka moe ano a Tane i a Hine-tu-maunga kia puta ko Para-whenua-mea, ko te wai whakamaakuu tenei i nga putake o nga tamariki a Tane. Me mutu i konei nga korero kia mau ai te tapu. He kupu whakamarama, kaua e wehi ki tenei whakapapa, kua oti ke te whakamaamaa kia ngawari ai, ki a tatou, me a tatou whakatupuranga.	Then Tane married Hine-tu-maunga and begat Para-whenua-mea which are the waters that moisten the roots of Tane’s children. We close now that the sacredness may be respected. As a clarification, do not be afraid of these genealogies, they have been relaxed and subdued to protect us and future generations.

Note. Forster, 2008, retrieved from <https://www.bushmansfriend.co.nz/proverbs-and-quotes-xidc18714.html>

The Origins of Māori Weaving

Figure 17 below provides the whakapapa of Hine-rauamoa who is the deity of harakeke (Best, 1900, pp.467-468).

Figure 17: Whakapapa of Hinerauamoa



Note. Adapted from “Maori origins: Part II” by Best, 1900, Transactions and Proceedings of the Royal Society of New Zealand 1868-1961, 33(58), pp. 467-468. Copyright (1994) by the Royal Society of New Zealand; Tamarapa & Wallace, 2013; Te Kanawa & Turi-Tiakitai, 2011.

Tamarapa and Wallace (2013) state that Tāne’s name was Tāne-nui-a-rangi and “according to Ngāti Awa elder Hāmiora Pio, the knowledge of weaving began with Hine-rauamoa, the wife of Tāne-nui-a-rangi” (p. 3). Hine-te-iwaiwa, the daughter of Tane-nui-a-rangi and Hine-rauamoa, is the patroness of all things pertaining to women and other accounts have her as the deity of Te Whare Pora (Te Kanawa & Turi-Tiakitai, 2011). There are other tribal variations for example, Niwareka was responsible for bringing the textile weaving arts to the world (Te Ao Hou, 1965). She brought with her from the underworld a fine cloak named Rangi-haupapa with elaborate tāniko as the first earthly example of weaving (Orbell, 1995). Hine-ngaroa “...taught the art of weaving baskets and sleeping mats in coloured patterns” (Best, 1898, p. 634). Best (1898) claims that when a taura (student) becomes initiated into the whare pora she becomes ‘...a daughter of Rua and Hine-ngaroa’ (p.629). According to the tribal version of

Hauraki, Hine-rehia is said to have discovered the art of raranga (Orbell, 1995). Within these narratives are themes of whakapapa, tapu and knowledge and skills and ritual of which pertain to articles of clothing, kākahu and belt. According to Te Kanawa and Turi-Tiakitai (2011), “Rongorongo, the wife of Turi, is said to have presented her father, Toto, a dogskin cloak called *Puke-ki-whatawhata-o-rangi* in exchange for the Aotea waka” (p. 24). Narratives regarding the origins of weaving and the deities are tribal. It is well known that the tikanga practiced in weaving is accorded to the iwi or tribe. The knowledge of weaving is specific to each tribe.

Hine-te-iwa-iwa is almost always mentioned as the female patroness of all things pertaining to women and their state of being, as such Hine-te-iwa-iwa is associated with weaving practices (Boyd, 2010). In Māori customary kōrero, Hine-te-iwaiwa established the powers and responsibilities of women. These responsibilities involved removal of excess tapu and childbirth. Hine-te-iwaiwa set the precedence of a model wife and mother. Girls were dedicated to her at birth. Whakapapa have been traced back through the aristocratic female-line and has often ended with her. It is known by Māori weavers, that Hine-te-iwaiwa is the mother and patroness of weaving.

Te tuku o Hine-te-Iwaiwa
 Raranga, raranga tāku takapau,
 Ka pukea e te wai,
 Hei moenga mo aku rei.
 Ko Rupe, ko Manumea,
 Ka pukea: ē! ē!
 Mo aku rei tokorua ka pukea.
 Ka pukea au e te wai,
 Ka pukea, ē! ē!
 Ko koro taku tane ka pukea.
 Piki ake hoki au ki runga nei:
 Te Matitikura, ē! ē!
 Ki a Toroa irunga,
 Te Matitikura, ē! ē!
 Kia whakawhanaua aku tama
 Ko an anake ra.
 Tu te turuturu no Hine-rauwharangi;
 Tu te turuturu no Hine-te-iwaiwa.
 Tu i tou tia me ko Ihwareware;
 Tu i tou kona me ko Ihuatamai.
 Kaua rangia au e Rupe.
 Kei tauatia, ko an te inati,
 Ko Hine-te-iwaiwa.
 Tuku iho irunga i tou huru,
 I tou upoko,
 I on tara-pakihiwi,
 I tou uma,

I to ate,
I ou turipona,
I ou waewae.
E tuku ra ki waho.
Tuku ewe,
Tuku take,
Tuku parapara.
Naumai ki waho.
(Shortland, 1882, p. 28)

Interestingly, the kūmara and tū (belt) and the direct connection to ngā Atua (the Gods), Rongomaraeroa (personification of the kūmara), “an alternative name of Rongo” (Hiroa, 1949, p. 61) meaning peace and Tūmataurangi who presided over Man and war, are the polar opposites in nature (McLean & Orbell, 1990). McLean and Orbell (1990) also allude to Tū who owned a belt to carry the kūmara kao (dried kumara). As previously mentioned, the ‘tū’ was a belt worn by women, however, Best (1898), notes that this was with the exception of the tū maro that was worn by warriors. Furthermore, there is a connection to the role of the weaver and the tohi (incantation). Hiroa (1949) gives an account of the karakia, “tohi ki te wai no Tū” (p. 495). It is worthy to note as a point of reference to both Atua, the kūmara, belts and weaving. A pattern used most often is the rau kūmara (kūmara leaf/vine) (see Figure 21). This pattern has connections to whakapapa, Hawaiki, rituals and pūrākau. There is a possibility that the rau kūmara pattern is an original pattern used in Te Ao Kōhātu period.

Meanings and Symbolism

The patterns and materials used in weaving carried a history and had a whakapapa. Though the patterns used were similar or had slight variations, it is the meanings and symbolism that was developed within the iwi (tribe).

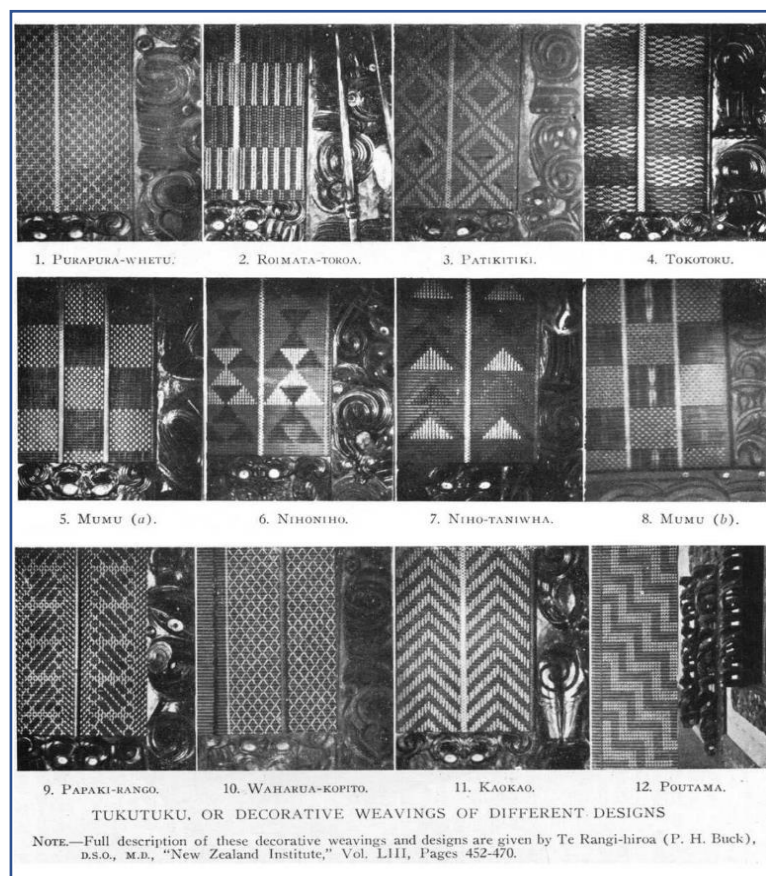
Te Hiroa (1920) refers to tukutuku as arapaki and tuitui (lattice panels/work) (p.452). The tūmatakahuki is a traditional stitch that is used in tukutuku to bind the horizontal and vertical rods. These vertical rods were either kākaho (*Arundo conspicua*) or kakaka (*Pteridium esculentum*). These were a common fern with straight long stalks (Te Hiroa, 1920). Rimu (*Daorudium oupressinum*) and totara (*Podocarpus totara*) was also used in the more elaborate whare. The wood was left for some time and easier to adze. These rods were painted red with haemitite and black with parapara. How the rods were sequenced in groups of threes, fours or fives determined the pattern. “The rods or laths are called *kaho tara* by the Arawa, and *kaho tarai* on the East Coast. The Whanganui called them *arapaki*, and also used the same word

for the entire -panel, including the panel-patterns” (Te Hiroa, 1920, p. 454). Hiroa (1920) also provides an explanation of the tūmatakahuki stitch as it is a prominent feature in a tukutuku panels, used to bind the vertical and horizontal rods together. However, Hiroa (1920), further explains the practice of the tūmatakahuki,

One end was sharpened, whilst the other was rounded and had a loop of flax through it with which to hang it on the wrist. It was called a *huki*. The *tohunga*, having decided on his pattern, thrust the *huki* through one of the interspaces between the rods and stakes, and the assistant followed the *huki* with a strip of material. The *tohunga* returned it through the appropriate interspace, and so the process went on. In modern times the panels have been completed separately and then fitted into the panel- space (Hiroa, 1920, p. 454).

Figure 18 are tukutuku patterns and names of which Te Hiroa considered existed prior to European influence. (Boyd, 2010).

Figure 18: Patterns of Tukutuku



Note. Adapted from *Takitimu*, by T. Mitira, 1972, (pp.24-25). Creative Commons 3.0. Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/MitTaki-fig-MitTakiP002a.html>.

Patterns and meanings are specific to Māori and iwi so acknowledgement should be noted here. For marae in the different rohe (boundary, district, region) that display tukutuku, each of the tukutuku will narrate a tribe's history, ancestor and/or significant event.

The names and the meanings of patterns are interpreted by Tūhoe weavers, Rose Te Ratana and May Te Pou depicted in Figure 19.

Figure 19: Patterns and meanings

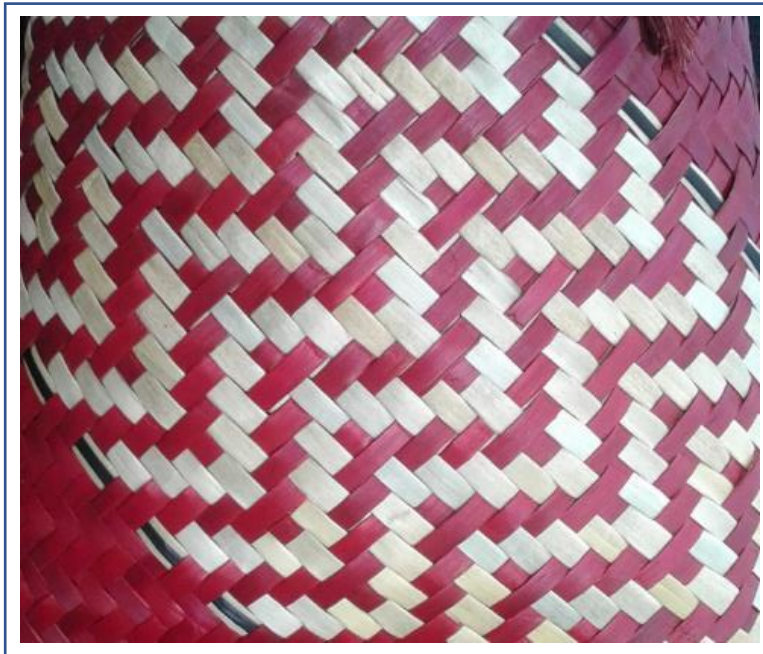
Roimata or roimata toroa	Tears of the albatross, associated with accident, disaster and sorrow
Mumu or whanganui mumu	Mumu denote strategy, marriage. Named after its reputed origin in the Whanganui.
Poutama	Stepped Pattern
Purapura whetu	Star seed, navigation, multitude
Pātikitiki	Flounder also a star. Symbol of prosperity and hospitality.
Nihoniho or niho taniwha	Teeth. Teeth of the creature/water spirit/monster, guardianship.
Papakirango	Fly-swat, preservation, manaakitanga (care)
Waharua-kōpito	The engagement of karanga and between kaikaranga, kaikōrero
Kaokao	Warrior stance, protection
Tokotoru/ Waewae pākura	This is the footprints of the swamp hen and denotes before inhabitation of man. Footprint also established whether there was kai in the area.

Note. Patterns and meanings adapted into Figure 20. (May Te Pou, personal communication, 2 February, 2021; Rose Te Ratana, personal communication, 2 February, 2021)

This is not new, as the progression of creativity of weavers have occurred time, and time again evident in historical accounts of Māori weavers of experimenting with different mediums and materials. As Nixon (2007) outlines, “an integral part of traditional Māori society was recording the history, significant occurrences and what made one hapū or whānau different from the rest was through waiata, karakia, carvings and weavings” (p. 17).

Figure 20 below shows the rau kūmara pattern woven in kete, and whāriki.

Figure 20: Woven rau kūmara patterned pikau (backpack)



Note. Pikau (backpack): Rau kūmara whakairo/pattern. Pikau made and photograph taken by Jacqueline McRae-Tarei. [Photograph].

Whakapapa pertaining to the natural resources and the Atua, often related to significant events and interpretations of nature that were transmitted through patterns and design all of which were symbolic and meaning. The art of weaving was indeed a medium in which kōrero was transmitted, thus it is part of the fundamental corpus of whakapapa knowledge. Figure 19 shows the pattern rau kūmara and in relation to what has been previously discussed, this pattern connects to the Atua, rituals, Hawaiki and pūrākau. However, as knowledge became localised to the tribe, so was the loss in meaning of patterns. There is a gap in the research in terms of locating the origins of patterns. The reason why may associate to a tikanga that is still practiced by some weavers today and that is the covering of unfinished work. This tikanga is also retold by Hauraki about Hinerehia weaving only under the cover of darkness,

Hinerehia was an expert weaver and met her human husband Kangaroa while out gathering seaweed. She moved to his village and only wove at night or on foggy days, covering her unfinished work in the daylight hours. The women of the village were anxious to learn Hinerehia's weaving skills. The women set out to learn Hinerehia's skills and tricked her one night into believing it was still dark. Hinerehia realised that she had been deceived by these women and fled off to the Moehau ranges never to return again. This is how the women of Hauraki obtained their weaving skills and why preparation and weaving only take place during the day as when these skills were known only to the patupaiarehe, they belonged to the darkness. A woman who might be careless about such matters may be cautioned

to remember how Hinerehia came to grief, “me mahara ki te raru o Hinerehia” (Auckland Museum, 1997; Bacon, 2004; Orbell, 1995).

There was a culmination of anxiety and eagerness of the other village women to acquire Hinerehia’s weaving skills and this was exacerbated by her concealing her weaving and not sharing those skills. Clearly Hinerehia did not want to break her custom and wanted to protect the knowledge she held as a weaver. Traditionally, weaving patterns were guarded from strangers. However, it could then be argued that it is not the patterns as such that is protected but the intricate knowledge that these patterns symbolise. Patterns represent Māori spiritual values and connected one with the past teachings of the ancestors. As Patterson (1992) outlines, “...traditional weaving patterns that are handed down from generation to generation within a tribe is regarded as tribal property” (p.25). The element of protecting such knowledge was prevalent. Mead (1968) alludes to this somewhat, stating that “each tribe had its own list of pattern names which, along with the patterns themselves, weavers attempted keep secret (pp. 63-64). Mead (1968) continues that the abstract motifs and geometric patterns of tāniko and the naturalistic interpretation were incidental resemblances but that the pattern name and story were “...to enable weavers to communicate easily with other members of the group about the designs they used, nothing more” (p.64). My response is that communication is the vehicle through which knowledge is disseminated out, and clearly during the eras stated in previous chapters, kōrero had meaning, had whakapapa, and had origin. Should communication ever stop, so would be the transmission of knowledge. My response will become clearer a little further on.

Rituals

To initiate the weaver into Te Whare Pora incantations were used (Hiroa, 1949; Pendergrast, 1987). For Māori these ceremonies involved ritual of tikanga (Mead, 2003). The word ‘tikanga’ itself provides the clue that tikanga Māori focuses on the correct way of doing something (Mead, 2003; Patterson, 1992). Tikanga not only ensured that correct behaviour is followed but also displayed through initiation what the whānau, hapū, and iwi expected of the traditional weaver in relation to her characteristics. She was bound by tikanga and the lore of tapu once the rituals were completed (Mead, 2003).

The tohunga and the taura (pupil) are alone in the whare pora; no others may be admitted. The pupil seats herself before the turuturu: these are two sticks about 1 in. in diameter and 4 ft. in length; they are stuck in the ground some distance apart, according to the width of the garment to be woven: the upper ends of the sticks

often rest against the roof near the walls of the house. This is all the frame used by the Maori weaver these upright sticks though in weaving such cloaks as korowai four turuturu are used; To these sticks is attached the tawhiu, which is the first aho, or woof- thread. The tawhiu is pulled taut and secured, and then to it are attached one end of the io; or warp-threads (known as "whengu" among some tribes), which io are thus suspended from the tawhiu, and hang down to the floor of the house. Thus, the work is held or supported by the tawhiu and braced by the turuturu. The cross-threads, or woof (aho), are woven from left to right across the frame. Each aho is composed of four twisted threads (miro). Two of these are passed on either side of each io, being woven in and out, over and under, in a very dexterous manner, and forming, if the aho are not too far apart, a very close, neat, and strong garment.

The first aho to be woven next the tawhiu is the aho tapu, or sacred woof-thread. It is imbued with the sacredness of the house, the weaver, and the various ceremonies.

But the tohunga and the tauira are waiting for us. She is seated before the turuturu. The right-hand one is the sacred turuturu; the left-hand one is noa (common, devoid of tapu), and is known as "Rua." Before the pupil are spread out or suspended various garments of a fine design, woven by a master-hand in fine patterns of dyed fibre. It is desired that the pupil may be taught to do such fine work as that before her; that the knowledge, taste, dexterity, and power be forced into her during one lesson, as it were, and not drawn out through a long series of lessons, extending maybe over a considerable period of time, as is the case with the benighted pakeha. You may imagine this to be an impossibility. Not so: the gods who live for ever can accomplish it (Best, 1898, pp.627-628).

Best (1898) also records the incantation recited by the tohunga during the ritual of Te Whare Pora.

He Moremore Puwha

(E poua ana tena i te tangata.)
 Poua mai te pou, ko te pou-e
 Ko whakahihiri, ko whakahohoro
 Tu-mata-ihi, Tu-mata-whare
 Tukua mai te aho kia kawitiwiti
 Kia taia hohoro mo te oti wawe
 Wawe ki runga, wawe ki raro
 Wawe ki te oti o te hikuhiku
 Oti tatahi, oti ki te whare
 Ruru te puke
 Puki-i-ahua, Puke-i-apoa
 Apoa ki te rangi
 Whanui ki te whenua
 E oti. E oti-e.
 (Best, 1898, p.628)

As previously stated in Chapter 1, Te Rau Whakapono, the skill of weaving was a quality that females were expected to achieve and master, however, it can be debated that the weaver

was already a master in her craft. When considering incantations and the rituals undertaken in other *whare wānanga*, the purpose is always to ensure that memory and perfect recitation is adhered to. The term *whare pōrukuruku* from *Mataatua* denoted solitary teaching, knowledge passed from teacher to pupil, namely father to son (Benton & Benton, 1995). Though there is no evidence of an actual knowledge exchange between the teacher and learner within *Te Whare Pora*, but it is evident that the dissemination of weaving knowledge did continue and learning occurred. This also suggests that the weaver upon initiation, had already mastered the terrestrial knowledge of weaving but that the initiation ritual was a means to connect to celestial knowledge. She became a divine being of *tapu* and *mana*, receiving and retaining knowledge thus reaching the status of *tohunga*. This suggests also that the initiation into *Te Whare Pora* was conducted by *tohunga* who were master weavers possessing the knowledge of the worldly and the higher celestial knowledge of *Te Whare Pora*. Early writers such as Best, disputed that the *tohunga* was not only male as alluded by other early writers, but there were also female who conducted ritual and incantations (Best, 1898). The two types of knowledge are *kauaeraro* and *kauaerunga* which is further described by Benton and Benton (1995),

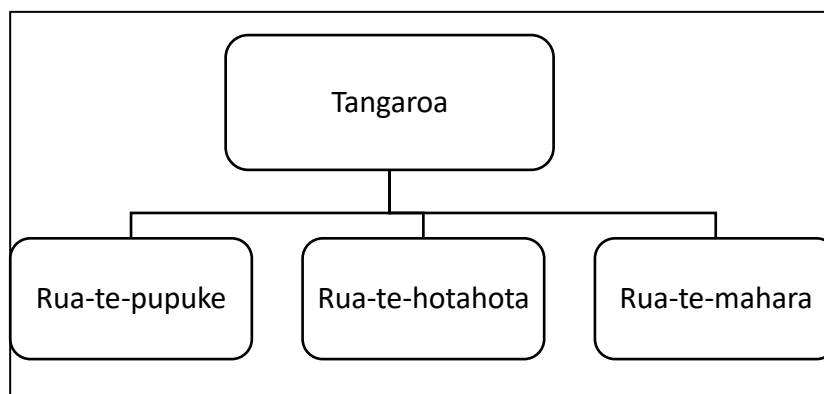
Knowledge of all kinds consisted of two underlying components, "terrestrial" knowledge (that is history, legends, worldly matters), symbolised by *te kauwaeraro* (the lower jaw), and "celestial" knowledge (that is, higher mythology, *karakia*, religious matters, etc.), symbolised by *te kauwae runga* (the upper jaw) (see Best, 1986, p.12; McLean, 1981, p.19; Williams, 1985, p.105; as cited by Benton & Benton, 1995, p. 2).

Shirres (1997) contends that the wider purpose of *karakia* (incantation, prayer) was to be one with the Gods, to bring their *tapu* and *mana* into operation in our world thereby carrying out our roles in creation. Similarly, Marsden (2003) states *mana* as authority deriving from the gods to mean 'lawful permission delegated by the gods to their human agent to act on their behalf and in accordance with their revealed will' (p.4). "The gods represent the vital power and force of all *tapu*, ..." (Best, 1934, p. 84). The art of weaving and the traditional weaver were sacred and interrelated with concepts of *mana*, *mauri* and *tapu* (Puketapu-Hetet, 2000). *Tapu*, *mana* as well as *noa* are concepts that frame the Māori world view (Ka'ai & Higgins, 2004). *Noa* often paired with *tapu* restores the balance. The perception of *noa* is also relevant for the weaver as one cannot always be in a state of *tapu*.

Other sources of tapu derive from the materials used by artists, such as anything from the forest belonged to the God Tane (Mead, 2003, p. 259; Puketapu-Hetet, 2000). Whakapapa describes the relationships between people but also for Māori extends beyond these relationships into connections between humans and the universe (Ka'ai, et al., 2004).

Benton & Benton (1995) state, "...they are associated with handicrafts, carving and the weaving of cloaks; the first whare wānanga is also said to have been constructed by Rua-te-pupuke" (p. 5). Rua-te-pupuke, Rua-te-mahara and Rua-te-hotahota (see Figure 21) are associated to the high regard for expertise in the arts (Benton & Benton, 1995).

Figure 21: Whakapapa of Rua



Ngata comments that the three Rua are children of Tangaroa, and “were demi-gods of knowledge, thought and deepest thought (Benton & Benton, 1995, p.5).

Another name given is Rua-i-te-hihiri. Melbourne (2009) alludes to Rua-i-te-hihiri as the deity of raranga.

Te Whare-porahau is another name for the Whare-pora referred to by Tuhoe, while Hine-te-iwaiwa is the *ruahine* or ‘female expert’ of the arts of women. Rua-i-te-hihiri is mentioned in an *oriori* s a deity of the art of *raranga*, with reference to Tangaroa and other Hine:

Ka hopu ra to ringaringa ki te turuturu
 Ka mau, whakaarahia i te putahi
 Tuaumutia ra, ka kai Rua-i-te-hihiri
 Ka kai Tangaroa me tana whanau wahine
 Hine-karekare me Hine-ahu-one
 (p. 80)

Pūrākau – Acquiring Knowledge; Ritual and Tapu

Pūrākau explaining the origins and how the world came to be is explained through whakapapa. There are different tribal interpretations of the origins and these differences are unique to that tribe, location and ancestors. Whakapapa, pūrākau / oral narratives and tikanga practice are how Māori ancestors perceived the world. As previously stated, Io is the source of knowledge and is reiterated in pūrākau and waiata (song) of Tāne ascending the heavens to acquire ngā kete o te wānanga, the three baskets of knowledge. He was then named Tāne-nui-a-Rangi. The kete names are Tuāuri, Tuatea, Aronui. Toi raranga is embodied within the Aronui kete.

The origin and acquisition of knowledge is depicted in the narrative of ‘ngā kete mātauranga e toru’ (three baskets of knowledge). Simmons (1986) relates “a version of the ‘baskets of knowledge’ where the protagonist is Tāwhaki” (as cited in McRae-Tarei, 2013, p. 14). In other waka / tribal traditions, it is Tāne, who is the central character. Marsden (2003) depicts a narrative of ‘ngā kete mātauranga e toru,

The legend relates how Tane after he had successfully organised the revolt that led to the separation of their parents Rangi (Father Heaven) and Papa (Mother Earth) having concluded the various purification rites wended his way through the heavens until he arrived at the penultimate heaven. He was again sanctified by Rehua the Priest God of exorcism and purification who then allowed Tane entrance into the twelfth heaven the abode of Io. There he received the three Baskets of Knowledge...He descended to the seventh heaven where his brothers had completed the Whare Wananga (House of Learning or Wisdom). After the welcome, he had to undergo more purification rites to remove the intense ‘tapu’ ingested from his association with the intense sacredness of Io. Having completed the purification rites, Tane entered the Whare Wananga named Wharekura and deposited the three Baskets of Knowledge named Tuauri, Aronui, and Tua-Atea (pp. 3-4).

This narrative describes first that knowledge derives from Io and therefore is tapu. It also depicts that there is a process and right way when engaging knowledge which also implies that tapu knowledge is not to be treated wantonly and thus accords respect. Marsden (1992) states, “on the surface, such a story may be regarded as a fairytale...Nothing could be further from the truth for this legend is part of the corpus of sacred knowledge...” (p. 4). Manihera (1992) further states that learning and knowledge is sacred, “by giving things out... ..they lose their sacredness, their fertility. They just become common. And knowledge that is profane has lost its life, lost its tapu” (p. 9). These are cues in Māori creation and knowledge narratives and are “representative of the genesis of Māori thought” (Durie, 1998, p. 144).

Benton & Benton (1995) assert the kete that Tāne brought from the heavens contained three divisions of learning,

- te kete aronui, containing religious, ceremonial and other advanced knowledge relevant to the enlightenment of man, and to the preservation of his physical, spiritual, and mental welfare (cf. Andersen, 1928, pp.346-7; Best, 1986, p.11; McLean, 1981 p.14);
- te kete tuauri, representing knowledge of benign ritual and the history and practices of human lineages (cf. Andersen, 1928, p.346; Best, 1986, p.11; McLean, 1981, p.14); and
- te kete tuatea, which was the repository of evil knowledge (in some versions, this kete comprised knowledge of karakia generally, whether malign or benign in intent or effect; (cf. Andersen, 1928, p.346; Best, 1986, p.11; McLean, 1981, p.14) (As cited by Benton & Benton, 1995, pp. 2-3)

The oriori mō Tā-Maunga-o-te-Rangi depicts the knowledge and weaving.

