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Tāral Kōrpro Tol

Articulating a Māori Design Language



Toi Raro Part 2

A thesis presented in partial fulfilment of the requirements for the degree of

Doctor of Philosophy Fine Arts at Massey University, Palmerston North. Aotearoa New Zealand

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Chapter 5

Review of Māori design projects

In this part of the thesis, *Toi Raro* (Part 2), the 'new' knowledge (Māori elements and principles of design) derived from the analysis of 'old' knowledge, was applied to three Māori design projects within a contemporary context. The design projects include; *Ko Aotearoa Tēnei: This is New Zealand!* A design exhibition exploring bi-cultural identity within Aotearoa New Zealand; The Māori alphabet blocks project, a collaborative project with an American company *Uncle Goose*; and *Whakarare*, the design of an original Māori typeface, were evaluated. These projects allowed for the trialling of the provisional elements and principles of Māori design across a range of design briefs.

A key challenge within the first project, *Ko Aotearoa Tēnei: This is New Zealand*, was to develop new patterns and forms that resonated with both Māori and Pākehā audiences. Another was the simultaneous use of Māori and non-Māori modes of representation. The Māori alphabet block project provided the chance to apply the elements and principles of Māori design within a commercial milieu. The design challenge here was to create a quality product that resonated with Māori, was affordable, and reflected important Māori concepts embedded in the principles of Māori design. Finally, with *Whakarare*, the key task was to successfully create designs that resonated with Māori in the absence of literal Māori iconography or mimetic replication of cultural referents. The success of this design project demonstrated that it is possible to express a Māori aesthetic without the reliance on stereotypical customary visual referents or iconography.

In returning to the question posed by this thesis; how can the visual language and *tikanga* of customary Māori carving be used to inform contemporary Māori design practice? The trialling of the Māori design elements and principles in this chapter demonstrates that ideas from customary carving are translatable into contemporary Māori design practice. By employing the Māori design elements and principles each project was grounded within a Māori worldview that allowed for the transmission of important cultural values and ideas. Of note, this part of thesis is intended to be read in tandem with part one, *Toi Runga*, and with part 3, *Te Hononga Toi Māori*. While *Toi Runga* provides information about the newly articulated elements and principles of Māori design, *Te Hononga Toi Māori* acts as quick reference to understanding customary Māori terms, pattern, symbolism and relevant design terminology.

Ko Aotearoa Tēnei! This is New Zealand

The first project in which the Māori elements and principles of design were trialled was *Ko Aotearoa Tēnei: This is New Zealand!*, a design exhibition that featured portraits of imminent Māori and Pākehā identities who have helped define Aotearoa New Zealand culture. The aim of the exhibition was to resolve the ambiguous sense of identity experienced by people of mixed heritage. This led to the creation of a digital *poutūārongo* in which Māori and Pākehā ancestors were presented together. The identities included the Māori demi-god Māui Tikitiki-a-Taranga, Captain James Cook, Raharuhi Rukupo, Kate Sheppard, Michael Joseph Savage, Sir Apirana Ngata, Dame Whina Cooper, Sir Edmund Hillary, David Lange, William James Te Wehi Taitoko (Billy T James) and Helen Clark. The tiered arrangement of these figures can be seen in figure 104. In the actual exhibition at the Toi Pōneke Gallery, Wellington, 22 June – 14 July 2012 the figures were shown side by side. This can be seen online at http://madebyjohnson.co.nz/ko_aotearoa_tenei.html. The images were printed on 1400mm x 686mm, giclee archival print, 260gsm lustre archival paper in order to assimilate the scale of *poupou* within *wharewhakairo*.

There were a number of criteria that informed the decision to use these identities. Firstly, the digital *poutūārongo* needed to represent both Māori and Pākehā cultures. Therefore, a balance between Māori and Pākehā identities was imperative. Secondly, the *poutūārongo* structure required a chronological ordering of figures. Thus, a decision was made to use Māui and Captain James Cook, two foundational figures within Māori tribal narrative and New Zealand history, to imitate the chronological structure. In eighteenth and nineteenth century *poutūārongo* figures were arranged with youngest at the bottom and the oldest at the top. In *Ko Aotearoa Tēnei: This is New Zealand!* this order has been reversed to accommodate Māori and non-Māori modes of representation.

Māui first made an appearance in Te Tokaanganui a Noho at Te Kuiti in 1873. It was a house built under the direction of Te Kooti Te Turuki Arikirangi who also included eponymous ancestors from other tribal groups outside the King country while in exile and under the protection of Tawhaiao. In this instance Māui appeared as a *poupou* figure. Just under a decade later in 1882 Agnew Brown, a Pākehā farmer from Gisborne, appeared in Te Mana o Tūranga as a base portrait on a rear wall *epa* beneath the ancestors Kiwa and Ruawharo. Therefore the precedent for ordering of ancestors one above the other and the commemoration of Pākehā and the Māori demigod have a precedent in the *wharewhakairo*. A deliberate decision was also made to represent both male and female ancestors. This was to bring balance to the over-representation of male figures within history. While there are three female figures, Kate Sheppard, Whina Cooper and Helen Clark, in retrospect, a balanced ratio of male and female figures would have been better. The naming of the portraits is based on the year of birth of the personalities. For example, the image of Captain James Cook is entitled *Seventeen Twenty Eight*. The year of birth for two ancestors, Māui and Raharuhi Rukupo are unknown. Consequently, the Māui portrait is entitled *Te Ao Tūroa* referencing the period of primordial ancestry. The portrait of Rukupo is entitled, *Early Nineteenth Century*.

