

TOI MARAMATANGA  
A VISUAL MAORI  
ART EXPRESSION OF MEANING

KAHUTOI MERE TE KANAWA

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*Ko Tainui te waka*

*Ko Motakiora te maunga*

*Ko Waipa te awa*

*Ko Maniapoto, Waikato, Tuwharetoa me  
Rarua oku iwi*

*Ko Ngati Kinohaku, Uekaha, Rora me  
Apakura oku hapu*

*Ko Oparure te marae*

*Ko Kahutoi Te Kanawa taku ingoa*



4<sup>th</sup> August, 2009. Photograph. Kahu Te Kanawa.

#### *Nga Roimata*

This cloak was made by my mother, Dr Diggeress Rangituatahi Te Kanawa in 1986. To honor her mother Dame Rangimarie Hetet's passing. The white tassels represents the tears we shed for her, this cloak was gifted to me in 1999.

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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.

Kahutoi Mere Te Kanawa.

## ABSTRACT

The focus of this thesis is to visually show the significance and relationship between the use of natural materials, and geometric patterns used in *Māori* weaving. The patterns will reflect indigenous episteme of artistic and tacit knowledge. These patterns are significant to the *Māori* worldview of *kaitiakitanga* (stewardship of knowledge), which is cognisant in the ontology of *Māori* weaving. These patterns are significant forms of *Māori* cultural symbols that reflect elements of nature, evolution of time and space. The focus is to show how natural materials can be utilised in an art form that embraces bicultural activity, as a reference to customary and new age methods of thinking and practice.

This leads to self-enquiry and our own responsibilities, only to ask ourselves;

What are the guiding principles within art and design, that upholds the core values of *Mātauranga Māori*? (*Māori* epistemological thinking).

The concept of this thesis is to define the cultural significance of *kaitiakitanga*<sup>i</sup> (stewardship), through the preservation of *Mātauranga Māori* and practice as weavers and artists. This concept challenges our own understanding of what we know and what we don't know about the relationships between people, place, environment and use.

The methods and processes used for this work will be based on customary practices and methods, using native

materials, endemic to New Zealand. These materials will be harvested at different time periods.

The methodologies used in this project, is a product of intrinsic knowledge and testing new boundaries, through researching more specific detail about varieties of *harakeke* (New Zealand flax) cultivars, testing the flexibility, functionality and durability of materials.

This will challenge the test, of making sure that the methods used will be significantly practiced throughout the processes involved in the making of artistic pieces of work, in accordance to *tikanga* (protocols). The use of native materials enhances cultural values of *kaitiakitanga* as a metaphor, which asserts sustainability of *Māori* epistemological notions of practice and meaning.

This also applies to the visual language of *Māori*.

The concept of visual language embraces metaphoric meanings and understanding, which relates to our co-existence with the earth, animals and the elements.

All these elements of nature are contained within symbolic traditional patterns. Some of these patterns have derived from phenomena of thought structure, historical events and our co-existence through our connectedness to the land, waters, oceans, sky and universe.

How can *Māori* forms of art be embraced and imbued, in modern society, that signifies place, belonging and cultural enhancement?

## ACKNOWLEDGEMENTS.

To my dearest mother, Dr Diggeress Rangituatahi Te Kanawa and grandmother, Dame Rangimarie Hetet for passing on the gift of *mahi raranga/whatu* and *tukutuku* to me, I will be forever indebted to you both for the rest of my life.

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## INTRODUCTION

The thesis will describe insight of meaning, to *Toi Maramatanga*<sup>ii</sup>, (valuing the symbolism of our visual language). *Toi Maramatanga* is inherent in visual, oral and performing arts of our forebears. Our ancestors have left us with a legacy of artistic renaissance for our enquiry, discovery of thought and applied artistic skills as cultural signifiers of tacit skills and knowledge. The potential to apply these principals of esoteric knowledge by way of design, performance, process, narrative and visual arts, is an acknowledgement to the legacy of artisans before us. It replicates and captures new design, structure and thinking that are guided by tradition, customs and values. The final art pieces will demonstrate the types of patterns that have been used and passed down as metaphoric symbols of

identity and meaning. Incorporated in these art pieces will be a mix of customary skills, displayed in a form for aesthetic display as opposed to function.

The images will show facets of practice that has been inherited and passed down through generations. These are gifts of realism and truth as we understand and know in our practice as *kaitiaki* of the art form.

## 1. KAITIAKITANGA

How do we practice kaitiakitanga today within an art form?

*Kai* - Fulfill its proper function. (Williams. 2005, p.86)

*Tiaki* - Guard, keep. (Williams.2005, p.414)

*Tanga* - Be assembled. (Williams.2005, p.378)

The word *tiaki* is the basis of the longer word *kaitiakitanga*. *Tiaki* means to guard. It also means to preserve, foster, protect and shelter.

So, notions of care and protection are at the heart of *kaitiakitanga*, which is in alliance with a conservation ethic. Retrieved 5/5/2009

<http://www.teara.govt.nz/en/Kaitiakitanga-Guardianship-And-Conservation/4>

## Role of *kaitiaki*

The prefix *kai* means someone who carries out an action. A *kaitiaki* is a person; group or being that acts as a carer, guardian, protector and conserver. The gods of the natural world were considered to be the original *kaitiaki*. For instance, *Tāne*, god of the forest was the *kaitiaki* of the forest. All other *kaitiaki* emulate those original ones.

Many *hapū* (sub-tribes) and *whānau* (families) care for a place such as a lake or forest. They work to conserve the natural heritage, address environmental problems and reclaim traditional knowledge. Retrieved 5/5/2009

<http://www.teara.govt.nz/en/Kaitiakitanga-Guardianship-And-Conservation/4>

*Kaitiakitanga* for many weavers is inherent in the art practice and skill. The dissemination of these skills through transfer is another form of *kaitiakitanga*, to insure that the receivers of this inherited knowledge take on the mantle of guardians.

My mother and grandmother were the *kaitiaki* (guardians) of *Māori* weaving in my community. *Māori* weaving became a prominent activity within the home and my mother and grandmother would hold workshops at home with other women who would come from outside of our *papakāinga* (home settlement) to learn the skills and techniques of customary and traditional weaving.

As children we became passive observers of these ongoing activities, while growing up and being educated in a Western academy of learning. We were always encouraged to do well at school and seek further afield beyond our environment.

On reflection, we experienced a lifestyle of goodwill to each other, lived in harmony with our land, learnt independence

and self-determination to uphold our cultural values, and respected each other as individuals.

### *PAPAKAINGA*

Our *papakāinga* was almost a haven and a comfort zone for many of us, for others it was a different experience and left as soon as they could. The value of what we had was our richness of truth and belonging, not money validating a sense of belonging and affiliation to our land. Image 1 of *Oparure Marae* reflects the purpose of '*papakāinga*', or our home. 'Home' in a context, which is philosophically embedded in different frameworks of *ako* – Learn, teach, instruct, advise (Williams.2005, p.7). This cultural richness, which leads to human-land relationships is all part of sustainability of knowledge kept within the *whanau* (family) and *hapu* (sub tribe).

We are at a critical stage of cultural restoration, to inform our *rangatahi* (youth) with the richness of *mātauranga* (*body of knowledge*) *Māori*, so that they to can recognise the impact and ambiguity of a capitalist society.

The capitalist socio-economic environment has forced many of our *whanau* members to look far beyond our *papakāinga*, to pursue careers and work, to give them a higher earning income bracket to survive. Our marae is the focal point of our *papakāinga*, which perpetuates the visual histories of our *whakapapa* and artistic knowledge through weaving, carving, performance and oral language. We are fortunate in that we have a *kohanga reo* (language nest for pre-school), *Kura kaupapa Māori* (total immersion *Māori* School) and a *Whare Kura* (secondary school for total immersion *Māori*), all based in our *papakāinga*. The

*tamariki* (children) who have been immersed in these *Kura*, know that the future of *kaitiakitanga*, *mohiotanga* (taught knowledge) and *matauranga* (inherited knowledge) is critical to the survival and well being of all the arts.



November 1996 Photograph. Kahu Te Kanawa.

Image 1. *Oparure Marae*

## 2. REPOSITORY OF KNOWLEDGE

I have referred to readings from Dr Te Ahukaramū Charles Royal, as he has written extensively about *Mātauranga Māori*, using his creative potential of indigenous knowledge, through research. He has observed and written about the teachings of many of our elder's thoughts and wisdoms, defining them in a context that has clarity. He is also a well respected musician and scholar.

Three words come to mind when I consider what 'knowledge' is to our people. They are:

*Matauranga* - or acquired knowledge (external)

*Mohiotanga* - or knowledge gained from experience or intellect

*Wānanga* - or wisdom enabling access to the divine or universal power source. (Ruka Broughton) as quoted by Royal, retrieved 10/5/2009  
<http://www.charles-royal.com/default.aspx-pg>

Royal further explains:

*Mātauranga Māori* are distinctive and successful approaches to environmental sustainability, an exploration of *iwi* and *hapu* relationships with land and sea and *kaitiakitanga* an emerging approach to environmental management.

These skills and practices are for *Māori* weavers are the key concepts of sustaining weaving materials, knowledge and language within the art of *Māori* weaving

*Matauranga Māori* or traditional knowledge has a full and total relationship with all aspects of *Māori*, *mana Māori*, *whanaungatanga* and *Te Tai Ao*, or environmental sustainability. Retrieved 10/5/2009  
<http://www.charles-royal.com/default.aspx-pg>

***Matauranga*** – inherited knowledge from forebears

(Ngata, 1994. p.248)

The chosen recipient, who is taught the *matauranga* of his or her forebears, therefore takes on a responsibility of *kaitiaki*.