Taku kore rawa nei ki te rau kiekie,
Taku noho tonu nei ki te rau harakeke.
Tēnā anō rā tō tāua kahu,
Nā tō matua rā nāna i waihangā,
Nā Rua-te-pupuke, nā Rua-te-Mahara,
Nā Rua-te-hotahota, nā Tua-waihangā;
He kahu rā mō tāua ki te pō.
(I am bereft of the kiekie leaf,
I must put up with the flax leaf,
But there is indeed our cloak
Which was made by your parent
Recess-of-Knowledge, Recess-of-Thought
Recess-of-Enterprise, Prodigy-of-Learning.
A garment for both of us in the night.)
(Ngata & Jones, 1970, pp. 28-41 as cited by Benton & Benton, 1995, p. 5)

The adept weaver was integral to the community and ensured the continued welfare of the people in this new land. Another account of barter, was a beautifully made cloak, given the name of Karamaene which, was exchanged for a great carved war canoe, now held in the Auckland Museum (Pendergrast, 1987, 1996). Finely woven cloaks held mana and tapu as that of the wearer. According to Wallace (2002), “the mana of the individual permeated the article” (p.19). Skillfully made cloaks afforded names were treated the same reverence as the wearer. As such, an expert kairaranga was essential to the people and community and thus held in great esteem (Firth, 1959). The kāhui kairaranga were a major component to the continued economic and social wellbeing of the traditional Māori society. According to Benton & Benton (1995) and articulation of each knowledge kete, that all aspects pertaining to knowledge of Te Whare

Pora is contained within te kete aronui. This further supports that the knowledge of rituals, karakia and incantation to advance learning that contributed to the holistic wellbeing of the people and aligns to the role of the kāhui kairaranga of Te Ao Kōhatu and the valued-based framework in which traditional Māori society was formed.

Socio-economic impacts

At the time of contact with the European, the socio-economic circumstances changed for traditional Māori society. The impacts on Māori society felt as a trickle initially. Trade between Māori and Pākehā were profitable for both sides.

The impact of European contact also influenced the art of weaving. With the arrival of European settlers came a new level of technology and resources introducing guns, machinery, cutlery, and European clothing. New animals and domesticated fowls were also introduced as well as materials such as wool, twine and candlewick all of which was utilized by the Māori weaver in the manufacture of kākahu (Firth, 1959; Mead, 1968). A readiness to adopt new materials showed the traditional weavers' ability to adapt and experiment. This transpired over a period of a century before European clothing was fully adopted (McRae-Tarei, 2013, p. 21).

Cumberland's (1949) chapter in the Geographic Review, *Aotearoa Māori; New Zealand about 1780* gives a depiction of the tribe and their highly skilled experts that provided economic exchange and trade.

Under certain circumstances the services of specialist craftsmen were exchanged. Practically all Maori tribes were largely self-sufficient; each had its own specialists in the manufacture of tools and weapons, the preservation of foodstuffs, the fabrication of clothing, fishing nets, bird snares, and the like. Wood carvers, tattooers, medicine men, and dispensers of black magic -tohunga or experts-were found in all tribes, but the reputation of some spread beyond the bounds of their own tribe, and their services were in demand in distant areas; and for these, garments, food, and ornaments were tendered in exchange (Cumberland, 1949, p.412).

Before the signing of the Treaty of Waitangi, there were concerns by Māori of the unruly behaviour and sheer numbers of European settlers. The trade between Māori and European settlers were not as profitable for Māori as it had been. The demand by Europeans for flax were at first met, but the demand outweighed the work that would be needed to extract fibre, Māori refused. Pākehā then built the flax mills.

The 1835 Declaration of Independence gave the authority and sovereignty to the United Tribes of New Zealand. No other country had right to govern or make any laws. However, there was also no indigenous power structure in place.

Busby saw the Declaration as a step towards making New Zealand a British possession. He believed it would ‘be the most effectual mode of making the Country a dependency of the British Empire in everything but the name’. Britain further exercised this claim through the Treaty of Waitangi. Initially the Treaty was one of partnership and signed by Māori chiefs and British Crown...Some historians suggest that the Declaration was only taken seriously by the British in 1840, when it proved to be an impediment to the annexation of New Zealand. Before sovereignty could be transferred to the British crown via the Treaty of Waitangi, the Declaration had to be revoked (Ministry of Culture and Heritage, 2020).

At the time of signing the Treaty of Waitangi, it was a time of rapid changes for traditional Māori society and way of being. Holman (2007) confirms this when referring to the 1890s, the observation to 1840 was, “when the tohunga was plentiful” (p. 131). This also included the kairaranga of Te Whare Pora who became tohunga of the weaving arts. There was, however, a transition within traditional Māori society and this formally began after the signing of the Treaty of Waitangi. This change that was occurring was not known but was felt by Māori and is described as follows,

The quality of any habitat can be satisfactorily appraised only in the light of a knowledge of the particular group inhabiting it at a particular time. As the habit of the group changes, or as a different group irrupts into the habitat, its potentialities and promise are transformed; after every advance in the culture of its occupants and every change of occupancy, its resources must be re-evaluated (Cumberland, 1949, p.401).

The Crown put in place a Government and shortly followed were the Acts. These Acts lawfully caused an upheaval and major shift on every aspect of traditional Māori society. By the 1860s the impact of these reforms fell upon Māori like a wave,

The ‘western Heke’ are Europeans, the flood of explorers and settlers who have come south to displace Māori and all others in their path. The advance guard are pictured as ‘spray that leads the way’, to be followed by the larger waves of the sea of Pākehā behind them, about to inundate the land and overwhelm its residents. Here the politics of displacement and erasure cheerfully borrows Māori concepts to describe those persons and powers that will sweep the speakers of the language away:

From the hidden Land of Tane that gave our nation birth. The mighty wave of the western Heke is surging round the earth (Holman, 2007, p.446).

Figure 22 provides a historical background in relation to Te Ao Kōhatu and the socio-historical and cultural processes influenced during this period. Aspects of philosophical knowledge spaces that developed is included. The established communal societal construction and socio/political impacts of kāhui kairaranga that occurred during the departure of Hawaiki, to the settlement of Aotearoa and the period of European contact up to 1860.

Figure 22: Socio-Historical and Cultural Impacts for Kāhui Kairaranga during pre-1860

Te Ao Kōhatu		Socio-historical and cultural impacts	
Pre 1350	<u>Migration</u> Kumara Hue Gourd Tātua Aute tree Pandanus Polynesian kuri Cordage; evidence of these resources re: oral traditions <u>Existing Skills</u> Lore: Well developed oratory skills Agriculture Navigation Fishing Raranga	Pre-1350 Hawaiki	<u>Hawaiki</u> Developed society Customs Rules <u>Reasons for departure from Hawaiki</u> Land disputes, resources exhausted Community disharmony War <u>Migration weaving influence</u> Artefacts in this period was the end result of local developments to a technology originated in Eastern Polynesia. South East Asia and Polynesian weaving similarities.
	1350-1860 New materials/resources <u>Flora - Native plants</u> houhere (lacebark), pingao (golden sand sedge), tī kōuka (cabbage tree), raupō (bulrush), kuta/paopao (rush), neinei (spiderwood), karetu (scented grass), tōi (broad-leaved cabbage tree), flax (harakeke), karetu (scented grass), maurea (perennial herb) <u>Dyeing plants and mud</u> kanono (coprosma australis), tanekaha(phyllocladus), taotoa (phyllocladus tricomanoides), karamu-rau-nui (coprosma robusta), maramara/paru (mud) <u>Waitumu (mordants) plants/trees</u> makomako (aristotelia serrata), tutu (coriaria arborea), whiinau (elaecarpus dentatus) <u>Fauna - weaving materials</u> kekeno (fur seals) manu (birds) kuri (dog)	1350-1640 Settlement in Aotearoa	<u>Settlement in Aotearoa</u> Readapting waka whakapapa and refining communities to tribal geographic boundaries. Building and strengthening tribal connections through conquering in war, marriage etc. Also advantages within the boundaries and the natural resources available, coastal tribes and their available natural resources in kaimoana with inland tribes. <u>Adapting to new environment</u> Using the people skills (kāhui kairaranga) in terms of readjusting and adapting to new environment, new natural flora and fauna of Aotearoa. The Aute from Polynesia was used to produce clothing but was unsuitable for coolerclimate. New materials led to the adaptation and refinement of textile weaving techniques. <u>Whare Wānanga</u> Houses of Learning established. Te Whare Pora and associated tikanga practice according to Lore was implemented by the kairaranga.

New technology	<p><u>Extracting muka (fibre) using a shell</u></p> <p>patu muka (stone pounders), turuturu (weaving sticks) autei (needles made of bone)</p> <p><u>New weaving techniques develop</u></p> <p>Toetoe (splitting blade into strips), takirikiri (removal of the strip from butt or uptake), kaku (scraping the butt)</p> <p><u>Tools for weaving</u></p> <p>kuku (sea mussel) kakahi (fresh water mussel) paua (mutton fish) porotaka hei matau (greenstone curved hook with notches) used to size whenu and scrap harakeke. Kumete (Totara wooden vessel for dyeing)</p>		<p><u>Economic-socio wellbeing of traditional society</u></p> <p>The status of a chief or person of importance would be known by his/her kakahu. Bartering of resources strengthened the economics of an iwi. Also bartering the skill of a kairaranga for (kākahu) for the skill of a kaiwhakairo/carver for (waka).</p>
Patterns, Style, Form	<p><u>Utilitarian artifacts</u></p> <p>hinaki (nets), kawē (carriers), kete(basket)whiriwhiri/kono/paro/rourou/ poti/tatahi/puputu/putea/waikawa, whāriki (mats), taka, pokipoki, tamata, hipora, porera, tienga, tukutuku/arapaki (lattice work)</p> <p><u>Patterns</u></p> <p>Raranga; kete/whāriki takitahi(checkerwork), rangarua/paetu/takitahi (twill2), hora (twill 3), twill 4, twill 5 Tāniko; aramoana, tukemata, aonui, whakarua koopito (single oblique lines, triangles, diamonds, chevron scrolls, vertical and horizontal lines). Taaniko pattern was concealed from view on the kahukuri</p> <p><u>Styles of clothing</u></p> <p>Ngā kakahu (types of clothing)raapaki/mai(raincap), kahukuri/kahuhuruhuru/korowai (cloaks of feather/ hair/skin (<i>kuaira</i>) from dog/bird/seal) kaitaka/parawai/huaki/paepaeroa (cloaks with taaniko), pihepihe (ornamental cloak) piupiu (kilt/girdle), taatua (belts), hu (slippers) kahu raranga pūputu.</p>	1640 - 1840 European contact	<p><u>First Wave of European</u></p> <p>Dutch explorer Abel Tasman sighted New Zealand in 1642 and called it Staten Landt. In 1645, Dutch cartographers renamed the land Nova Zeelandia after the Dutch province of Zealand.</p> <p><u>Colonisation</u></p> <p>Timeline consist of the initial steps towards the systematic colonisation of Maori. At this time, marked the original National architects of policy and law makers whose outcome was to ensure land was acquired as fast as possible for the British settler/colonist. Maori population soon became the minority. Social and cultural values and practices begin to take effect on the kāhui kairaranga and the entire Maori society.</p> <p><u>Different Worldviews</u></p> <p>1800 'Curio trade' sold or traded Maori artefacts</p> <p><u>Assimilation</u></p> <p>1814 Reverend Samuel Marsden preached the first sermon. Christianity introduced by missionaries</p> <p><u>Become the Minority</u></p> <p>1831 Māori petition the British government 1835 Declaration of Independence was drawn up by James Busby declaring the sovereign power and authority rested with the Māori chiefs and tribes. 1837 Britain decides to establish a colony that ensured colonisation was regulated. 1839 <i>Tory</i> sets sail for New Zealand; first shipload of British emigrants 1840 Treaty of Waitangi signed.</p>

			<u>And Landless</u> 1840 Land purchases prohibited of private land purchases from Maori. Māori owned land 66,400,000 acres. By 1975 Maori land reduced to 3,000,000 acres.
Techniques	<u>Weaving skills and techniques excel</u> Tāniko was developed during the settlement period pre-1800(fine, intricate, complex with elaborate geometrical arrangement), Piupiu (suspended strands consist of 2 ply muka) Four types of kaitaka; Paatea, Huaki, Paepaeroa and Paepaeroa Huaki. <u>Whatu</u> taaniko and whatu muka (finger weaving, single pair twining and close single pair twining) pokapoka/aho poka (wedges/bullets) huaki (double taaniko boarder) paepaeroa (single taaniko border) kōtui (sewing) <u>Raranga</u> Kete (open and closed plait, whakapoti/to make corners, whiri toru/3 ply plait whiri tuamaka/4plyplait, kopetipeti whakakitaratara, /upper border finishings) Whāriki (tapiki, kapeu, kopetipeti/upper border finishings, hono/maurua/single and double joins, pahupahu small hono or join).	Treaty timeline 1850-1860	<u>Political Agenda</u> 1854 New Zealand's first Parliament Men's right to vote was based on the possession of individual property, so Māori who possessed their land communally were almost entirely excluded from voting for Parliament 1858 First Māori King appointed during the kingitanga movement to oppose land sales 1860 New Zealand Wars begin 1860 Kohimarama Conference. 200 Maori discussed the Treaty and land. The Kohimarama Covenant suggested that a native council be set up. This did not occur, and the conference was never held again. <u>Impacts on the traditional Maori clothing</u> Traditional clothing fashions changed and European clothing was fully adopted by Māori Only one variety of piupiu and cape remained and the dogskin and kaitaka range passed out of existence by the end of this period. Christian motifs and letters begin to appear in weaving. Maori material culture equated as works of the devil. Belief and social system disseminated.
Colours	Red - haemitite black, - parapara (mud) brown and undyed fibre using tree bark and paru (mud) muka - (used for mahi whatu/tāniko) white kiekie - (used for raranga works) white pingao - yellow		1800's Introduced coloured wool, silk and cotton were utilised in textile weaving and taaniko, cloaks and kilts. Introduced birds – varieties of colour
Traditions of the Kairāanga	<u>Values</u> Ritual: Initiation into Te Whare Pora Whakapapa: Natural world: Pa harakeke Karakia: Tangaengae Tikanga: Hutia te rito The knowledge of whakapapa ensured the kaitiakitanga of the native flora to protect and nurture. The environment had mauri mauri and respect was accorded.		<u>Change of Value</u> During this time, the flax mill and machinery became more prevalent in the industry and export. The manual production of flax fibre, an activity previously dominated by Maori ended. The value of the harakeke; was a valuable resource for the people and wellbeing in traditional Māori society, the value changes and become monetary.
Te Wao Nui ā-Tān	<u>Oral Traditions</u> Whakapapa of the plants, birds,		<u>Early Literature</u>

	<p>Pakoti and Tāne begat the harakeke. Niwareka who brought to the world, the first finely made, tāniko cloak called Rangi haupapa. Rangomauamoa and Hine te iwaiwa are known as deities of weaving and all things pertaining to women. Hinerehia, Hauraki patupaiarehe weaver.</p> <p>Pūrākau_ Whakataukī, Tongi Tapu, Tikanga</p>		<p>By the end of the era of Te Ao Kōhatu, Māori lore and philosophy are deemed as odd, uncivilised and rituals as barbaric practices.</p> <p>The direct antithesis of the early European's concept of nature and land was the need to control and tame the land. This is expressed in the book of Genesis, mankind is superior to other creatures and the right to tame the land.</p>
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Note. Adapted from: Banks, J. (1769); Best, E. (2011); Best, E. (1941); Curnow, J. (1986); Davidson, J. (1996); Jacomb, et al. (2004 September); Mead, H. M. (2003); Mead, S. M. (1968); Patterson, (1992); Pendergrast, M. (1987); Tamarapa, A.(2011); Wallace, P. (2002); Winiata, P. (2006); Puketapu-Hetet, E. ().

Conclusion

The focus of this Chapter, Te Rau Mārama, incorporated models on the approach to this research. It was also to examine and understand how the knowledge of weaving was transmitted. This required an indepth look at the origins of mātauranga Māori. In the early Te Ao Kōhatu period, and pre-European contact, the social, political, economic and spiritual constructs were firmly established. Instilled in traditional Māori society was the operation of a value-based framework which was to ensure the wellbeing of the people. Whakapapa knowledge was indeed the fundamental fabric of Māori society and the dissemination of knowledge was in part in keeping order of society. Whare wānanga, the houses of learning, ensured that those who were inducted, were knowledgeable in the areas of expertise in society as these skills contributed to the wellbeing of society. The expert was revered within their respective communities and as such, deemed to have mana; that the mana of those woven treasures also reflected their integrity, skill, and knowledge. Thus, it can be concluded that the kāhui kairaranga of Te Whare Pora in Te Ao Kōhatu indeed possessed mana.

The level of skill that the kāhui kairaranga possessed, can be equated to, as in any society, to the level of the wellbeing of the community. This in fact considers the roles of all people within a community and that mahitahi occurred in the community groups of specialised knowledge areas, whether this was weaving, carving, gardening, fishing etc. The importance of this, is that it was about the collective interests of the community, but that specialist knowledge also contributed to overall wellbeing.

Towards the end of Te Ao Kōhātu, the European population surpassed and quickly far exceeded the Māori populace. The manual production of flax fibre undertaken predominantly by Māori ceased. Establishment of flax mills and machinery led to increased productivity and aided the commodification of this traditional fibre in the trade and export industry (1871, Report of the commissioners appointed to enquire into the preparation of the Phormium fibre or New Zealand flax). Mead (1968) alluded, that it is apparent that by 1860, “western-type institutions of economics, politics, education, law and religion were introduced...” (p.35). Western constructs impacted traditional Maori society, “...structural changes occurred – leadership systems broke down, population became decimated and some landless, the religious system overthrown and the whole social fabric loosened” (Mead, 1968, pp. 34-35). The Treaty of Waitangi became the spearhead for this significant shift toward the end of Te Ao Kōhātu, and no aspect of traditional society was left untouched.

This research should be of interest to all New Zealanders in terms of recognising the importance of the traditional Māori arts, their maintenance and survival, as a critical component of our national identity, including the Māori language and culture. Importantly, this research will be of significant benefit to the national Māori community and to Indigenous peoples globally as we work as an international community to uphold the right to develop and maintain indigenous cultures. This point corresponds to the various treaties and declarations such as The Universal Declaration of Human Rights – General Assembly of the United Nations 1948 (1949) and The Kari-Oca Declaration entitled ‘Indigenous Peoples’ Earth Charter (1992). Article 27 of the Universal Declaration of Human Rights 1948 (1949) is of particular interest and states,

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.
(https://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf, pp.7-8).

Similar to Article 27 of the Universal Declaration, is the Mataatua Declaration 1948 (1949) which outlines indigenous rights to protect and preserve customary Māori practices. Furthermore, the Treaty of Waitangi (1840) which formalised the relationship between the Crown and Māori and Māori values, practices and traditions are protected (Cram, 2003) in particular with reference to Articles 2 and 3.

The expected approach of the creative component of the exegesis is to visually critique, analyse and reflect commentary drawn from themes of Chapter 1, Te Rau Whakapono Kōrero and Chapter 2, Te Rau Mārama. This approach is to bring meaningful insight and creative exploration into Chapter 3, Te Rau Aro.

Chapter 3: Te Rau Aro

Introduction

This chapter focuses on artefacts within the Te Ao Kōhatu period specifically, the mamaru (Māori sail) and artefacts that were collected from Cook's first voyage. The mamaru has a history; it was used to transport. This chapter, Te Rau Aro, will describe the 'thinking' behind the actual 'making' of the artefacts and therefore, this chapter will also contain many visual images, particularly in the case of the mamaru. This approach has been used in terms of gaining greater insight into the woven artefacts of the Te Ao Kōhatu period and to consider the creative possibilities toward the actual making.

Design of the Study

Raranga, tukutuku, whatu muka and tāniko are traditional Māori fine arts and are located in the realm of mātauranga Māori (Māori knowledge) within Te Ao Māori (the Māori world). Māori philosophy is embedded within these narratives and provides the framework for practice which extends to the art of weaving. This knowledge has been handed down from generation to generation through oral narratives (Taituha, 2014).

All cultures evolve over time as new technology is introduced and as various ethnic groups are exposed to one another. Furthermore, all cultures in contemporary times have artefacts from the past that serve as cultural indicators of the way in which its people behaved and as reminders of where they came from (Taituha, 2014, p.19).

The following paragraphs provide information of woven artefacts reflecting the Te Ao Kōhatu era and are a critical source of information. The figures display examples of artefacts from the period, tables of data, measurements, materials, natural resources, and weaving techniques and practices of the time. Quiet contemplating has prompted questions and not all have answers, but this is an attempt to provide a wider view of information pertaining to the artefacts of Te Ao Kōhatu.

Artefacts of Te Ao Kōhatu

Te Māmaru, Rā or Sail is an artefact held in storage by the British Museum and is the only known Māori sail to exist. The description by the British Museum is,

Canoe sail, ra. Plaited in check from strips of flax leaf, in thirteen panels joined together with mat joins, with zigzag bands of hexagonal openwork three-directional plaiting; along top edge and around 'tail' fringes of dark coloured feathers. Loops made of four two-ply, soft, flax-fibre strings wrapped with fine rolled cords; some loops still have kaka feathers attached; two have small remnants of dog hair (<https://www.britishmuseum.org/collection/image/489469001>).

The Māmaru is said to have been collected by James Cook and conceivably existed before European contact (Irwin & Flay, 2015). The sheer size of the Māmaru is approximately 4.5 metres in height and nearly 2 metres wide. It has a pennant as wide as 1 metre in length with a trim of feathers of what has been identified by the British museum as that of the kākā bird. The feathers are along the top edge of the Māmaru.

Early writers, Cook, Banks, Best, Parkinson and Forster have described the traditional Māori sails as 'large woven mats', 'triangular' in shape and that the broader edge of the triangle is at the top like the 'Oceanic Spritsail' (Irwin & Flay, 2015). It also has two spars, hence the loops on either side of the Māmaru. It has 13 papa which means 12 hono. The tapered edges have to be tapiki or cast off, but this is not a very easy technique to do in raranga because it goes against the natural path of weaving. Every whenu has its place, just like a jigsaw.

Figure 23 below provides full details of the font of the Māmaru.

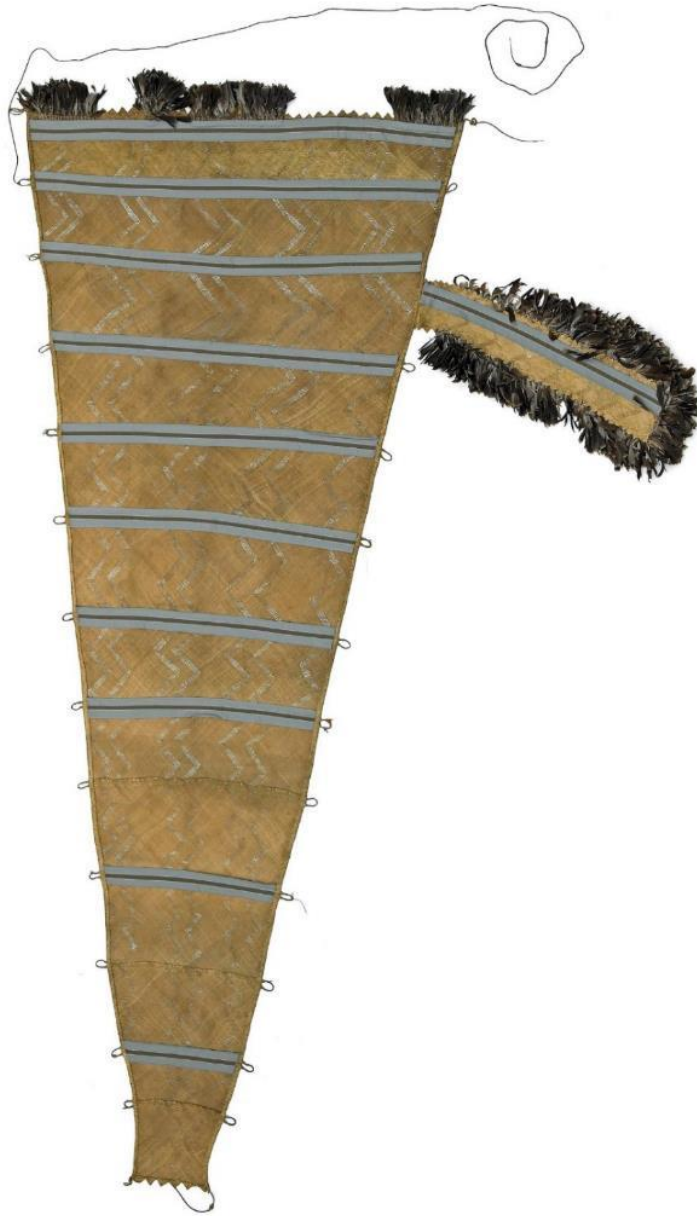
Figure 23: Full: front. Canoe sail, made of vegetable fibre, and kākā feathers. Production date 1770 - 1800 asset number: 489462001



Note. From <https://www.britishmuseum.org/collection/image/489469001>). Copyright the Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 24 below shows the back of the Māmāru. Note that the hono covered by the strips of material is covered. It can only be assumed, judging by its age, that they are there to reinforce the joins.

Figure 24: Full back. Canoe sail, made of vegetable fibre, and kākā feathers. Production date 1770 - 1800 asset number: 489462001



Note. From <https://www.britishmuseum.org/collection/image/489469001>). Copyright the Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 25 is also known as the Matangireia (Te Ratana, personal communication, August 2, 2020). The name Matangireia, is reported to have been the abode of Io associated with the oral narrative of the ascension of Tāne to the various realms and the retrieval of the knowledge baskets. Whether or not there is any correlation between the sail pennant and these points just made is worthy of further investigation, but for the time being, this is merely an observation. Figure 24 is an odd attachment to the sail and it is a little over 1 metre in length (Firth, 1931).

Figure 25: Front: Section (Textile). Canoe sail, made of vegetable fibre, and kākā feathers.
Production date 1770 - 1800 asset number: 489470001



Note. From (<https://www.britishmuseum.org/collection/image/489470001>) Copyright The Trustees of the British Museum. CC BY-NC-SA 4.0.

Firth (1931) describes how the streamer is attached to the sail,

Bound to sail-edge by two-ply cord. This held fast by a knot at the end, then passed through hole in sail, another in streamer and back under itself, to repeat the process $\frac{1}{2}$ inch to $\frac{5}{8}$ inch further on (fig. 10). This attachment cord of the streamer is passed through the same hole in the sail as is made by the edge securing cord of the latter. In its tie the streamer-attachment cord also catches in the edge-cord which runs round the streamer as a basis for the feather-work (see fig. 10). The cord is finally secured at the end by a simple knot (fig. 11). The cord which runs round the edges of the streamer is of double two-ply (p.135).

This is interesting as the streamer attached to the sail is referred to as a “pennant” that served as a “tell-tale” (Irwin & Flay, 2015, pp.424-425). The role of the tell-tale is to indicate whether the air stream on the sail surface is smooth or turbulent (<https://www.lovesailing.net/sailing-theory/sailing-basics/parts-of-a-sail/parts-of-the-sail.php>). The streamer appears bigger thus heavier than the modern-day tell-tale. One other piece of information in this regard, is from Irwin and Flay (2015), “it may have been a decoration that also helped the sailors to trim the sail effectively” (p.425). The feathers attachment have been identified by the British Museum as being possibly that of the kākā (native parrot). It was a highly prized bird by chiefs because of the red colour. There are several references to the Kahukura cloak. The feathers of the kākā

that was used in cloaks were those located at the torso.

Figure 26 provides a better view of the image and shows that the technique used is similar to the feather attachment in kahu huruhuru (feathered cloaks).

Figure 26: Front: Section (Textile), asset number: 489472001



Note. From (<https://www.britishmuseum.org/collection/image/489472001>) Copyright the Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 27 provides a view of the front of the sail with the feathers attached and also the peak technique.

Figure 27: Front: Section (Textile), asset number: 489478001



Note. From (<https://www.britishmuseum.org/collection/image/489478001>). Copyright the Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 28 shows a weaving technique which has been commonly named as peaks. This is located at the bottom and appears like woven triangles. However, there are different names for this technique that is used by weavers. On observation, the shape of this weaving technique appears to be similar to ocean waves. However, though it is used in the making of this sail, it is used prominently in contemporary and more recent items such as kete and wall hangings.

Figure 28: Full: Section (Textile). Canoe sail, made of vegetable fibre, and kākā feathers.