The arrangement of Māori and Pākehā identities atop one another was potentially problematic from a Māori cultural perspective. For some Māori, the placement of Pākehā above ancestors would be inappropriate. However, this problem was averted in that the figures from the *poutūārongo* were separated into individual portraits and presented side-by-side in the exhibition. The use of both Māori and Pākehā figures was critical to the aim of this project, which was to create a new *whakapapa* representing bi-cultural Māori and Pākehā identity.

The simultaneous use of Māori and Pākehā approaches to art and representation was also important in the creation of the digital *poutūārongo*, because the works represent both cultures. The suite of identities is an attempt to create a synthesis of the two-world views. For example, while the *poutūārongo* structure acknowledges Māori practices related to the representation and ordering of ancestors, the presentation of the identities as individuals acknowledges a Pākehā approach to portraiture. The simultaneous use of stylised and naturalistic imagery in all of the portraits recognises Māori and Pākehā approaches to representation.

The colour scheme was restricted to red, black and white as these colours are associated with both cultures; red, black and white features prominently in customary Māori carving and rafter painting of the nineteenth century, while red and white appear on both the union Jack and the English rose emblem. The decision to use a simplified colour scheme was also made because of complex pattern and figure arrangements within the works. Additionally, the use of red, black and white grounds the images within a *whakapapa* of customary Māori art practice.



Figure 103. *Ko Aotearoa Tēnei! This is New Zealand*. Composition demonstrating stacked reversed *poutūārongo* structure. The base figure of the *poutūārongo* is Māui. At the top of the *poutūārongo* is Helen Clark.

Te Ao Tūroa (Māui-tikitiki-a-Taranga)

Māui's prominence as a foundational identity for Aotearoa New Zealand is highlighted by his acknowledgement in a number of tribal narratives. The most salient is Māui's fishing up *Te Ika a Māui*, the North Island of New Zealand, using the jawbone his grandmother (Alpers, p.51, 1966). The jawbone motif on the left shoulder of Māui (figure 104) references this event. The jawbone motif is also significant within the Māui and Tama-nui-te-Rā narrative, and because it alludes to *te kauwae runga* and *kauwae raro*, Māori concepts of sacred and profane knowledge associated with the *The Lore of the Whare-wānanga*. Māui's placement at the base of the *poutūārongo* is in accordance with the reversed *poutūārongo* structure.

Another important narrative featured in *Te Ao Tūroa* is the reference to Hine-nui-te-Pō (Alpers 1964, p.70). In *Te Ao Tūroa*, the legs of Hine are shown wrapping around the neck of Māui, crushing him as he attempts to enter the goddess of the underworld through her vagina. The hands of Hine make contact with the head of Māui at the very bottom of the image. Additionally, Both Hine and Māui's hands are modelled on those of figures on Northern *waka kōiwi*. This creates a visual and metaphorical link between Hine, Māui, and *waka kōiwi* which carried the bones of the deceased.



Figure 104. Detail of Te Ao Tūroa. Jawbone motif, mokomoko motif, lizard spiral, and pīwaiwaka motif.

The use of the *mokomoko* (lizard) motif in *Te Ao Tūroa* is also a reference to the Hine-nui-te-Pō narrative where Māui assumed the form of a lizard to enter the goddess in some tribal narratives. For eighteenth and nineteenth century Māori the lizard was associated with misfortune and death. The *mokomoko* motif appears on the right hand shoulder and between the legs of Māui. Additionally, a new spiral called *Piko-o-Te Pō* was designed using the *mokomoko* motif (figure 104) appearing on the hip of Hine-nui-te-Pō.

A final reference to the Hine and Māui narrative is the use of the *pīwaiwaka* (fantail) as a *heru* (comb), placed in Māui's *tikitiki* (topknot) in figure 104 (far right). While watching Māui's attempt to conquer the goddess of death the *pīwaiwaka* laughed, inadvertently waking the goddess which resulted in the death of Māui (Grey, 1885, p.35). According to Jahnke (2006), the notion of silence expressed in this

narrative, is reflected in *kūwaha*, the entrance way to the *pātaka* literally means silent mouth. The *kūwaha* is known metaphorically as *Te Tatau o te Pō*, the door to the domain of Hine-nui-te-Pō (Simmons 1985).

Te Ao Tūroa also references Māui's gift of fire into the world. In this narrative Māui tricked *Mahuika*, the goddess of fire, into giving him fire from her fingertips (Alpers, p.58, 1966). The flames on the finger-tips of Māui in *Te Ao Tūroa* allude to this narrative.

In terms of the Māori principles of design, the most prominent principle in *Te Ao Tūroa* is *mana wāhine* (female spiritual element). This design principle, which asserts the significant spiritual role of women and the generative and degenerative power of the female element, is expressed through the figurative references to Hine-nui-te-Pō and the *piko-o-te-pō* spiral. The use of this important narrative at the apex of the *poutūārongo* positions the work in *whakapapa* and *mātauranga* Māori.

