I have been fortunate to be surrounded by Māori weaving since I was a child. My grandmother, Rangimarie Hetet, and my mother, Diggeress Te Kanawa, always had some form of weaving in the making as I was growing up. They also taught many women and men. Their teachings and their manaaki (care for, show hospitality, empathy) towards potential weavers, was to ensure that this knowledge was passed on to future generations. This was, and still is, a testimony of their passion for Māori weaving to continue on for coming generations, a gift handed down from our ancestors.

I have acquired this customary knowledge within a Māori teaching context, that is, outside the western notion of education and the conventions of the classroom. This was done right from the time I showed interest in the art of mahi raranga (weaving activities), whatu (fibre weaving) and tukutuku (wall panel lattice work). Growing up with the smell, sounds and textures of harakeke (Phormium tenax) and other raw weaving materials, was a natural state of co-existence. There was always a kākahu on a stand in the making, or harakeke and kiekie (Freycinetia baueriana banksii) being prepared for whāriki (woven mats), kete (baskets), tukutuku or piupiu (flax skirts). Gathering different tree barks for dyeing harakeke fibre, called muka, was a highlight for me, as I became familiar with the different types of native flora and fauna and processes involved with natural dyeing. Kiekie would be gathered in the summer months, stripped and boiled then hung to dry, while harakeke was readily available.

Kahutoi Te Kanawa is from a family of weavers, being the daughter and granddaughter of renowned weavers Diggeress Te Kanawa and Dame Rangimarie Hetet. Kahutoi was appointed Senior Lecturer at Te Tumu, School of Māori Pacific and Indigenous Studies At Otago University in 2006

With these activities happening constantly around me while growing up it was inevitable that there would be an impact on my observation of detail, skills and techniques put into the work that was being produced. The intensity of the fine detail and concentration in producing a piece of work all came down to exact measurements, tightness in tension, colour tones, understanding the patterns, techniques and precision of raranga and whatu to produce aesthetically exquisite pieces of work.

I was only able to observe these processes to begin with and as time went by my mother and my grandmother would allow me to help. I progressively worked beside them before they let me work on my own. This was over a time frame of fifteen to twenty years. I would sit beside them, listening to the kupu (words) of raranga and understanding the concept of organised work ethic. They were always trying out new ideas.

Sadly, this process of transmission of knowledge and skill is slowly dwindling away. The intensity of social interaction and lifestyles we live today are not conducive to this style of transmission.

I have found in the past twenty years that teaching raranga, whatu and tukutuku in educational institutions has had its complications. In the first instance, accepting raranga, whatu and tukutuku as a programme of learning to aspire towards a career, has been a contentious issue for many institutions to adopt. The bureaucracies of institutions have regarded raranga, whatu and tukutuku as hobbies and crafts, rather than as art forms.

Students were not able to source funding for such a course, without having a letter of confirmation from the educational institution to confirm the length of the course and stating a possible career pathway towards employment. The very notion that this course was not going to help students learn anything, or having to prove that such a skill would lead to any form of self-employment or a career pathway was, to say the least, demeaning. This would happen every year students enrolled in the course, until such time that the course was advanced to a diploma and degree level of learning and approved by the New Zealand Qualifications Authority. Like my mother and grandmother, I persevered with the

bureaucracy that encroached upon the growth and development of these courses. Although there is still some resistance to the arts of raranga, whatu and tukutuku being recognised as a curriculum of academic study, perseverance and persistence has been the key to their survival.

In the past Māori lived within a subsistence economy where much of the productivity of labour was organised in a collective manner. Mahi raranga was a daily practice that contributed to the wellbeing of Māori society. Materials for weaving were obtained from the environment, including the seashore and the forest, materials such as kiekie, pīngao (*Desmochenus spiralis*), native tree barks from such trees as raurēkau (*Coprosma grandifolia/Australis*), hīnau (*Eleocarpus dentatus*), tānekaha (*Phyllocladus trichomanoides*) and of course harakeke (*Phormium tenax*). These natural materials were required to produce fishing nets, snares, binding, basketry, mats, sails, cloaks and latticework. This work required enormous patience and superb technique to be able to process the materials for weaving in the first instance, and then to weave the various items thereafter.