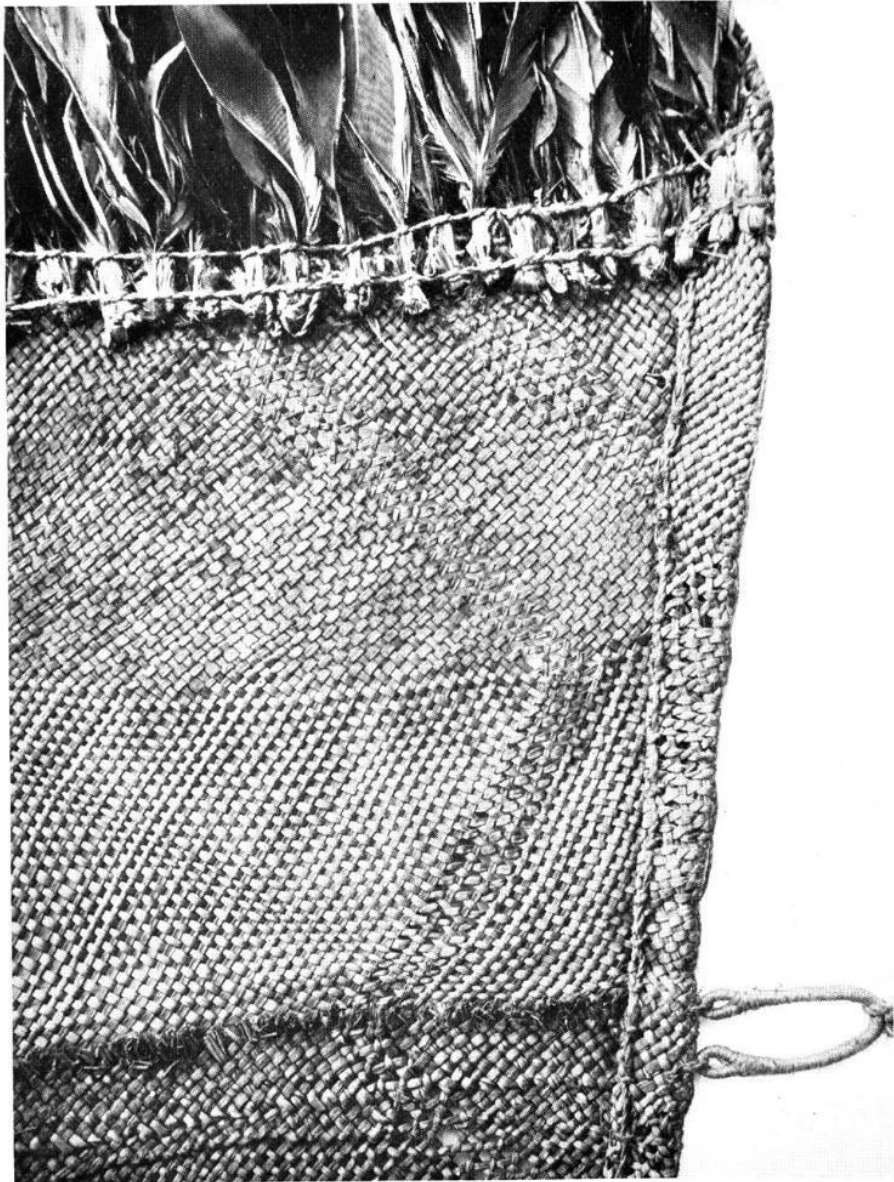
Production date 1770 - 1800 asset number: 489480001



Note. From (<https://www.britishmuseum.org/collection/image/489480001>). Copyright The Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 29 is an early photograph from 90 years ago and shows details of the feather attachment, the loop, and the finishing technique of the edge. Figures 25 and 26 depicts the feather attachment, however the cordage that is evident through the sail is also noted.

Figure 29: Māori canoe-sail, detail top right corner of posterior side



Note. In R. Firth, *Maori canoe-sail in the British Museum*, 1931, (p.134). Copyright The Trustees of Trustees of the British Museum. CC BY-NC-SA 4.0. In Firth, R. 1931, *Maori canoe-sail in the British Museum*. *The Journal of the Polynesian Society*, 40(159). pp129-135.

Figure 30 shows the whakapuareare (lace weave) in the Māmaru. The fineness of the weave is evident throughout the Māmaru. The whakapuareare is a definite contender in terms of an element to be considered by the kairangahau in the final creative works.

Figure 30: Front: Section (Textile), Canoe sail, made of vegetable fibre, kākā feathers, production date 1770-1800, asset number: 489477001

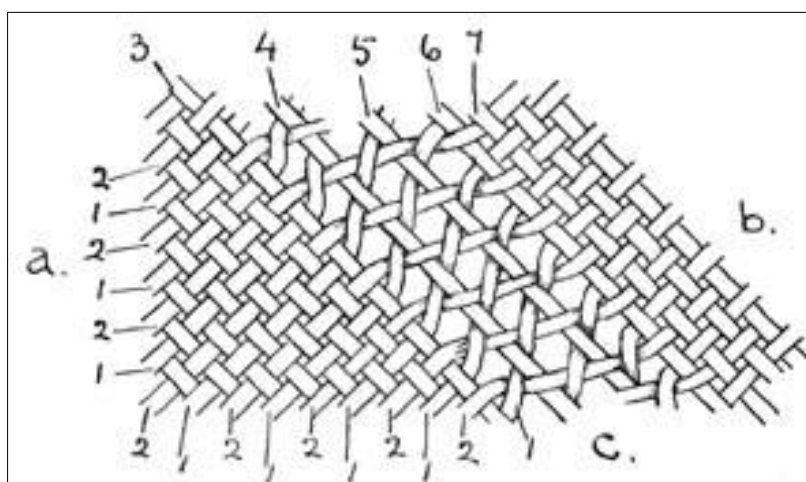


Note. From (<https://www.britishmuseum.org/collection/image/489477001>). Copyright the Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 30 and Figure 31 show the open or lace weave known as whakapuareare.

Figure 31 depicts a sketch of the whakapuareare by Te Rangi Hiroa and is easily understood by any weaver familiar with the raranga art form.

Figure 31: Māmaru-whakapuareare sketch



Note. In Te Rangi Hiroa *Maori canoe-sail in the British Museum – Additional notes*, 1931, (p. 136-140). Copyright The Trustees of Trustees of the British Museum. CC BY-NC-SA 4.0.

Figure 32 are the dimensions of the sail providing an idea of the size as described by Firth (1931).

Figure 32: Dimensions of sails

Dimensions of the sail in feet and inches			Converted to centimetres and metres (approx.)	
<i>Measurement</i>	<i>ft.</i>	<i>in.</i>	<i>cm.</i>	<i>m.</i>
Length	14	6	426	4
Width at top	6	4	193	2
Width at bottom	1	0	30.5	
Length of streamer	3	6	106	1
Width of streamer		9	23	

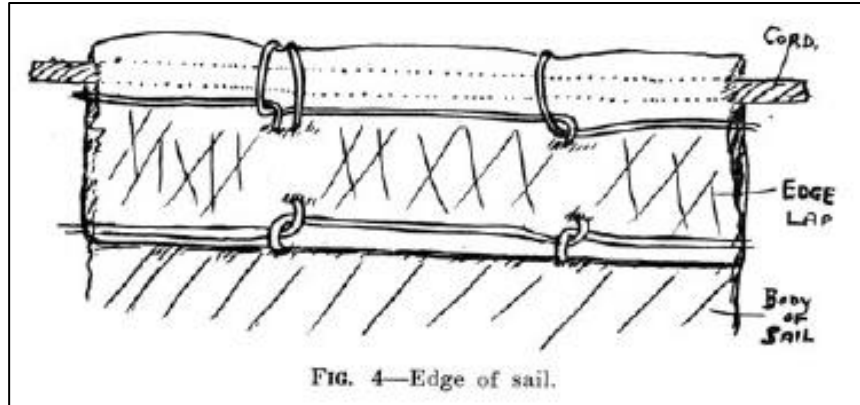
Adapted from Firth, R. (1931), *Maori canoe-sail in the British Museum. The Journal of the Polynesian Society*, 40(159). p.130.

Firth (1931) gives a description of how the rolled edge is finished and provides a sketch in Figure 33.

The edge of the sail is turned in, being folded in on itself twice. The resulting border appears in the underside of the sail, and is $\frac{3}{4}$ -1 inch wide. It is held by two rows of “stitching” of thin two-strand cord, the centre row enclosing also the cord which

runs inside the edge (fig. 4). Sometimes a single, sometimes a double “stitch” is used to hold the outer edge; for the inner edge a single “stitch” only is used (p. 133).

Figure 33: Māmaru-Edge of the sail sketch

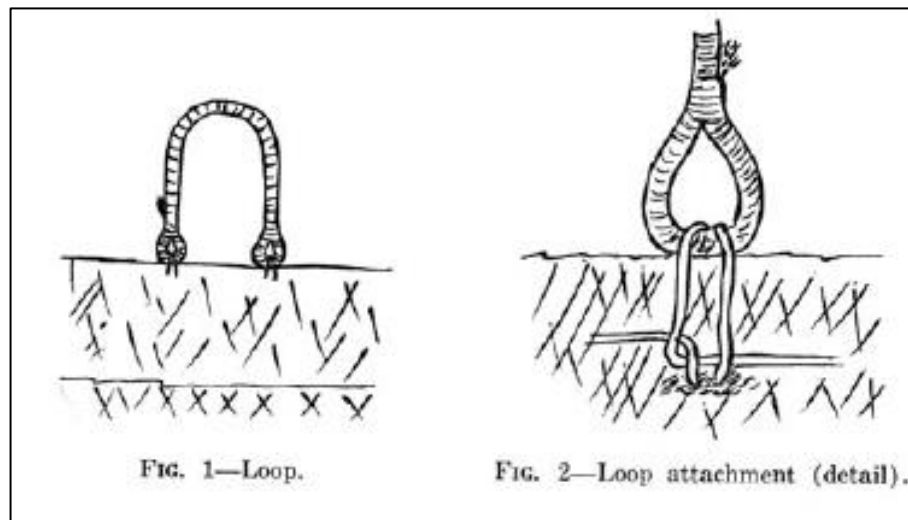


Note. In R. Firth, *Maori canoe-sail in the British Museum*, 1931, (p.134). Copyright The Trustees of Trustees of the British Museum. CC BY-NC-SA 4.0. In Firth, R. 1931, *Maori canoe-sail in the British Museum. The Journal of the Polynesian Society*, 40(159). pp. 129-135.

Figure 34 displays the loop attachment in the sail. Firth (1931) describes the loop or rigging attachment technique,

Rigging attachment-To the edges of the sail are fastened twenty-four loops, twelve on each edge, in the same plane as the sail itself (fig. 1). These are of multiple-strand (? four) flax cord, whipped with thin two-strand cord. Each loop is approximately 4½ inches long and 3/16-1/4 inch in thickness. In many of the loops a little tuft of kaka feather—red from the underwing—is fixed and held by the seizing cord. The technique of the loop-attachment is fairly simple (p. 130).

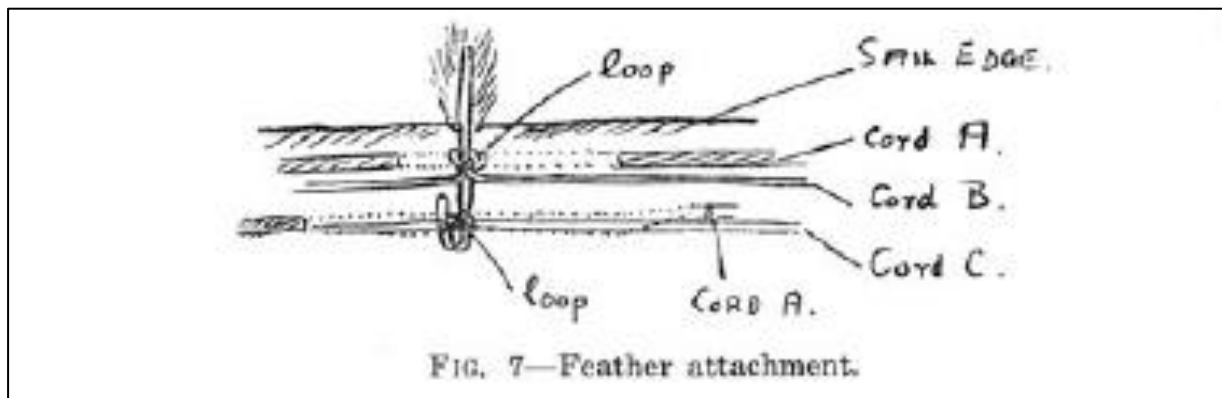
Figure 34: Māmaru-Loop sketch



Note. In R. Firth, *Maori canoe-sail in the British Museum*, 1931, (p.134). Copyright The Trustees of Trustees of the British Museum. CC BY-NC-SA 4.0. In Firth, R. 1931, *Maori canoe-sail in the British Museum*. *The Journal of the Polynesian Society*, 40(159). pp129-135.

Figure 35 provides a sketch of how the feather was attached to the mamaru.

Figure 35: Māmaru-Feather Attachment sketch



Note. In R. Firth, *Maori canoe-sail in the British Museum*, 1931, (p.134). Copyright The Trustees of Trustees of the British Museum. CC BY-NC-SA 4.0. In Firth, R. 1931, *Maori canoe-sail in the British Museum*. *The Journal of the Polynesian Society*, 40(159). pp. 129-135.

Moments of Aro

In reference to the mamaru, Figures 13-19 and Figure 21 provide visual references to different compositions of the sail. It is the only known example of a Māori sail to exist. The production of this mamaru has been dated between 1770-1800 and is a very fine example of early Māori technology. The Māmaru is a very rare treasure indeed and is located on the other side of the world, at the British Museum, where it has remained in a state of preservation.

As I searched intently through each of the images, what strikes me immediately is the fineness of the weaving. The width of each whenu is the width of a matchstick. There are many techniques that have been used in the production of this mamaru. Some techniques are unfamiliar and I look forward to experimenting and working these out and perhaps by doing this, it may provide other insights into my own ‘making’ captured in Chapter 4.

The sheer size of the Māmaru steers me toward thinking that there is a likelihood that the weaving may have been done out in the elements. Ideally, the best months to weave outdoors due to the temperature/climate is between late February and March and also in late September and October. The Te Ao Kōhatu kairaranga of this mamaru lived in a time of what would have been the last generation of this era, where a Māori traditional worldview consisted of a belief and knowledge system constructed to ensure that societal order was exercised and doing so assured the wellbeing of their people and communities. Maintaining societal balance extended beyond the physical buildings; there was a tikanga for human beings to be in co-existence with nature. This was a time that the kāhui kairaranga of Te Ao Kōhatu thrived; and their community were the beneficiaries of their skills, hands and mind and knowledge. It was in this time period, that the traditional whare pora was implemented, maintained and fully utilised.

The Māmaru was made for purpose and was utilitarian in design. However, as explained consistently throughout this exegesis is that there was “symbolic meaning in weaving” (R. Te Ratana, personal communication, January 15, 2021). Every technique and decorative element of Māori woven taonga are symbolic of Māori traditions. This will be an element considered in the creating and making.

The mamaru provides a visual mnemonic of an event that can only be described as an extraordinary and epic journey. Crossing the expanse of oceans, from South East Asia, through Melanesia and across the Pacific, evidence suggests particularly throughout the Polynesian triangle and the many tropical islands scattered in this wide location, is that stops were made along the way. Perhaps these initial stops were stops of exploration, but also became periods of occupation.

The migratory influences can be traced in relation to types of plants used in weaving, geometric designs, weaving techniques and spiritual traditions. This in

turn reflects the multi-faceted or holistic approach to weaving that is characteristic of South East Asian and Polynesian cultures and their holistic worldviews. It is this holism (environmental, spiritual, economic, social and cultural components) that also frames the art of weaving. This complex philosophical approach or world view has its genesis in South-east Asia. In terms of Māori origins there is compelling scientific evidence as of the connection between Polynesians and their South-east Asian ancestry (Anderson, 2000; Davidson, 1998; Howe, 2003; Irwin, 1992; McRae-Tarei, 2013, p.11).

In 1350, the great migration ended upon reaching their destination and arrival at the shores of Aotearoa. The Māmaru is not only symbolic of this momentous event, but provides tangible evidence and a glimpse of an instance of time of what is now mostly remnants in Māori origins and history and this we still need to preserve.

Reference to Colour

The colour red has significance and originates from Hawaiki and has transversed generations which is evident in toi Māori, raranga, whakairo, whakataukī and tribal kōrero. The translated kupu (word/s) for red are: kura, raukura, where. The origins of kura is said to have come from a tree grown in Hawaiki called Kura-tawhiti and which flocks of red feathered birds gathered. The kura or raukura was also an important traditional head-dress adorned with red feathers, worn only by certain people, a sign of their sacredness and status (Wallace, 2002). This colour in Māori tradition is synonymous with notions of mātauranga, tapu, mana and taonga tuku iho (treasured heirloom) (Wallace, 2002; White, 1888; Moorfield, 2012).

The environment determined the colours. “The red colour came with the waka migration and that the colours we see today particularly red came from the migration” (R. Te Ratana, personal communication. January, 16, 2021).

Gloria Taituha (2021) explains the colours used in raranga,

The colours we see prominently in raranga was what was available from the environment raurekau yellow, tanekaha (reddish-brown) mixed with ash from the Maire tree. Hinu bark from the tree was used as the waiwai (mordant) were used to retain the black from paru. Tawheo and kanuka (pink flowers) were used as the waiwai (G. Taituha, personal communication. January, 16, 2021)

The Value of Feathers

According to Mead (1969), “feathers were stuck into the topknot by their quills, the tail feathers of the huia, black with white tips, being regarded as the most valuable. Feathers of the albatross (toroa), long-tailed cuckoo (koekoea), and heron (kotuku) were also valued” (p. 27).

The use of feathers and the reasons why they were used do not appear to have been written down or specifically referred to in history.

However, feathers are symbolic to Māori . A further reference to the nature of birds as being the domain of Te Wao nui a Tāne is the whakapapa pertaining to Tāne Mahuta. There are several references to manu (birds) in pūrākau and whakataukī.

The following whakataukī resonates with the Māmaru.

Ma te huruhuru, ka rere te manu
Adorn the bird with feathers and it can fly

Figure 36 shows the symbolic meanings of native birds as interpreted by Harwood (2011).

Figure 36: Native manu (bird/s) used in the weaving of kākahu.

Ngā manu	Symbolism
Brown Kiwi	Known as the hidden birds of Tāne Mahuta
Black and white tipped tail feathers of the huia*	Associated with rangatiratanga (chieftainship)
Kōtuku, white heron	In flight is to connect to Ranginui
Toroa, Albatross*	Represents strength and grace
Kāhu and Kārearea, Swamp Harrier and Falcon	Respected for their strength and fearlessness
Ruru, Owl	Represents spirits or atua
Kākā	Highly prized connected to high chiefs and Atua
Kākapo*	Acquired for personal adornments and Māori clothing
Weka, Kererū, Kākāpō	Used in cloak making
*The decline of using native bird feathers was seen in the mid-nineteenth century due to numbers declining or extinction and the numerous introduced birds used in kākahu were preferred giving new varieties of colour.	

Note. Harwood, 2011, pp.439-440

Figure 37 provides information by Shawcross (1970) of artefacts, namely the different cloaks, collected by Cook.

The Māori artefacts collection held at Cambridge University from Cook's first voyage, reveal what type of artefacts were in existence during the Te Ao Kōhatu era. Figure 36 is a summarised adaptation of some of these artefacts from Shawcross's (1970) research and publications in the *Polynesian Journal*.

The table below consists of information from different sources. However, the first four columns are from Shawcross's (1970) observations of the artefacts. Mead also wrote that the first column 'artefact' is the collection gathered during Cook's first voyage to New Zealand. Therefore, this collection is the earliest record of Māori artefacts. Shawcross (1970) defines the columns of 'distinguishing features', 'dimensions' and 'technique'. His notes are utilised as they are extensive, and some areas are areas relevant to this research. The column of 'other information' is also of interest because there are relevant facts that pertain to artefacts of interest.

Figure 37: Artefacts from Cook's Collection

Artefact	Distinguishing features	Dimensions	Technique	Other information
<p>Figure 13 (28) Kahukurī or Dog cloak We now have evidence that at least two dog-skin cloaks (<i>kuri purepure</i> and <i>akaitaka kuri</i>) (ref: Tapsell, 2009, p. 102)</p> <p><i>Cloaks</i> D24.80. Pl. IV, fig. 28. Duff 1969 (36); Oldman 1946 (159); Pitt-Rivers (1132, 1137); Parkinson 1784 XXV; Ryden 1963 (1848.1.63, 1848.1.5).</p>	<p>The main kaupapa or body of the cloak was woven by fibre (harakeke); 62 warps (whenu) and 69 wefts (aho). Upper edge of the cloak At both selvage edges of the cloak, is the plait or whiri of which suspended are tied small dog hair tags. Lower border consisting of a band of black bordered by white fibres to which a thick band of skin tags are attached on the outside</p> <p>Measured length for strips/warps of skin</p>	<p>Measured at the upper edge 123 cm; lower 126 cm.; height 88.5 cm. Each loop is 26 cm. The left loop has a lace attached of 26 cm. The tacking of the whiri was at 2cm intervals. 10 dog hair tags in 5.5 cm. intervals Skin tags are doubled and about 13 cm. long 3-4 mm. wide 0.35 mm. thickness 52 cm. shortest length 63 cm. longest length</p>	<p>Single or double pair twinning (whatu) Formed by a plait to which are attached two loops, about 25 cm. from each end. The whiri was attached to the selvage edge by fibre tacking, stitched. Dog hair tags were suspended and attached in the whiri Warps of skin are attached on the outside and are at approximately 20 strips to 10 cm and are woven by 51 rows of aho.</p> <p>The pelt of the dog was cut lengthwise into strips which would include the head, tail and limbs where possible</p>	<p><i>warp (whenu)</i> <i>weft (aho)</i> twinning (aho whatu) The lace is tied into the right loop, holding the cloak in place by the wearer's neck. Cloak pin (aurei) was not required. Selvage (edge of woven rows of the cloak). Fibre tacking, blanket stitch or half hitching (tuitui muka). plait (whiri) The lower border is complex and suggests that the aho whatu was the close pair twinning (pukupuku) technique. The size of the Māori Kuri from nose to croup/buttocks was about 66.5 cm. and nose to tip of tail 89 cm Spotted dog-skin cloak (kuri purepure) (ref: Tapsell, 2009, p.100) Full dog cloak (Ihu pukupuku) (ref: Tapsell, 2009, p.101)</p>
<p>Figure 13 (27) Rain cape D24.81. Pl. IV, fig. 27. Ryden 1963 (1848.1.6, 1848.1.64).</p>	<p>Fibre tags served to deflect rain and were thatched in appearance. No selvages on this cape</p>	<p>Upper hem 136 cm.; lower hem 125 cm. The fibrous tags are about 14 cm. long, which have a natural, anti-clockwise twist</p>	<p>Upper hem consists of a heavy four ply whiri and cord or lace with three or four rows of tags being set together very densely forming a 'ruffed collar'</p>	<p>Shawcross (1970) does not specifically mention the fibre Body of the cloak (kaupapa). Single pair twinning (aho whatu pātahi).</p>

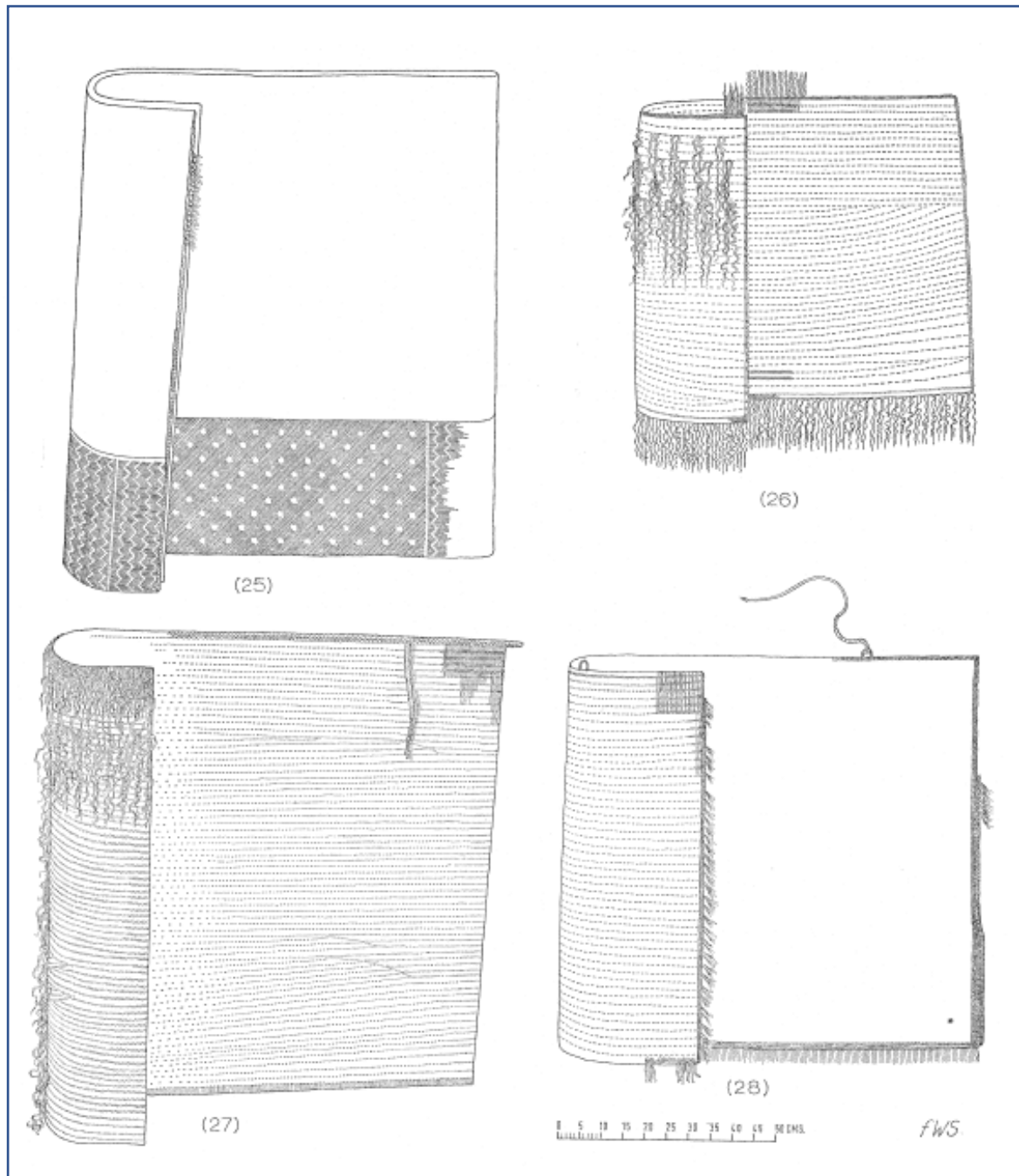
		Measurement of texture is 4.3 whenu per cm. Distance between aho rows is 0.68 to 0.77 cm.	Kaupapa of the cloak is woven by the aho whatu pātahi method. At row 69 whenu are increased to 74 whenu in the middle. The technique commences at row 15 and the lower at 47.	This technique described aligns to the pokapoka method. This design of the cape was shaped to the wearer. Not a drastic effect as with the kahutoi but moreso designed for the torso.
Figure 13 (26) Kahu toi D24.83. Pl. IV , fig. 26. (References as for D24.81.)	Kahutoi is a smaller cape and more complex in manufacture. Each selvedge are twisted braids from the outermost whenu. The tags or thrums are twisted anti- clockwise	Upper hem 95 cm.; lower hem 101 cm.; height 69 cm. Height is effectively increased a further 12 cm. at the lower hem by a fringe of tags, and an additional 6 cm through extension of the whenu beyond the upper hem. Tags are 20 cm. in length and are doubled over The weaving (texture) is fine, with 5 whenu per cm. and between 0.53 and 0.64 cm. between each aho row	The upper hem of the same double pair wefts, while the lower is thickened by closing together three rows of double pair wefts. The kaupapa incorporates the aho whatu rua woven Tags are attached at intervals of three weft rows and 10 cm. apart The pokapoka is inserted at row 36 from the selvage giving 43 rows through the middle.	<i>Cordyline indivisa</i> ; a variety of the cabbage tree family (toi) Double pair twinning or double pair interlocking weft twinning (aho whatu rua) Designed for the warrior (toa) Tag or thrum (hukahuka)

<p>Figure 13 (25) Kaitaka</p> <p>D24.84. Pl. IV, fig. 25. Duff 1969 (35); Moschner 1955 (nr. 25); Ryden, 1963 (1848.1.63).</p>	<p>Large, finely-made cloak with a broad, decorated lower border of light and dark <i>taaniko</i>. This cloak is remarkably fine and in excellent condition, still soft and pliant (200 years approx.) Shawcross agrees with Mead's findings that weaving patterns were in a state of transition prior to European contact. This is important to note as that spreading views at the time 1970 and prior were that patterns changed during European contact.</p>	<p>Fully laid out the upper hem is 250 cm. long, reducing to 242 cm. on the lower hem. The tagged false selvedge is 106 cm. long and its untagged opposite is 110 cm. Length 125cm. The taaniko lower band measured 31 cm. Measurements of the herring bone were, 37.5; 68.5; 47.5; 55; and 24.5 cm. respectively.</p>	<p>At the time the whatu technique was not recorded. Human hair may have been used within the fibres. Shawcross didn't observe this at the time of inspection, noting them as gark and light. The pattern used was the vertical herring bone.</p>	<p>Coloured close finger twinning (taaniko or tāniko) Mead was said to have identified the boarded having traces of yellow and black.</p>
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Notes. The lengthwise or longitudinal **warp** (whenu) are held stationary in tension on a frame or loom while the transverse **weft** (aho and sometimes woof) is drawn through and inserted over-and-under the **warp** (retrieved from https://en.wikipedia.org/wiki/Warp_and_weft).