The principle of *tātai rahinga* (arrangement by scale) is another prominent design principle in the *Te Ao Tūroa poupou*. Exaggerated scale was used to highlight the important parts of the Māui's body, the head and the hands. In terms of scale, the next important elements are the *mokomoko*, *pīwaiwaka* and *kauae* motifs that assist in the reading of the narrative.

While *tātai hangarite* (arrangement of symmetry), informs the general structure of *Te Ao Tūroa*, the principle of *tātai hikuwaru* (disrupted symmetry) is seen in a number of areas within the *Te Ao Tūroa* portrait. In terms of gesture, the break from symmetry is achieved through the positioning of Māui's arm over the body, and through the arrangement of Hine-nui-te-Po's legs around the neck of Māui. Further disruption of symmetry is evident in the use of different spiral designs on the hips of Hine-nui-te-Pō, and in the continuation of the *mokomoko* spiral down from the shoulder and across the lower base. By linking two disparate planes, the extension of this *mokomoko* pattern across the lower element demonstrates the principle of *tātai mokowā* (spatial interconnectedness). The connection of these planes alludes to the inseparability of the material and spiritual realms. This is also alluded to through the Māui and Hine narrative as Māui attempts to pass from one realm into another. Returning to the principle of *tātai hikuwaru*, disruption of symmetry is achieved through the use of different motifs on the shoulders of Māui, the *kauae* and *mokomoko*.

The Māori design principle of *tātai whakapapa* (proximal *tiki* arrangement) is a critical element within this composition. However, its expression within the Māui portrait is better understood when looking at the larger *poutūārongo* structure where Māui is placed in a continuous relationship with of the other figures. Thus a proximal *tiki* relationship is still established to express *whakapapa* and notions of

continuity. Critically, the *poutūārongo* structure creates a *manawa* line that guides the viewer in from the top of the *poutūārongo*, the first portrait, to the bottom, the last portrait.



Figure 105. *Te Ao Tūroa*. Portrait of Māui Tikitiki-a-Taranga. http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Seventeen Twenty Eight (Captain James Cook)

The decision to use Captain James Cook within *Seventeen Twenty Eight* was not one taken lightly. In her seminal work, *Decolonising Methodologies*, Tuhiwai-Smith (1999) pointed out that figures such as Cook and Columbus are intimately associated with colonisation, and the detrimental effects colonisation has had upon the lives of indigenous peoples. As noted earlier, Māori might view the arrangement of Pākehā above Māori identities adversely. However, in creating these works a conscious decision was made to acknowledge those people who are significant to both Māori and Pākehā. In other words, it is a *poutūārongo* about my *whakapapa*. In view of the esteem given to *tupuna* who captained *waka* to Aotearoa, it would be an oversight biculturally to omit Cook from the corpus of portraits. Though not actually a New Zealander, Cook's voyages presaged the settlement of Pākehā in *Aotearoao* New Zealand.

In creating the figure of Cook, the first question that presented itself was: is it appropriate to use Māori patterns and motifs on a non-Māori ancestor? From a Māori perspective, the obvious response is yes, because this is the only way an ancestor could be represented. There are also precedents for depicting Pākehā in *whare*. Agnew Brown appears at the base of the rear wall *epa* in Te Mana o Tūranga (1882) and Colonel Bryce was onto a *poupou* by Pakariki Harrison in the Te Awamutu High School *whare* Otawhao (1980s). However, most Māori carved patterns allude to significant cosmo-genealogical narratives such as the Rua-te-pupuke and Tangaroa story where carving was brought to the world from another realm (Potae & Ruatapu, 1871). Therefore, a decision was made to create a series of new patterns that alluded to narratives and ideas associated with Cook. These patterns were then applied to the Māori structure of the *poutūārongo* form.



Figure 106. Detail of Seventeen Twenty Eight. Compass and rope spiral, Endeavour ship motif, and rose motif.

Stylistically, a nautical theme was used in creating patterns for Cook. The spirals patterns on the shoulders and hips were created using a compass and rope motif (figure 106, left). During sea voyages the compass is a critical navigational device, while the rope was a ubiquitous part of sailing ships such

as Cook's Endeavour. The rope pattern was also used to render the distinct hair-piece of Cook. The anchor motif used on the buttons and cuffs of Cook are further references to sea voyaging. The central motif, a sextant held by Cook, was also a significant element in voyages used as a navigational tool. The sextant and Endeavour (figure 106, middle) are accurately representations aimed at giving the Cook portrait a sense of authenticity.

One important pattern, not related to the nautical theme, is the English rose motif. This motif (figure 106, right), featured on the shirt of Cook, is inextricably associated with England. Its application to the shirt suggests that Cook is cloaked in the symbol. The Southern Cross, an important navigational marker and part of the Southern skies, is also shown in the star formation by Cook's right eye. The use of *haehae* and *unaunahi* on the arms of Cook reference Te Moananui-a-Kiwa, traversed by Cook. Additionally, the practice of using fish to describe Māori patterns relates to the Ngāti Porou account for how carving came into the world (The University of Auckland, 1988, p.20). In this story, Rua te pupuke retrieved carved *poupou* figures, including his son Manuruhi who was turned into a tekoteko, from the *whare* Hau-te-ananui-o-Tangaroa, the house of Tangaroa.