This could include *whakapapa* (genealogy), history of area, *whaikorero* (oratory), *karakia* (prayers/incantations) *nga toi* (visual arts) either carving, weaving, painting and or performance arts.

They all encompass intense sessions of continuous learning. A person chosen to uphold the *matauranga* of our forebears, would have to possess a certain characteristic of strength, tenacity, commitment, humility and a willingness to teach and share.

***Mohiotanga*** - knowledge (ibid)

In this case a person has acquired knowledge through observation, experience and has an intellect that reflects his or her own interpretation of knowledge.

***Wananga*** - lore of the *tohunga* (skilled person) of occult arts. (Williams, 2005 p.431& 479)

To enter the realm of *wananga* would only be bestowed upon those that are chosen to receive the knowledge, from *tohunga* – skilled person (Williams, 2005. p.431)

The teachings would be of a rigorous nature that called forth the agility of mind, patience, and total focus to the point of entrenchment of spiritual wellbeing.

We have an innate concept of *wananga* today as we seek knowledge through our *kuia* (elderly woman), *kaumatua* (elder); attend weekly *wananga* to learn as much as we can. This is done through a concept of learning that is conducive to our learning environment with a cultural curiosity and enquiry.

In this millennium, we are faced with the knowledge of knowing the ozone layer is slowly being destroyed, the ice of the Antarctica is melting, the rise of sea levels are flooding islands, global warming through gas omissions raises temperatures and climate changes.

Floods, bush fires, tsunamis and earthquakes are more frequent, which has impacted on human lives, and it is only now that we are starting to take notice of nature's warning signs.

As we embrace a capitalist economy that encourages progress and development to survive, many of us lack the knowledge of *tikanga*<sup>iii</sup> that embraces concepts of *kaitiakitanga*.

This has been lost at a micro and macro level of daily living, as we have embraced a colonial lifestyle and values.

This converts to time periods from a daily to a yearly basis and raises the questions of why we have replaced and prioritised our historical values of survival, with a new lifestyle.

Now we find ourselves trying to live in synergy with our lands, waterways and atmosphere, as we try to recycle waste, conserve energy and rethink the way we live. The waste that is derived from products we consume daily has caused concern for communities, regional, district and city councils.

If we can revolutionise thinking of responsibility towards our waste products, this will determine our own impact of social behaviour towards care and respect for each other.

Using natural resources for making artworks has been an integral part of our lives for four generations. This is not a

new skill base to many *whanau*, but today we see many *kete* (hand woven baskets) and *pikau* (back packs), used for everyday use, as opposed to thirty to fifty years ago. There has been a definite resurgence of *Māori* weaving.

In 1923 the following article was written by (Te Rangi Hiroa, also known as Sir Peter Buck). A prominent Scholar, and ethnologist of high standing, who has recorded through a lifetime of research accounts of New Zealand and Māori way of life in journals, articles and books.

Eighty seven years ago Sir Peter Buck wrote,

The rougher baskets and mats, being an everyday use, are still made throughout the country. European plates and dishes have done away with the need for the rough flax containers for cooked food, and so many of the younger generation of *Māori* have never

even seen them, so naturally knowing nothing of how to plait them. The art of making finer mats and baskets, with coloured designs, is rapidly passing away and is now confined to the old and middle aged in certain districts”. (Buck, 1923, pg.706).

In the past fifty years my grandmother Dame Rangimarie Hetet was asked by the *Māori* Women’s Welfare league to teach women how to weave cloaks using customary practices. My mother and grandmother started teaching many *Māori* women from different parts of the country. I observed many classes. Guided by their teaching and paying special attention to detail, gave me an appreciation of the task and responsibility to continue on this work. Weaving was primarily practiced by *Māori* women.



### 3. *MAREIKURA*

**Why is it important that I write about our space and place at this time?**

***Mariekura*:** An order of female supernatural beings.

(Williams: p181 2005)

*Rangiatea* was a special care of the *whatukura* and *mareikura*, the male and female denizens of the celestial realm, who were the attendants of *Io*.” (Best. 1923, p.7)

Personally *mareikura*, was a practice of my attendance to the teachings of my mother and grandmother, without knowing what that meant, not asking questions, just engaging and being accepted into their space.

While my mother and grandmother would not place themselves as supernatural female beings, they both worked in two worlds of *Māori* and *pakeha* (predominantly European descent). (Williams, 2005 p.252). They experienced timeframes of two world wars, depression, land confiscation, land alienation, industrialisation, new laws to education, language loss, cultural changes, urban drift, just to name a few changes that went on in their lifetimes.

Through all this, they maintained their position and passion to continue on with their skills of weaving and passing this on to the next generation. I personally view this as a practice of “*mareikura*”, keeping the knowledge alive. Surrounded by strong influences of farming development, children been educated in a Western academy, and working what little land left to them, they

embraced both cultures and could walk between both worlds with ease and comfort.

My grandmother noticed that women were not bothering to weave much and wondered,

Why should they neglect the useful work that occupied the older generation – such a wonderful art?(Pakatiti, 1998 p.55).

Their efforts to continue on with this knowledge spanned over many years, and this is also known as, *te ao manamania*” Te Makarini Te Mara, personal communication 3 June 2009. It is recognition of dedication, and commitment to a philosophical existence that spans generations within a *whanau* (family), *hapu* (sub-tribe) and or *iwi* (tribe).

I have been fortunate to be one of many recipients of “*te ao manamania*”, through the skills of *Māori* weaving. This

now leaves me in a position to find an appropriate person/s to pass on these skills and knowledge I have inherited.

The exciting stage of my life now, is that I have a choice of a younger generation of *rangatahi* (youth), who have been immersed in core values and principles of *mātauranga Māori*. They speak *Māori* as their first language, they understand and value the principles of *mātauranga Māori* and they are aware of the global impact of economic development. They are in a metaphoric context likened to an indemnity, to uphold and maintain our cultural survival in all forms of *Māori* art.

As a current member of *Te Roopu Raranga / Whatu o Aotearoa*, (National Maori Weavers Collective), the urban and rural communities have seen an increase of Maori weavers. Courses are taught in educational institutions that recognise the skills and intrinsic knowledge involved in this craft and art form.

Research is being conducted throughout the country and abroad, pertaining to material culture, art history, museum

artefacts and scientific analyses of plant materials used in different forms of *Māori* weaving.

The resurgence of interest has seen an increase of publications and exhibitions on a national and international scale.

and they became more interested in the pieces because they were given a better understanding and appreciation of the fundamental processes put into each piece.

## 4. MĀORI WEAVING

### AS AN ART

#### Is Māori weaving recognised as an art?

For many years *Māori* weaving sat in the realm of a skilled craft as opposed to art, and the type of work that is produced from weaving items were made for functionality rather than aesthetic pieces of art. However imbued in these pieces of functional items are design features that are rectilinear, allusive, structurally fashioned, sculptured and are aesthetically pleasing to the eye. These pieces of work carry history, *whakapapa* (genealogy) and cultural significance. With many of the exhibitions that have featured *Māori* weaving, there have been live demonstrations that showed visitors the work involved,

I was one of the first live demonstrators at the Māori exhibition in 1998, held at the British Museum. The interest created an insight into our cultural history for visitors throughout Britain and Europe. In 2004 the Eternal Thread (*Te Aho Mutunga kore*) exhibition opened at the *Pataka* Museum, Porirua and showed at the bathhouse Museum, Rotorua and the War Memorial Museum, Auckland before leaving the country, for San Francisco, to open in August 2005. Over 26,000 people visited this exhibition over 10 days in San Francisco, and once again brought about a new insight to visitors about our country, multi cultural diversity and where we are heading to as a nation within the arts. Retrieved from [www.maoriart.org.nz/noticeboard/general/mama\\_highlights](http://www.maoriart.org.nz/noticeboard/general/mama_highlights)

This was an exhibition of an unknown art form for many, and curiosity for the people of the United States of America, televised through several television channels, inspired visitors from near and far to visit the exhibition. The public who visited the exhibition were exposed to live demonstrators/artists, who still practiced traditional and customary practices. This posed the question of, how does the, United States of America Government support indigenous arts through a multi faceted country of cultural diversity?

In an indirect way, our exhibition opened the minds of many visitors that were oblivious to the Native American people' that have a rich culture and skill, that has been either completely ignored or just has not had the exposure and recognition.

The community of San Francisco is in love with this exhibition, said Belva Davis, the 20,000 visitor, after she had seen the exhibition. "It is sad that this hasn't happened earlier – I am enthralled by the special

energy created and the beauty of the works on display. Retrieved from [www.maoriart.org.nz/noticeboard/general/mama\\_highlights](http://www.maoriart.org.nz/noticeboard/general/mama_highlights).

As one of the demonstrators there is still much more work to be done in our country, to exhibit works made from natural materials of our own flora and fauna.

The special patterns and designs can be incorporated in buildings, gateways, bridges, landscapes, corporate signage, and can have a future in product designs that we use everyday.

## 5. THE ALIGNMENT OF METAPHOR

### What practices of art today can we bring forth from the past?

The visual weaving patterns are metaphoric symbols of evolution, elements, land formations, food and historical struggles. These patterns, challenge human consciousness, identity, practices, and cross cultural significance of place and time, embedded in *Māori* creation. Viewing a hand woven *kete whakairo* like this, does take a while for the eyes to actually focus and see the other patterns incorporated within it. To visually understand how the design relates to its meaning. The designer of such a pattern would have to imagine in their minds how the visual effect would capture the vision of the beholder.

The designer would need to define how one could view this vision, of landmasses pushing against each other, then interpret the pattern formation and mathematically work out the sinistral (strands moving towards the left) and dextral, (strands moving towards the right), movements. (Pendergrast, 2005 p.20) This overlay of effecting change in the pattern, and in addition incorporating colour, is a phenomenon of realism within an art practice. This is a skill of profound calculation and vision.