This paper will discuss how the teaching of Māori weaving relies heavily on the conventions of the classroom for its survival, which is sadly the legacy of our colonial past. 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 (custodian) 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 'natural' Māori settings and contexts 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' Pākehā educational context. The reality for most potential weavers today is that most 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 it 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 Māori contexts.

Educational Institution	Learning from a tohunga
Instructed by a lecturer in a	Instructed by a tohunga when
structured timetable.	they were ready to relinquish
	the knowledge.
A mixture of practice and	More practice based learning.
theory.	
Learning is determined by a	Learning was determined by
degree consisting of papers,	one's interest, observation
based on the level	and commitment.
achievement.	
Assessment is determined by	The function and quality of
the outcomes and objectives	work would be determined by
achieved.	the assessment of the
	tohunga.
Protocols of the institution	Lore of the land and
would be observed.	environment was observed.
Supervision, pastoral care	Whānau-based support
and learning support	system. One would be
available to students.	nurtured by way of kanohi ki
	te kanohi (one on one
	learning).
A wide variety of resources	Knowledge base would come
available through a library,	from tohunga, kuia and
supervisors, mentors, and	kaumātua.
skilled practitioners.	

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.

Te mātauranga o ngā raranga/whatu

Terminology of words and their meanings are very important to a weaver. For example, harakeke (*Phormium tenax*) and/or wharariki (*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 (*Linium usitatissum*) family. Captain James Cook¹ called harakeke flax, and so through the generations, it has become commonly referred to simply as 'flax'.

The language of weavers differs from tribe to tribe, yet the practice remains quite similar. Here are some of examples of different names given for various plaits commonly used.

tāwai, whiri rino, kārure	Two strand cord
hukahuka	Two strand thrum
tautoru, tātoru	Three strands
whiri papa, whiri kawe, whiri	Three strands flat shape)
pāraharaha	
rauru	Three strands or more (flat
	shape)
whiri tuapuku, whiri tōpuku	Four strands cord (round
	shape)
whiri-iwi-tuna, tuamaka	Eight or more strands (flat
	shape)
whaka-iwi-taniwha	Eight plait (round shape)
whiri tārikarika, whiri	Eight plait (square shape)
tuawaka	
whiri pekapeka	Nine strands (flat shape)
whiri taurakeke	Ten strands (square shape)

Weavers have favoured using harakeke determined by its durability, strength, fibre content and availability. There are over 67 cultivated varieties of harakeke and wharariki, 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 wharariki, and basically continue to use what is familiar to them for whatever purposes they need it.

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 whāriki and kete
Awahou	Eastern Bay of Plenty	Used for piupiu and kete, very wide blade, pale green shade
Huhiroa	West coast, Wanganui, Taranaki	Bluish green leaf, very good fibre content
Hewara	Waikanae, Ōtaki	Broad buff green leaf, dark narrow

A table of harakeke cultivars

Mai I Te Ao Kōhatu	
Weaving: An Art Form Derived From Mātauranga Māor	i
As A Gift From The Ancestors	

	1	
		edges
Huruhuruhika	Taranaki	Used for rough
		garments
Kohunga	Mangatautari,	Very fine muka,
	Maniapoto	used for korowai
Kōrako	Taranaki	Dark green leaf
Koura	Wanganui	Strong fibre, used
		for korowai
Kuru	Opunake	Strong fibre
Kauhangaroa	Wairoa	Decorative variety,
		not much fibre
Māeneene	Urewera	A favoured whāriki
		cultivar
Manunu	Taranaki	Used for cordage
Mataora	Pipiriki	Short fibres but
	_	strong, used for
		borders of fine
		cloaks
Makaweroa	Torere, Eastern	Fine silky muka
	Bay of Plenty	content
Mawaru	Rotorua district	Green kete
Moto-o-nui	East coast,	Variegated fibre
	Urewera	suitable for
		weaving
Ngaro	Taranaki,Waikato,	All purpose
	Whaingaro	variety, bronzy
		leaf. Strong fibre
Ngutunui	Taranaki,	Red edge, erect
	Maniapoto	leaf, used for
	_	piupiu.
Okaoka	Waiuku	A very good all
		purpose variety
Oue	Tairawhiti, East	Very good all
	Coast, Waikato,	purpose harakeke
	Taranaki,	_
	Mangatautari	
Paoa	Muriwai, Gisborne	Very yellow shade
		used for fine kete
Parekoreitawa	Taranaki,	Variegated and
	Waiomatatini,	used as an
	Maniapoto	ornamental
	-	harakeke, silky
		fibre but dries out