Looking to the Māori principles of design, *tātai rahinga* (arrangement by scale) is prominent in *Seventeen Twenty Eight*. This design principle was used in customary Māori art to draw attention to the important figures and design elements. Here, Cook's head is exaggerated in scale to almost the same size as his body. In terms of balance, the general structure is informed by the principle of *tātai hangarite*, symmetrical arrangement. Bi-lateral reflection operates in the portrait of Cook, and there is correspondence in both the use of pattern and spirals on both sides of the axis of symmetry. However, the principle of *tātai hikuwaru* (disrupted symmetry) operates in the placement of the sextant motif (placed along the central vertical axis), by the Endeavour motif in the background, the Southern Cross motif, and the lizard between Cook's legs.

The principle of *tātai whakapapa* (proximal *tiki* arrangement) is expressed through the larger *poutūārongo* structure in which the figures are linked together. They are arranged chronologically from *te mātāmua* (the eldest) at the bottom to *te pōtiki* (the youngest) at the top. The use of this structure reinforces the *tātai manawa* principle, whereby the overlapping and stacking of figures creates a continuous path through the composition.

The principle of *tātai mokowā* is demonstrated through the arrangement of design elements around Cook's head. By rendering Cook's head in black, and overlaying it with cloud and star elements, it appears to merge into the night sky background. Though no contour is used to delineate the shape of Cook's face, the shape of the face is still perceived because of the layering of surrounding design elements, including the ocean wave motif and the clouds. Here, we see an example of the Gestalt law of closure, whereby the mind intuitively seeks to complete open forms.



Figure 107. Seventeen Twenty Eight. Portrait of Captain James Cook. http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Early Nineteenth Century (Raharuhi Rukupo)

Raharuhi Rukupo, a Rongowhakaata carver with *whakapapa* to Ngāti Maru, Ngāti Kaipoho and Ngai Tamanuhiri, is one of the most significant artists in Aotearoa New Zealand's history. The effect of Rukupo on New Zealander's sense of identity is highlighted by the placement of one of his major works, the *whare whakairo* Te Hau ki Tūranga, within the Museum of New Zealand Te Papa Tongarewa. He is also associated with a number of other significant carving projects, including the waka *Te Toki-a-Tapiri* (1840), carvings for a church in Manutuke (1849) and the *whare whakairo* Te Mana-o-Tūranga at Manutuke in Poverty Bay.

Early Nineteenth Century is grounded within Rongowhakaata customary practice by the use of the *kōwhaiwhai* pattern, *pitau-a-manaia*, on the Rukupo figure. This pattern first appeared in Te Hau ki Tūranga in 1842 in transitional embryonic form and was subsequently formalised into the distinctive *pitau-a-manaia* by Natanahira te Keteiwi for the *maihi* of Te Poho o Rawiri (1863) and the Manutuke church (1849). Here, *kōwhaiwhai* is used to render the shoulder, arms, mouth, eye, and cheeks of Rukupo. A *manaia* head composed of *kōwhaiwhai* is also translated across the body. This *manaia* head expresses Rukupo's *mana* and leads to a significant part of the human body, the genitals. In addition to this, the mouth of the *kōwhaiwhai manaia* form is used to frame another important design element, the hand holding the *toki* (adze).



Figure 108.Detail of *toki* (adze). Left image, *toki* from carved *poupou* in Te Hau ki Tūranga of Raharuhi Rukupo. Right image, *toki* held by Rukupo figure in *Early nineteenth Century*.

In carving the *toki* was often used as a motif to show that a figure was a *tohunga* (expert) and/or a *rangatira*. The *toki* design is an accurate linear rendering of the *toki* from the self-portrait of Rukupo (figure 108) inside Te Hau ki Tūranga. This creates another direct link between *Ko Aotearoa Tēnei* and nineteenth century Rongowhakaata carving. The use of the halo around the hand holding the *toki* references Christianity, which had a major affect on Rukupo. Describing the name Rukupo, and his involvement in the Anglican Church, Harrison wrote:

It is said that the people gave him the name Raharuhi because his return was like that of Lazarus of the Scriptures. This name may also have been a baptismal name, as he was a teacher at the Anglican mission stations at Tūranga (Gisborne) (Te Ara website, retrieved, July, 2012).

Brown (1996) added that the effects of Christianity on Rukupo are apparent in his artistic practice. Within Te Hau ki Tūranga attempts to capture the attention of the new Māori-Christian audience is reflected in the increased use of text and naturalistic illustration (Brown, 1996, p.15). In Te Hau ki Tūranga the use of a secondary figure between the legs of all the *poupou* figures, and the absence of genitalia on *epa, poutūārongo* and *poutāhuhu* figures further demonstrates the impact of Christianity (Jahnke, 2013). Returning to pattern, the use of the *ponahi* spiral on the right shoulder and hips of Rukupo is a prominent pattern in the Rukupo portrait and it is a pattern convention endemic within Te Tairāwhiti carving practices. The use of a *kōwhaiwhai* spiral to denote one of the shoulders, while disrupting the symmetry of the main structure, is also a deliberate reference to the carving conventions apparent on *poupou* in Te Hau-ki-Tūranga where carvers used two, or three, different spiral patterns on a single figure to render hips and shoulders.

The most prominent principle of Māori design in *Early Nineteenth Century* is *tātai mokowā* (spatial interconnectedness). The *kōwhaiwhai* patterns used to illustrate the shoulder, mouth, eyes and arm of Rukupo merge with the background at the top right hand side of the work. At the same time the cloud forms and naturalistically rendered bird and tree elements in the top left create ambiguity in terms of different the layers. This approach to relief, or layering in this case, is used to create unity between the design elements in order to express the notion of inseparability between the material and spiritual realms.