May 2008. Photograph. Kahu Te Kanawa

Image 2. *Kete whakairo*.

The pattern in this *kete whakairo* symbolises *Te Karu o te Whenua* (the eye of the land) that signifies ‘*mauri*’ (life force) of the land; it is ‘paramount’ to the survival of *Māori* wellbeing, the *whenua* (born of the land), born of the mother, nurturing its’ progeny, we respect and care for *whenua* and *puna* (spring of water) in our responsibility as *kaitiaki*. According to the *Māori* creation story this supports the notion of *kaitiakitanga* through the artistic narratives identified within this pattern of symbolism.

### Contextual Meaning

Integrated in the first language of communication as *tangata whenua*<sup>iv</sup>, is the visual language of our arts.

The *matauranga* of *Māori* artisans can also be found in the patterns, used in *whakairo* (carving) *raranga/whatu* (*Māori* weaving) *kowhaiwhai* (*Mōāri* painting designs) and *Tā Moko* (skin surface designs) figurative and non-figurative, that are iconic to *Aotearoa*.

In the oral traditions that are widely used in *whaikorero* (*Māori* oratory), poetry, literature and performing arts. The following *whakatauki* (proverb) is often used:

*Hutia te rito o te harakeke* If the tender shoot of the flax is plucked

*Kei whea te komako e ko* Where will the bellbird sit?

*Ki mai koe ki ahau* You say to me

*He aha te mea nui, i te ao* What is most important today

*Maku e ki atu* I will answer

He tangata, he tangata It is people, it is people

he tangata e It is people.

(Townsend, T.1997, p.115)



April 7<sup>th</sup> 2009. Photograph. K. Te Kanawa.

Image 3. A *tui* (native NZ bird), sucking the nectar of the *korari* (*harakeke* flower).

The metaphoric meaning of this proverb gives credence to the natural wellbeing of the plant and animal life of this

land, and the responsibility of the *tangata whenua*, (people of this land) is to nurture and take care of them.

It is unfortunate today that we find ourselves in a paradox aligned with the social construct of our survival, where people have become the greatest destroyers of the environmental elements through a capitalist social structure that has impacted on our cultural economy to survive.



## 6. RESEARCH METHODOLOGIES

The research methodologies I have used in this project are a combination of qualitative and quantitative processes. I have had personal interviews with my mother and drawn on conversations I had with my grandmother, Dame Rangimarie Hetet. Although my grandmother passed before I started the Masters of Art and design, I worked closely with my mother and grandmother and many of the conversations we had was based on practiced base research, through *ako* learn and teach, (Williams, 2005 p.7).

While in this practice of *ako*, the learner has to be free of mind from other outside influences to observe, focus and articulate the principles and philosophies taught to them.

Thus a critical element in the 'revolution' has to be the struggle for our minds - the freeing of the indigenous mind from the grip of dominant hegemony. A further issue here is that many indigenous groups have followed practices and programs of what has been

termed 'decolonization'. In many ways this is a different way to achieving similar outcomes to the processes of 'conscientization' and 'consciousness-raising'. However, I would argue that both of the processes are very different and teach and emphasize some distinctly different elements. My preference for using the latter terms is in fact based on the proactive and positive stance of a Kaupapa Maori approach.

In summary, the lesson of the Kaupapa Maori approach from New Zealand is that transformation has to be won on at least two broad fronts; a confrontation with the colonizer and a confrontation with 'ourselves'. This is what I have labeled as the 'inside - out' model of transformation. (Smith.G, 2003)

I consider this methodology to be *kaupapa Māori research*, (the evolution of research through practice, and new discovery to question and critique your own purpose of differentiation).

Research (particularly wānanga) into mātauranga Māori, with the purpose of creating mātauranga

Māori derived analyses of the world, does something different again. As such, it adds another thread to the fabric of Māori related research activities. It starts with the premise that a body of knowledge existed in New Zealand prior to the arrival of the European in New Zealand. This body of knowledge was impacted upon seriously through colonisation, endangering it in many and substantial ways. However, all was not lost as new knowledge was created by Māori in the 19<sup>th</sup> and 20<sup>th</sup> centuries and important fragments and portions, particularly the Māori language, remain with us today. These *mōrehu* (survivors) knowledge fragments are sufficient to catalyse a new creativity with respect to mātauranga Māori. (Royal .A.C.)

Retrieved 5/5/09 <http://www.charles-royal.com/default.aspx-pg>

I have used a research method called hermeneutic phenomenology: as a display of lived experiences through

the continuation and passing on of art skills and knowledge.

“Only concerned with human experience as it is lived with a focus towards illuminating details and seemingly trivial aspects within experience that may be taken for granted with a goal of creating meaning and achieving understanding”. (Wilson & Hutchinson,1991p.263-276)

The duality of mind and body functioning to achieve results is the innate research that pushes the enquiring artisan and or crafts person to explore new ideas and design concepts, through consciousness. This consciousness of enquiring thought is forever evolving, which can be subjective or objective.

The basic tools of research are the five senses of hearing, sight, smell, touch and taste. It is through these five senses that humans make observations about facts in the world of reality. But making sense of the facts observed occurs in the mind, by way of classifying data, seeing connections, establishing

causal relations and generating hypotheses that can be tested by experimentation. (Walker.R, 2004)

Other research I carried out was with scientist at the Otago University, testing *harakeke* cultivars at the Dunedin Botanic gardens, this is where some quantitative measures were recorded for the strength and breaking points of the fibre and helping to identify the types of cultivars. (2007;Clothing and Textile Sciences, University of Otago)

## Tensile Testing

Close up photo of the clamp system shows how the clamps hold the *muka*. A number of strands of various cultivars were tested in this way. This shows the *muka* strands being tested for its strength, by measuring the breaking points.

The *harakeke* cultivars were not named, but numbered. They were tested for strength, strain, elasticity and toughness.

The fibre lengths measured between 40cm to 100cm, as the cultivars varied between the density of fibre that could be extracted from each leaf. Identifying the cultivars were difficult in that there were mixed varieties that were grown in the South Island.

Image 4. Testing fibre strength and elasticity.



June 2008. Photograph. Bronwyn Lowe.

This shows the *Muka* after tensile test finished. The *muka* is stretched until it breaks. The cord on the left of the picture sends the data to the computer the whole time the test is running. The computer records the strength and stiffness of the *muka*. The results were that the North Island cultivars, such as *Paretaniwha*, *Huhiroa*, *Arawa* and *Makaweroa* had much more fibre content. The tenacity of the fibre, toughness, elasticity and strain was much higher medium measure than that of the South Island cultivars. Therefore the popular cultivars such as *Taeore*, *Ngutunui*, *Ngaro* and *Kohunga* found in the North Island especially in the *Maniapoto* region are the best for *muka* preparation. A lot depends on weather conditions and soil types in which the cultivars grow. This can change the characteristics of the *harakeke* cultivar. The type of cultivar that best suits the South Island conditions are most likely harsher, but tougher due to the cold and wind-blown temperatures they endure. (Lowe, B.J, Carr D.J, McCallum R.E, Myers T, Gorham A, Holmes H, Holtham C, Matenga L, Miller L, Ngarimu-Cameron R, Raumati W, Te Kanawa K, 2009)

It is our responsibility as indigenous practitioners, scholars, artists, and indigenous allies to reclaim our purpose, place and future aspirations. This is currently dominated by mono-cultural thinking, and without the commitment and perseverance to continue on with our own epistemology, metaphorically we will be a society of homogenised survivors not *Māori*. It is inherent knowledge that we know as truth, in that it has been the pinnacle of our survival. We honour this knowledge through oral practiced and visual histories. We need to invest in our own intellectual thinking in our visual art spaces, as a means of advancing our own bodies of knowledge in ways that we feel are most appropriate.

Practical workshops are a way of impacting on new learners and interested parties whom have a vested interest in cultural values and systems of working with natural materials and *Māori* practical systems.

I took part in the *Harakeke* cultivar research, carried out from 1994 – 2002 with Manaaki Whenua Landcare Research, testing twelve *harakeke* cultivars planted

throughout New Zealand, familiarising myself with characteristics and properties of all. After five years of this research, my colleagues and I, became very familiar with the cultivars through each of their characteristics, not by name. It was only after we finished the research that we were given the names of the cultivar species. The three of us that took part in this research, all knew what they were before being told. This was an insightful moment for the scientists that worked with us.

( Scheele.S, 2004 p.31-40)

## 7. KIMIHIA

### Process and making final work.

*Kimihia* – (to seek out for new knowledge)

**In the context of *kimihia*, could this be similar with hermeneutic phenomena, in research?**

I endeavoured to carry out my own research to define shading within the dyeing processes.

I soaked different *harakeke* fibre to see if the dye would take differently to the *wai* (liquid tannin), and if the colour would vary much in shade. I soaked one lot of fibres for 1 day and the other for half a day, with the yellow and tan colouring. This would also indicate whether a fifth colour could be added to a *taniko* (fine coloured finger weaving) that enhanced new aesthetic colour balance or vibrancy. The next challenge was to incorporate colour balance so the *taniko* pattern, was not disrupted in the use of geometric design. The numerical division of pattern had to structurally fit in with the metaphoric symbols.

## Symbolism of *Taniko*

Symbolism used in our *taniko*<sup>v</sup> is reminiscent of our thinking as practitioners of this art form and value systems in relation to our whenua.

So what does the inverse of this mean?

If we did not have symbols, icons and patterns that are identifiers of our cultural heritage, we would not have a visual presence in this world. These visual symbolic patterns, created as metaphoric meaning from ancestors' thoughts through art, are uniquely our truths.