		brittle
Paretaniwha	Rotorua	Very tall and erect,
		used for strong
		kete
Taiore	Maniapoto	Black edge, fine
		fibre
Tāpoto	Hawkes Bay	Pale yellow, strong
		and short narrow
		blades, used for
		kaitaka, kete and
		whāriki
Tīhore	Taranaki	One of the best
		varieties of
		harakeke
Wharariki	Tūhoe	Used for sleeping
		mats

There are names for each part of the harakeke plant, from the rhizomes to the tip of the leaf.

The leaf of the blade – rau



The flower of the stem – puāwai The scape or flower stem – kōrari



The opening of the blade – kāuru The withered dry blades, found at the base of the plant –

pakawhā

The roots/rhizomes – huahua paiaka or huahua pakiaka The hard base of the blade – pūtake/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 – pia harakeke The epidermis of the blade- para The green waste known as – kukakuka The fibre – muka/whītau

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

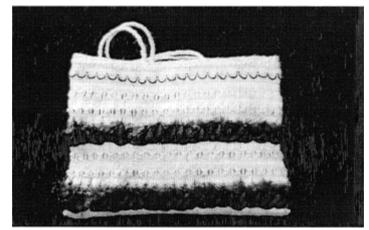
The harakeke plant also contains medicinal properties and each part of the leaf has a different name to identify which part of the rau harakeke (leaf of the harakeke) is used for medicinal and for weaving purposes.

The customary practices of seasonal harvesting of native materials was based around the weather conditions and the seasonal phases of growth rejuvenation of plant materials. Weavers must know the best seasons to harvest harakeke,

kiekie that grows in the native bush, and pīngao (*Desmoschoenus spiralis*), commonly known as golden sand sedge. The protocols of harvesting for each of these three native plant materials are totally different. This could only be taught through practice and observing the trained weavers. It would take three or four field trips for the student to become proficient in this process, which could span between three to four years of learning from a weaver who observes all the correct procedures according to what type of material is being harvested.

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. As quoted by my grandmother, 'a very good weaver is always methodical in their preparation and not wasteful with the materials'. This has been instilled in me and I always try to demonstrate this in my own teaching, impressing the value of this tikanga (protocol) on my students.

Processes involved with preparation are dependent on what the materials are harvested for. For example, a kete muka as shown below requires a specific process in preparation for weaving the kete.

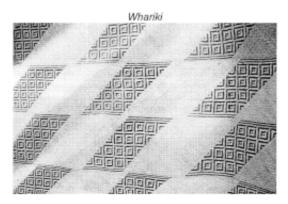


Kete Muka made by Kahutoi Te Kanawa

The variety of harakeke harvested to produce this is called kohunga. This variety has fine muka (fibre), which is easy to extract from the rau harakeke. The feathers are sorted into their size, shape, colour, paired off and bound together with the pia harakeke (the gum of the harakeke plant). Approximately 200 feathers would be prepared, which would take about 6-8 hours. The muka is soaked and pounded with a patu muka (stone implement), to soften the muka. The muka is prepared into approximately 120 whenu (warp cords) and 100 aho (weft threads). The weaving of the kete muka would normally take approximately two weeks to complete the finished product. From the harvesting to the finishing of a kete muka, the time period could be three to four weeks. This is only one example of the amount of time and the technical skills required to produce a quality product.