The principle of *tātai rahinga* (arrangement by scale) accounts for the exaggerated scale of the head and hand of Rukupo. In terms of scale, the large *kōwhaiwhai manaia* competes with the head, and again highlights the immense *mana* associated with Rukupo. The cloud motif used throughout the works heightens the exaggerated sense of scale of all of the *poutūārongo* figures.

The underlying structure of *Early Nineteenth Century* is bi-lateral symmetry. This is reinforced by the central placement of Rukupo, and reflection of design elements across the vertical axis. For example, the arms, legs, spirals, and facial elements are essentially in the same place on either side. However, the principle of *tātai hikuwaru* is used extensively to generate dynamic rhythms throughout the composition. Disruption to the symmetry occurs in a number of places, most notably, the *kōwhaiwhai* element on the torso of Rukupo, the hand holding the *toki* (adze), and the merging of foreground and background pattern towards the left hand side of Rukupo's face.

The principle of *tātai whakapapa* (proximal *tiki* arrangement) is an inherent part of all figures within *Ko Aotearoa Tēnei*: *This is New Zealand*, because of the use of the *poutūārongo* structure. This structure creates a *whakapapa* connection between all figures and expresses relationships in terms of *mātāmua* and *pōtiki*.

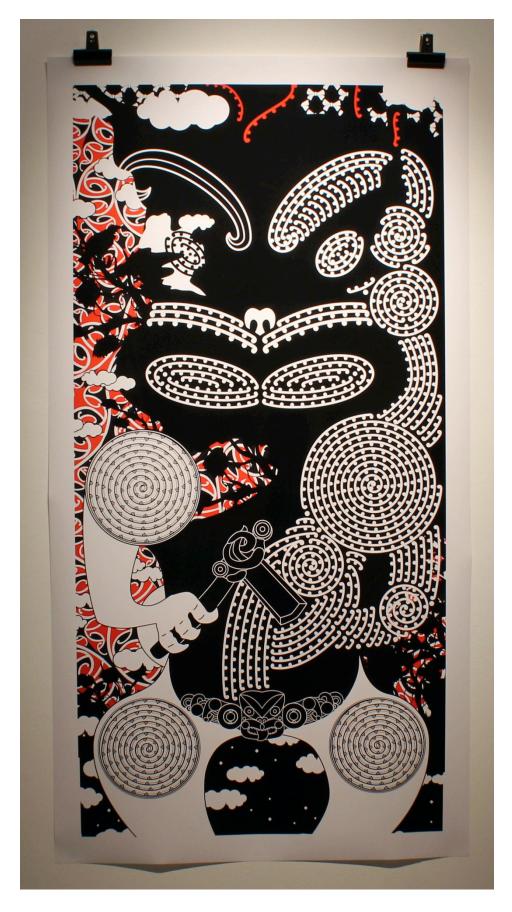


Figure 109. Early Nineteenth Century. Portrait of Raharuhi Rukupo http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Eighteen Forty Seven (Kate Sheppard)

The *poutūārongo* figure in *Eighteen Forty Seven* depicts Kate Sheppard. Sheppard was a key member of the New Zealand's women's suffrage movement, which helped to usher in universal suffrage in 1893. Born in Liverpool, England to English and Scottish parents, Sheppard's family moved to New Zealand in 1869. Her relevance to New Zealander's sense of identity is highlighted by the use of her portrait on the New Zealand ten dollar bill. She was known for her intelligence, skills as an orator, and humanitarian sense of justice, which informed all of her efforts (Malcolm, 2012). Christian socialism and her strong religious education contributed greatly towards her work and liberal philosophies. As a woman of great *mana*, the *poutūārongo* of Sheppard is inherently associated with the principle of *mana wāhine*. This design principle asserts the important spiritual role of women, and the notions of generative and degenerative powers associated with the female figure. The large red spiral motif on the used to render the hip, and the smaller *mokomoko* design allude to the narrative of Māui and Hine-nuite-Pō. Here, the proximal relationship of the *tiki* with the body of Sheppard signifies the innate power associated with the female form.

As with the image of Cook, a conscious decision was made to develop new patterns to acknowledge Sheppard's European *whakapapa*. A *tā moko* pattern based on the Scottish flag was created for use as *moko kauae* (female chin tattoo). While highlighting this Scottish heritage, the application of *moko kauae* to Sheppard connects to Maori customary arts practice. To create a counter balance to this, a deliberate choice was made to render the lips red. This alludes to her English heritage and breaks from the Māori tradition where the lips were tattooed black.

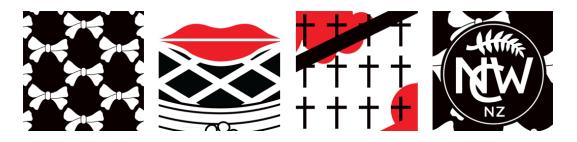


Figure 110. Detail of motif and pattern from *Eighteen Forty Seven*. From left to right, Woman's Christian Temperance Union ribbon, moko kauae pattern, crucifix pattern, The National Council of Women of New Zealand (NCWNZ) emblem.