Consciousness is not separate from the world, but is a formation of historically lived experiences.

Susan Lavery (2003) International Journal of Qualitative Methods, 2 (3). Retrieved 5<sup>th</sup> June 2009.

[http://www.ualberta.ca/~iiqm/backissues/2\\_3final/html/Lavery.html](http://www.ualberta.ca/~iiqm/backissues/2_3final/html/Lavery.html)

The stories of our lived experiences and the phenomenon of weaving practice can sometimes become diluted in written

narratives through theorists, interpreted by the reader in their own thought processes. It tends to open it self to stories and oral histories, if the interpreter has not have the lived experience as an artisan that has produced artistic works.

A practised artisan becomes a holder of many interpretations and facets of symbolic meaning through the visual interpretation of a realist practice and purpose.

Therefore I argue that the true essence of “*mauri*” (life force) in terms of art comes from an experienced practice, not a theological interpretation.

The inheritance of this knowledge is captured in the imagery focused on illuminating details of creativity through practical application and *ako* (reciprocated learning). Our progeny not only carry with them our DNA, but also through passing on an applied practice of language, be it oral or visual we rekindle our links to our *whenua* (lands), and this determines our unique existence in the 21<sup>st</sup> century.

This example of *taniko* shows the five colours, and the importance of aesthetic balance with the combination of patterns. If there is one stitch out of line, the whole pattern cannot synchronise to fit in with each other.



11<sup>th</sup> July 2009. Photograph. K ahu Te Kanawa.

Image 5. *Taniko* work.

The patterns used in this piece from left to right are the *Haehae* - (break in pattern, diagonal straight lines) using all five colours.

*Nihotakirua* - (two teeth), shown in the yellow, fawn, brown and white, with the black being the negative background colour to enhance the other four colours.

*Niho* – (teeth) shown in the brown and white. It is important to note here that the colour balance must compliment each other, to accentuate the pattern.



*Hoehoe* – the motion of canoe paddles, shown in fawn and black. (Te Kanawa.D, 1992 pg.39)



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 6: Completed *taniko* piece.

The completed taniko piece, I purposely left the strands at the end and plaited them into a three braid plait, representing the kuia and my grandmothers that have nurtured and cared for the many *mokopuna* (grandchildren) they have loved and cherished.

The central pattern of this piece of taniko is called *Matariki*, (the Pleiades) representing the seven stars signifying the beginning of our *Maramataka* (Māori New year).

This is also a time when we experience great losses, many of our elders pass over at this time of the year, and for me it was also the time when my mother passed. The taniko is symmetrical, horizontally and vertically. I was taught to complete a *taniko* without designing the pattern, and to achieve this, the pattern has to be thought out carefully in ones head, than the first line is woven to set the pattern. This first line is called Te Aho Tapu (the sacred line). (Te Kanawa.D, 1992 pg.39)

For me this was a lived experience that I had to recall and process my thoughts to visualise the pattern. To create meaning and understanding, acquiring the skills I was taught many years ago, and the test was to see whether I could still achieve this. This was a very anxious moment and emotionally draining time for me, I did not want to get this wrong.

## 8. WHARIKI OR TIENGA

### Why was the whariki a challenge for me?

The *whariki*/*Tienga* (fine mat) is made out of *kiekie*, as the durability and fibre of *kiekie* (*Freycinetia baueriana* ssp. *Banksii*) (Beever.J, 1991.p.44) lasts longer than many *harakeke* cultivars. I have also discovered through using *harakeke* and *kiekie* when making *kete whakairo* and *whariki* the *kiekie* sustains the tension and pattern evenly. This was my first attempt at making a *kiekie whariki*, on my own. The double join I used in this whariki is called *maurua*, which was created and taught to me by my grandmother and mother. No other weavers I know of today use this join, and researching through the texts, I could not find this particular one.

This pattern in image 7, is called *turi whati*, which means bent knees' of a weaver while weaving, (Pendergrast.M, 2003.pattern.160) This pattern also refers to the stance of the men while performing the *haka* (war dance). Men who were going into battle would be blessed on a *whariki* with

this pattern incorporated in the *whariki*; this would give them psychological and spiritual strength. (Personal communication. Diggeress Te Kanawa April, 6<sup>th</sup> 2009).



24<sup>th</sup> May 2009. Photograph. Kahu Te Kanawa.

Image 7 *Turi Whati*.



24<sup>th</sup> May 2009. Photograph. Kahu Te Kanawa.

Image 8 *Hai Taimana*.

Image eight is a display of four patterns incorporated into each other. It has the negative and positive features of the same pattern, in blocks or diamonds, or known as *Hai Taimana*, a *Maori* derivative of ace of diamonds.

(Pendergrast.M, 2003.pattern.92)

The patterns meet in the centre, which is fused with a combination of an overlay of 1,2,3 black sinistral (strands facing left) and the opposite is the overlay of 3,2,1 white dextral (strands facing right) that run horizontal and vertical to each other to form triangular patterns that intersect with each other. This pattern is built around the metaphoric shape of the *patangaro* (the star fish) or in other areas *papaka* (the crab) *papakirango* (fly swat) or *mumu* (checkered blocks). (Private interview, Te Kanawa 2009).

These patterns relate to food in abundance, to feed the men in their quest to build strength in their pending combat. This is the reason for combining the patterns in the *whariki* as a visual narrative of strengthening the warriors in spiritual and physical wellbeing.





24<sup>th</sup> May 2009. Photograph. Kahu Te Kanawa.

Image 9. *Rauputiputi*.

These patterns are the combination of *rauputiputi* (flowering blossoms, growth) bottom row of pattern, and *kowhiti whakapae* (harvesting of food crops). These are reminders to the *manawhenua* (men of the land), the food source they are protecting.

Combining all these patterns together in a *whariki* is to show visual narratives relative to the *papakāinga*. The patterns show the abundance of food crops and fish supplies. The reversal of black and white strands is showing strength and unity of the people, therefore lead by but one chief, and the *whariki* was used for the warriors to stand on, take part in a ritual of blessing before going to battle.

The practical use of this *whariki* in image ten, will be used as a display to remind us of the intrinsic essence of *kaitiakitanga*, *mohiotanga* and *marautanga* in the field of arts' heritage and visual language.

Although this *whariki* was displayed on a hard concrete floor, this emphasised the strength of weaving knowledge and skill is still relevant today as it was in the past.



6<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 10. *Whariki*

## 9. KETE WHAKAIRO

The *kete whakairo* (patterned baskets) displayed were a combination of many hours of work that signified the *whakapapa* of raw materials, starting from *pingao*, *kiekie* and *harakeke*.



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 11. *Pingao kete whakairo*.

This *kete whakairo* is quite small in size, and that is because the length of the *pingao* was short, as the longer lengths were used for *tukutuku* panels. The red dyed strands are *kiekie*, to balance the widths of the strands with the tapering of the *pingao* strands. This pattern has derived from the *whakapapa* of the *patiki* (flounder).

### PINGAO

*Pingao* (*Desmoschoenus spiralis*), commonly known as the golden sand sedge is a sand binding plant, and found on many moving sand dunes. This plant is used today to protect sand dunes and as a sustainable resource for weaving.

The harvesting of this plant varies from coast to coast. This is due to the appearance of the seed heads, which usually appear in spring. This is when no harvesting is done, so that the seed heads can ripen and shed for regrowth, especially during the warmest summer months. This

*pingao* was harvested from Kaitaia, January 2008, and has been dried and kept to use for *tukutuku* and *kete whakairo*. The *pingao* leaves can be kept for long periods of time, as long as they are hung in a dry area.

## KIEKIE

The *kiekie* still remained the strongest and most durable material to work with. *Kiekie* can only be collected in the warmer months, from as early as September through to late January. The other months of the year, the *kiekie* is left to rejuvenate and the fruit of the *kiekie*, is left to ripen. The fruit often appears in some areas just before spring, (however this is dependent on the seasonal changes in the weather), caused through climate changes. Weavers watch out for the growth of this fruit, which is shaped like a pineapple, and has a sweet taste when ripe. The birds often suck the juice of the fruit and nectar of the flower. The process for harvesting the *kiekie* is to pluck the middle shoots, and not to cut any vines what so ever, as this will kill the growth of the vines, that feed off the trees. *Kiekie* is an epiphyte, and when harvested the leaves that are

plucked away are the only ones that can be taken. This is the *tikanga* (protocol) for harvesting *kiekie*.



7<sup>th</sup> December 2009. Photograph. K Te Kanawa.

Image 12. *Kiekie kete whakairo – papakirango*.

This *kete whakairo* shows the *papakirango* pattern. It is likened to the fly swat. (Pendergrast.M, 2003 pattern.52)



This *kiekie* was harvested from in the Awakino gorge, near Piopio in January 2009. The *kiekie* in this area is thick and in abundance, so the harvesting would replenish younger growth and combat against overgrowth.



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 13. *Kiekie kete whakairo – Patiki*.

This *kete whakairo* in image thirteen, has three colours to show the interweaving of cross over in colour. The pattern here is a variance of *patiki*, in reference to the flat fish or

the flounder. The *kiekie* takes 2-3 weeks of drying after it has been harvested, stripped and boiled, than another 2 weeks of dyeing and further drying. Weaving the *kete whakairo* and the *whariki* took a total of 6 months work. The *kete whakairo* in image 14 is called *rauponga*, which relates to the vegetation of *ponga* (fern) in our native bush.



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 14. *Kete whakairo - rauponga*



The *kete whakairo* in image fifteen, is called *koeaea*, which relates to the flow of the whitebait swimming up stream. (Personal communication. Diggeress Te Kanawa, June 2009). Made of *kiekie*, the darker strands were steeped in hinau bark and paru for two days, so as the dye would penetrate through the kiekie strands. The white is of course natural.