The one very important aspect I have learned from weaving and from my mentors is not to rush the work, as the product will not be of a good quality. This is another important tikanga I try to impress upon my students.

Items such as whāriki and korowai (cloaks) can take up to 18 months to two years to produce. If the weaver has a fulltime job, this type of work requires the weaver to have an agile mind and extreme patience to complete a product of high quality.

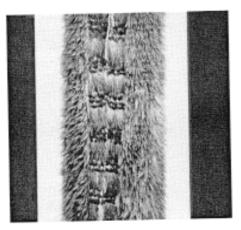


Whariki made by Dame Rangimarie Hetet

The whāriki above has over 9000 weaving threads measuring approximately two metres by three metres deep. The total time taken to complete this product is two years.

The korowai below would have taken two to three years to complete. The determination and drive to complete such a task is really governed by your own desire as a weaver to test your own patience, skills and passion to achieve and complete the milestone.

Korowai



Korowai made by Diggeress Te Kanawa

Many weavers today have the opportunity to explore other mediums, but use skills derived from learning raranga/whatu. The discovery and exploration of incorporating other materials is up to each individual weaver/artist. Some pieces are aesthetically pleasing and take on sculptural forms that have enhanced corporate offices, foyers, homes and art galleries. The creators of such pieces are usually self employed artists, teachers and/or weavers that have an absolute passion for Māori weaving. Lighting fixtures are used to enhance pieces and many of our weavers today are travelling overseas and are engaging with other fibre artists who share a keen interest in exploring new ideas. They are creating pieces with vibrant colours, poltical messages and more recently making an impact on the catwalk of designer fashion wear. The flare for

creativity and new knowledge has expanded, and a new formulated company, called Hapene, has deciphered a new way of using the rau harakeke that stretches the leaf so that it takes on a whole new lace type look. This business has become very lucrative with these harakeke blades adorning many florist and gift shops. This is another innovative way of using harakeke. However, there are many young weavers and artists who continue to explore and use the techniques and weaving skills that have been passed down to them. I am particularly aware that weavers' work is still not being recognised for the time and effort that is put into producing such exquisite pieces. Often the tukutuku panels for new wharenui are made with voluntary labour. In some cases this could mean one to two years of planning, designing, harvesting within the correct seasons and weaving the panels. I have seen at least four new wharenui done in this way over my lifetime.

Conclusion

Over the past fifty years, there has been a revival of weaving as a Māori customary art form. This was instigated by the Māori Women's Welfare League, who saw the need to revive the art and craft of Māori weaving amongst our Māori communities before it became lost to our colonised society. Tertiary institutions are now getting used to these customary art practices as being part of our way of life. The ideal way of teaching these art forms would be in a marae setting that has a connection with an institution, so that they can both support each other to articulate the learning styles of both worlds, te ao tawhito and te ao hurihuri, the old and new worlds.

Unfortunately, the art form has been reclassified by contemporary artisans as a 'craft' as opposed to an art. There have been museum institutes, art galleries and the Māori sector of Creative New Zealand who have exposed Māori weaving as an art form on a national and international level through exhibitions such as *Te Māori*, the British Museum 1998, *Te Aho Tapu* Auckland War Memorial Museum 1989,

and most recently *Te Aho Mutunga Kore – The Eternal Thread*, co-curated by Pātaka Museum and members of the National Māori Weavers Association, Te Roopu Raranga/Whatu o Aotearoa. These fine exhibitions are much appreciated and valued for the amount of work put into them. Just by seeing the pieces, it is not difficult to appreciate and value how much time, skill and technique is worked into the pieces to be able to view an aesthetically pleasing piece of weaving. The work of weavers in today's society is to bring forth the artistic and skilful techniques, to integrate detail and to introduce this knowledge into our education system, communities and society. It is part and parcel of our cultural values, heritage and unique art forms that belongs distinctly to our country. In my view, the value of weaving and the knowledge associated with this precious art form are still to be realised.

Notes

¹ Captain Cook is reported as 'discovering' Aotearoa/New Zealand in 1769.