The pattern used to illustrate Sheppard's body was created using the emblem of the *New Zealand Woman's Christian Temperance Union* (NZWCTU), which was at the forefront of the campaign for women's suffrage (figure 110). Here, Sheppard is clothed in the symbol of an organisation that represented both her spiritual and social ideologies. Applied to the background and foreground layers,

the pattern creates a sense of both ambiguity and interconnectedness between the layers and design elements. Stylistically, an attempt was made here to mimic the use of *tātai mokowā* (spatial interconnectedness) seen in Northern carved *papahou*. The complex layering of pattern, cloud forms, diagonal lines, and free form *kōwhaiwhai* contribute to this sense of spatial ambiguity.

The emblem from the *National Council of Women of New Zealand* (NCW), another important female organisation that Sheppard was a part of, was also used as motif within this portrait. It was placed at the centre of the shoulders to assist the viewer in navigating the key parts of the body (figure 110). The crucifix motif was used to create a pattern within the background layer. This obvious reference to Christianity traverses the space between Sheppard and the figure above her, Michael Joseph Savage, both of whom were devout Christians. Her high collared-shirt and swept-up bun hairstyle, hallmarks of her appearance, have been incorporated to assist in the identification of Kate Sheppard. These naturalistic elements were also used to counterbalance the use of pattern and non-figurative imagery.

The principle of *tātai rahinga* was used to draw attention to the two most important parts of the figure, the head and the genitals. In addition, colour, as seen in the application of red to the lips and the lower *kōwhaiwhai* spiral further highlight the significance of these areas of the body. Importantly, this *kōwhaiwhai* spiral also creates a stylistic connection between the image of Sheppard and that of Rukupo below.

Symmetry, *tātai hangarite*, or symmetrical arrangement, is still clear despite the numerous asymmetrical elements. Symmetry is maintained in the first instance by the placement of Sheppard's head, and the red *kōwhaiwhai* spiral, on the central axis. The circular shoulders and facial features of Sheppard are also reflected on either side of the central axis. The principle of *tātai hikuwaru* is seen in the arrangement of the limbs, the varied use of pattern, the cloud forms and the diagonally arranged stripes of colour. The design convention of simultaneity, where profile and frontal aspects feature together on the same figure, is seen in the simultaneous frontal and profile presentation of the arms.



Figure 111. Eighteen Forty Seven. Portrait of Kate Sheppard. http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Eighteen Seventy Two (Michael Joseph Savage)

Michael Joseph Savage, the first *Labour* Prime Minister of New Zealand, was chosen as a *poutūārongo* figure because of his contribution to New Zealand society. During the early to mid-twentieth century he was a major advocate for the public ownership of industry, free health care, the creation of the welfare state and social security reforms. Importantly, he also strengthened relationships between Māori, particularly the followers of the Rātana Church (*Tohu o te Māramatanga*) and the government.

In the *Eighteen Seventy Two* portrait there is a focus on creating a balance between Māori and Pākehā methods of representation incorporating naturalistic elements (the clothing, hair, Rātana pendant and eucalyptus leaves in the background) and customary non-figurative elements (the *rauru* and *whakarare* pattern as well as the *manaia* forms). The incorporation of non-customary Māori objects and methods of representation with customary modes of practice is not new to Māori arts. The carved *whare*, Te mana-o-Tūranga from Manutuke (1882), is an exemplary case. Inside this revolutionary *whare* carvings feature the simultaneous use of naturalistic and non-figurative elements, as well as typographic and painted designs.

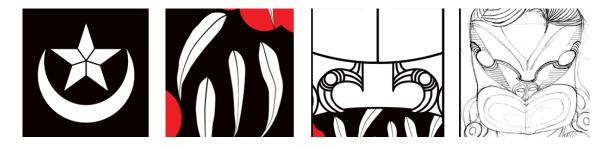


Figure 112. Detail of motif and pattern from *Eighteen Seventy Two*. From left to right, Rătana pendant, eucalyptus leaves pattern, penis rendered through negative space, original sketch showing outline of Savage's glasses.

In *Eighteen Seventy Two*, naturalistically rendered details such as the quiff hairstyle and three-piece suit are trademarks of Savage's real-life appearance. Savage's glasses, which were another inherent part of his image, also feature in this portrait; however they are illustrated in a much less overt manner, capitalising on the contour created by the separation of the face into areas of white and black colour. In the original sketch of Savage (figure 112 far right) the glasses can be seen overlaid with the eyes. However, the final outcome demonstrates the merging of naturalistic and stylistic illustrative techniques (figure 113). The naturalistic rendering of eucalyptus leaves, which form part of the background pattern, reference Savage's life in Australia. Savage was born in Australia in 1872 to Irish immigrants and did not move to New Zealand until 1907. The crucifix pattern in the Sheppard portrait appears in the background of *Eighteen Seventy Two*, connecting the two figures and alluding to the role of Christianity in the lives of Sheppard and Savage. In addition, Savage's "applied Christianity" political approach further highlights the influence of Christianity on his life. In a slightly ironic twist, a penis has been illustrated on Savage using the negative space created by the mouths of two *manaia*. Missionaries heavily censored the use of genitalia in Māori carving. In response to this, Māori carvers developed new methods for rendering or alluding to the sexual organs. While the missionaries viewed the penis as lewd, for Māori it represented virility and *mana*. In this instance Pākehā ideologies have been subsumed using an illustrative method that was actually developed in response to the suppression of sexual Māori imagery.