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa

Image 15. *Kiekie kete whakairo - koeaea*

### *Harakeke kete whakairo.*

The *kete whakairo* in image sixteen, is called *rauputiputi* (flowers). I have reversed the colour to show how the opposite effect looks like using the same pattern. Both these *kete* are made from two varieties of harakeke. *Rauputiputi* is made from *maenene harakeke*.



August 11<sup>th</sup> 2009. Photograph. Kahu Te Kanawa.

Image 16. *Harakeke kete whakairo – rauputiputi.*



August 11<sup>th</sup> 2009. Photograph. Kahu Te Kanawa.

Image 17. *Whakapuareare* – open weave style.

This *kete whakairo* in image seventeen, although very plain, still has a pattern woven into it. This style is called *whakapuareare*. Amongst weavers it is a common phrase used to describe a *kete* made with series of patterned openings in it. (Pendergrast.M, 2003 atternp193). This *kete* I wanted to show the natural yellow colour of the harakeke when dried, this harakeke is called *paoa*.

## 10. MUKA

In other areas *muka* is also known as *whitau*, this is the harakeke fibre that is extracted to weave a variety of cloaks and *kete muka* (fibre basket).



June 2008. Photograph. K Te Kanawa.

Image 18. Extracting the *muka* from the *harakeke*.

*Muka* is one of my favourite materials that I like working with, because it has a texture that is not so harsh on the hands, and I love the feel of this strong fibre. The *harakeke* used in these pieces are from our own family *paharakeke*. We have varieties such as *taeore*, *kohunga*, *ngutunui* and

*ngaro*. These cultivars have been nurtured for many years passed down through five generations of weavers in our family. They have been used for *whariki*, *kakahu* (cloak), *kete*, and *piupiu* (*harakeke* skirt).



August 11<sup>th</sup> 2009. Photograph. K Te Kanawa.

Image 19. *Kete Muka*.

This *kete muka* took three months to make, from start to finish. The interwoven black strands are also *muka*, dyed from *hinau* bark and the *paru* (iron oxide mud). There was no specific pattern combination in this *kete muka*. This was done just to simplify the use of black and white with the *mawhitiwhiti* (cross stitch) incorporated in it.



December 7<sup>th</sup> 2009. Photograph. Kahu Te Kanawa.

*Kete* Series: Image 20.

These kete are arranged and hung in a sequence of whakapapa. Starting from the *pingao*, as this material is the connection between *tane* and *tangaroa* (the Gods' of the forest and sea). The next series of *kete* are the *kiekie*, as this is an epiphyte that grows deep in the native bush, and belongs to the domain of *tane*. Then there is *harakeke*, and the *kete muka* is centred in the middle to show the fibre that is produced from *harakeke*. Although the *kete* are hung on a white background, this also helps accentuate the patterns and the style of *kete* that visually shows “*toi maramatanga*” of *Maori* weaving.



In the following image 21, this young couple were fortunate to be able to marry adorned with a *kahukura*, (the red cloak, being the kaka bird feathers) and a *kahukereru* (a native wood pigeon cloak).



Te Namu Searanke and Haylee Putaranui, Te Tokanganui a Noho, Te Kuiti, November 2008. Photograph: Kahutoi Te Kanawa.

### ***Kahukura and kahukereru made by:***

#### **Dr Diggeress Te Kanawa QSM, N.Z.A.M**

As this couple exchanged vows, two tui flew to the windowsill and sat while the proceedings took place. This is the voice of *wairua* (spiritual wellbeing), which cannot be explained, but was witnessed and felt by everyone who saw this happen.

These are phenomena that are endemic to our society and soars beyond the voice of our *pae* (the place of *whaikorero* – oratory).

It is these moments in time that remind us of our *kaitiakitanga*, or shared responsibilities of these lands and its sustainability.

The *kahukura* has a raised and recessed effect, by placing the feathers reverse side up and flat side down, and the pattern denotes the popular *niho taniwha* (sharks teeth), this is very rare to obtain today. The value of such cloaks, that are produced using only customary practices are priceless today.

The hours spent on making such garments are actually immeasurable and the fortitude of achieving a garment is incomprehensible.

## 11. KAITIAKITANGA IN PRACTICE

Waste materials were kept, cut into small pieces, soaked before putting them through a hollander beater, laying out onto screens and dried to turn into paper.



11<sup>th</sup> August 2009. Photograph. Kahu Te Kanawa.

Image 22. *Recycled harakeke, pingao and kiekie.*

The different grades of paper, was determined by the amount of pulp used to get a different thickness in weight and size. Screens used determined the paper size. Some images were put onto the paper to see if the paper would enhance the image or not. This was not as successful, so I decided to weave patterns out of the paper by cutting them into strips. Cutting them into strips brought about a sense of rejuvenation of recycling waste materials and making simple patterns that started the resurgence of understanding patterns and numbering. I felt that if we were to give children recycled strips to play with, and overlaying them, or plaiting they start to formulate their own thinking in practice. The child begins to configure, create and understand texture, dimensions and numeracy. When Lego blocks that click into each other with instructions, are given to a child, there is a certain amount of creativity happening but no room to invigorate their own thinking. The reason for including these pieces into the exhibition is to show how we could possibly start using recycled materials as a starting point for children to play with.

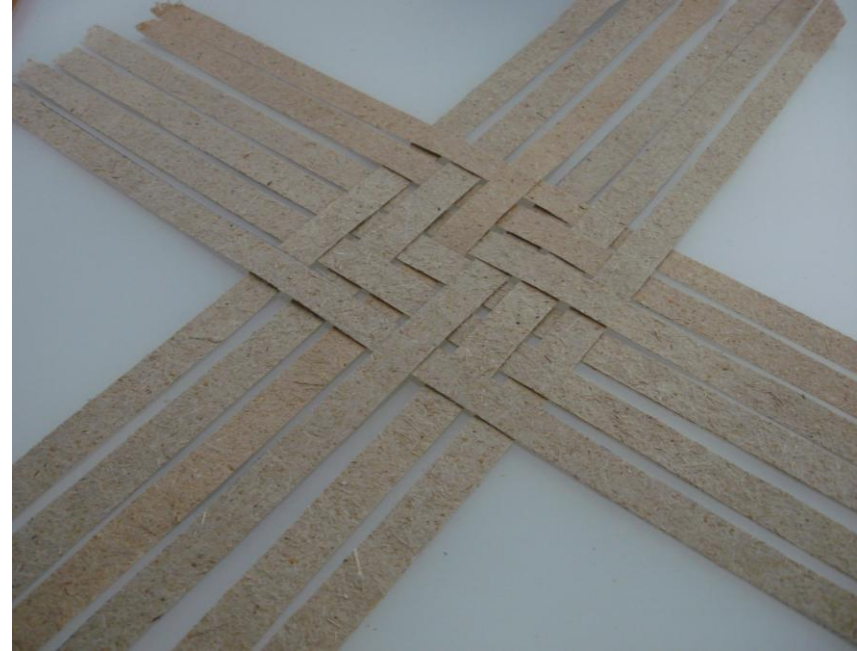




7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 23. *Whakatutu*

These pieces of recycled paper are layered in twills of two vertically. This mathematically shows how the interaction of pairing to make patterns is integrated in the thinking of layering and manipulating surfaces to coincide with each other. The name of this pattern is called *whakatutu*. (To be upright)



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 24. *Patiki* (flounder)

Using an overlay of over 1,2,3 and then reversing the same pattern on the opposite side, starts the shaping of triangles, blending into each other giving another patiki shape. I purposely left the top angled layered differently to show how it can be easily missed, but yet look aesthetically in coordination with the rest of the triangles.



7<sup>th</sup> December 2009. Photograph. Kahu Te Kanawa.

Image 24. *Taki rua* – twills of two.

This pattern is similar to the *whakatutu*, but it is layered in twills of two horizontally. This is called *takirua*, over and under sets of two. This is a very common weave in *kete*. The objective of this small exercise is to show that we tend to forget to create our own forms of puzzles, and go out and buy toys for our children, without being creative ourselves. Here is just one example of the joys of recycling, creating a puzzle, using numeracy and understanding the flexibility of creativity.

## 12. *TOI MARAMATANGA*

### **How can the depth of *Toi Maramatanga* be understood?**

Within a *Māori* context, understanding the art of visual language can only be understood if one can decipher how the shape, form, size and depth of patterns are formulated. To acquire this depth of understanding, it would be a lifetime commitment to learning and practice.

So therefore a structure of understanding the art, is *Toi Maramatanga* (understanding visual art).

This art form can be a collective of sculptural, two and three dimensional art, surface design, body performance and graphics.

All can be processed using new ideas and creative media. Accessing native materials is a means and way of developing the skills of knowledge around *Toi Maramatanga*, as a starting point.

This entails the understanding of *tikanga* (protocols) associated with the conservation of materials for future generations and the gathering of native materials.

In *mahi raranga/whatu* and *tukutuku* (*Māori* lattice weaving techniques), the intrinsic knowledge is an applied practice built within *kauapapa wananga* (core cultural activities) in this context.

*Māori* weaving patterns are based on numerical and divisional sets of mathematical functions to create patterns.

The *kaupapa* (foundation) of a piece of weaving can be set in one's mind, based on stories, cosmology, signifiers of *atua* (gods), evolution of time, elements, animals and mammals through the practice of balancing colour and adornment within the structure and process of the making.

### 13. *VISUAL LANGUAGE*

Māori weaving terminology in the following table shows the inherit knowledge that surpasses the *kupu* (words) used in Māori oral language.

Visual and expressive language, can reach into deeper definition of emotion and descriptive narratives. I have only given two examples here.