Figure 38 provides sketches by Shawcross of kākaku (mentioned in Figure 36) that Cook collected, namely the kaitaka (25), kahutoi (26), raincape (27) and kahukurī (25).

Figure 38: Shawcross (1970) Kaitaka, Rain cape, Kahu toi and Kahukurī sketches



Note. Shawcross, W. (1970). The Cambridge University collection of Maori artefacts, made on Captain Cook's first voyage. *The Journal of the Polynesian Society*, 79(3), 305-348.

Mead (1968) points out that the period which he has termed as the “Pre-classic style” of tāniko production, is the period where the style of tāniko patterns were at the height of sophistication, “extremely fine and intricate...very complex with elaborate geometrical arrangement...” (p. 48). The tāniko pre-classical style era ended in 1770. The style of tāniko that Mead refers to was that of the Kaitaka Kurī in the collection of Cook’s first voyage to New Zealand.

Conclusion

Te Rau Aro depicted woven artefacts of Te Ao Kōhatu period. The information contained in this Chapter is descriptive but showed the level of excellence of the kāhui kairaranga of the time. These artefacts included cloaks of the period from Cook’s first voyage however particular attention was made on the Māori sail. It is the only surviving Māori sail which is housed in the British Museum and is noted as not being housed in New Zealand. This in itself is kaupapa regarding Māori taonga (treasure) held in Museums in different parts in the World is a discussion of repatriation to be had and continued until all taonga are returned. However, with regards to the Māori sail, this taonga aligns to the period. Upon reflection, it also aligns to themes of the previous two chapters. These themes are overarched by the transitions and impacts that our early Māori ancestors experienced and is the impetus of the ensuing Chapter, Te Rau Aroha.

Chapter 4, Te Rau Aroha as mentioned, prompted moments of ponder and reflection for me as the kairangahau. As a contemporary weaver, the use of the word *contemporary* is in regard to time as in the present, however the preferred term I will use is, Cultural Practitioner. This term refers to my practice and how I engage in the practice of weaving through the lens of Te Ao Māori. Chapter 4, Te Rau Aroha will contain a visual journal that records the creative processes for an artefact that is reflective of the theoretical research. It is in that space that the word *Aroha* is contextualised. *Aroha* is used in the context of having regard for, respect, and held in esteem. It also speaks about responsibility and accountability we take on within our respective communities. My approach in the writing of Te Rau Aroha is conceptualised under the Toi Awe creative framework but also contains and alludes to the practices of tikanga.

Chapter 4: Te Rau Aroha

Salutations to Hauraki.

Tai a ha hā! Tai a ha hā!
He mihi ki te whenua
He tangi ki te tangata, i te Tara o Te Ika-a-Māui
Ko Moehau-a-waho, ko Te Aroha-a-uta
Ka whakawhiti atu rā ki Tikapa oneone
Hokinga kainga, e kō kō ia, e ara, e!
Kāti rā, e kui mā, e koro mā, ko koutou te hunga
Kua takahia te ara whānui, ngā pō nunumi
Haere, haere, whakangaro atu rā
Ki a tātou te hunga ora o Pare Hauraki
E whai nei i ngā tapuwae o ngā mātua, o ngā tūpuna
Ko te pae tawhiti whāia kia tata
Ko te pae tata whakamaua kia tina
Nā reira, e ngā iwi, e ngā mana, e ngā reo o Hauraki
Huri noa, huri noa, tēnā koutou
Tēnā koutou, tēnā koutou katoa

*I pay homage to my ancestral landmarks of Hauraki.
I see the ancestral mountains of Moehau and Te Aroha and see the ancestral waters of
Tikapa. As it is these landmarks, that let me know, I have returned home.
I acknowledge to our ancestors of Tainui, who have passed though the veil of great
nights
I feel their absence.
To us, the people of Hauraki, follow the footsteps of your ancestors as they have
transverse these lands of Hauraki from one side to the other, as this is the means,
that connects you to your ancestral land.
Thus, to the prestigious people of Hauraki,
I give salutations!*

Establishing my origins through pēpeha.

Ko Tamatepō, Tamaterā oku tūpuna
Ko Tainui te waka
Ko Tapu Ariki me Whakamoehau ngā maunga
Ko Tikapa te moana
Ko Hikutaia, Ohinemuri ngā awa
Ko Ngāti Pū,
Ngati Tamaterā, Ngati Tara/Tokenui ngā iwi
Ko Hikutaia, Whangamatā nga papakainga
Ko Ngāhutoioti te marae
He uri ahau nō Hauraki

*My great ancestors are Tamatepō and Tamaterā
My ancestral canoe is the mighty Tainui
Tapu Ariki and Whakamoehau are my ancestral mountains
Tikapa is the sea
Hikutaia and Ohinemuri are the fresh waters
Ngāti Pū,
Ngati Tamatera, Ngati Tara/Tokenui are my tribal affiliations
Hikutaia to Whangamatā are my ancestral grounds*

*Ngāhutoitoi is our safe meeting grounds
I am a descendant of Hauraki and Tainui*

Introduction

Toi Awe

refers to the inspiration and means by which an artist formulates an original idea and then manifests that idea into reality. This principle involves documenting or recording the creative journey so that an artist is able to critique any part of the creative process to produce a better-quality piece of work.

The model Toi Awe has been utilised to frame this chapter which shows the creative thinking behind the individual work. However, the name of this chapter, Te Rau Aroha is a Māori value and in this context of *Aroha*, which is about having regard for one another. It is also about responsibility and that we take ownership of as we are accountable to one another and to those within our communities. This chapter is about the creative process; the what and the who. It is about my accountability as a kairangahau and kaiararanga to my fellow PhD kairangahau/kairaranga and to my community fellow kairaranga who have supported and involved in the making of the individual and collaborative works for the whakatūranga.

There are two wāhanga in this chapter; the individual and the collaborative creative works and this Chapter will unfold the thinking around these works.

This Chapter, Te Rau Aroha is conceptualised through the Toi Awe model framework. In other words, it is a conceptual construct between the research and the individual creative works. This chapter will contain a composition of my weaving and practice elements that show alignment to the literature of Chapters 1-3. This is communicated through reflections, imagery, sketches, photographs, kōrero, ideas and the practice in tikanga and weaving. This is my '*culturally defining artistic*' section as a '*cultural practitioner*' and my response to the most pertinent themes in the literature regarding the voice of the kāhui kairaranga of Te Ao Kōhatu.

The Individual and the Collaborative Works

There are two areas of works to be defined within the whakatūranga (exhibition). The first is the individual creative works. These are two sails. The first sail will be made by me. The other sail will be made in collaboration with Kawerau weavers. Each of the Kawerau weavers are part of the kāhui kairaranga of today. They are experts in their own right. More information pertaining to their role will be explained further along. The second area is the collaborative works alongside

with my fellow PhD students. They are Gloria Taituha and Rose Te Ratana. Our PhDs are defined in the time period of which our theoretical components relate to. Our collaborative creative work is the combined or overall creative response to all three PhDs. More information regarding the collaborative work will be further explained toward the end of this Chapter, Te Rau Aroha.

Cultural Practitioner

Mason (2013) defines the difference between a heritage artist and a cultural practitioner. Mason (2013) explains that a ‘*Heritage Artist*’ is Māori and seeks understanding through examining artefacts in museums, exhibitions and history and this informs their weaving practice. Mason (2013) also articulates the role of the ‘*Cultural Practitioner*’ as being all of the aforementioned but added to this is that they are the knowledge keepers of traditional practice which includes tikanga. I therefore state my position that I am a Cultural Practitioner of Raranga.

A Way of Being

I begin respectfully with a mihi (greetings); an acknowledgement to the whenua and to the people whom I am accountable to. This is the Māori way of being and it has always been this way. Connecting oneself to the whenua is a Māori tradition steeped in Māori history and has been passed through the generations and that this way of being, is the correct way of being. Hauraki is where I was born, where my whānau originate and live and where my ancestors walked.

Pūtauaki te maunga
Tarawera te awa
Mataatua te waka
Ko Ngāti Hāmua ki Ngati Awa me Tūwharetoa ngā iwi
Nō reira, tēnei te mihi ki a koutou katoa.

*Pūtauaki is the maunga
Tarawera is the river
Mataatua is the ancestral canoe
Ngāi Hāmua and Tuwharetoa of which I refer to are the tribes
Ko Kawerau te nohoanga
I give salutations to you all!*

I must also acknowledge my affiliation to Pūtauaki and Kawerau. Pūtauaki is the maunga of which my children affiliate to, through their iwi. Kawerau is where I was brought up and where I have remained. These words are not merely words but encompass so much more, emotions, and feelings of manaaki, aroha, kaitiakitanga, kotahitanga and whakapono that ensures the wellbeing of the collective, be it the people or, be it the lands and natural resources of which you connect to. As

such, I draw a correlation to the importance of whakapapa and make connections to the land, the waters, the mountains, acknowledging also my ancestors and finally to my iwi prompting that these important landmarks have historical relevance for us as these are the lands that our people and ancestors have walked upon from the moment Tainui waka arrived and the settlement of the Hauraki people. I acknowledge Mataatua waka, of whom my tamariki and mokopuna are descended, through their ancestors, their whānau and their homelands. The connection to the people and their wellbeing and to these lands have always been. For me, there is a sense of responsibility to share this knowledge of raranga with our communities and is my acknowledgement and declaration as kairaranga to honour the way of the traditional kāhui kairaranga in this contemporary world.

The era of Te Ao Kōhatu has an undefined timespan but concludes in the year of 1860. The themes of Hawaiki, the Great migration, arriving to the shores of Aotearoa and the period of first contact with Europeans all have a common link with the notion of ‘transition’. This period is defined by two very significant factors that spearheaded two major transitions in early Māori society. The first significant factor pertains to the recitation of pepeha, a very clever way that has its origins through oral traditions which was the primary form of communication of disseminating knowledge acknowledging Hawaiki and the waka migration. The other significant factor is the way we respond to events of remembrance such as Waitangi Day, land and iwi hui and those occasions where Māori seek political re-dress from the Crown. Both transitions occurred under very different circumstances, however, the impact of both factors were similar in result in terms of the extremity and major readjustment and adaptations needed for Māori society to survive.

The Great Migration and voyaging is a significant event in Māori history. The seven ancestral waka were Mataatua, Tainui, Te Arawa, Aotea, Kurahaupō, Takitimu, and Tokomaru. Each seafaring explorer boarded their respective and affiliated waka. The names of each waka are immortalised through the traditions of pepeha. To recite ones pepeha consists of a mihi or spoken greeting as the pretext of an introduction, who you are, which ancestral waka you descend from and the significant historical landmarks to where you affiliate to. This tradition in reciting pepeha has a deep and historical relevance not only because it is a way to identify who you are, but because it also acknowledges the undertaking of a fundamental shift through this momentous oceanic journey. The act of reciting ones pepeha is to honour the waka ancestors who paved the way in pursuit of the collective wellbeing of the Māori people. This is a natural trait that we as Māori are familiar with; that social connection and engagement with whānau and extended whānau comes

naturally within the collective. It is knowing our rich and meaningful history, knowing the intricacies of Te Ao Maori and by knowing, we understand that we contribute to the collective wellbeing of our community. This is what anchors us as a collective, as the Indigenous First Nation people of Aotearoa.

E hara taku toa I te toa takitahi, engari he toa takimano, takitini
Success is not the work of one, but the work of many.

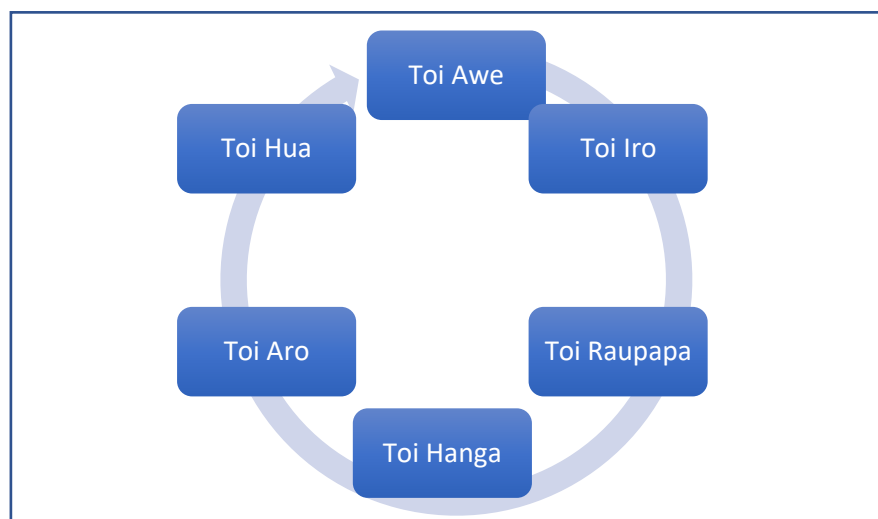
Kataraina Davis defines the wider meaning of this whakataukī as social innovation. Davis (n.d) further states,

Māori have been innovating for generations. History shows, there was a need to work together, be creative, take risks, and be comfortable in ambiguity to ensure the continuation of our people – Ngāi Māori. Māori are innovating everyday and social innovation allows and encourages us to live and breathe our daily practices while addressing social challenges for the betterment of our people.

“Ehara i te mea poka hou mai, nō Hawaiki mai anō, it is not something of recent origin but a tradition from Hawaiki” (Mead & Grove, 2001, p. 23). The traditions handed down to the Māori references tikanga Māori (correct procedure, custom or lore) including those related to mahi raranga, tukutuku, whatu muka and tāniko, and highlights the transmission of knowledge across generations. This places emphasis on the role of the kairaranga as the facilitator of this transmission process.

Figure 39 shows the Toi Awe model as a continuous process in creating/making.

Figure 39: Toi Awe model



Note: Toi Awe is a creative process that is framed by philosophical underpinnings of practice as cultural practitioners in developing their own individual work and their collaborative installation. Re-adapted from K. Rautangata, 2013, *Toi Awe, Toi Iro, Toi Hanga, Toi Hua, Te Awamutu, New Zealand: Te Wānanga o Aotearoa* (pp.8-11).

As a practitioner and teacher of Māori weaving the *Toi Awe* model has been adapted by the researcher. The majority of students I have taught have come from iwi across Aotearoa New Zealand and around the world. This model was created and developed to provide a ‘best fit’ approach to practitioners within the field of Toi Māori at Te Wānanga o Aotearoa ensuring that the selected methods are appropriate to Toi Māori (subject matter) and Kai Toi (subjects) (Smith, 2012).

Figure 40 is the explanation of each Toi within the Toi Awe model.

Figure 40: Toi Awe Table

Toi Awe (creative process)	refers to the inspiration and means by which an artist formulates an original idea and then manifests that idea into reality. This principle involves documenting or recording the creative journey so that an artist is able to critique any part of the creative process to produce a better-quality piece of work.
Toi Iro (exploration)	refers to the exploration of context in which a creative work or artist’s practice is produced. Investigating creative and performance arts in relation to their social, historical, political, philosophical and cultural settings is important as it provides a deeper understanding of the work in question and allows us to analyse, what the artist may have been experiencing at the time. This concept derives from the ancient inner wānanga of whakairo. Iro is the intersection of wisdom and understanding.
Toi Raupapa (organisation)	refers to effective management and organisation of time and resources to deliver a high-quality product. This principle also incorporates the observance of tikanga and kawa and health and safety requirements.
Toi Hanga (creation)	refers to the application of technical skills that allow an artist to manipulate a medium and transform this medium into a completed body of work. This principle also relates to the ability of the taurira to apply the principles of Toi Raupapa, Toi Awe, Toi Iro and Toi Aro to their creative practice.
Toi Aro (reflection)	refers to an artist being able to critically reflect and analyse the creative process. Through this process new learnings, innovations and future directions can be solidified.
Toi Hua (completed body of work)	Is the culmination of Toi Hanga, Toi Iro, Toi Awe and Toi Raupapa that results in a completed body of work. These principles combined allow the artist to flourish in their chosen kaupapa toi (area of specialty) and have all the skills necessary to produce quality art’.

Note. Re-adapted from Rautangata, K. (2013). *Toi Awe, Toi Iro, Toi Hanga, Toi Hua.* Te Awamutu, New

Zealand: Te Wānanga o Aotearoa (pp 8-11).

A visual diary / journal is the standard practice within Toi Awe. It provides a record and detailed evidence of the cultural practitioners thinking and journey from ‘the thought’ at the outset of the journey, to ‘the execution and presentation’ of the final creative output. The visual diary / journal contains ideas, concepts, experiments, sketches, images, calendar notes, research notes, personal communication quotes, observation notes, patterns, designs, techniques, samples, marquettes and self-reflection notes.

Mead (2003) clearly articulates the complexity of balancing modern attitudes with tradition,

It is a process of rediscovery for many Māori artists, a time for experimentation, for testing, for adopting what seems to be good, sensible practice and rejecting aspects such as accountability to the Gods. Some find inspiration in following tradition and linking back to the roots of the art form and to artists of generations gone by (p. 262).

I am a cultural practitioner of weaving in a contemporary time. My practices are reminiscent of the kāhui kairaranga of Te Ao Kōhatu and that all weavers belong in the whakapapa of the kairaranga. That is the knowledge from teacher to learner passed down.

Mā mua ka kite a muri, mā muri ka ora a mua
Those who lead give sight to those who follow, those who follow give life to those who lead.

This whakataukī also speaks to the importance of working together. It acknowledges and values the importance of both the leader and the followers for both are essential and co-dependent (Inspiring Communities, 2018, p.2).

Toi Raupapa

Toi Raupapa,

...refers to effective management and organisation of time and resources to deliver a high-quality product. This principle also incorporates the observance of tikanga and kawa and health and safety requirements (Rautangata, 2013, pp 8-11).

The Teachings of Te Whare Pora – Ngā Ture o Te Kura o te Toroa

The space used for the making of my atefacts is at Te Kura o te Toroa, Te Wānanga o Aotearoa ki Kawerau. This space was cordoned off during the time of the making. The tikanga practices incorporated in this space were;

- Karakia Whakawātea
- Kare kau te kai me te wai
- Tangohia nga hū
- Karakia Whakamutunga

While these tikanga practices are simple they are observed for the purpose that this space is clear for knowledge to flow fluidly, that there are no disturbances or influences from the outside world, and to ensure a state of balance is maintained at all times by starting and finishing with karakia.

Karakia Whakawātea

Unuhia, unuhia
Te Uru tapu a tapu a Tāne
Kia wātea, kia māmā hoki te ngakāu, te wairua, te tinana i te ara takatū
Koia rā te rongo, whakairia ake ki runga
Kia wātea, kia wātea,
Ae rā, kua wātea!
Haumie, huie
Tāiki e

Figure 41 shows the whare pora in which I work. It is within this space that my practice of tikanga and mahi raranga occurred. This included takatu harakeke (flax preparation), noting changes and sketches on the whiteboard as the weaving occurred.

Figure 41: Whakaako: my creative studio space



Note. Photograph by Jacqueline McRae-Tarei at Te Kura o te Toroa, Te Wānanga o Aotearoa, 16-18 Islington Street, Kawerau [Photograph of creative space].

Toi Iro

Toi Iro,

...refers to the exploration of context in which a creative work or artist's practice is produced. Investigating creative and performance arts in relation to their social, historical, political, philosophical and cultural settings is important as it provides a deeper understanding of the work in question and allows us to analyse, what the artist may have been experiencing at the time. This concept derives from the ancient inner wānanga of whakairo. Iro is the intersection of wisdom and understanding (Rautangata, 2013, pp 8-11).

Connection to Whakapapa

Connecting the whakapapa aspect in the creative component is through the use of the plants used. The natural plant materials used were harakeke, muka and pandanus. The pandanus is to acknowledge the migration; this particular pandanus is from Rarotonga. I want to acknowledge my Supervisor, Professor Tania Ka'ai who travelled to Rarotonga to seek permission observing an important tikanga, to procure the pandanus from Mike Tavioni, who is a respected elder, artist and repository of Cook Island knowledge. Ngā mihi aroha ki a kōrua.

Figure 42 shows the pandanus soaking in a pot of water. This allowed the pandanus to be pliable for weaving in the making of the mamaru.

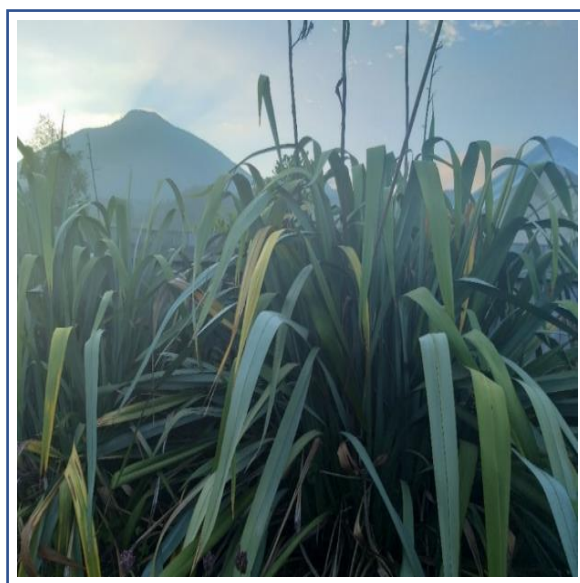
Figure 42: Pandanus



Note. Photograph by Jacqueline McRae-Tarei at Te Kura o te Toroa, Te Wānanga o Aotearoa, 16-18 Islington Street, Kawerau [Photograph of Pandanus].

Figure 43 shows one of two pā harakeke that I have harvested from. The harakeke I have used was from a plant I received from my husband's papakainga in Māpou, Ngāti Hāmua and was replanted at our home of Kawerau. It is a beautiful harakeke, excellent for mahi raranga particularly kete and whāriki. The background in Figure 42 also shows the prestigious maunga, Pūtauaki, providing guardianship for Ngāti Tūwharetoa ki Onepū and Ngāti Hāmua ki Ngāti Awa; the ancestral home of my children and family. I have lived in Kawerau nearly all my life and consider this place home too.

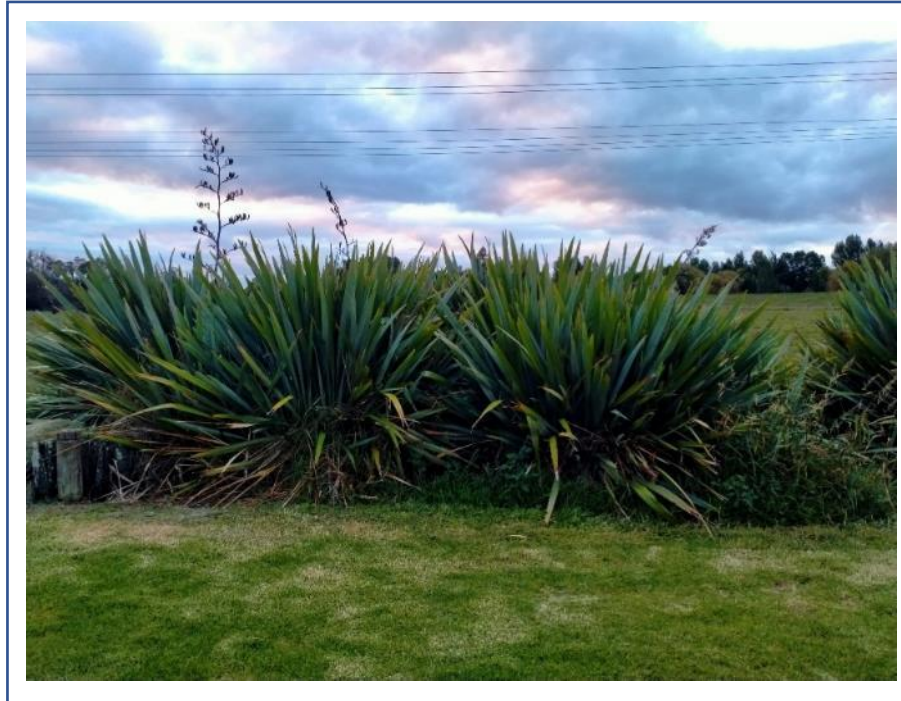
Figure 43: Pā harakeke under Pūtauaki



Note. Photograph by Jacqueline McRae-Tarei taken Kawerau [Photograph of pā harakeke].

Figure 44 shows the pā harakeke at Ngahutoitoi marae, Paeroa. I also utilised this harakeke in the making of the māmāru.

Figure 44: Pā harakeke at Ngahutoitoi marae, Paeroa



Note. Photograph by Tamaara McRae taken at Ngahutoitoi marae, Paeroa [Photograph of pā harakeke].

It was important to connect through whakapapa in the making of the māmāru. Harakeke has its own whakapapa and every plant has its own history and connection to past and present weavers. In this way, there is another connection to the kāhui kairaranga within the creative component.

Figure 45 shows the process of layering the whakapapa of Toi Hanga. The woven whakapapa symbolises the whakapapa of weaving and of weavers. The first element used in the making of both sails begins with the woven whakapapa.

Figure 45: Whakapapa of weaving

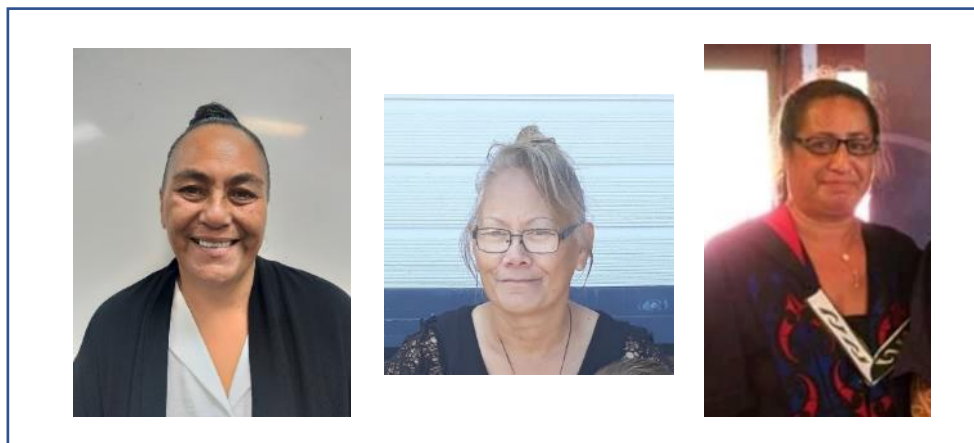


The Māori Sail – The individual and collective knowledge of weaving

The Māori sail is a clear correlation to Hawaiki and the migration. This has been considered as the ‘form’ of the individual installation and the construct of elements will be explained. There are two sails that are made for the individual installation. The first sail is the matua sail. The second sail is the taunaki sail. The first sail will be made by myself. The second sail will be made in collaboration with other known weavers of Kawerau, namely May Te Pou, Aroha Ruha and Geraldine Karekare all of whom have accumulated over 100 years of weaving knowledge (across all three weavers and myself). Also, a special acknowledgement to the following past and present tauira who also wove rows of takirua and provided kai, Nicky Gates-Paul, Carol Kohi, Nicky Nuku, Shania and Paige Wilson. This sharing and transmission of knowledge is representative of the whakapapa of weavers. This is a need in terms of how the kāhui kairaranga in Te Ao Kōhatu was part of the collective of specialised bodies of knowledge groups for the collective wellbeing of the people.