The principle of *tātai hangarite*, or symmetrical arrangement, is prominent in this image through correspondence in the size, form, and arrangement of design elements on both sides of the central axis of symmetry. As discussed earlier, this approach to bi-lateral reflection reduces tension within compositions and makes images easier to read because each half represents the composition as a whole. However, the principle of *tātai hikuwaru* can also be seen in a number of places including; the use of the Rātana star and crescent pendant, the buttons on Savage's shirt and the design of Savage's hair. Importantly, the background patterns are asymmetrically composed but are counterbalanced by the overriding dominance of symmetry.

The Māori design principle of *tātai rahinga*, arrangement by scale, draws attention to Savage's head as the focal point of *mana* and *tapu*. Scale was also used to emphasize the important features of the head, the tongue and the eyes. The protruded tongue feature, or *whātero*, is a gesture associated with *haka*, and *wero* (the formal challenge to visitors seen on the *marae ātea*). While the hands are smaller than those of the other figures in *Ko Aotearoa Tēnei: This is New Zealand*, their significance and importance are emphasised through their rendering as *manaia*. Small *manaia* are also used to draw attention to the pubic region. Here the penis is defined by the beaks of the *manaia*.

The principle of *tātai whakapapa* is expressed through the connection of Savage's feet with the head of Sheppard. At the same time, Ngata's feet overlap the head of Savage connecting these two figures. This arrangement of figures one above the other expresses *whakapapa* relationships between all of the figures. The stacking of figures in this digital *poutūārongo* also creates a *tātai manawa*, or heart pulse, which guides the viewer through *Ko Aotearoa Tēnei: This is New Zealand*.



Figure 113. Eighteen Seventy Two. Portrait of Michael Joseph Savage http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Eighteen Seventy Four (Sir Apirana Ngata)

Apirana Ngata was born in Te Araroa in 1874. As the eldest of 15 children, he was first and foremost a man of Ngāti Porou. After attending Te Aute College, he studied towards a Bachelor of Arts in political science and by 1897 had completed both this, a law degree, and been admitted as a barrister and solicitor. He was the first Māori to graduate in a New Zealand university, and the first New Zealander to gain a double degree. While he could easily have pursued law, Ngata made a career choice that would be more directly beneficial to Māori, who were often referred to as "the dying race" (Buck, 1924). He threw himself into politics, joining the Young Māori party and becoming a member of parliament in 1905, where he spent the next 38 years improving Māori land rights, education, and living standards for Māori. "Rarely has the *Māori* point of view been more forcibly expressed," wrote Puketapu in 1966 (Te Ara Online Encyclopaedia, 2013). One of many of his achievements was the 1931 Māori Land Development Scheme, which saw Māori lands transformed into farms. He continued to publish academic articles throughout his life, leaving a legacy of Māori cultural and economic revival.



Figure 114. Detail of motif and pattern from *Eighteen Seventy Four*. From left to right, *taratara-a-kae* spiral, *taringa aute* (ear lug), *pakake* (whale) motif and spiral, *poutama kōwhaiwhai* pattern.

Throughout the *Eighteen Seventy Four* design a number of stylistic references and motifs were used to express Ngata's *whakapapa* as a Ngāti Porou leader (see figure 114). In the first instance, the spiral forms used to illustrate the shoulder and hip areas are based on those known as *whakaironui*. These types of spiral, featuring the *taratara-a-kae* pattern, were used extensively by carvers from the Tairāwhiti region on *waka*, *pātaka* and *whare whakairo*. The *taratara-a-kae* pattern alludes to the story of Kae and Tinirau. The use of the *taratara-a-kae* pattern in Tairāwhiti, according to Jahnke (2006), has its origins in the Rawheoro School at Uawa (Tolaga Bay), which was attended by Iwirākau from Ngāti Porou and Tūkaki from Te Whānau-a-Apanui. At this *whare wānanga* Iwirākau and Tūkaki received the *manaia* and the *Taowaru* (*taratara-a-kae*) forms, probably from the *tohunga whakairo*, Hingangaroa Reference?. For Apirana Ngata, Pakariki Harrison and Robert Jahnke the *Taowaru* is the Rawheoro style *of taratara-a-kae* seen on Te Tairuku Potaka in the Auckland Memorial Museum. The

wheku head of Ngata and the *taringa aute* (ear lug) element are also closely associated with Ngāti Porou carving practices. A final reference to Ngāti Porou is seen in the background *takarangi*, or spiral, which was created using a humpback whale motif. This motif alludes to the important Ngāti Porou narrative of Paikea, a founding ancestor of the tribe. In one account Paikea was aided by humpback whales (Author not given, Te Ao Hou, September 1962), while in another story he turned himself turned into a whale (Reedy & Ruatapu, p.202, 1993).

A deliberate decision was made to render one of Ngata's hands naturalistically and the other in the form of a *manaia*. This alludes to Ngata's ability to live in two worlds, that of Māori and that of Pākehā. The two hands also reference a now important quote from Ngata (1949), "*E tipu, e rea, mo nga ra o tou ao, ko to ringa ki nga rakau a te Pakeha hei ora mo te tinana, ko to ngakau ki nga taonga a o tipuna Māori hei tikitiki mo to mahuna, a ko to wairua ki to Atua, nana nei nga mea katoa*" (Higgins & Meredith, 2012). In this proverb, Ngata spoke of the need for Māori to embrace the tools of Pākehā while holding onto the treasures of their Māori ancestors.