This is to emphasise how imagery and design when making the shapes or figures, were important to learn the movement of the patterning and to emphasise the visual form of language.

The practice and skill involved in forming these patterns to emphasise visual language, would be unspoken in practice and was left to the viewer to interpret.

Māori language has different dialects, tribally, and in some cases so are the weaving patterns.

<i>Māori Raranga/Whatu</i>  (Weavers' Language)	<i>Te Reo Māori</i>  (Māori Language)	English Version
<p><b><i>Purapurawhetu.</i></b></p> <p>( Personal communication. D.R. Te Kanawa.1995)</p> <p>A pattern found in <b><i>tukutuku /turapa</i></b>, (lattice work) <b><i>whakairo</i></b> (patterned weaving) and <b><i>taniko</i></b>.</p> <p>Myriad of stars in the night sky.</p>	<p><b><i>Whetū</i></b> –star (Ngata.H.M. 2005, p. 450)</p> <p><b><i>Tini</i></b> – myriad – (Ngata.H.M,2005 p.292)</p> <p><b><i>He tini nga whetu kai te rangi.</i></b></p> <p>There are myriads of stars in the sky.</p>	<p><i>Star</i> (sta:)n 1. Any of a vast number of celestial objects visible in the clear night sky as points of light.</p> <p><b>2.</b> A hot gaseous mass, such as the sun, that radiates energy.</p> <p>(Hawkins.J.M, Le Roux.S. 2005, p1469)</p> <p><b>Myriad. Adj/a</b> large indefinite number.</p> <p>(Hawkins.J.M, Le Roux.S. 2005, p.9898)</p>

<i>Māori Raranga/Whatu</i>  (Weavers' Language)	<i>Te Reo Māori</i>  (Māori Language)	English Version
<p><b><i>Wapokere.</i></b> Private conversation with Dame Rangimarie Hetet. (1993)</p> <p><b><i>Wa-</i></b> time, <b><i>Po-</i></b> Darkness, <b><i>Kere</i></b> – shimmering of something about to happen.</p> <p>Used in a taniko (fine finger weaving pattern).</p> <p>A black raised and recessed technical weave visually showing the <b>evolution</b> of time, the beginning of time.</p>	<p><b><i>Whanaketanga</i></b> - <i>E whakakahore ana etahi iwi i te whanaketanga o te tangata.</i></p> <p>Some people deny the theory of the <b>evolution</b> of human beings.</p> <p>(Ngata.H.M. 2005, p. 135)</p>	<p><b>Evolution</b> 1. A gradual change in the characteristics of a population of animals or plants over successive generations.</p> <p>2. A gradual development esp. to a more complex form.</p> <p>(Hawkins.J.M, Le Roux.S. 2005, p.500)</p>

This term *Wāpokere* was a term I could not find in any other dictionary and so accepted that this was a weaving term only for this type of pattern. In particular I have only found this pattern used on certain types of cloaks, such as the *kaitaka*, *papaeroa* or *kahuwaeroa*. All these cloaks were only adorned on *Rangatira* (chiefs) or *Ariki*, descendants of high rank.

## 14. TRANSMISSION OF KNOWLEDGE TODAY

### What are the differences in teaching today?

I will discuss how the teaching of *Māori* weaving relies heavily on the conventions of the classroom for its survival, as many of these types of art courses are introduced into institutions. I will discuss how the art form has developed as a consequence of this and compare the old style of teaching, with the new and the compromises that we have had to make in the process. We need to be vigilant in our determination to protect our natural resources and the environment.

To be *kaitiaki* (carers) of the land, flora and fauna, oral and visual arts of Aotearoa/New Zealand, is a way forward towards maintaining our cultural heritage and identity.

I realise how extremely fortunate I was to have been taught the art form of *raranga* by my mother and

grandmother who are described as *tohunga*, repositories or experts in weaving.

This knowledge was transmitted in a ‘natural’ *Māori* setting and context using *Māori* pedagogical methods where *Māori* people would expect to find weavers at work.

Unlike many learners today, I did not learn from these esteemed women in a ‘formal’ mainstream educational context. The reality for most potential weavers today is that many learn this art form within mainstream institutions.

As a teacher of the art form, the challenge for me is to be able to take the knowledge I have learnt and transmit this knowledge to others, within the confines and structures of an educational institution.

To achieve this it is important to understand the differences between the way learning occurs and is transmitted in both mainstream and a *Māori* context.

## 15. COMPARATIVE LEARNING AND TEACHING STYLES

Hemara's chart outlines and compares the difference between these two institutions.

Educational Institution	Learning from a <i>tōhunga</i>
Instructed by a lecturer in a structured timetable.	Instructed by a <i>tohunga</i> when they were ready to relinquish the knowledge.
A mixture of practice and theory	More practice-based learning.
Learning is determined by a degree of papers, based on the level achievement.	Learning was determined by your interest, observation and commitment.
Assessment is determined by the outcomes and objectives achieved.	The function and quality of work would be determined by the assessment of the

	<i>tohunga</i> .
Protocols of the institution would be observed.	Lore of the land and environment was observed.
Supervision, pastoral care and learning support available to students.	<i>Whānau</i> based support system. The learner would be nurtured by way of <i>kanohi ki te kanohi</i> (one on one learning).
A wide variety of resources available through a library, supervisors, mentors and skilled practitioners.	Knowledge base would come from <i>tohunga</i> , <i>kuia</i> and <i>kaumātua</i> .

(Hemara.W. 2000, p.40-45)

This raised awareness of *mātauranga Māori* (*Māori* knowledge) and the delivery of this knowledge in mainstream institutions is critical to ensure that weaving, as an art form is kept alive. I see this as an important role for me as a teacher of weaving.



## 16. TERMINOLOGY

How important is our terminology?

Quite simply if we lose the terminology of our weavers' language we will lose the essence of the true value and meaning.

Terminology of words and their meanings are very important to a weaver. For example, *harakeke* (phormium tenax) and or *whārāriki* (phormium cookianum), commonly known, as flax is not actually the same type of plant as that of the European flax.

Phormium tenax was named and described from J.R. Forster and G. Forster in 1776, having been collected on Cook's second voyage in 1773.

Phormium tenax roughly translated from Greek and Latin as "strong basket".

The word 'flax' comes from the Anglo-Saxon 'to weave' or to 'plait'. Flax belongs to the European flax (*linum usitatissimum*) family. Captain James Cook called *harakeke* –

flax, and so through the generations, it has become commonly referred to simply as 'flax'.

The language of weavers', differ from tribe to tribe, yet the practice remains quite similar.

Here are some of examples of different names given for various plaits commonly used.

<i>Tawai, Whiririno, Kaoure</i> (s twist)	2-strand cord
<i>Hukahuka</i>	2-strand thrum
<i>Tautoru, Tatoru, Karure</i>	3 strands
<i>Whiri Papa, Whiri Kawe</i>	
<i>Whiri paraharaha</i>	3 strands (flat braid)
<i>Rauru</i>	3 strands or more (flat braid) 5,6,7
<i>Whiri tuapuku, topuku</i>	4 strands (round braid)
<i>Whiri-iwi-tuna, tuamaka.</i>	8 or more strands (flat/square)
(Personal communication with Dr Rangimarie Hetet, June 1993)	

*Whaka-iwi-taniwha*

*Whiri tarikarika, Whiri Tuawaka*

*Whiri Pekapeka* 9 strands (flat)

*Whiri taurakeke* 10 strands (square)

Weavers have favoured *harakeke* determined by the durability, strength, fibre content and availability.

There are over 67 cultivated varieties of *harakeke* and *whārāriki*, each having its own name and visual characteristics. There are very few people in today's society who know all the properties of the varieties of *harakeke*.

Weavers today have their own favourite variety of *harakeke* or *whārāriki*, and basically continue to use what is familiar to them for whatever purposes they need it for.

There are names for each part of the *harakeke* plant, from the rhizomes to the tip of the leaf. The reasons for including these terms, is to show the affinity and respect weavers had for this plant. These are shown in images twenty five and twenty six.



Image 25.

May 2009. Photograph. Kahu Te Kanawa

The flower of the stem - *puawai*.

The scape or flower stem - *korari*



Image 26.

May 2009. Photograph. Kahu Te Kanawa

The leaf of the blade – *rau*

The opening of the blade - *kauru*

The withered dry blades, found at the base of the plant - *pakawha*

The roots/rhizomes – *huahua paiaka* or *huahua pakiaka*

The hard base of the blade – *putake/take*

The inner middle leaf – *rito*

The leaves either side of the inner leaf – *awhi rito*

The outer leaves of the *awhi rito* – *matua* or *whaea* (parent leaves)

The gel/resin from the lower blade - *piaharakeke*

The epidermis of the blade- *para*

The green waste known as – *kukakuka*

The fibre – *muka/whitau*

Some weavers use other terminology, however these are commonly known terms amongst many weavers.

The *harakeke* plant also contains medicinal properties and each part of the leaf has a different name to identify which part of the *rauharakeke* (leaf of the *harakeke*) is used for medicinal and for weaving purposes.

Once the harvesting is completed, the learner must observe the proper procedures for preparing the materials. The finished product is dependent on the preparation of materials.

a very good weaver is always methodical in their preparation and not wasteful with the materials.

(Personal communications June 1993, Rangimarie Hetet).

### Identifying characteristics of Harakeke cultivars:

Understanding the depth of knowledge of *harakeke* is important to the weaver to know, as *tikanga* and conservation practice. This is to prevent harvesting *harakeke* that is used for specific functions. It is wasteful to harvest *harakeke* for *raranga* (weaving only), if the *harakeke* has a high-density fibre content. Some weavers, who are privileged to have several cultivar varieties, usually maintain the growth and health of the plants by just simply using them every day.