Figure 46 shows the profile pictures of the Kawerau weavers who assisted in the making of the taunaki sail.

Figure 46: Kawerau weavers



Note. Profile pictures. From left to right are; Aroha Ruha, Geraldine Karekare and May Te Pou.
[Photographs provided by weavers]

Mā whero, mā pango ka oti ai te mahi
With red and black the work will be complete

This whakatauki is similar to ‘nau te rou’ in that it refers to working together, however it also talks more directly to the need for collaboration. Traditionally

‘whero’ signified chiefs/leaders and ‘pango’ signified the community/workers. It acknowledges the need for ‘both’ to work together in order to complete the work (Inspiring Communities, 2018, p.1).

The women involved in the making of the second sail, the *rā taunaki* are renowned weavers. During that time there was also the opportunity to deliver the raranga programme with Level 4 and 5 tauira in Kawerau for 8 weeks. These tauira also were very much involved in the process of the making of the *Rā* as *mahitahi* is very much part and parcel of being a cultural practitioner of raranga. In effect, the doors of Te Whare Pora widened the circle of weavers when both opportunities emerged and the result to share, to teach and to learn was incorporated in both the classroom and in the space of weaving the *Rā*. The engagement of tikanga, the sense of connection through wairua results in the collective wellbeing of mauriora within this ako (teaching and learning) space. These become imminent in this ako space, when the foundation of mahitahi is laid and the elements of whakarongo, titiro, kōrero, ako and aro occur. The sharing of knowledge is amplified and thus contributes to the sustainability of Te Whare Pora - the art form itself and knowledge.

Toi Hanga

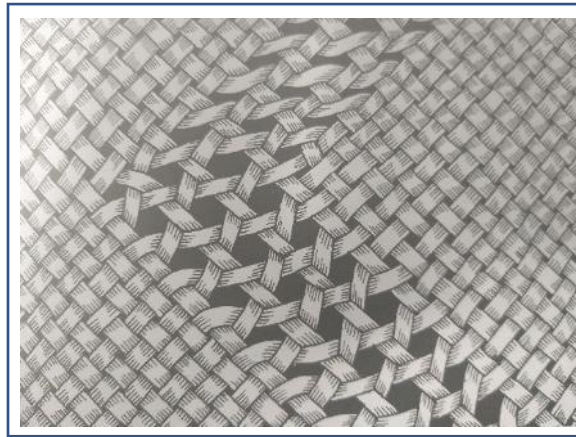
Toi Hanga,

...refers to the application of technical skills that allow an artist to manipulate a medium and transform this medium into a completed body of work. This principle also relates to the ability of the tauira to apply the principles of Toi Raupapa, Toi Awe, Toi Iro and Toi Aro to their creative practice (Rautangata, 2013, pp 8-11).

Techniques and processes

The technical elements of the individual installation are encapsulated within the Toi Hanga process. The whakapuarepuare (as can be seen in Figures 47 and 48) is very much an outstanding design element to be included.

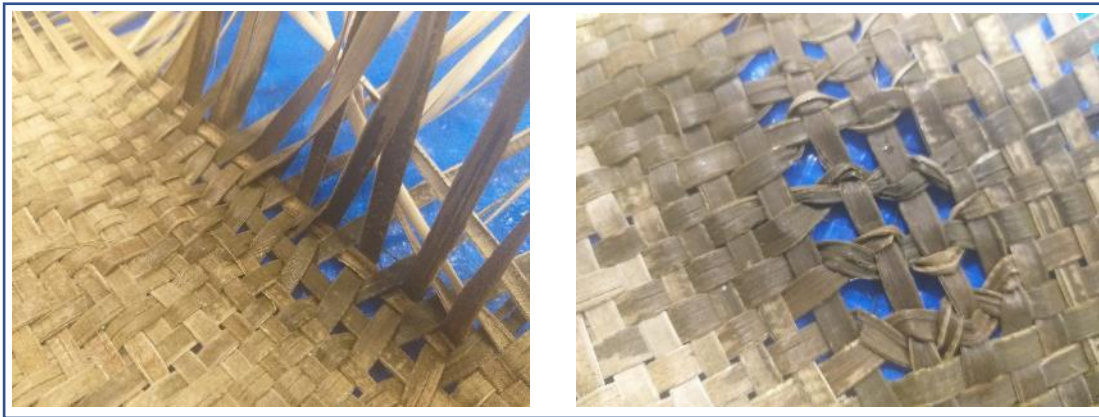
Figure 47: Whakapuareare



Note. Pendergrast, 2011, Raranga whakairo: Māori plaiting patterns, pattern 205 (No page nōs) [photograph]

Pendergrast (2011) refers to the whakapuareare as a decorative opening in the plait. Pendergrast (2011) further explains the connection to the diving kete called the *kawhiu* and the practical purpose of allowing water to escape. This may give an understanding as to why the technique was used in the traditional Māori sail.

Figure 48: Whakapuareare element: process snapshots



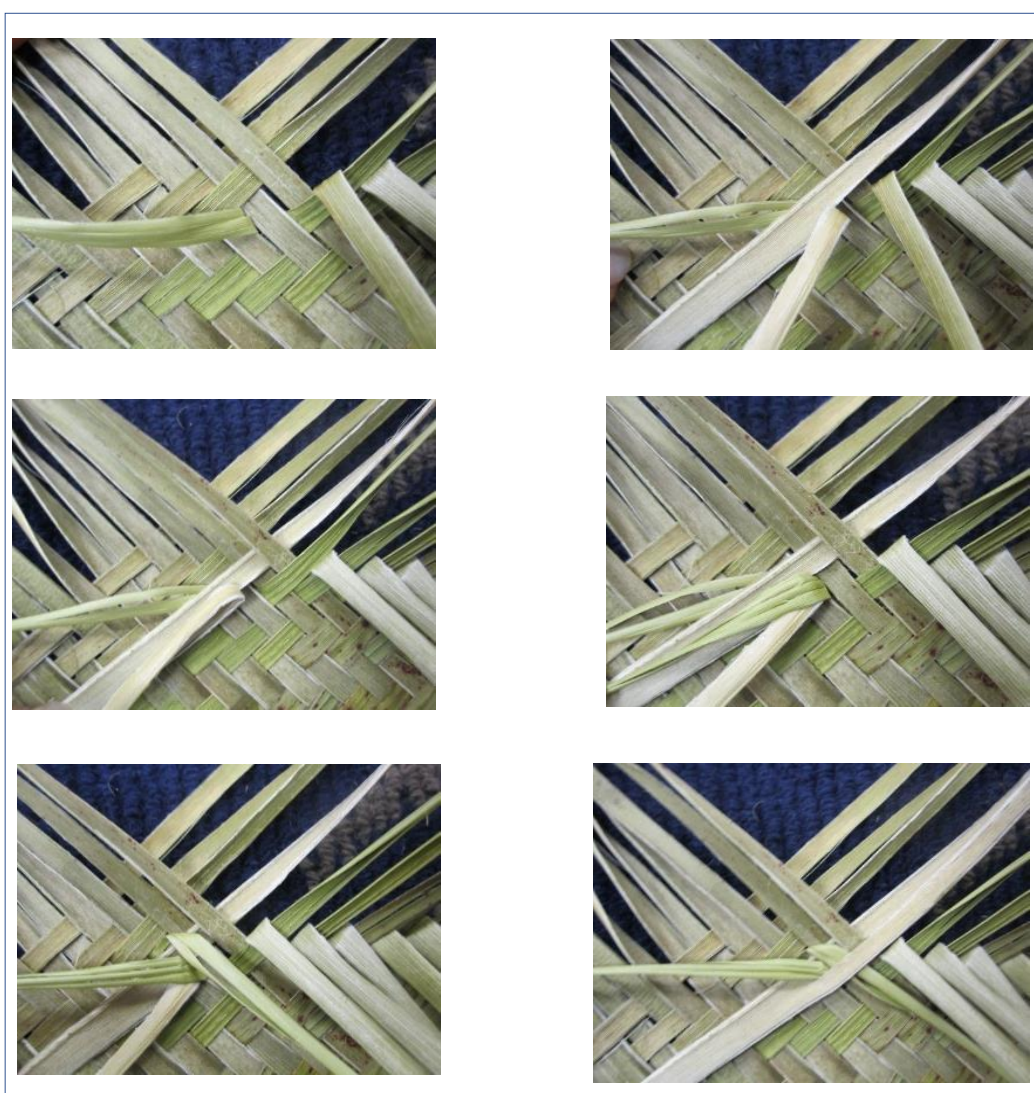
Note. Whakapuareare Photographs taken by Jacqueline McRae-Tarei. [Photograph of whakapuareare].

How the whakapuareare is shaped is zig zag and triangular in appearance. Mead (1968) refers to this pattern and sequence as the chevron of the Aramoana in tāniko. He further alludes that ‘...the observation of incidental resemblances between geometric pattern and its naturalistic interpretation...’ (p. 63) and was how Māori observed. He states, “The name Aramoana (ocean path), a little more picturesque, was labelled so presumably because continuous chevrons looked like stylised waves’ (p. 63). This design element is also considered in the individual installation of the sails.

The hono is vague in terms of a description as well as the actual hono image in the mamaru referred to in Chapter 3. This is an extension technique. However, the actual process or hono has not been described or shown. It is obviously an old technique. The following images are of the hono technique to extend each whenu and will be a technique used in the individual installation.

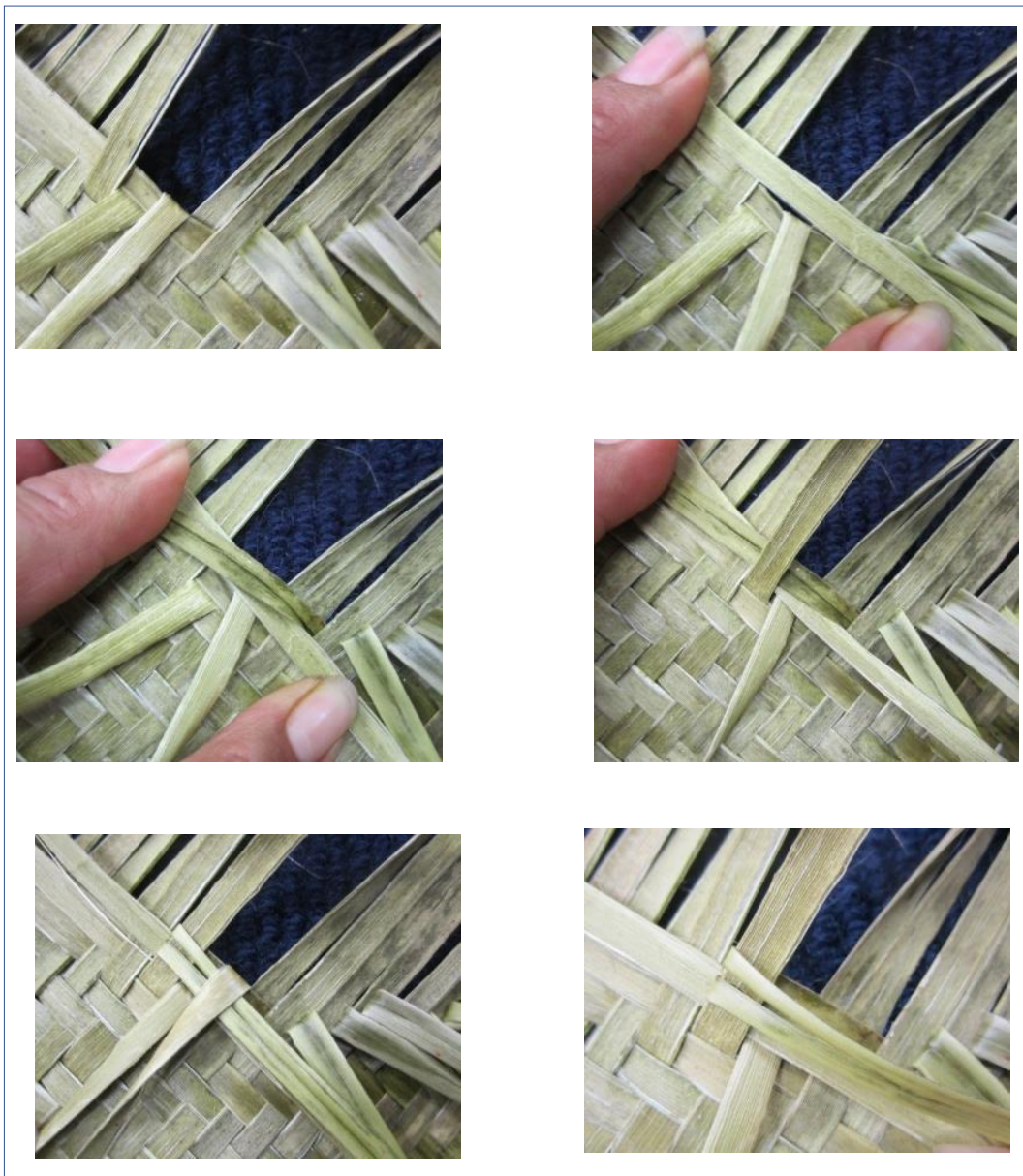
Figures 49 and 50 show the hono technique.

Figure 49: Hiki matau for the hono (joining) techniques



Note: Readapted from McRae-Tarei, 2013, pp. 39-41. [Photograph by Jacqueline McRae-Tarei 2011].

Figure 50: Hiki maui for the hono technique

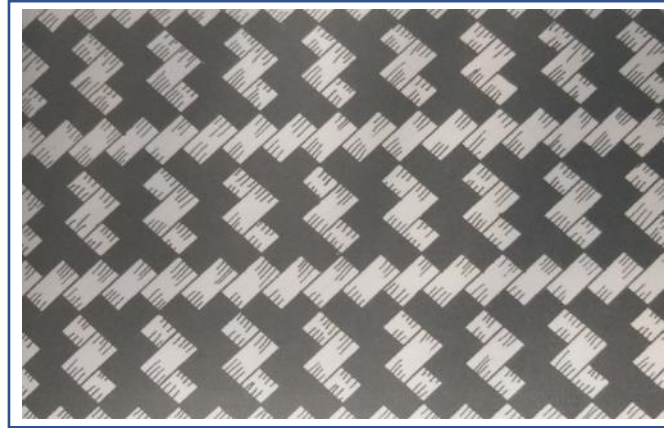


Note: Re-adapted from McRae-Tarei, 2013, pp. 41-43. [Photograph by Jacqueline McRae-Tarei 2011].

Joins are double (hono rua) or single (hono tahi) (Te Hiroa, 1923, p. 722).

Te Hiroa (1923) further explains the hiki (fringe) and hono (join), “In the double join there are two rows of fringes, as against one in the single. Some tribes call the fringe a hiki, and thus call the double join a hono with two hiki (p. 724).

Figure 51: Kowhiti Whakapae

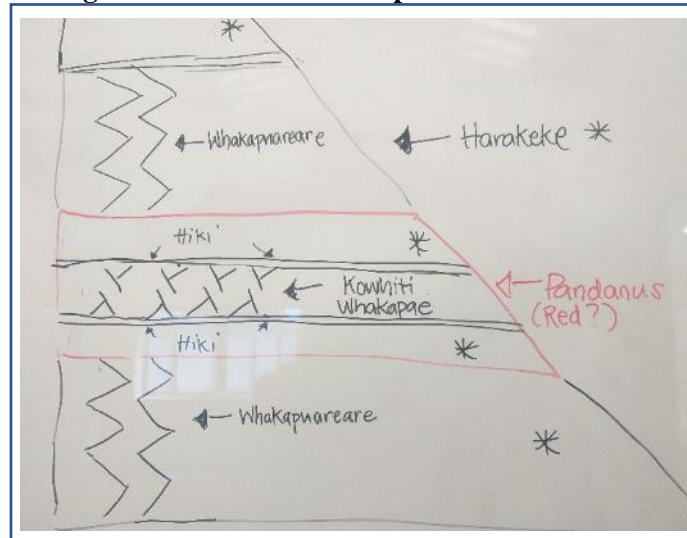


Note. Pendergrast, 2011, Raranga whakairo: Māori plaiting patterns, pattern 30 (No page nōs) [photograph].

The meaning of kowhiti whakapae pertains to the start of a journey that takes the traveller beyond the horizon (Ministry of Education, 2017, p.11). This pattern is considered in the making (please see Figure 51). Also considered is the use of pandanus. Another element to represent the great migration and the connection shared within Polynesia.

Figure 52 depicts this idea of the kowhiti whakapae and pandanus in the whiteboard sketches.

Figure 52: Kowhiti Whakapae and Pandanus



Note. Whiteboard sketch noting the kowhiti whakapae and use of pandanus. Taken by Jacqueline McRae-Tarei [photograph].

Figure 53 shows the *peak* technique. The name is an English term but is used to denote how it peaks out of the body of weaving, hence its name. The fact that it is used in the mamaru in Chapter

3, tells us that it is not a contemporary technique and that there would be a whakapapa pertaining to this technique but more research is needed about this technique and its whakapapa. It is a technique that is also considered in the individual installation.

Figure 53: Process snapshots of the peak design



Note. End process of whakapuareare techniques by Jacqueline McRae-Tarei [photograph]

Toi Aro

Toi Aro,

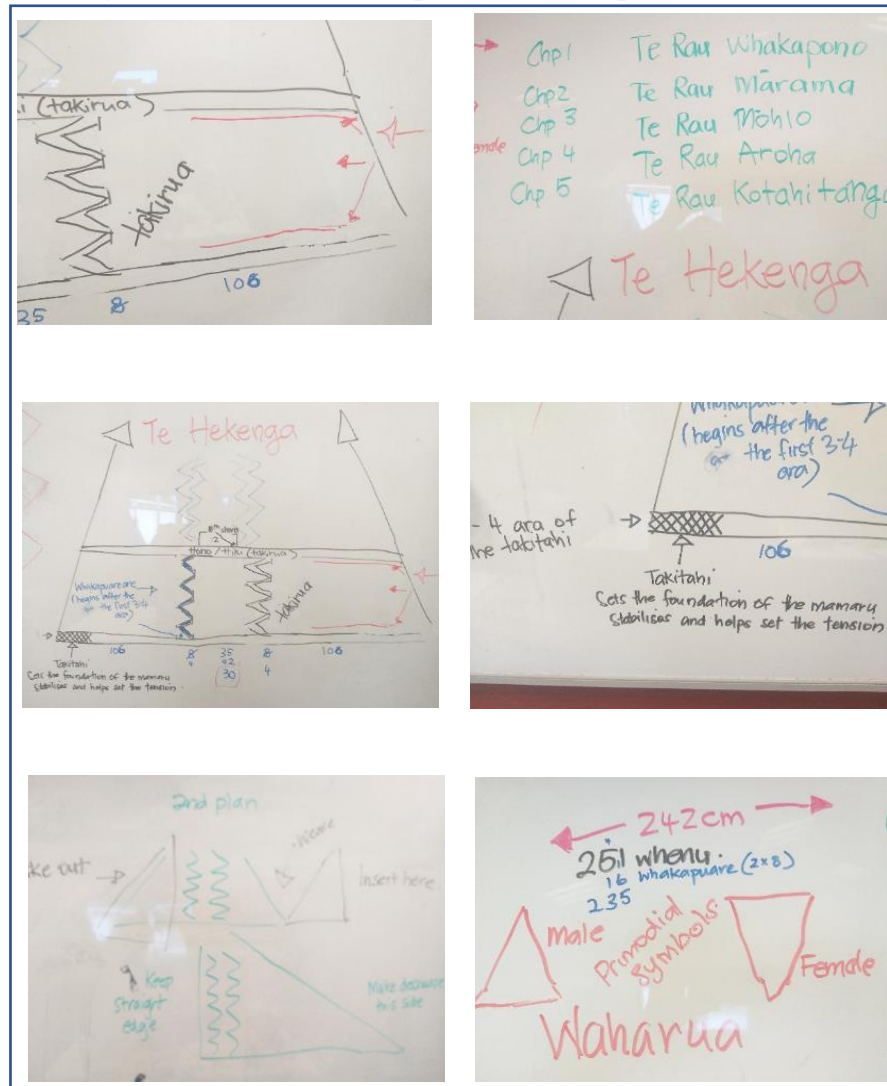
...refers to an artist being able to critically reflect and analyse the creative process. Through this process new learnings, innovations and future directions can be solidified (Rautangata, 2013, pp 8-11).

These whiteboard sketches are the beginning of the Toi Aro process reflecting the weaving process and necessary changes for the individual installation.

Reflections

Figure 54 are examples of aro or reflective processes as I wove the mamaru. There were several whiteboard sketches and processes with original ideas that changed and developed along the way. Within my creative studio space was a whiteboard which I found to be a very helpful tool in exploring ideas.

Figure 54: Whiteboard snapshots; Toi Aro processes



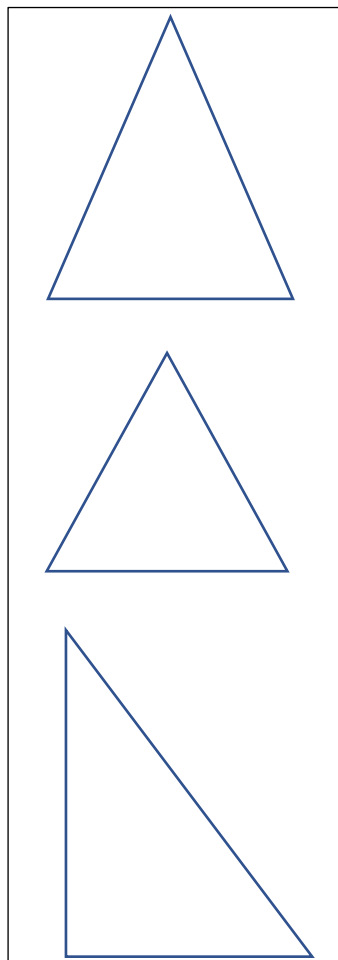
Note. The group of images pertaining to the changes on my whiteboard. Photographs taken by Jacqueline McRae-Tare at Te Kura o te Toroa. [Photograph of Toi Aro process].

This process prompted the thinking in terms of what type of triangle gave more height when considering the width of whenu I was using. The traditional width of each whenu (flax strand) of the mamaru in Chapter 3 was .25 of a cm. The width I was using was .80 of a cm. By doing this, I effectively halved the height, which was not my original intention. I wanted height. To do so, I needed to change the shape of the triangle. The shape of the mamaru in Chapter 3 is an isosceles

acute triangle. The shape from here became an isosceles obtuse because of the width of the whenu I was using. To give more height, I decided to go with the scalene right triangle.

Figure 55 depicts the changes from top to bottom in the triangular shapes undertaken during the making of the first sail.

Figure 55: Triangles shapes of the sail



Isosceles acute triangle. The shape of the original mamaru.

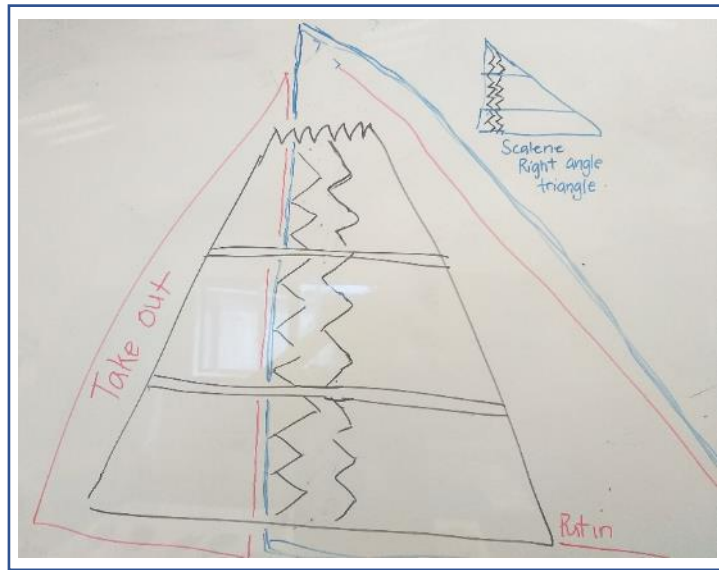
Isosceles obtuse triangle. My first attempt at making the Rā Matua; very short.

Scalene right triangle. The shape has changed but the height was achieved.

Note. The base line of each triangle is the same measurement and depicted to scale.

Figure 56 shows the changes of the shape that needed to be done in order to give height and shows the development of the idea in changing the shape of the sail.

Figure 56: Changing the shape of the sail



Note. Whiteboard sketch noting the change of the shape for the sail. Taken by Jacqueline McRae-Tarei [photograph].

Exploring and experimenting and reaching a resolve were part of this creative space. The Toi Awe model and the phases you undertake were definitely experienced during this time. The following whakataukī reflects this adequately.

I orea te tuatara ka patu ki waho
A problem is solved by continuing to find solutions.

This whakataukī refers to the need for creative thinking, adaptability and perseverance. In order to solve a problem, you need to have all of these (Inspiring Communities, 2018, p.4).

Figure 57 show the toroa wing feathers that will be used on the sail.

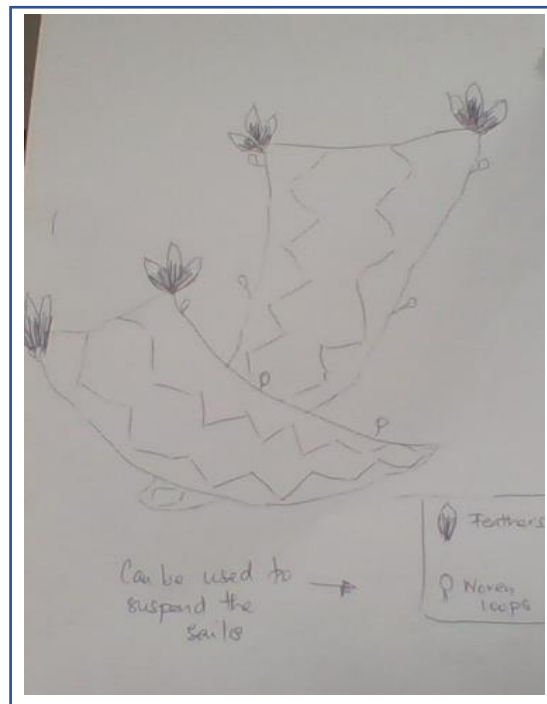
Figure 57: Toroa wing feathers



Note. Toroa feathers given from private collection from Tauranga moana. Photograph taken by Jacqueline McRae-Tarei [photograph]

The feathers are another element of the mamaru. Upon reflection, using the toroa feathers is an element I also considered because of the synergies and connections to Te Kura o te Toroa, where the weaving of the individual installation is taking place; and also the Toroa is renowned for its grace and strength. These two reasons influenced the kairangahau/kairaranga. The length of these feathers is approximately 45 cm. Where they might be located in the installation is shown in Figure 58.

Figure 58: Sketches pertaining to the feather placement in the individual work



Note. Sketch from Jacqueline McRae-Tarei (hardcopy) visual diary [photograph]

Toi Hua

Toi Hua,

is the culmination of Toi Hanga, Toi Iro, Toi Awe and Toi Raupapa that results in a completed body of work. These principles combined allow the artist to flourish in their chosen kaupapa toi (area of specialty) and have all the skills necessary to produce quality art' (Rautangata, 2013, pp 8-11).

The Idea of Suspension and Relationship of the Sails

Thoughts of how and why the installation would be located in the space has been considered and a decision made that both mamaru will be suspended. The interaction of the observer is purposeful in that you must look up, towards the stars, and as such, this denotes the past but in the present. How each sail sits within its own space and with each other is also to prompt the observer in engaging with the installation.

Kia whakatōmuri te haere whakamua.

I walk backwards into the future with my eyes fixed on my past.