June 2009. Photograph. Kahu Te Kanawa

#### ***Kohunga***

This *harakeke* plant is called *kohunga*. A popular cultivar grown in the *Maniapoto* area, and favoured for its long silky *muka* (fibre). To a weaver there are distinctive characteristics that identify the difference between others. This cultivar has long slender *rau* (leaves); the keel and the edges are black, which is usually a sign of silky *muka*. The colouration is an olive green not a dark green.



June 2009. Photograph. Kahu Te Kanawa

*Ngutunui.*

This *harakeke* cultivar is called *Ngutunui*, favourable for making *piupiu* (flax skirts). The muka is very strong and was also used for handles of *kete* (baskets) and making cords to lash things together. This is popular for its wide leaf and thick fibre content. It has a shade of blue and reddish keel and edges that distinguished its characteristics amongst others.



June 2009. Photograph. Kahu Te Kanawa

*Ngaro.*

This *harakeke* cultivar is called *Ngaro*. It has a distinct bronze colouring through it. Not a prolific grower in some districts but has a very strong fibre. This *harakeke* was used for all purposes. Predominantly found around the *Taranaki*, *Waikato* and *Whaingaro* districts.

This *harakeke* cultivar is called *Ngaro*. It has a distinct bronze colouring through it. Not a prolific grower in some districts but has a very strong fibre. This *harakeke* was used for all purposes. Predominantly found around the *Taranaki*, *Waikato* and *Whaingaro* districts.



June 2009. Photograph. Kahu Te Kanawa.

**Image 30. *Taeore*.**

This cultivar is called *taiore/taeore*, it has a very fine silky fibre and is used for making the *aho* (weft thread) to weave cloaks and in the fine *taniko* (coloured finger weaving).

This *harakeke* is a variety, that many weavers like to have planted in their backyard, and can be easily propagated for new growth of a *paharakeke* (plantation) of the one variety.

## 17. BICULTURAL REGIMES

The conceptual scenarios for working in the notion of a bicultural nation have been available for some time. Ethno history in a social context and academic approaches of the 1960's, was admirably taken into consideration. This would have prepared the minds of scholars for acceptance of native systems of knowledge as science, social structure and therefore as being of equal importance to Western philosophies. What would have been known is the importance given to equality and balance. The recognition of rituals, rights, honour and cultural reform was about to determine a new regime of political renaissance. Emerging *Māori* artists such as Ralph Hotere, Kataraina Mataira, Fred Graham, Selwyn Muru and Arnold Wilson in the late 50's and early 60's were a group of scholars breaking new ground in the field of arts, that invoked visual messages of past histories and symbolism of *Māori* iconography.

These are times of our own investigations and instinctive responses, to environmental change as human consumers of energy, water, and land. These are times when the visual, performance, literal, oral and computerised arts, can portray what is necessary, for peace of mind for the people of our country. The harsh realities of survival, depends and relies on a knowledge economy of people, who are eventually governed by a competitive race to earn the highest dollar. The need to compete for higher qualifications and entrepreneurial commercial entity purports to address the higher echelon of living conditions, as a social and independent society. This rhetoric charismatically enhances their own needs to survive, and is designed in a way that the lower socio economic consumers, rely on Western systems to survive.



When we cannot feel the gratification of exchanging gifts, experience the joy of the act in doing so, and hold onto dignity that we can honour each other with, and if we cannot use the arts to present a positive image of ourselves to the rest of the world, with pride and sincerity, than we have lost the essential qualities of being human.

## CONCLUSION

In conclusion the research I conducted for this exegesis and exhibition has affirmed the importance of art as a historical and cultural identifier of existence as a *Māori* weaver. The realisation of our potentiality through lived experiences reinforces the ability to develop the arts over periods of time, to pass this *matauranga* on through the practice of *kaupapa rangahau* and *kaitiakitanga*. I have interpreted it as being similar to the practice of hermeneutic phenomenology, as the methodology of research, as a lived experience over thirty years of practice, teaching and observing.

To present the findings of the research undertaken within the Master of Art and Design programme, I elected to exhibit eight *kete*, one *whariki* and one piece of *taniko*. Each of these pieces have been described earlier in this exegesis. In bringing together these pieces and including a light box with recycled paper patterns on them, I intended to demonstrate the primary components of *Toi*

*Maramatanga* for me as a weaver. Through this, I aim to answer the research questions posed in my abstract:

What are the guiding principles within art and design that uphold the core values of *Mātauranga Māori*? (*Māori* epistemological thinking). How can forms of art be embraced and imbued in modern society, that signifies place, belonging and cultural enhancement?.

In addressing the core values of the passing down of knowledge, environmental sustainability along with the mathematical knowledge and tacit knowledge, within my art practice, it is my intention that the weaving presented here goes beyond a demonstration of skill into conveying

*Mareikura*, the practice of activating the realm of women's knowledge. Therefore my decision to exhibit the particular suite of works is guided by the research enquiry into how *Māori* art forms can be embraced in a modern world. These *kete*, the *whariki* and *taniko* are the result of knowledge including celestial navigation, planting, gardening and fishing. Furthermore, as a collection, they map the

relationship between plants that provided the source materials, as well as the locations where the plants can be harvested. In this instance they also pay tribute to the *papakāinga* or community in which I was raised and learnt these skills.

As these are functional items that are used both in everyday and ceremonial use within *Te Ao Māori*, it was difficult to determine how best to present them for the examination process. The gallery-like studio spaces at Auckland University of Technology, are not the kind of environments that works such as these would be usually be encountered, therefore exhibiting them posed challenges. I did consider presenting them in a context of a *marae*, but decided to test how they could activate viewers in a contemporary space. I believe the *mana*-authority (Williams, H.W.2005 p.172) and the knowledge contained within the works can hold their own, and in fact ‘warm up’ the space. The whariki was placed on the floor emulating its originating function as a mat. The kete were arranged

on the wall to the left of the space and the taniko to the right of the space on a plinth.

The paper pieces were on a light box to the left hand corner. The floor to ceiling windows provided natural lighting.

## Exhibition



December 7th 2009. Photograph. Kahu Te Kanawa

Image 31.

*Kete Whakairo* series.

The series of *kete* on a white blank wall was to show how the *whakapapa* (genealogical) placement of the kete, chosen by the materials used;

- starting from *Pīngao*, (the material that has an association with both *atua*- gods' of the sea and forest, *tangaroa* and *tāne* respectively).
- *kiekie*, the next material favoured by weavers for its association with *tāne* and for its flexibility and strength.
- *harakeke* which has a variety of cultivars to choose from and a strong fibre that can be extracted.

The kete exemplified the importance of pattern and representation of placement to exhibit these pieces.

The *whariki* placed on a hard concrete floor, was another decision to show how the beauty of pattern using natural materials harvested, processed and woven can still withstand adverse conditions and enhance an empty space.

The meanings of all these patterns as explained in a previous pattern, is relative to the *papakāinga*.

The land in which I was brought up in and the concrete floor are total contrasts.



December 7th 2009. Photograph. Kahu Te Kanawa

Image 32



December 7th 2009. Photograph. Kahu Te Kanawa

Image 33

This *taniko* (off loom coloured fine finger weaving) is a piece of work completed without a draft pattern. The numerical division of colour and pattern is an example of design and colour balance that is thought of in the head, and woven together through a series of tight single *whatu* (finger stitching) and changing of colour to create the pattern.



December 7th 2009. Photograph. Kahu Te Kanawa

Image 34



Image 35

December 7th 2009. Photograph. Kahu Te Kanawa



December 7th 2009. Photograph. Kahu Te Kanawa

Image 36

This series of recycled paper pieces, made from left over strands of *harakeke*, *pingao* and *kiekie*, is to show the diversity and use of the materials. The basic weaving patterns can be used as mathematical configuration and design. This promotes thought provoking design media that can be used in product design and packaging as an example, and recognising the importance of eliminating waste that impacts on the environment. This is another



example of *kaitiakitanga* within the process of art and design.

I would like to continue on with the passing down of knowledge and at the same time bring about the importance of *kaitiakitanga* and understanding of *toi maramatanga*. I endeavour to keep the generative knowledge alive by passing this onto who has the patience, time and stamina to learn and recognise the importance of it.

It is my duty as a fifth generation weaver of our family to do this, along with other sisters. With the passing of our mother, who for us held the mantle of *Mareikura*, in the context of *Māori weaving*. This is a reality for us, and as we plan our futures we do have the responsibility to share and nurture this *matauranga*. I hope that when my work gets viewed, that people will appreciate and understand the work and thought put into the pieces. The aspirations of some of our people is to have a deeper understanding of our material culture, which is embedded in the actual practice, performance and making of our art.

To invoke dialogue of understanding is to recognise the amount of work and thought behind the making and design. The weaving pieces are a historical display of patterns that resonates our connectivity to our place and space in a time period that determines our future aspirations, attributing indigenous epistemological thinking within art.

Although the images are not new, and the materials used have been used many times before, the depth of understanding the making is the shift that the viewers would need to consider as a cultural signifier of difference. I hope that this thesis will enlighten readers understanding of the depth of knowledge in visual language and practice, through “*Toi Maramatanga*”, so our *rangatahi* (youth) carry this thinking through to the next generations.

## APPENDICES

### WAIATA

E ngā uri whakatupu  
Whakarongo kia kaha  
Hāpainga ake rā  
Ngā mahi huatau ā ngā tūpuna  
I waiho ake nei  
Hei painga mō te iwi o Aotearoa e

Kia kaha rangatahi  
Kei ngaro ngā taonga ō ngā tūpuna  
Kei whakaari atu kit e ao tūroa  
Taku mana nō tuawhakarere, nō aku tūpuna  
I mauria mai ne i Hawaiki rāno e

O coming generation,  
Listen, be strong.  
Uplift the arts, left by our ancestors  
For the good of the  
People of Aotearoa

Be strong oh youth,  
Lest the treasures of your  
Ancestors are lost as a portrayal for the future.  
My inward strength stems from  
The dim path brought by our ancestors from Hawaiki

Composed by Rangimarie Hetet & Diggeress Te Kanawa.  
Ruki (2009)

Appendix Two.