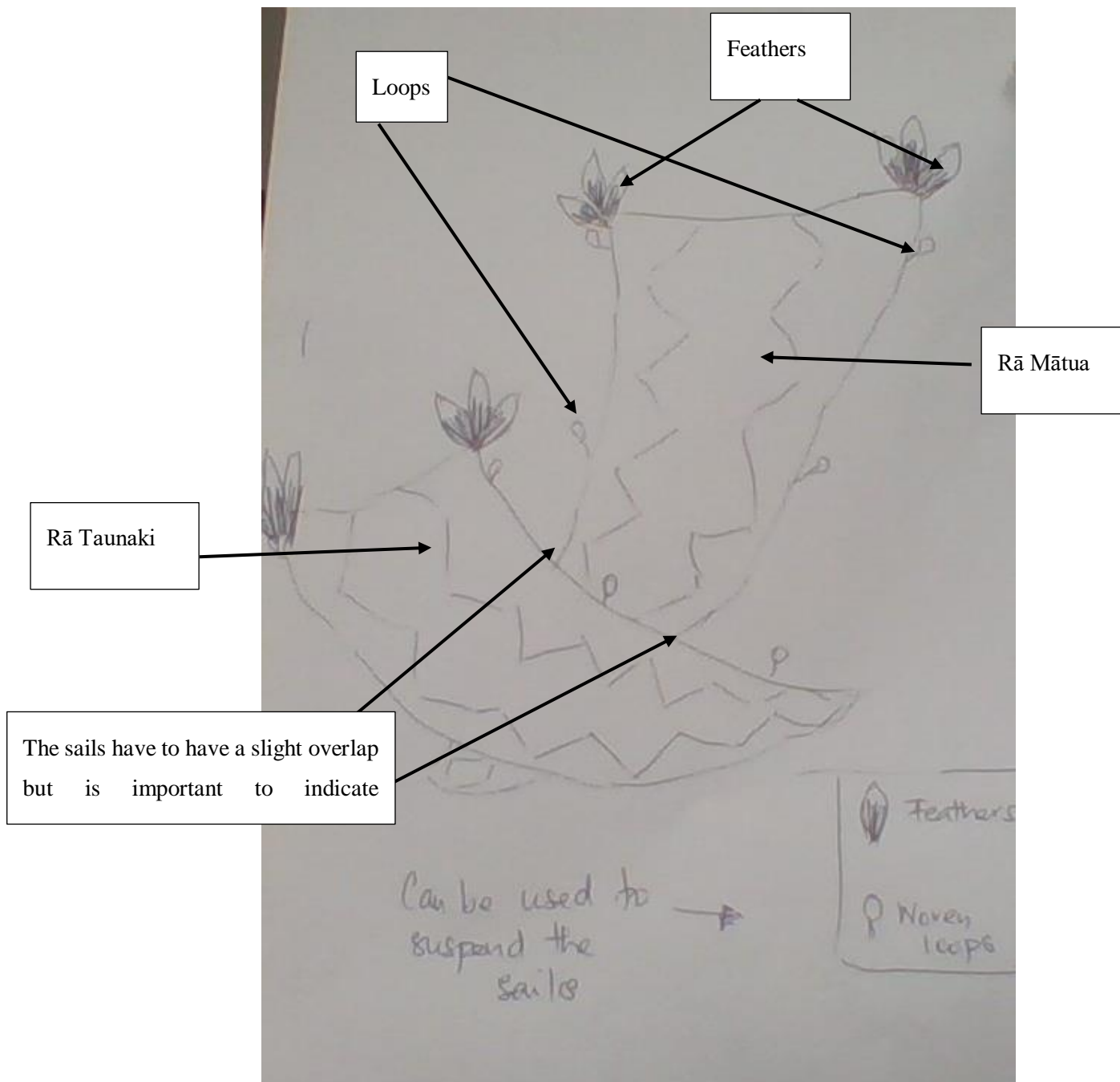
(Rameka, 2016, p.387)

This whakataukī is explained by Rameka (2016), “This whakataukī or ‘proverb’ speaks to Māori perspectives of time, where the past, the present and the future are viewed as intertwined, and life as a continuous cosmic process” (p. 387).

The relationship between the sails and the space occupied is to give a sense of layering and whakapapa. This idea will be developed and the conclusion of how they finally will be displayed will be explained in Chapter 5, Te Ara Hua.

Figure 59 provides more details of the sketch including the different elements, suspension and placement of the two sails Rā Matua and Rā Taunaki.

Figure 59: Suspension and placement of sails, Te Rā Taunaki and Te Rā Matua



Note. Draft sketch denoting placement of sails from Jacqueline McRae-Tarei (hardcopy) visual diary [photograph]

Rā matua (Head sail) and Rā Taunaki (Support sail) are the contemporary interpretation of the māmaru or te rā (Māori sail). These rā are not exact replicas of the māmaru from 1800, that is housed at the British museum, however, they do incorporate the traditional woven techniques/practices used by the kairaranga (weaver/s) of the time. The kāhui kairaranga of Te Ao Kōhatu (pre-1860) experimented with materials and developed their

techniques. The kāhui kairaranga of Te Whare Pora, were unequivocally creative producing not just for utilitarian purposes, but, perfected and produced articles of beauty that encompassed a body of knowledge, whakapapa, pūrākau, uara and tikanga. Toi raranga has never been stagnant and has always been an evolving art form from inception. The rā matua and rā taunaki exhibited are an acknowledgment, expression and creative response of the mana of the kāhui kairaranga of Te Aō Kohatu and is the means to contribute to the sustainability of the practices, seen and unseen of Te Whare Pora.

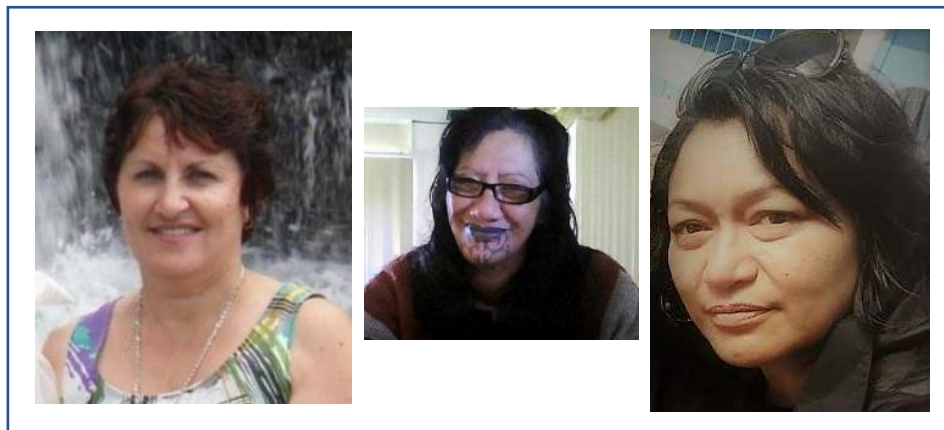
Collaborative PhD Exhibition: Mahitahi

Ko koe ki tēnā
Ko ahau ki tēnei
Kīwai o te kete

You have that handle of the basket,
I'll have this handle of the basket
Let us together uphold the mana of weaving.
(Puketapu-Hetet, 2000, p.53).

Figure 60 are the profile pictures of this PhD collaboration.

Figure 60: Postgraduate Profile pictures of kairangahau/kairaranga



Note. Profile pictures re-adapted from Ka'ai & Smith, 2019, Mahitahi: An indigenous collaborative methodology. From left to right are; Gloria Taituha, Rose Te Ratana and Jacqueline McRae-Tarei. [Powerpoint Presentation].

My fellow PhD students, Gloria Taituha and Rose Te Ratana and I and our collaborative installation is underpinned by a collaborative model framework. The PhD exegeses contain both theoretical and creative components and therefore each exegesis can be assessed individually. The theoretical component is defined by the research undertaken within our

different eras in relation to Ngā mahi a Te Whare Pora practices in Aotearoa (Ka'ai & Smith, 2019). The era of which I have researched is Te Ao Kōhatu pre-1860; the era for Gloria Taituha is Te Huinga-1860-1970 and the era for Rose Te Ratana is Te Ao Manamanaia- 1970 onwards. The collaborative creative component is the overall response from all of our combined research. Our journey as a collaborative has been one of *aroha*. We all have deep regard for one another and take on the consequential responsibility of the knowledge and practices of Te Whare Pora and thus, are accountable to this knowledge and to each other. Instilled within this collaboration is the constant engagement of uara (Māori values) and takepū (Māori principles). This happened before the PhD as we were connected by the network or whakapapa of weavers and weaving.

Talking through our research, how did it connect and how could we reflect this research in the collaborative creative component was done through a number of weekend wānanga. It was then decided, who was responsible for each element of the collaborative creative work. I was to source the turuturu element. Further information of installation photos regarding the collaborative and the individual works for the final installation is in Chapter 5, Te Rau Hua.

Turuturu

The turuturu is also referred to as weaving pegs (Simmonds, 2014). Simmonds (2014) states that the turuturu belonged to "...Hine-te-iwaiwa and Hinerauwharangi (Atua wāhine associated with weaving and childbirth. The pegs are used to support a korowai (cloak) or other garment as is being created by the weaver" (p.iii). "Rituals were part of the process of weaving. In former times, the righthand peg of the pair was regarded as sacred but the left was not" (<https://collections.tepapa.govt.nz/object/134361>).

The turuturu in the collaborative creative work was commissioned by carver Richard Harris. Richard carves as a living and works in conjunction with our carvers located in the Waiariki rohe in Rotorua. When I first approached Richard, I went into the background of the exegeses and why the turuturu would be part of the collaborative work and how it was envisaged within the final installation. Richard's whakaaro (thoughts) pertaining to the whakairo (carved pattern) of the turuturu were the pākati and the hae hae (see Figure 61). He also made the stand for the purpose of the installation out of totara (See figure 62). The totara would be a durable and strong foundation for the turuturu. The overall height was considered for the purpose of the installation. This is the whakapapa kōrero of these turuturu.

Figure 61: The left and right turuturu



Note. As pictured left and right turuturu by carver Richard Harris, photographs taken by Jacqueline McRae-Tarei [photograph].

Figure 62: Totara stand



Note. Totara stand for turuturu by carver Richard Harris, photograph by Jacqueline McRae-Tarei [photograph].

Conclusion

The design elements referred to within this chapter, not only align with the literature of Chapters 1 -3, but they also align to the true meaning of the name of this exegesis, Te Mana o te kāhui kairaranga, Mai i te tīmatanga. The precedent was set in the ongoing collaboration of weavers and weaving. This practice has its origins in Te Ao Kōhatu. This passing of knowledge and way of being, has always been. This is the key message of Te Rau Aroha.

The individual creative works, specifically the two sails are a contemporary interpretation that has originally derived from the technical research of the Māori sail, ‘mamaru’. Not all technical processes will reflect that of the mamaru, however it is the inspiration behind the

making. The collaborative work alongside my kairangahau and kairaranga and the individual works of the final installation will be contextualised in the following Chapter, Te Rau Hua.

Chapter 5: Te Rau Hua

Introduction

Te Rau Hua is the culmination of Toi Hanga, Toi Iro, Toi Awe and Toi Raupapa that results in a completed body of work. These principles combined allow the artist to flourish in their chosen kaupapa toi (area of specialty) and have all the skills necessary to produce quality art' (Rautangata, 2013, pp 8-11). Chapter 5 is the culmination of the final collaborative whakāturanga (exhibition), the processes undertaken for the opening. There are five wāhanga in this chapter:

First, is the name and background of the collaborative creative woven piece/work/artefact with Gloria Taituha and Rose Te Ratana. Also, the background and name given for the whakāturanga of all woven works both individual and collaborative. I also provide a Hauraki connection through our iwi kōrero.

Second, is a background and why this specific site was chosen for the whakāturanga.

Third, is the background, photographic timeline and the technical information undertaken to install the individual and collaborative creative works.

Fourth, is a photographic collage with a written summary in the preparation toward and during the opening ceremony of the whakāturanga.

The Collaborative Creative Work: Whakamata

The name chosen for our collaborative creative work is Whakamata. Whakamata is a name provided by the master weaver, the late Diggeress Te Kanawa. It is the very first line of whatu in a kākahu. The whakamata was placed 15 cm from the top of each whenu. It was the first ara (line) of whatu that marked the boundary between the tāniko and kaupapa of a kākahu.

We (the three kairangahau and collaborators) had wānanga about the name and meaning of Whakamata which prompted conversations of rituals and the initiation of Te Whare Pora and belief systems. The ara of the whakamata is connected to each of the turuturu (the collaborative piece of work). This ara begins from the left peg (noa) and ends at the right peg (tapu). The concepts of noa and tapu is prevalent in the weaving of the whakamata. The

whakapapa of knowledge and tapu has been spoken about extensively in Chapter 2. But the kōrero of tapu and noa emphasises two points. First is the need to maintain the balance of noa and tapu when weaving. The second is, as you weave and complete each line, you continuously connect to the source of tapu and the knowledge of the Whare Pora.

Hence, the name given, Whakamata is valid and appropriate as it derives from the whakapapa knowledge of weaving and weavers.

Te Whakāturanga: Teeraa Te Awatea

The name gifted for the whakāturanga in its entirety, is derived from a Waikato-Maniapoto waiata of the same title (Waikato Tainui & Wintec, 2013). The waiata is known as a memorialisation to the deceased, but is provided by whānau as a metaphoric celebration of creative practice. The journey of mourning having similarity to the journey of the creative process, where dark periods make way for the dawn of new findings, new enlightenment. The name also acknowledges the many who have travelled into the night, who have fought for and founded art forms known today. These ancestors have made way for creativity, and although our pain will never cease in losing them, we are blessed with the dawning of new creative days. The author's whānau also acknowledge the mountains and lakes of Tūhoe and Hauraki, the ancestors of Tūhoe and Hauraki who have traversed the way for the author's fellow researchers to reach their new day (M. Toka & G. Taituha, personal communication, January 23, 2021).

The Hauraki connection is of Hine-rehia and her weaving at night. This kōrero is also referred to in Chapter 2. The story is as follows;

Hinerehia was an expert weaver and met her human husband Kangaroa while out gathering seaweed. She moved to his village and only wove at night or on foggy days, covering her unfinished work in the daylight hours. The women of the village were anxious to learn Hinerehia's weaving skills. The women set out to learn Hinerehia's skills and tricked her one night into believing it was still dark. Hinerehia realised that she had been deceived by these women and fled off to the Moehau ranges never to return again. This is how the women of Hauraki obtained their weaving skills and why preparation and weaving only take place during the day as when these skills were known only to the patupaiarehe, they belonged to the darkness. A woman who might be careless about such matters may be cautioned to remember how Hinerehia came to grief, "me mahara ki te raru o Hinerehia" (Auckland Museum, 1997; Bacon, 2004; Orbell, 1995).

The name Teeraa Te Awatea is very significant and aligns to Hauraki traditions.

Apakura, Te Wānanga o Aotearoa

The history of Te Wānanga o Aotearoa began in 1983. There have been many significant milestones since then. As we know it today, Apakura is in essence the mauri of Te Wānanga o Aotearoa. I fondly call Apakura ‘Rome’ and that this is the central hub for the entire motu (country). The connection between Rose, Gloria and I is that we all work for this amazing organisation. We connect to the raranga programme in more ways than one. Although I have moved into a Management role specifically for all our programmes in Kawerau, Turangi and and more recently Taupō, I work alongside kaiako who facilitate these programmes. I am in constant awe of all of them; the staff and the tauira alike.

We decided to situate the whakāturanga at Apakura, first, because it felt right. We actually had a few choices of sites, but at the end of the day, we knew Apakura was the right place. A big reason was of course the history of the location, but also because tauira are able to come and view Teera Te Awatea and feel the mauri of Te Wānanga o Aotearoa and it’s history.

A tongi from King Tawhiao the second Māori king is appropriate to cite (see below) to reflect Apakura. This whakataukī pays homage to Tainui and to Te Wānanga o Aotearoa. This is the tongi that is used within our Ako Wānanga space.

Māku anō e hanga tōku whare
Ko tōna tāhuhu, he hīnau.
Ōna pou he māhoe, he patatē
Me whakatupu ki te hua o te rengarenga,
me whakapakari ki te hua o te kawariki. 2

I will build my house
Its ridge pole will be made of hīnau
Its posts will be made of māhoe (whiteywood) and patatē (seven-finger)
Those who inhabit that house shall be raised on rengarenga (rock lily)
and nurtured on kawariki.

The Installation Processes

The curator of Teera Te Awatea was Aisha Roberts. Aisha is the Poutiaki of Toi for Te Wānanga o Aotearoa and worked with the three kairangahau in preparation for the exhibition. Figure 62 is a superimposed image of the sails I created to how they may be placed in the space. Acknowledgement to Aisha for Figure 63 and her assistance in the installation process.

Figure 63: Superimposed sails for installation

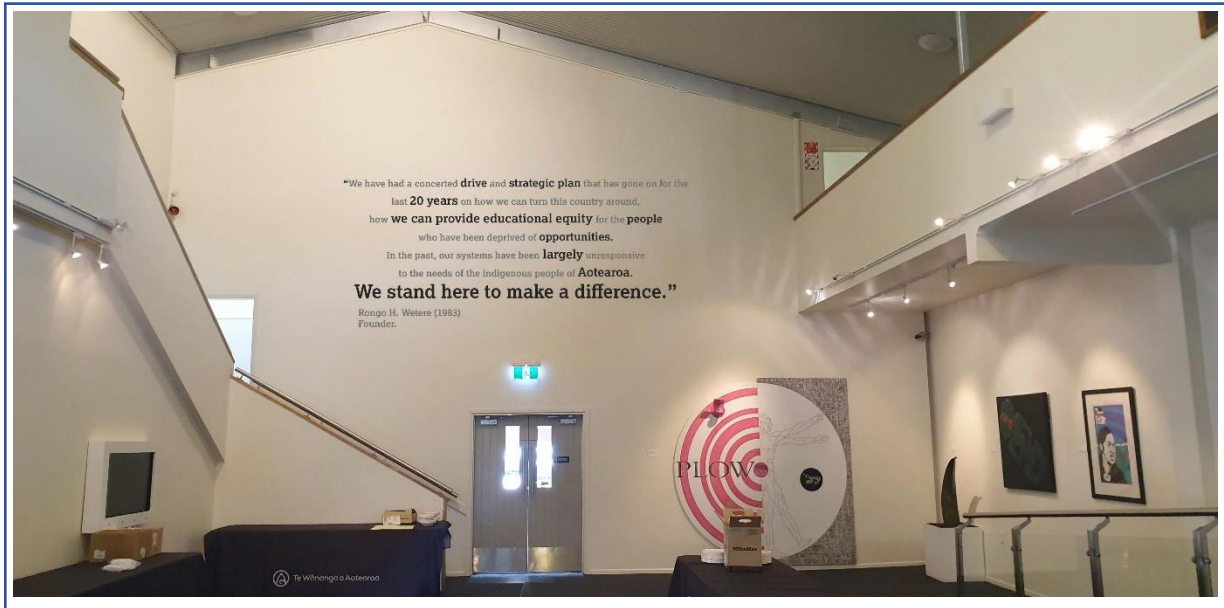


Note: Superimposed picture of sail in the installation by Aisha Roberts [photograph].

Understanding the whakāturanga – Teeraa Te Awatea

Teeraa Te Awatea combines all of the creative pieces of the three kairangahau. In its entirety, tells a story about the kāhui kairaranga and their genesis over time as she journeyed from Hawaiki to Aotearoa New Zealand and was part of the peopling of Aotearoa New Zealand which led to the establishment of iwi across the country as we know them today. It tells of the exploration of new materials and significant landmark periods which have impacted on the kāhui such as the effects of colonisation manifested in various landmark events. The impact of Teera Te Awatea shows the significant leadership of the kāhui kairaranga across centuries. It shows how the kāhui kairaranga were enduring, steadfast and resilient and were committed to protecting the knowledge of the artform and Te Whare Pora for future generations.

Figure 64: The space



Note: Photographs taken by Jacqueline McRae- Tarei [photograph].

Figure 64 shows the exhibition space. This is where exhibitions are displayed at the Apakura Campus in Te Awamutu. The quote shown on the rear wall is a quote that has been displayed specifically for Teera Te Awatea. It is a quote by Rongo Wetere the Founder of Te Wānanga o Aotearoa, that articulates the reason WHY Te Wānanga o Aotearoa began and is a shared vision by kaimahi (staff) of Te Wānanga o Aotearoa of whom stand by to this day.

Figure 65 shows the final stages of the installation of He Rā. A crane was used to suspend the rā. Nylon was used to suspend the rā to different points of the ceiling and wall. An overlap of the rā was slight but to denote the layer upon layer effect representing whakapapa. The feathers were inserted last and during the process of installation. The rā on a waka would cut through the waves of the ocean and fly like a bird, utilising ngā hau (the winds), hence the suspension and the huruhuru toroa (albatross wing feathers).

Figure 65: Installing He Rā



Note: Photographs taken by Peter Tarei [photograph].

Figure 66 shows the the artist statement of He Rā and was located with woven works.

Figure 66: He Rā

1

2

3

4

5

6

He Rā

Jacqueline McRae-Tarei
Ngāti Pū, Ngāti Tamatera, Ngāti Whakaue

Te Ao Kōhatu (pre 1860) is the era of inception for Māori. This era defines an entrenched mātauranga Māori system that dispersed, connecting the people, to the land, to Atua and the Universe. This is whakapapa knowledge and is the corpus of all knowledge for Māori. It is with this knowing, that the validity of each of the woven works within the installation of Whakamata stands strong.

The kāhui kairaranga of Te Whare Pora experimented with materials and developed techniques of raranga, whatu and tāniko. They were the experts, unequivocally creative and skilful, producing articles of beauty and mana. As such, contributed to the wellbeing of their communities.

Woven articles of kākahu, whāriki, tāniko, tukutuku, whakairo kete emerged from the knowledge of whakapapa, mātauranga and tikanga. The patterns, designs, materials and techniques are mnemonic templates and derive from Te Ao Kōhatu. Toi raranga has never been stagnant, but is an evolving art form that is timeless. This art form carries history, stories and whakapapa to the next generation.

He Rā is a creative response and acknowledgment of the kāhui kairaranga in Te Ao Kōhatu from Hawaiki to Aotearoa. It is a contribution to the wider installation of Whakamata toward the sustainability of practices and mātauranga of Te Whare Pora.

Mā mua ka kite a muri, mā muri ka ora a mua
Those who lead give sight to those who follow,
those who follow give life to those who lead

Materials:
Harakeke and pandanus

Image descriptions:

- 1 The first weave
- 2 Takitahi starting with takirua
- 3 Weaving
- 4 Building the Whakapapa
- 5 Whakapuareare
- 6 Toroa

Note: Artist statements by curator Aisha Roberts.

The weaving of He Rā was within the space of Te Whare Pora, located at Te Wānanga o Aotearoa ki Kawerau. This wānanga site was given the name Te Kura o te Toroa – The Plumes of the Albatross, by Tūwharetoa kaumatua. There were two whakapuareare woven into each Rā; one mirrored that which was used in the Māmaru at the British Museum, and the other whakapuareare pattern depicted maunga which was my design. Each maunga represented the kairaranga who supported and wove alongside one another and me of course; an acknowledgement of their weaving hands and of their whakapapa. Whenu of pandanus was used sporadically within He Rā. The kōwhitiwhakapae pattern was also used, but I decided to use no colour as was the Māmaru, plain, but beautiful in and of itself. However, as explained previously, it denoted the migration from Hawaiki to Aotearoa, New Zealand but importantly, it highlighted the transitions and impacts that our Māori ancestors experienced during the period of Te Ao Kōhatu. Another reason not to use any colour can be likened to how it is today, that is, if we are not looking for it, we won't see it, but if you do see it, it's there plain as day. We have to know our history and where we have come from to be better informed and to know how to move forward together. We do this by engaging with the world through our philosophies and tikanga. Hence, He Rā is the creative response and acknowledgement of kāhui kairaranga of Te Ao Kōhatu.

Figure 67: Installing Whakamata

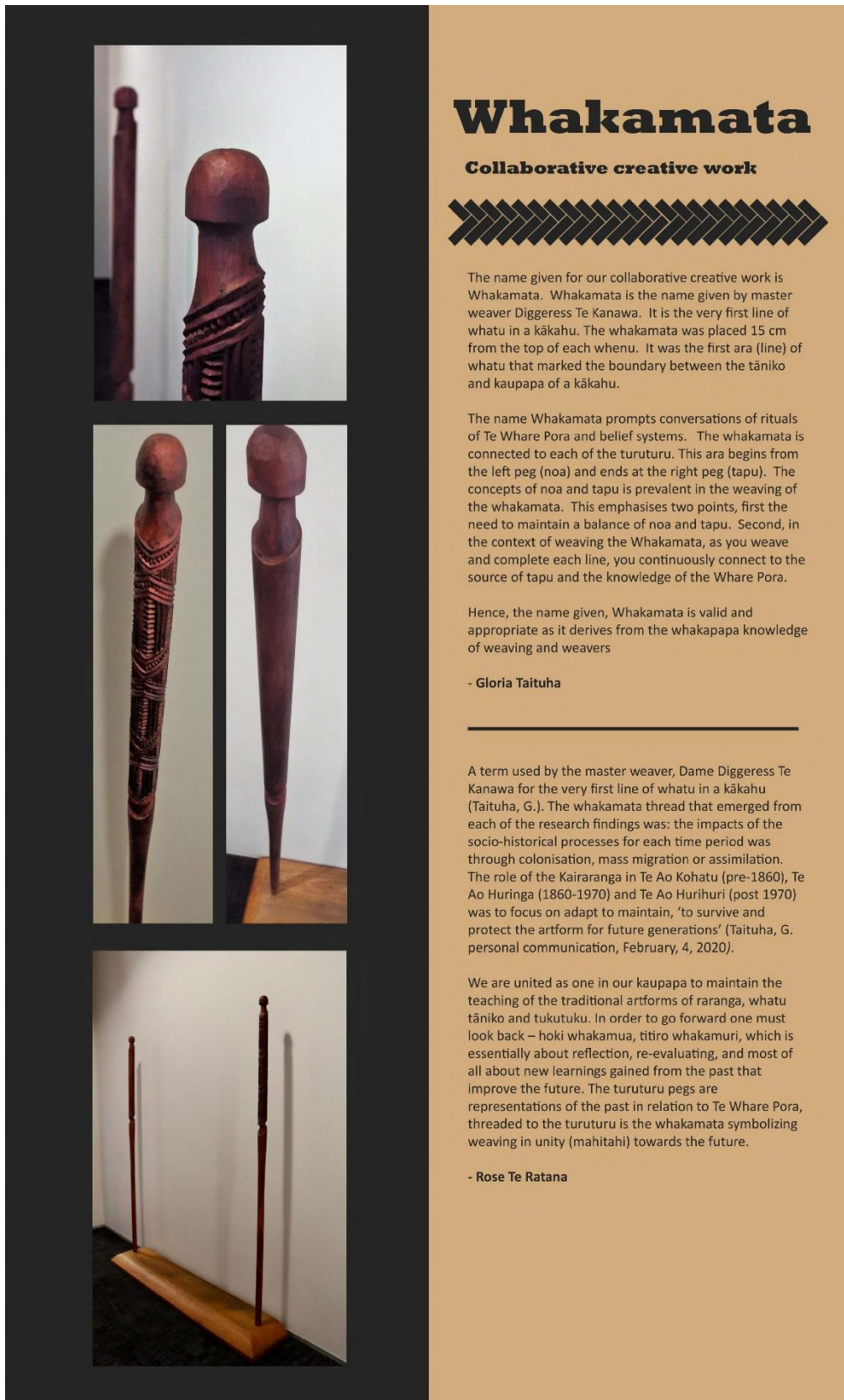


Note: Photography by Tipene Stephen Ward; Advisor Kaimahi Communications & Engagement [photograph].

Figure 67 shows the final kōrero between Gloria Taituha, Rose Te Ratana and Jacqueline McRae-Tarei to install *Whakamata*, the collaborative creative work.

Figure 68 shows the collaborative artist statement of *Whakamata*. The kōrero has been articulated by fellow PhD students, Gloria Taituha and Rose Te Ratana. Rose was responsible for the conceptualisation of the whakamata display and its philosophy within te ao Māori. Gloria was responsible for the harvesting, preparation and creation of the whakamata (the first line) using muka. I was responsible for engaging with the maker of the two turuturu. Whakamata is displayed between these two turuturu. The kōrero of the turuturu and why the turuturu was used in the whakatūranga was because of its historical significance. Within Te Whare Pora, there was a ritual associated with learning and the right hand, turuturu. This ritual involved karakia and was when the novice weaver bit the turuturu matau (right peg), which was the tapu (sacred) turuturu. At that point, she came under the state of tapu. Knowledge and tapu as previously mentioned is associated with Io and Tane's ascension through heavens to retrieve ngā kete o te wānanga. The turuturu and associated ritual has historical merit as it has ancient foundations that reflect the period of Te Ao Kōhatu.

Figure 68: Whakamata



Whakamata

Collaborative creative work



The name given for our collaborative creative work is Whakamata. Whakamata is the name given by master weaver Diggeress Te Kanawa. It is the very first line of whatu in a kākahu. The whakamata was placed 15 cm from the top of each whenu. It was the first ara (line) of whatu that marked the boundary between the tāniko and kaupapa of a kākahu.

The name Whakamata prompts conversations of rituals of Te Whare Pora and belief systems. The whakamata is connected to each of the turuturu. This ara begins from the left peg (noa) and ends at the right peg (tapu). The concepts of noa and tapu is prevalent in the weaving of the whakamata. This emphasises two points, first the need to maintain a balance of noa and tapu. Second, in the context of weaving the Whakamata, as you weave and complete each line, you continuously connect to the source of tapu and the knowledge of the Whare Pora.

Hence, the name given, Whakamata is valid and appropriate as it derives from the whakapapa knowledge of weaving and weavers

- Gloria Taituha

A term used by the master weaver, Dame Diggeress Te Kanawa for the very first line of whatu in a kākahu (Taituha, G.). The whakamata thread that emerged from each of the research findings was: the impacts of the socio-historical processes for each time period was through colonisation, mass migration or assimilation. The role of the Kairaranga in Te Ao Kohatu (pre-1860), Te Ao Huringa (1860-1970) and Te Ao Hurihuri (post 1970) was to focus on adapt to maintain, 'to survive and protect the artform for future generations' (Taituha, G. personal communication, February, 4, 2020).

We are united as one in our kaupapa to maintain the teaching of the traditional artforms of raranga, whatu tāniko and tukutuku. In order to go forward one must look back – hoki whakamua, titiro whakamuri, which is essentially about reflection, re-evaluating, and most of all about new learnings gained from the past that improve the future. The turuturu pegs are representations of the past in relation to Te Whare Pora, threaded to the turuturu is the whakamata symbolizing weaving in unity (mahitahi) towards the future.

- Rose Te Ratana

Note: Artist statements by curator Aisha Roberts

Figure 69: Invitation to the Opening of Teeraa te Awatea



Note: Artist Invitation by curator Aisha Roberts

Figure 69 shows the invitation to our many whānau, iwi, hapu and fellow kaimahi (colleagues) and tauira (past and present students).

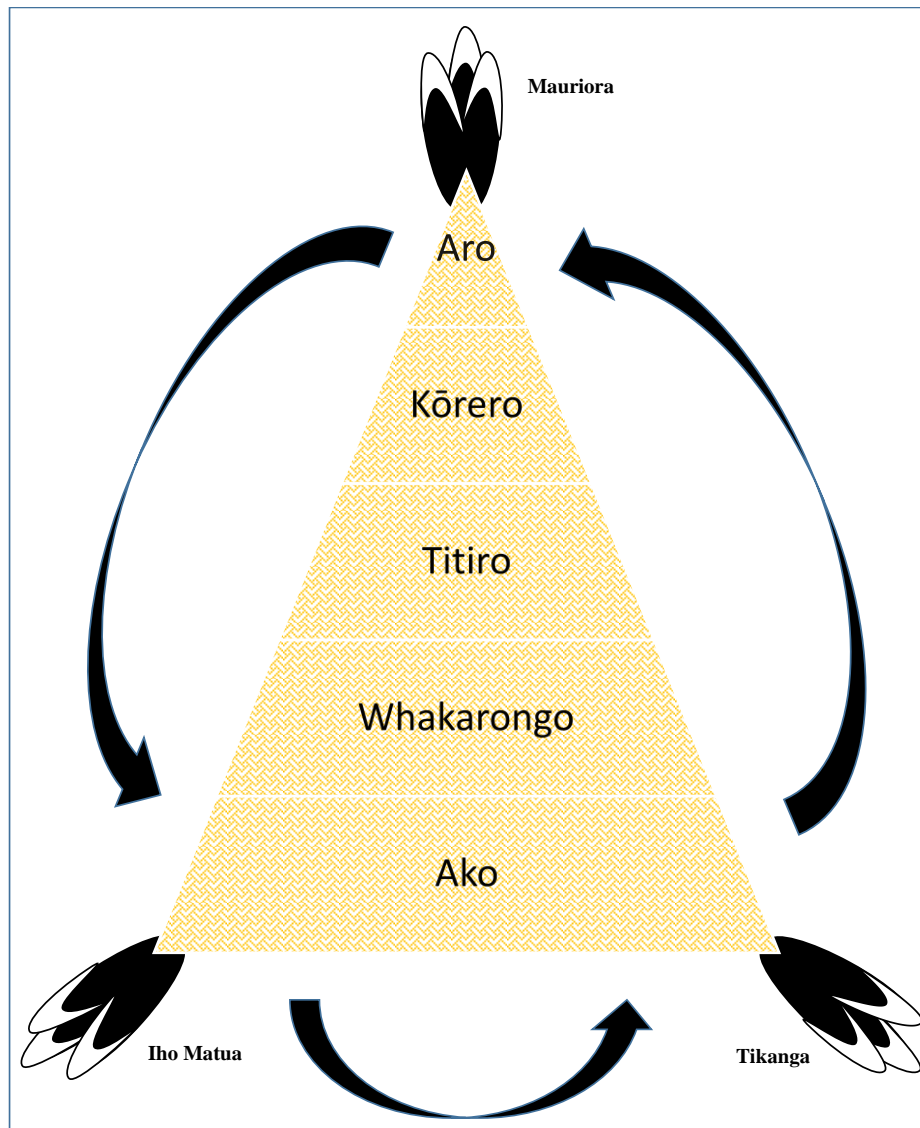
I was humbled to receive a koha during the opening of Teeraa te Awatea by master carver, matua Kereti Rautangata. He asked the question of me, “what made you choose the name, He Rā? I told him that initially I pondered over the name I should use. I knew it wasn’t Māmaru,

rā matua, or rā taunaki, but simply, He Rā; it felt right. He proceeded to tell me about the connection between Rā and the Sun, in that our world revolves around the sun, that is, it is at the centre, it is the heart. This was fitting as Temara appropriately quotes, “if light was our tikanga, then the sun must be our philosophy” (Temara, 1999, p.5).

New Learnings – Mahitahi, Ako, & Ngā Toi o Te Whare Pora

Mahitahi has been an ongoing feature of my life; as a weaver, and particularly through my raranga journey to become a weaver, and also on my PhD journey in the writing of this exegesis. As a member of the kāhui kairaranga in today’s world alongside my fellow PhD kairaranga/kairarangahau, Rose and Gloria, fellow community weavers and raranga tauira, I have come to realise that there is a mahitahi ako (pedagogy) that is relevant to kairaranga and their creative practice. I have developed a mahitahi ako model building on from the mahitahi model in Figure 13, demonstrating how this knowledge emanates from Te Whare Pora touching all of our networks and communities, because Te Whare Pora is its origins, as I have observed. Figure 70 shows a mahitahi ako model using He Rā as a symbol and the design.

Figure 70: Mahitahi ako model



The sail defines aspects of ako within Te Whare Pora. Hence Ako is the anchor and the foundation shown in the broadest part of the sail. Ako is both teaching and learning, it is about sharing and collaboration. The fundamentals of ako is an approach and implementation of, whakarongo (listening), tītiro (observing), kōrero or whitiwhiti kōrero (talking and robust discussions) and aro (reflecting). The arrows show an ongoing and continuous stream that allows for correct and appropriate knowledge building. This also allows for realisations of common ground, resolutions and agreements that is done respectfully through working together. The huruhuru represent the broader foundations of Te Ao Māori, of Iho Matua (Māori philosophy or beliefs) and Tikanga which are the correct ways and practices of which

kairaranga adhered to. This includes responsibility and accountability for one another and the respect afforded to the knowledge of weaving. At the top of the sail is Mauri Ora and the importance of the collective wellbeing of the people and the sustainability of the mātauranga contained within Te Whare Pora.

Conclusion

The written component of this exegesis has taken a long time, and at times has been an arduous journey. The PhD is not meant to be easy. You have to commit to this kaupapa. Teeraa te Awatea is the final output of the exegesis. It has allowed us to be able to creatively respond and reflect the written component. Throughout this journey was the notion of kotahitanga. The unity felt and exemplified through whanaungatanga was evident in the gathering of our whānau and communities at the opening of Teeraa te Awatea, from mahitahi with my fellow researchers Gloria Taituha and Rose Te Ratana, and all of those who worked alongside us and supported us through the journey.

Finally, reflecting on the research aims of this exegesis and the research questions, it is evident from this research that the kāhui kairaranga of Te Ao Kōhatu were indeed held in great esteem. They upheld the mana of Te Whare Pora and ensured that the knowledge of Te Whare Pora was passed on through the generations. They laid the foundations of intergenerational transmission and knowledge transfer. It is an obligation to ensure this knowledge continues and as with our collaborative PhD, it is our collective contribution to the wider pool of mātauranga Māori. We are led by those who have gone before us who have led by example. It is also true that we also set an example and that we contribute to the well-being of our communities and our people.

Mā mua ka kite a muri, mā muri ka ora a mua
*Those who lead give sight to those who follow, those who follow give life to those who
lead.*

References

- Allo, J. (Jan. 1970). *The Maori Dog*. Auckland, New Zealand: University of Auckland, unpublished Master of Arts thesis.
- Alpers, A. (1996). *Maori myths and tribal legends* (2nd edition). Auckland: Addison, Wesley, Longman New Zealand Limited.
- Anaru, N. (2011). *A Critical Analysis of the Impact of Colonisation on the Māori Language through an Examination of Political Theory*. (Master of Arts thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <https://openrepository.aut.ac.nz/handle/10292/11469>.
- Anderson, A. (2017). Changing perspectives upon Māori colonisation voyaging. *Journal of the Royal Society of New Zealand*, 47:3, 222-231, DOI: 10.1080/03036758.2017.1334674
- Anderson, A. J. (2000). Slow boats from China: Issues in the prehistory of Indo-Pacific seafaring. In S. O' Connor. & P. Veth. (Eds.), *East of Wallace's Line: Studies of past and present maritime cultures of the Indo-Pacific region* (pp. 13-50). Rotterdam, Netherlands: A. A. Balkema.
- Attwood, B. (2011). Settler histories and indigenous pasts: New Zealand and Australia. In A. Schneider & D. Woolf (Eds.), *The Oxford history of historical writing: 1945 to the present*, 5, 594-614. New York, NY: Oxford University.
- Banks, J. (1769). *The Endeavour Journal of Sir Joseph Banks, 1768—1771: Account of New Zealand*. Retrieved from <http://gutenberg.net.au/ebooks05/0501141h.html#nz>
- Barlow, C. (1991). *Tikanga whakaaro: Key concepts in Māori culture*. Auckland, New Zealand: Oxford University Press.
- Basil, K. (November, 2008). Kuri - Polynesian dogs. *Te Ara - the Encyclopedia of New Zealand*. Retrieved from <http://www.TeAra.govt.nz/en/kuri-polynesian-dogs>.
- Benton, R. & Benton, N. (1995). *The unbroken thread: Maori learning and the national qualifications framework*. Wellington, New Zealand: New Zealand Council for Education Research. ISBN 0-908916-78-7
- Best, B. (1900). *Maori origins, part II. Transactions and Proceedings of the New Zealand 1868-1961*, 33(58), 467-468. Retrieved from: http://rsnz.natlib.govt.nz/image/rsnz_33/rsnz_33_00_0491_0467_ac_01.html
- Best, E. (1898). *The Art of the Whare Pora: Notes on the clothing of the ancient Maori, their knowledge of preparing, dyeing, and weaving various fibres, together with some account of dress and ornaments, and the ancient ceremonies and superstitions of the whare pora*, (31), 625-658. Retrieved from <http://rsnz.natlib.govt.nz>
- Best, E. (1907). Maori forest lore: Being some account of native forest lore and woodcraft as also of many myths, rites, customs, and superstitions connected with the flora and fauna of the Tuhoe or Ure-wera district-part 1. *Transactions and Proceedings of the Royal Society of New*

Zealand, (40), 185-254. Retrieved from <https://paperspast.natlib.govt.nz/periodicals/TPRSNZ1907-40.2.9.1.15>

Best, E. (1918). Polynesian navigators: Their exploration and settlement of the Pacific. *The Geographical Review*, 5(3), 169-182. Retrieved from <http://www.jstor.org/stable/207638>

Best, E. (1922). *The astronomical knowledge of the Maori, genuine and empirical: Including data concerning their systems of astrology, austrolatry, and natural astrology, with notes on certain other natural phenomena*. Wellington, New Zealand: Dominion Museum.

Best, E. (1924). *The Maori* vol. 1. Wellington, New Zealand: Government Printer. Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/tei-Bes01Maor-t1-body-d3.html>

Best, E. (1934). *The Maori as he was: A brief account of Maori life as it was in pre-European days*. Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/tei-BesMaor.html>

Best, E. (1941). *The Maori-Volume II*. Wellington, New Zealand: The Polynesian Society (Inc.). Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/tei-Bes02Maor.html>

Best, E. (1976). Maori religion and mythology being an account of the cosmogony, anthropogeny, religious beliefs and rites, magic and folk lore of the Maori folk of New Zealand-part 1. In *The published works of Elsdon Best*. A. R. Shearer: Wellington, New Zealand. Copyright by Victoria University of Wellington.

Best, E. (1996). *Tūhoe: The Children of the Mist*. Auckland, New Zealand: Reed Books. (reprint of the 1925 original).

Best, E. (2011). *Maori religion and mythology part 2*, pp. 271-272. Wellington, New Zealand: Victoria University of Wellington. Retrieved from <http://nzetc.victoria.ac.nz/collections.html>.

Best, E. (June, 1899). Notes on mythology: The Origin and Personification of the Heavenly Bodies, &c. *The Journal of the Polynesian Society*, 8(2), 93-121. Retrieved from http://www.jps.auckland.ac.nz/document/Volume_8_1899/Volume_8%2C_No._2%2C_June_1899/Notes_on_Maori_mythology%2C_by_Elsdon_Best%2C_p_93-121/pl

Borrel, N. (2021). *Haere rā*. In Canvas, January 16 2021, pp.6-10.

Boyd, P. (2010). *Tukutuku: He whai toi, he toi tupu. Tukutuku: in pursuit of an understanding of Māori art practices*. (Doctor of Philosophy thesis. The University of Auckland, Auckland, New Zealand). Retrieved from <https://researchspace.auckland.ac.nz/handle/2292/22623>

Brechin-Smith, D. (2019). *He paki taonga i a Māui: He putunga kōrero mai i Te Moana-nui-a-Kiwa*. Wellington, New Zealand: Te Papa Press

Brougham, A. E., Kāretu, T., & Reed, A. W. (2004). *The Reed book of Māori proverbs: Te kohikohinga whakataukī a Reed*. Auckland, New Zealand: Reed Publishing (NZ) Ltd.

Churchill, W. (1993). *Struggle for the land: Indigenous resistance to genocide, ecocide, and expropriation in contemporary*. Monroe, ME: USA. Common Courage Press.

Clayworth, P. (2014). Anthropology and archaeology - Explorers and missionaries, 1769 to 1840. Retrieved from <http://www.TeAra.govt.nz/en/anthropology-and-archaeology/page-1> (accessed 9 March 2020)

Colenso, W. (1880). On the vegetable food of the ancient New Zealanders before Cook's visit. *Transactions of the New Zealand Institute*, 13, 3–38.

Colenso, W. (1891). Vestiges: Reminiscences: Memorabilia of works, deeds and sayings of the ancient Maoris. *Transactions of the New Zealand Institute*, 24, 445-467

Consedine, B. (2007, September). *Historical influences: Māori and the economy*. New Zealand: Te Pun Kokiri. Retrieved from: <https://www.tpk.govt.nz>

Crowe, A. (2014). New Zealand place names shared with Central East Polynesia. *Rapa Nui Journal*, 28(1), 5-21.

Cumberland, K. (1949, July). \Aotearoa Maori: New Zealand about 1780. *The Geographical Review*, 39(3), 401-424. Retrieved from <http://www.jstor.org/stable/210642>

Curnow, J. (1986). Review of Hawaiki - A new approach to Maori tradition. *The Journal of the Polynesian Society*, 95(2), 277–279. Retrieved from <http://www.jstor.org/stable/20706001>

Davidson, J. (1996). Maori prehistory. In D. C. Starzecka (Ed.), *Maori art and culture* (pp.8-25). Auckland, New Zealand: David Bateman Limited.

Davidson, J. (1998). Maori Prehistory. In D. C. Starzecka (Ed.), *Maori Art and Culture*, (p, 8-25). London, England: British Museum Press.

Davidson, J. (1998). *Maori Prehistory*. In *Maori Art and Culture*. Ed. D. C. Starzecka, London, England: British Museum Press 8 – 25.

Davis, K. (n.d.). How social innovation is deeply Māori in *Innovative Unit: New solutions for thriving societies*. Retrieved from <https://www.innovationunit.org/thoughts/how-social-innovation-is-deeply-maori/>

Del Mar, F. (1924). A year among the Maoris: Study of their arts and customs. London, England: Ernest Benn Ltd. In New Zealand Electronic Text Centre (Ed.), *Chapter II — At the House of the Weaver*. Retrieved from <http://nzetc.victoria.ac.nz/collections.html>.

Durie, E. T. (1998). Ethics and values in Māori research. *He Pukenga Korero*, 4(1), 19-25.

Durie, M. H. (2003). *Ngā kāhui pou: Launching Māori futures*. Wellington: Huia Publishers Ltd.

Eccles, D. (2008). *The Polynesian spread of colonization in the Pacific* [Map]. From https://upload.wikimedia.org/wikipedia/commons/4/4b/Polynesian_Migration.svg

Edwards, S. (2013). Na te mōhio ka mātau: Remembering mātauranga Māori in localised practice In S. Edwards & R. Hunia (Eds.), *Dialogues of mātauranga Māori: Remembering* (pp. 42-65). Te Awamutu, New Zealand: Te Wānanga o Aotearoa.

Else, A. (2011). Gender inequalities. In *Te Ara-the Encyclopedia of New Zealand*, Retrieved from <http://www.TeAra.govt.nz/en/gender-inequalities>.

Firth, R. (1929). *Primitive Economics of the New Zealand Maori*. London, Great Britain: George Routledge & Son, Ltd.

Firth, R. (1931). Maori canoe-sail in the British Museum. *The Journal of the Polynesian Society*, 40 (159), 129-135. Retrieved from <http://www.jps.auckland.ac.nz/document>.

Firth, R. (1959). *Economics of the New Zealand Māori*. Wellington, New Zealand: R.E Owen, Government Printer.

Flavell, Te U. (2013, April 18). *Hansard Report: Debate on Pacific issues* (Vol. 689). https://www.parliament.nz/en/pb/hansard-debates/rhr/document/50HansD_20130418/volume-689-week-40-thursday-18-april-2013.

Flax Commission. (1871). Report of the commissioners appointed to enquire into the preparation of the Phormium fibre or New Zealand flax. In *Appendix to the Journals of the House of Representatives*, 2 (G-04). Wellington, New Zealand. Retrieved from <http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.5>

Furey, L. (2006). *Maori gardening: An archaeological perspective*. Wellington, New Zealand: Science & Technical Publishing, Department of Conservation.

Furey, L. (2008). *Ngā tupu mai i Hawaiki: Plants from Polynesia*. Retrieved from <http://www.TeAra.govt.nz/en/nga-tupu-mai-i-hawaiki-plants-from-polynesia>.

Gemmell, M. (2013). *A history of Marginalisation: Maori women*. (Masters of Education, Victoria University, Wellington, New Zealand). Retrieved from <https://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3065/thesis.pdf?sequence=2>

Gordon-Burns, D. (2014). “... And did she cry in Māori?”: *Recovering, reassembling and restorying Tainui ancestresses in Aotearoa, New Zealand*. Doctor of Philosophy, University of Canterbury, Christchurch, New Zealand.

Gordon-Burns, D., & Taonui, R. (2011, Summer). Whakaotirangi: A canoe tradition. *He Pukenga Kōrero*, 10(2), 10-18.

Graham, J. (2009). Nā Rangi tāua nā Tūānuku e takoto nei: Research methodology framed by whakapapa. *Mai Review*, (3), 1-9. Retrieved from <http://www.review.mai.ac.nz>.

Grey, G. (1853). *Ngā mahi a nga tupuna*. Wellington: Maori Purposes Fund Board.

Grey, S. G. (1961). *Polynesian mythology and ancient traditional history of the Maori as told by their priests and chiefs*. Auckland: Whitcomb and Tombs Limited.

- Grey, S. G. (1971). *Ngā mahi a nga tupuna*. Wellington: Maori Purposes Fund Board.
- Grudgeon, W. (1892). Māori migrations to New Zealand. *The Journal of the Polynesian Society*, 1 (4), 212-232. Retrieve from: <http://www.jps.auckland.ac.nz>
- Hakiwai, A. T., & Smith, H (Eds.). (2008). *Toi ora: ancestral Māori treasures*. Wellington, New Zealand: Te Papa
- Hamilton, A. (1896). *The art workmanship of the Maori race in New Zealand*. Dunedin, New Zealand: Fergusson & Mitchell Printers and Manufacturing Stationers.
- Harris, P., Matamua, R., Smith, T., Kerr, H., & Waaka, T., (2013). A review of Māori astronomy in Aotearoa-New Zealand. In *Journal of Astronomical history and heritage* 16(3), 325-336. Retrieved from <https://www.researchgate.net/publication/26093922>.
- Harding, A (Ed.). (2019). Knot+ed. Retrieved from https://www.academia.edu/40340512/KNOT_ED_Connecting_Weavers_Of_Taiwan_and_Kawerau
- Hayne, H., & MacDonald, S. (2003). The socialization of autobiographical memory in children and adults. In R. Fivush & C. Haden (Eds.), *Autobiographical memory and the construction of a narrative self: Development and cultural perspectives*. (pp. 99-120). London, England: Lawrence Erlbaum Associates.
- Henare, M. (1998). *Koru of Maori ethics*. Auckland, New Zealand: University of Auckland.
- Higgins, R., & Loader, A. (2014). *Waiata tawhito - traditional Māori songs - Origins of waiata*. Te Ara, The encyclopedia of New Zealand. <http://www.TeAra.govt.nz/en/waiata-tawhito-traditional-maori-songs/page-2>.
- Hiroa, T. R. (1923). Maori Plaited Basketry and Plaitwork. *Transactions and Proceedings of the New Zealand Institute*, 54, 705-742. Retrieved from <https://ia800504.us.archive.org>.
- Hiroa, T. R. (1924). Evolution of Māori clothing. *The Journal of the Polynesian Society*, 33(129), 25-47.
- Hiroa, T. R. (1931). Maori canoe-sail in the British Museum. *The Journal of the Polynesian Society*, 40 (159), 136-140. Retrieved from <http://www.jps.auckland.ac.nz/document>.
- Hiroa, T. R. (1949). *The coming of the Māori*. Christchurch, New Zealand: Whitcoulls Limited.
- Holman, J. (2007). *Best of both worlds: Elsdon Best and the metamorphosis of Māori spirituality. Te Painga rawa o ngā ao rua: Te Peehi me te putanga kē o te wairua*. (Doctor of Philosophy in Māori in the University of Canterbury, Christchurch, New Zealand). Retrieved from <https://core.ac.uk/download/pdf/35458181.pdf>
- Howe, K. R. (2003). *The quest for origins: who first discovered and settled New Zealand and the Pacific Islands?* Auckland, New Zealand: Penguin.
- Huata, N. (2000). *The rhythm and life of poi*. Auckland, New Zealand: Harper Collins.

Hudson, M., Milne, M., Reynolds, P., Russell, K., & Smith, B. (2010). Te Ara Tika Guidelines for Māori research ethics: A framework for researchers and ethics committee members. Auckland, New Zealand: Health Research Council of New Zealand on behalf of the Pūtaiora Writing Group.

Ihimaera, W. (1982). Maori life and literature: a sensory perception. *Turnball Library Record*, 15 (1), 1.

Ingold, T. (2017). Anthropology contra ethnography. *Hau: Journal of Ethnographic Theory* 7(1), 21-26. Retrieved from <https://www.journals.uchicago.edu/doi/pdfplus/10.14318/hau7.1.005>

Inspiring Communities. (2018). Whakatauki information sheet. Retrieved from <https://inspiringcommunities.org.nz/wp-content/uploads/2018/09/Inspiring-Communities-%E2%80%93-Whakatauki-information-sheet.pdf>

Irwin, G. (1992). *The prehistoric exploration and colonisation of the Pacific*. Cambridge, United Kingdom: Cambridge University Press.

Irwin, G., & Flay, R. G. J. (2015). Pacific Colonisation and Canoe Performance: Experiments in the Science of Sailing. *Journal of the Polynesian Society* 124(4): 419-443; DOI: <http://dx.doi.org/10.15286/jps.124.4.419-443>.

Irwin, K. (1994). Māori Research Methods and Processes: An Exploration. *Sites*, (28), 25–43. ISBN 978-94-011-4179-6 (eBook). DOI 10.1007/978-94-011-4179-6

Jackson, M. (1987). The Māori and the Criminal Justice System: A New Perspective: He Whaipānga Hou. *Department of Justice, Policy and Research Division, Wellington, 1987-1988*, 37 – 38. He Whaipānga Hou.

Jacomb, C., Walter, R., Easdale, S., Johns, D., O’Connell, D., Witter, D. & Witter, A. (2004 September). A 15th century Māori textile fragment from Kaitorete Spit, Canterbury, and the Evolution of Māori Weaving. *The Journal of the Polynesian Society*, 113(3), 291-296. Retrieved from <http://www.jstor.org/stable/20707228>

Jahnke, R. (2010). Ko Rūamoko e ngunguru nei: Reading between the lines. *The Journal of the Polynesian Society*, 119(2), 111-130. Retrieved May 14, 2020, from www.jstor.org/stable/20790136.

Jenkins, K. (1988). Working paper on Maori women and social policy. *Royal Commission of Social Policy and quoted in the Report of the Royal Commission on Social Policy*, 3(161).

Jenkins, K., & Morris Matthews. M. (1998). Knowing their place: The political socialising of Maori women in New Zealand through schooling policy and practice, 1867-1969. *Women’s History Review*, 7 (1), 85-105.

Ka’ai, T. & Higgins, R. (2004). Te ao Māori – Māori world-view. In T. M. Ka'ai, J. C. Moorfield, M. P. Reilly, & S. Mosley (Eds.), *Ki te whaiao: An introduction to Māori culture and society* (pp. 13-25). Auckland, New Zealand: Pearson Education New Zealand

Ka'ai, T. & Smith, T. (2019, June). Indigenous collaborative methodology (mahitahi) and the academy. Paper presented at the *Native American and Indigenous Studies Association Conference*, University of Waikato, Hamilton, New Zealand.

Ka'ai-Mahuta, R. (2010). *He kupu tuku iho mō tēnei reanga: A critical analysis of waiata and haka as commentaries and archives of Māori political history*. (Doctor of Philosophy, Auckland University of Technology, Auckland, New Zealand). Retrieved from <https://openrepository.aut.ac.nz/handle/10292/1023>.

Ka'ai, T., Smith-Henderson, T., McRae-Tarei, J., Taituha, G., Te Ratana, R., Abraham, H. (2021). *Indigenous collaborative methodology (mahitahi) and the academy* (unpublished paper).

Kawharau, M. (2009, December). Ancestral landscapes and world heritage from a Māori viewpoint. *The Journal of the Polynesian Society*, 118(4), 317-338. Retrieved from https://www.researchgate.net/publication/287630217_Ancestral_landscapes_and_world_heritage_from_a_maori_viewpoint

Kereopa-Woon, K. (2017). Mātauranga Māori in psychology: Contributions to an indigenous psychology.

King, J. (2003). "'Whaia Te Reo': Pursuing the Language": How Metaphors Describe Our Relationships with Indigenous Languages. Retrieved from: <https://www.semanticscholar.org/paper>.