## TABLE OF HARAKEKE CULTIVARS

### APPENDICES TWO

These tables show varieties, area in which they derive from and what they are used for.

This type of information comes with years of experience and research working with the harakeke cultivars.

NAME	AREA	DESCRIPTION
Aonga	Waiomatatini, East coast North Island	Variegated variety

Arotata	Waikanae	Yellowish-green leaves, dark brown edge
Atewheke	Hauraki	Suitable for stripping and raranga
Atiraukawa	East coast, Taranaki, Opunake	Has high quality fibre
Arawa	Rotorua, Rotoiti	Clean fibre, piupiu harakeke
Atarau	Wanganui area	Strips well, less fibre mainly

		used for kete
Ate	Wanganui river, Pipiriki	Can be used for eel nets, and strong kete
Atewhiki	Taranaki	Good for whariki and kete
Awahou	Eastern Bay of Plenty	Used for piupiu and kete, very wide blade, pale green shade
Huhiroa	West coast, Wanganui,	Bluish green leaf, very good

	Taranaki	fibre content.
Hewara	Waikanae, Otaki	Broad buff green leaf, dark narrow edges
Huruhuruhika	Taranaki	Used for rough garments
Kohunga	Mangatautari, Maniapoto	Very fine muka, used for korowai
Koorako	Taranaki	Dark green leaf
Koura	Wanganui	Strong fibre, used for korowai
Kuru	Opunake	Strong fibre

Kauhangaroa	Wairoa	Decorative variety, not much fibre
Maeneene	Urewera	A favoured whariki cultivar
Manunu	Taranaki	Used for cordage
Mataora	Pipiriki	Short fibres but strong, used for borders of fine cloaks
Makaweroa	Torere, Eastern Bay of Plenty	Fine silky muka content

Mawaru	Rotorua district	Green kete
Ngaro	Taranaki, Waikato, Whaingaro	All purpose variety, bronzy leaf. Strong fibre.
Ngutunui	Taranaki, Maniapoto	Red edge, erect leaf. Used for piupiu
Oue	Tairāwhiti, East Coast, Waikato, Taranaki, Mangatautari	Very good all purpose harakeke.
Okaoka	Waiuku	A very good all

		purpose variety
Parekoreitawa	Taranaki, Waiomatatini, Maniapoto	Variegated and used as an ornamental harakeke, silky fibre but dries out brittle
Paretaniwha	Rotorua	Very tall and erect, used for strong kete
Paoa	Muriwai, Gisborne	Very yellow shade used for fine kete

Taiore/Taeore	Maniapoto	Black edge, fine fibre
Tihore	Taranaki	One of the best varieties
Tāpotō	Hawke's Bay	Pale yellow, strong and short narrow blades, used for kaitaka, kete and whariki
Wharariki	Tuuhoe	Sleeping mats

Source adapted from Orchiston, 1994 & Mead, 1969.

(Te Kanawa.K.M, 2004 p.125)

## APPENDIX THREE

### CUSTOMARY DYE PROCESSES

With the use of hot volcanic stones and tree barks the following images shows detailed processes of harvesting and preparing for a customary dye workshop. This is an example of practice based workshops that we can still partake in, to understand our responsibility of *kaitiakitanga* through ‘ako’(to learn or teach).

#### *Tanekaha*

This image, shows the leaf of a mature *tanekaha* (*Phyllocladus trichomanoides*) tree.

The shape of the leaf can be described as a similar appearance to a celery leaf. This is also commonly known as a celery pine tree. This particular tree would be approximately twenty five years old.

The bark is collected, making sure that the tree is not ring barked. Only enough is taken for the purpose of what is needed.

To assess how much is needed, can only be judged through years of practice and knowing. It is critical to know how to harvest and heel the tree immediately after extracting the bark, as the heeling of the tree is determined by the care and attention of the harvester. The gatherer ensures that the area in which the bark has been extracted, is not over



exposed to the sun, but gets enough warmth and sunlight to begin heeling immediately. This is done by mixing moss and a paste of mud to rub into the area of

scarring. The availability of trees, also determines how



much bark can be taken, as some bark can be stored and used a later time, when needed.



Te Kanawa, 1992 pg 23-25.

*Tanekaha* (*Phyllocladus trichomanoides*) trees grow in both the north and south islands of New Zealand. The tannin produced from this

bark has an acidic chemical to produce a reddish tan colour. The bark is beaten to ensure that the boiling process will enhance the strength of the dye colour. The bark is steeped in water before and heated with hot volcanic stones. The vessel used for this process of dyeing using heated volcanic stones is called an 'oko'. *Manuka* branches are used to place the heated stones inside the 'oko' and dye solution. This is to show the tools used in a pre-European, time period, and to appreciate how we can be so easily enticed into using a shovel or spade. Vigorous boiling commences within seconds of placing hot volcanic rocks inside the dye solution.

The *muka* (extracted fibre from *harakeke*) is soaked in the *wai* (dye solution), from three to four hours; they are dried and later rubbed in warm ashes when they are slightly damp. The ashes act as the mordant, so the fibre is exposed to the sun for approximately half an hour and the fibre gradually turns to a dark tan t brown colour.

I have tested the density of the dye, by soaking the fibre in the 'wai' at different intervals of time.



The shaped club, to beat the bark is called a patu; this has been passed down through five generations of weavers. The care of these tools, play an integral part of the processes involved in the dyeing activities as they are being used.

### **Pounding the tanekaha.**



**Hinau Bark**

The above image is the inner skin of hinau bark (*Eleocarpus Dentatus*), which is beaten and boiled similar to the tanekaha bark, to produce the wai (dye solution).



**Paru (Mud)**

The paru shown contains a compound of tannin and mordant. Increasing acidity due to oxidation of the paru causes the degradation of muka paru. This mud is not so readily available, as many of our swamp areas are drained for farming and agricultural crops.

The degradation of muka (harakeke fibre) that has been dyed in the paru is especially noticed on garments that have been stored in our Museums and other international museums, such as the Museum of Mankind Burlington, the British Museum in London, Pitt Rivers Museum and other international museums that house these artefacts.



This example in shows the degradation of black fibre from a cloak, that is over one hundred years old.

Although this is quite a lengthy time period,

the realisation that the knowledge in knowing how these techniques are applied has been slowly dwindling away

before our own eyes. These skills and techniques of dyeing and applied practice of taniko (fine weaving) have been replaced with tapestry needles and wool. In this particular piece, this has lines of blue and triangles of red incorporated into it, indicating how our ancestors started creating works using new materials, such as dyed wool. This cloak would be an artefact of the transitional period, approximately 1835-1860 circa.

With the use of scientific neutralises, the process of degradation on the black fibres can be reduced.



## Raurekau

Raurekau (*Coprosma grandifolia*)



A sharp knife is used to carefully peel away the bark, so that only the outer surface is removed. This clearly shows the golden yellow colouring around the rims of the scarred surfaces.



The outer surface of the bark is scraped away, to ensure that the darker epidermis of the bark surface does not discolour the colour.

In this image, the bark has just been dropped into the hot water and starts to turn the hot water to a light yellow.



After being steeped in hot water for a half hour, it is then boiled with the hot stones to produce a strong solution of a golden yellow dye. This is the only tree bark that does not need any other fixing agent to ensure the colour does not fade.



This particular dye colour, a golden yellow can be difficult to obtain, if the stones are not hot and the dye solution is a pale yellow. Groves of raurekau are a very rare find today, and so as a weaver and practitioner of customary dye practices, the raurekau trees are guarded and nurtured, especially trees that are at least fifteen to twenty years old. This is done by ensuring that the area is not subjected to farming developments, and fencing is erected to keep livestock from desecrating the area protects the trees. Raurekau groves are usually prolific in damper and shaded areas, and the native bush foliage contributes to the biodiversity and nutrients that contribute to maintaining an established grove. Hot stones are carefully placed in the hue (calabash), so as not to unbalance the hue and spill the dye solution, as shown in image sixteen.

The boiling is instantaneous as shown in this image, and the heat strengthens the golden tannin, which contributes to the longevity of the colour when the muka absorbs the dye. This is known, as I have viewed a cloak in a private collection passed down through five generations of one family and it still exists today. The cloak comprises of three panels of dyed yellow muka whenu (harakeke fibre warp cords in a cloak) and two panels of plain, which is the kaupapa (main body) of the cloak. The family that own this cloak know that they have a cloak for all their lifetimes and needs to be cared for in the most appropriate manner. I have also viewed cloaks in the British Museum, where the yellow colouring in the taniko (coloured pattern finger

weaving) is still intense.



Vigorous boiling of the yellow dye gives strength to the fibre and colour to last a very long time.



Images showing the finished dyed fibres, prepared for the new work. My intention is to use these dyed muka fibres in a piece of work that exemplifies distinct patterns, that reiterates our cultural symbols.

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<sup>i</sup> Kaitiakitanga means guardianship, protection, preservation or sheltering. It is a way of managing the environment, based on the traditional Māori world view.

<sup>ii</sup> Toi Maramatanga – understanding of thoughts and processes within an art form.

<sup>iii</sup> Tikanga – protocols and practices that adhere to a Maori worldview of knowing and doing.

<sup>iv</sup> Tangata whenua – people of the land.

<sup>v</sup> Taniko – fine Maori finger weaving using a series of twining using various colours of weft threads.



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