Kiro, C. (2000). Maori Research and the Social services - Te Puawaitanga o te tohu. In *Social Work Review*, pp. 26-32. New Zealand.

Kohere, R. (1920, October 30). *Kei hea Hawaiiiki*. Retrieved from <https://paperspast.natlib.govt.nz/periodicals/KOPARA19201030.2.5>

Lambert, S. A. (2007). *New Zealand Māori word encyclopedia*. Auckland, New Zealand: WE International Ltd.

Little, D. (2017). Philosophy of History. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*. Retrieved from <https://plato.stanford.edu/archives/sum2017/entries/history/>.

Lovesey, O. (2000). *Ngūgĩ wa Thiong'o*. New York, NY: Twayne Publishers.

Mahuika, N. (2009). Revitalizing Te Ika-a-Maui: Maori Migration and the Nation. *New Zealand Journal of History*, 43(2), 133-149. Retrieved from <http://www.nzjh.auckland.ac.nz/>

Mahuika, R. (2008). Kaupapa Māori theory is critical and anti-colonial. *Mai Review*, 3, 1-16. Retrieved from <http://www.review.mai.ac.nz>

Manihera, Te U. (1992). Foreward. In M. King (Ed). *Te ao hurihuri: Aspects of Māoritanga* (pp. 10-11). Auckland, New Zealand: Octopus Publishing Group (N.Z) Ltd.

Marsden, M. (2003). *The unwoven universe: Selected writings of Rev. Maori Marsden*. Masterton, New Zealand: Printcraft 81 Ltd.

Marsden, M., & Henare, T.A. (1992). *Kaitiakitanga: A definitive introduction to the holistic worldview of the Maori*. Unpublished manuscript. Retrieved from http://www.marinenz.org.nz/documents/Marsden_1992_Kaitiakitanga.pdf

Mason, N. 2013, *Sakahan: Exhibition catalogue international indigenous art*. Ottawa, Canada: National Gallery of Canada

Mason, O. T. (1966). *The origins of invention: a study of industry among primitive peoples 1838-1908*. Digitalised by Google. Retrieved from <https://archive.org/details/originsinventio00masoogooq>.

Matamua, R. (12 May, 2016). *Māori astronomy-Te Whānau Mārama*. Retrieved May 17, 2020, from <https://www.rnz.co.nz/national/programmes/nights/audio/201800524/maori-astronomy-te-whanau-marama>

Matira, T. H. (1972). *Takitimu* (pp. 452-470). Wellington, New Zealand: Reed Publishing (NZ). Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/MiTaki-fig-MiTakiP002a.html>.

Melbourne, T. (2009). *Te whare-oohia: Traditional Maaori education for a contemporary world*. (Masters of Education, Massey University, Palmerston North, New Zealand). Retrieved from <https://mro.massey.ac.nz/handle/10179/1714>

McLean, M. & Orbell, M. (1990). *Traditional songs of the Māori*. Auckland, New Zealand: Auckland University Press. Retrieved from <https://natlib.govt.nz/records/21930195>

McRae, J. (1997). From Māori oral traditions in print. In P. Griffith., R. Harvey., & K. Maslen (Eds.), *Book & print in New Zealand: A guide to print culture in Aotearoa* (pp. 17-40). Wellington, New Zealand: Victoria University Press.

McRae, J. (2000). Maori oral tradition meets the book. In *A book in the hand: Essays on the history of the book in New Zealand* (pp. 1-19). Wellington, New Zealand: Auckland University Press. <http://nzetc.victoria.ac.nz/tm/scholarly/tei-GriHand-t1-g1-t2.html#name-207424-mention>

McRae-Tarei, J. (2013). *The sustainability of tikanga practice and values within toi rārangā*. (Master of Arts thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <http://hdl.handle.net/10292/5760>.

McRae-Tarei, J., Lentfer, N., Te Pou, M. & Taituha, G. (2013). Kākahu: symbols of identity. In R. Ka'ai-Mahuta, T. Ka'ai & J. Moorfield (Eds.), *Kia rōnaki - The Māori performing arts* (pp. 151-165). Auckland, New Zealand: Pearson.

Mead, H. M. (2003). *Tikanga Māori: Living by Māori values*. Wellington, New Zealand: Huia Publishers.

Mead, H. M., & Grove, N. (2001). *Ngā pēpeha a ngā tīpuna: The sayings of the ancestors*. Wellington, New Zealand: Victoria University Press.

Mead, S. M. (1968). *The art of taaniko weaving*. Wellington, New Zealand: A. H & A. W Reed Ltd.

Mead, S. M. (1968). *The art of taaniko weaving*. Wellington, New Zealand: A. H & A. W Reed.

Mead, S.M. 1969. *Traditional Maori clothing: A study of technological and functional change*. Wellington, Auckland: AH. & A.W. Reed.

Metge, J., & Jones, S. (1995). He taonga tuku iho nō ngā tūpuna: Māori proverbial sayings: a literary treasure. *The Journal of New Zealand Studies* (5)2, 3-7. Retrieved from <https://ojs.victoria.ac.nz/jnzs/article/view/471>

Mikaere, A. (2011). *Colonising myths, Māori realities*. Wellington, New Zealand: Huia Publishers and Te Tākapu, Te Wānanga o Raukawa

Mikaere, A. (1994). Maori women: caught in the contradictions of a colonised reality. *Waikato Law Review*, 2. Retrieved from https://www.waikato.ac.nz/law/research/waikato_law_review/pubs/volume_2_1994/1.

Ministry of Education. (2017). *Te whāriki: Early childhood curriculum*. Wellington, New Zealand: Ministry of Education, New Zealand, Te Tāhuhu o te Mātauranga. ISBN: 978-0478-16926-3

Mitira, T. H, (1972). *Takitimu*. Wellington, New Zealand: Reed Publishing. Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/MitTaki-fig-MitTakiTit.html>

Moodley, Y., Linz, B., Yamaoka, Y., Windsor, H.M., Breurec, S., Wu, J., Ayas, M., Bernhöft, S., Thiberg, J. M., Phuanukoonnon, S., Jobb, G., Siba, P., Graham, D. Y., Marshall, B. J. & Achtman, M. (2009). The Peopling of the Pacific from a Bacterial Perspective. *Science*, 323(5913), 527–530. <https://dx.doi.org/10.1126/science.1166083>

Moorfield, J. (2012). *Te Whanake: Te aka: Māori-English, English-Māori dictionary and index*. Auckland, New Zealand: Pearson. ISBN: 978-1-4425-3846-7.

Narbey, B, (2012). *Epic waka journey: Retraces Maori history across the Pacific*. Retrieved from: <https://www.firstlighttravel.com>

National Ethics Advisory Committee – Kāhui Matatika o te Motu (2012). *Āhuatanga ū ki te tika me te pono mō te Rangahau Māori: Māori Research Ethics: An overview*. Wellington, New Zealand: Ministry of Health. Retrieved from <https://neac.health.govt.nz/publications-and-resources/neac-publications/m%C4%81ori-research-ethics-overview>.

Neich, R. (2001). *Carved histories: Rotorua Ngati Tarawhai woodcarving*.

Nixon, M. (2007), *Credibility and validation through syntheses of customary and contemporary knowledge*. (Doctor of Philosophy Massey University, Palmerston North, New Zealand). Retrieved from <https://mro.massey.ac.nz/handle/10179/1547>

Nomin, S., & Isnanguan, A. (2019a) *Taiwanese foot-brace loom* [Photograph]. Retrieved from https://www.academia.edu/40340512/KNOT_ED_Connecting_Weavers_Of_Taiwan_and_Kawerau

Nomin,S., & Isnanguan, A. (2019b). *Common rhombus shaped pattern* [Photograph]. Retrieved from https://www.academia.edu/40340512/KNOT_ED_Connecting_Weavers_Of_Taiwan_and_Kawerau

O'Malley, A., Owen, J., Parkinson, D., Herangi-Searancke, T., Tamaki, M., & Te Hira, L. (2008). Ako Moments: A Living Culture in an Educational Setting. In *Traditional knowledge conference 2008 te tatau pounamu: The greenstone door*, J. Te Rito., & s. Healy., (Eds.), pp. 226-235. Nga Pae o te Maramatanga: Auckland, New Zealand. ISBN 0-9582610-8-3.

Orbell, M. (1978). The Great New Zealand Myth: a Study of the Discovery and Origin Traditions of the Maori, reviewed by Margaret Orbell. In *NZ Journal of History*, 12(1), 79-81.

Orbell, M. (1991). *Hawaiki: A new approach to Maori tradition*. Christchurch, New Zealand: Canterbury University Press.

Orbell, M. (1995). *The illustrated encyclopedia of Māori myth and legend*. Christchurch, New Zealand: Canterbury University Press.

Orchiston, W. (2000). Ancient astronomical monuments in Polynesia. In *Astronomy across cultures: The history of non-Western astronomy*, H. Selin (Ed.), pp. 127-160.

Paki, V., & Peters, S. (2015). Exploring whakapapa (genealogy) as a cultural concept to mapping transition journeys, understanding what is happening and discovering new insights. In C. Mika., & V. Paki., (Eds.), *Waikato Journal of Education*. 20(2), 49-60. <https://doi.org/10.15663/wje.v20i2.205>.

Paraone, T. (1907). A Maori Cosmogony. *The Journal of the Polynesian Society*, 16(3), 109-119. Retrieved from http://www.jps.auckland.ac.nz/document//Volume_16_1907/Volume_16%2C_No._3/A_Maori_cosmogony%2C_by_Tiwai_Paraone%2C_p_109-119/p1

Patterson, J. (1992). *Exploring Māori values*. Palmerston North, New Zealand: Dunmore Press.

Paul, R., Kahu, H., Te Kani, C. & Ataera, J. (2001). *He Hīnātore ki te ao Māori: A glimpse into the Māori world: Māori perspectives on justice*. Ministry of Justice: Wellington, New Zealand. Retrieved from <http://tmoa.tki.org.nz/content/download/762/7209/file/HeHinatorKiTeAoMaori.pdf>. ISSN 0-478-50156-7

Pendergrast, M. (1987). *Te aho tapu: The sacred thread*. Auckland, New Zealand: Reed Publishing.

Pendergrast, M. (1996). The fibre arts. In D.C Starzecka (Ed.), *Maori art and culture* (pp. 114-146). Auckland, New Zealand: David Bateman Ltd

Pendergrast, M. (2011). *Raranga whakairo: Maori plaiting patterns*. Auckland, New Zealand: Penguin Group (NZ).

Pere, R. (1994). *Ako: Concepts and learning in Māori tradition*. Wellington, New Zealand: Te Kohanga Reo Trust.

Pihama, L., Smith, K., Taki, M., & Lee, J. (2004). *A literature review on kaupapa Māori and Māori education pedagogy*. Wellington, New Zealand: Institutes of Technology and Polytechnics of New Zealand Plymouth: Thomas Avery.

Porter, A. (1977). D8 (Mead): A study of a Maori mantle acquired by Sir Joseph Banks during Cook's first visit to New Zealand. *The Journal of the Polynesian Society*, 86(3), 393-401. Retrieved May 18, 2020, from www.jstor.org/stable/2070527 old taniko images

Puketapu-Hetet, E. (2000). *Māori weaving with Erenora Puketapu-Hetet*. Auckland, New Zealand: Pearson Education New Zealand Limited.

Ralston, C. (1993). Maori Women and the Politics of Tradition: What Roles and Power Did, Do, and Should Maori Women Exercise? *The Contemporary Pacific*, 5(1), 23-44. Retrieved May 2, 2020, from www.jstor.org/stable/23699869

Rameka L. (2016). Kia whakatōmuri te haere whakamua: 'I walk backwards into the future with my eyes fixed on my past.' *Contemporary Issues in Early Childhood*. 17(4), pp.387-398. doi:10.1177/1463949116677923. Retrieved from <https://journals.sagepub.com/doi/pdf/10.1177/1463949116677923>

Report of the commissioners appointed to enquire into the preparation of the Phormium fibre or New Zealand flax (1871). *Appendix to the Journals of the House of Representatives* (pp. 1-50). Wellington, New Zealand. Retrieved from <https://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.5>

Roth, H. L. (1923). *The Maori Mantle: With over 250 Line Illustrations and Diagrams and 22 Collotype Plates: and Some Comparative Notes on N W American Twined Work*. Halifax, England: Bankfield Museum.

Royal, C. (1998). *Te whare tapere: towards a model for Māori performance art*. (PhD thesis, Victoria University of Wellington, Wellington, New Zealand)

Royal, C. (2005). Hawaiki. *Te Ara-the Encyclopedia of New Zealand*. Retrieved from <http://www.TeAra.govt.nz/en/hawaiki/print>.

Royal, T. C. (1998). Te ao marama-a research paradigm. *He Pukenga Korero*, 4(1), 1-8. Traditional kaitiakitanga rights and responsibilities

Schafer, A. (June, 1965). Visits to the underworld in Maori mythology. *Te Ao Hou*, 50, pp. 43-46. Retrieved from <http://teaohou.natlib.govt.nz/journals/teaohou/image/Mao51TeA/Mao51TeA046.html>

Shawcross, W. (1970). The Cambridge University collection of Maori artefacts, made on Captain Cook's first voyage. *The Journal of the Polynesian Society*, 79(3), 305-348. Retrieved December 13, 2020, from <http://www.jstor.org/stable/20704718>

Shirres, M. (1996). *Karakia - a binding to the spiritual powers*. Retrieved February 2011, from <http://homepages.ihug.co.nz/~dominic/karakia2.html>

Shirres, M. (1997). *Te tangata: The human person*. Auckland, New Zealand: Accent Publications.

Shortland, E. (1882). *Maori religion and mythology*. Auckland, New Zealand: Longmann, Brown, Green and Longmans. Retrieved from <http://nzetc.victoria.ac.nz/tm/scholarly/tei-ShorMaor-t1-front-d1.html>

Simmonds, N. B. (2014). *Tū te turuturu nō Hine-te-iwaiwa: Mana wahine geographies of birth in Aotearoa New Zealand*. (Doctor of Philosophy in Geography, University of Waikato, Hamilton, New Zealand). Retrieved from <https://researchcommons.waikato.ac.nz/handle/10289/8821>

Simmons, D. (1966). The Sources Of Sir George Grey's Nga Mahi A Nga Tupuna, *The Journal of the Polynesian Society*, 75(2), 177-188. Retrieved from http://www.jps.auckland.ac.nz/document//Volume_75_1966/Volume_75,_No._2/The_sources_of_Sir_George_Grey%26%2339%3Bs_Nga_Mahi_A_Nga_Tupuna,_by__David_Simmons_,_p_177_-_188/p1.

Simmons, D. R. (1986). *Polynesia. Iconography of New Zealand Maori religion*. Leiden, The Netherlands: E. J. Brill Printers.

Smith, G. H. (1992, November). *Tane-Nui-A-Rangi's Legacy: Propping up te sky: Kaupapa Māori as resistance and intervention*. NZARE/AARE Joint Conference, Deakin University Australia. Retrieved from <https://www.aare.edu.au/data/publications/1992/smitg92384.pdf>

Smith, G. H. (1993). Kaupapa Māori: Educational resistance and intervention in Aotearoa (New Zealand). In G. Smith, *Higher education for indigenous peoples*. Auckland, New Zealand: Research Unit for Māori Education, University of Auckland.

Smith, H., & Hakiwai, A. (Eds.). (2008). Kākahu and whatu raranga: Woven garments, woven treasures. In *Toi ora: Ancestral Māori treasures* (pp. 157-190). Wellington, New Zealand: Te Papa Press.

Smith, L. (1999). *Decolonising methodologies research and indigenous peoples*. Dunedin, New Zealand: University of Otago.

Smith, P. (1921). *Hawaiki: The original home of the Maori: With a sketch of Polynesian history, 4th Edition*. Auckland, New Zealand: Whitcombe & Tombs Ltd.

Smith, S. P. (1896). The peopling of the North: Notes on the ancient Maori history of the northern peninsula and sketches of the history of the Ngati-Whatua tribe of Kaipara. *Supplement to the Journal of the Polynesian Society*, 5, 1-22.

Smith, S. P. (1913). *The Lore of the Whare-wananga: Part 1. The Kauwae-runga. New spirituality. Te painga rawa o ngā ao rua: Te Peehi me te putanga*. Doctor of Philosophy in Māori. University of Canterbury: Christchurch, New Zealand.

Steer, P. (March, 2017). On Systematic Colonisation and the Culture of Settler Colonialism: Edward Gibbon Wakefield's, A Letter from Sydney (1829). In D. F Felluga (Ed.), *Extension of Romanticism and Victorianism on the Net*. Retrieved from http://www.branchcollective.org/?ps_articles=philip-steer-on-systematic-colonization-and-the-culture-of-settler-colonialism-edward-gibbon-wakefields-a-letter-from-sydney-1829.

Sykes, A. (2015, 4 September). Te Miina o Papatūānuku, te mana o te wahine. *Māori Law Review, Hui a tau Conference 2015, Te hunga roia Māori o Aotearoa*. Retrieved from <http://maorilawreview.co.nz/2015/10/te-miina-o-papatuanuku-te-mana-o-te-wahine-annette-sykes/>.

Taituha, G. (2014). *He kākahu, he korowai, he kaitaka, he aha atu anō? The significance of the transmission of Māori knowledge relating to raranga and whatu muka in the survival of korowai in Ngāti Maniapoto in a contemporary context*. (Master's thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <http://hdl.handle.net/10292/8233>

Tamarapa, A. (Ed.). (2011). *Whatu Kākahu / Māori Cloaks*. Wellington, New Zealand: Te Papa Press.

Tamarapa, A., & Wallace, P. (2013). *Māori clothing and adornment – kākahu Māori - Weaving traditions and technique*. Retrieved from <http://www.TeAra.govt.nz>.

Taonui, R. (2005a). *Ngā tatai-whakapapa: Dynamics in Māori oral tradition*. (Doctor of Philosophy, University of Auckland: Auckland, New Zealand). Retrieved from <https://researchspace.auckland.ac.nz/bitstream/handle/2292/20659/whole%20vol.%201.pdf?sequence=11>.

Taonui, R. (2005b, 8 Feb). *Canoe traditions- The meaning of canoe traditions*. Te Ara-the Encyclopedia of New Zealand. Retrieved from <http://www.TeAra.govt.nz/en/canoe-traditions>.

Taylor, R. (1870). *Te ika a Maui: New Zealand and its inhabitants* (2nd ed.). London, United Kingdom: William Macintosh. Retrieved from <http://books.google.com>.

Te Ao Hou. (December, 1965a). A famous oriori from Tauranga. 53, p. 19. Retrieved from <http://teaohou.natlib.govt.nz/journals/teaohou/image/Mao53TeA/Mao53TeA019.html>

Te Ao Hou. (March, 1965b). *The story of Niwareka and Mataora*. 50, pp.17-19. Retrieved from <http://teaohou.natlib.govt.nz/journals/teaohou/image/Mao50TeA/Mao50TeA017.html>.

Te Kanawa, K. (22 Oct, 2014). *Te raranga me te whatu-Taniko and tukutuku*. Retrieved from 7 September, 2020 from <http://www.TeAra.govt.nz/en/diagram/43485/taniko-designs>.

Te Kanawa, K., & Turi-Tiakitai, J. (2011). In A. Tamarapa (Ed.), *Whatu Kākahu: Māori Cloaks*, Wellington, New Zealand: Te Papa Press.

Te Ratana, R. (2012). *Ritual in the making: Critical exploration of ritual in Te Whare Pora* (Master's thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <http://hdl.handle.net/10292/4787>

Temara, T. (1999). Maori philosophy: Iho matua. Unpublished article. Ruatoki, Whakatane.

Toa Takitini. (1929). He popo, ara he oriori. *Papers Past*, 89, (1), p.145. Retrieved from <https://paperspast.natlib.govt.nz/periodicals/TOATAK19290101.2.12.8>

Turi-Tiakitai, J. (2015). Tū te turuturu nō Hineteiwaiwa: Maintaining cultural integrity in teaching of Māori weaving. (Masters of Arts, University of Waikato, Hamilton, New Zealand). Retrieved from <https://researchcommons.waikato.ac.nz/handle/10289/9626>

United Nations (1949). *United Nations Universal Declaration of Human Rights* 1948. Retrieved 27 January 2018, retrieved from <http://www.un.org/en/universal-declaration-human-rights/>

United Nations (1992) *Kari-Oca Declaration - Indigenous Peoples Earth Charter*. Retrieved 27 January 2018, from http://www.lacult.unesco.org/lacult_en/docc/Kari-Oca_1992.doc.

wa Thiong'o, N. (1986). *Decolonising the mind: the politics of language in African literature*. London Portsmouth, N.H: J. Currey Heinemann.

Walker, R. (1990). *Ka whawhai tonu matou-Struggle without end*. Auckland, New Zealand: Penguin Books.

Wallace, P. (2002). *Traditional Maori dress: Rediscovering forgotten elements of pre-1820 practice* (Doctoral thesis, University of Canterbury, Christchurch, New Zealand). Retrieved from <http://hdl.handle.net/10092/5911>

Wehi, P.M. (January, 2009). Indigenous Ancestral Sayings Contribute to Modern Conservation Partnerships: Examples using Phormium Tenax. *Ecological Applications*, 19(1), 267-275. Retrieved from <http://www.jstor.org>.

Williams, D. (2001). *Mātauranga Māori and taonga: the nature and extent of Treaty rights held by iwi and hapū in indigenous flora and fauna, cultural heritage objects, valued traditional knowledge*. Wellington, New Zealand: Waitangi Tribunal.

Wilmshurst, J., Hunt, T. L., Lipo, C.P., & Anderson, A.J. (2011). High precision radiocarbon dating shows recent and rapid initial human colonization of East Polynesia. *Proceedings of the National Academy of Sciences of the United States of America*. 108(5), 1815-1820. doi:10.1073/pnas.1015876108 (<https://dx.doi.org/10.1073/pnas.1015876108>)

Wilson, J. A. (1906). *The story of Te Waharoa and sketches of ancient Maori life and history*. Retrieved from <http://www.archive.org/details/storyoftewaharoa00wils>

Winiata, P. (2006). The role of tikanga Māori institutions in the protecting, sustaining and nurturing of traditional knowledge. In J. S. Te Rito (Ed.), *Proceedings of the mātauranga taketake: Traditional knowledge conference. Indigenous indicators of well-being: Perspectives, practices, solutions*. Wellington, New Zealand: Nga Pae o te Mātauranga.

Waikato Tainui & Wintec (2013) *He mea whakairo i te ngākau – Designs of the heart: A compilation of traditional waiata*. [Revised edition]. Hamilton, New Zealand: Waikato Tainui & Wintec.

White, J. (1887). *The ancient history of the Maori and his mythology and traditions: Horo-uta or Taki-tumu migration Vol III*. Wellington, New Zealand: Government Printer.

Whitehead, J., & Annesley, B. (2005). *The Context for Māori Economic Development: A background paper for the 2005 Hui Taumata*. New Zealand Treasury, Wellington, New Zealand.

Glossary

Ao	Cloud, world
Ao Kōhatu	Pre 1860 era
Ao Māori	Māori world and/or worldview
Aotearoa	New Zealand
Atua	God/Gods
Aute	Paper Mulberry tree, also known as tapa
Autei	Needles made of bone
Awa	River
Hapū	Extended family
Harakeke	Phormium tenax, New Zealand flax
Hawaiki	Māori place of origin
Hawaiki nui	Great Hawaiki
Hawaiki pamamao	Long Hawaiki
Hawaiki roa	Far-distant Hawaiki
Heke	Migration or wave
He taonga tuku iho	A treasure passed down
Hinaki	Net
Houhere	Plant; lacebark
Huaki	Cloak; double tāniko border kaitaka
Hue	Bottle, gourd
Ira tangata	Human life/genes
Kahuhuruhuru	Feathered cloak
Kahukurī	Dog cloak
Kahu Toi	Rain cape made of toi
Kahuwaeroa	Dogtail cloak
Kākahu	General term of cloak, to put on clothes, dress
Kāhui kairaranga	Prestigious weavers
Kairaranga	Māori weaver, cultural practitioner; makers and knowledge keepers
Kai	Food, nourishment
Kairangahau	Researcher
Kaitaka	a highly prized cloak made of flax fibre with tāniko ornamental border
Kākaho	ulm, stem of toetoe - used for lining the walls of buildings and for making kites
Kaokao	Pattern; warrior stance, protection
Karakia	Prayer, incantation
Karetu	Plant; scented grass
Karu hapuku	Groper (type of fish) eyes
Kawa	Protocol
Kete whakairo	Coloured and/or patterned bag
Kōrero	Discussion
Korirangi	Cloak adorned with twined muka
Kotahitanga	Unity
Kōtui	Sew or sewing
Kūmara	Sweet potato
Kūmara kao	Dried kumara

Kumete	Totara wooden vessel for flax dyeing
Kupu	Word, words
Kuta/paopao	Plant; Rush
Makomako	Mordant; <i>aristotelia serrata</i>
Mana	Having great authority and respect, prestige or presence, can derive from the atua
Manaakitanga	Cultural and social responsibility
Māmaru	a Māori sail
Māori	Indigenous First Nation peoples of Aotearoa, native to Aotearoa
Māoritanga	Māori culture and traditions
Mātauranga (Māori)	Māori knowledge
Maunga	Mountain
Muka	Flax fibre threads
Mumu	Pattern; strategy, marriage
Neinei	Plant; spiderwood
Ngā kete o te Mātauranga e toru	Three kete of knowledge
Nihoniho or niho taniwha	Pattern; teeth of the creature/water spirit/monster, guardianship.
Oriori	Lullaby
Paepaeroa	Cloak; single tāniko boarder kaitaka
Pākehā	European/Non Māori
Pākehātanga	Western Culture
Papakirango	Pattern; fly-swat, preservation, care
Papatūānuku	Mother Earth
Patu muka	Stone pounder
Pātikitiki	Pattern; flounder, star, prosperity.
Pihepihe	Ornamental (piupiu) cloak
Pingao	Plant; golden sand sedge
Piupiu	Occilating strands consisting of 2-ply muka
Pokapoka	Pits. Bullet technique used in weaving to shape
Pono	Honesty, truth
Pora	Rough rain cape
Poupaenga	Carved posts
Poutama	Stairway. Pattern; steps
Pūrākau	Māori traditional/origin narratives
Purapura whetu	Pattern; star seed, navigation, multitude
Rākau atua	God sticks
Rangatira	Chief
Ranginui	Sky Father
Raupō	Plant; bulrush
Raranga	Māori weaving
Rau kumara	Pateern; kumara leaf/vine
Roimata	Tears
Roimata Toroa	Albatross Tears
Taa moko	Body tattoo
Takepū	Māori values, ethics, principles
Tāngata whenua	People of the Land
Tāniko/taaniko	Close finger twinning technique/ornamental border

Tapu	be sacred, prohibited, restricted, set apart, forbidden, under atua protection
Tatua/Tu	Belt
Tea	White
Te Ao Mārama	World of Light/Man
Te Wao Nui ā Tāne	The Great Forests of Tāne
Tika	Correct or right way
Tikanga	Custom, customary practice, protocols, principles, institutions
Tī pore	Pacific Island Cabbage tree, introduced species of Cabbage tree
Ti kouka	Native cabbage tree
Tohi	Incantation
Toi	Mountain flax, art
Toi raranga	Weaving arts
Tokotoru/ Waewae pakura	Pattern; this is the footprints of the swamp hen and denotes before inhabitation of man. Footprint also established whether there was kai in the area.
Tohunga	Priest or wise person
Tuapora	Rough rain cape
Tukutuku	Lattice work panel
Turuturu	Weaving pegs
Tutu	Mordant; <i>coriaria arborea</i>
Urupa	Burial grounds
Uwhi	Yam
Waewae kapiti	Hills and streams
Waharua kōpito	Pattern; the engagement of karanga and between kaikaranga, kaikōrero
Wahine, wāhine	Woman, women
Wāhi tapu	Sacred places
Waiata	Māori songs
Waitumu/Waiwai	Mordant
Waka	Canoe
Whaikōrero	Formal oratory
Whakapapa	Family tree, universal connection
Whakapuareare	Lace weaving pattern
Whakawhanaungatanga	Connection
Whakataukī	Proverbial sayings
Whānau	Family
Whare Pora	Prestigious weaving house
Whare pōrukuruku	solitary teaching, knowledge passed from father to son, mother to daughter
Whenua	Land
Whīnau	Mordant; <i>elaecarpus dentatus</i>