The three-piece suit and tie are hallmarks of Ngata's real-life appearance. The use of the *tukutuku* pattern called *poutama* on the shirt collar of Ngata is a reference to Ngata's intellect, and achievement as the first Māori to graduate in a New Zealand university. The *poutama* pattern refers to the genealogies and also the various levels of learning and intellectual achievement, as well as representing the steps which Tāne ascended in his quest for celestial knowledge (Te Ara Māori-English Dictionary, 2012).

The Māori design principle, *tātai rahinga*, is demonstrated through the exaggerated scale of the head. This scale, while instantly capturing our attention, expresses the importance of the head. The significance of the tongue, seen in a stereotypical Tairāwhiti style lapping the bottom lip, is also highlighted through an exaggeration in scale. In the *whātero* position, this protruding tongue is associated with the deity *Tūmatauenga*, through *haka* and *wero*. Ngata's *haka* stance in this portrait references an iconic photo where Ngata is seen leading a *haka* wearing his suit and tie.

Tātai hangarite, symmetrical arrangement, has almost been totally abandoned for asymmetry in this composition although the lower limbs are symmetrically composed along with the tilted head. The result is a more dynamic composition than those in which symmetry dominates. The use of asymmetrical posturing in *poupou* was prominent in the Tairāwhiti region during the early nineteenth century, and is particularly prominent the carved *epa* and *amo* of the Iwirākau style of Ngāti Porou.

Tātai mokowā, or spatial interconnectedness, is achieved through the use of overlapping elements. It is seen throughout the background layers where the whale motif, clouds, and body parts of Ngata overlap with one another. This design convention alludes to the inseparability of spiritual and material planes. At the same time use of interconnecting and overlapping creates a sense of unity and integration between the disparate design elements.

As with all of the figures in *Ko Aotearoa Tēnei*, the principle of *tātai whakapapa* (proximal *tiki* arrangement) is clarified when viewing the *poutūārongo* figures in terms of their interrelationship with one another. From this perspective all of the figures are inextricably connected to one another in an unbroken vertical composition. The arrangement expresses *whakapapa* or genealogical connection. Importantly, the notion of ancestry passing onto the next generation through deity is heightened by the use of Māui-tikitiki-a-Taranga as the base figure.



Figure 115. *Eighteen Seventy Two*. Portrait of Sir Apirana Ngata http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Eighteen Ninety Five (Dame Whina Cooper)

Born in Te Karaka, northern Hokianga in 1895, of Te Rarawa and Taranaki descent, the resourceful and intelligent Cooper became a Mãori leader in Northern Hokianga. She was instrumental in setting up land development schemes in the Hokianga region, along with Sir Apirana Ngata. After moving to Auckland in 1949, she became foundational president of the *Mãori* Women's Welfare League and helped to set up thousands of regional branches. The league was instrumental in improving living conditions for increasingly urbanized *Mãori* in the 1950s. Her placement within the *poutūārongo* of *Ko Aotearoa Tēnei: This is New Zealand*, is in no doubt after reading a speech she made at the opening of the 14th Commonwealth Games in Auckland in 1990. As historian Michael King wrote, "Her message then was one she repeated constantly in the last years of her life: 'Let us all remember that the Treaty was signed so that we could all live as one nation in Aotearoa" (Te Ara Encyclopaedia of New Zealand, retrieved January 12, 2013).

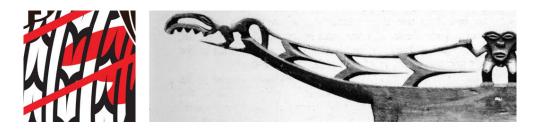


Figure 116. Image demonstrating transposition of design element from Kaitaia carving into new takarangi spiral.

Stylistic references to Coopers' Te Rarawa descent helped to ground the image within a *whakapapa* of customary arts practice. Examples of this include the *takarangi* (spiral) seen in the background behind Cooper's head. The chevrons elements in this new spiral are transposed directly from the chevron forms seen on the Kaitaia carving (figure 116). It is a new design composed of very old Northern design elements. Another reference to Northern carving traditions is the pattern used across the torso and the *ponahi* spiral on Cooper's hip. The *haehae* and *ritorito* on the torso mimic patterns seen on some *papahou* found in and around the Hokianga region.

A number of naturalistically rendered elements were also used to help the viewer identity the figure as Cooper. One hallmark of Cooper's appearance, particularly in later life, was the use of a headscarf. The decision to wrap Cooper in a *kākahu huruhuru* (feathered cloak) was inspired by a definitive photo of Cooper on the steps of parliament. In this photo, Cooper is shown mid-speech wearing both the headscarf and a woven cloak. The *kākahu huruhuru* is also appropriate because for Māori, *kākahu* garments are used to signal social status and wealth, and are often presented as gifts acknowledging special achievements (Wirihana, 2006). The principle of *tātai hangarite* (symmetrical arrangement) informs the underlying structure despite the varied use of asymmetrical elements. In the first instance *tātai hangarite* is asserted through the Cooper's head, which is located on the central vertical axis. The head has a number of bi-laterally reflected elements including eyes, eyebrows, lips, and *moko kauae*. Though Cooper's hair and the scarf elements are not bi-laterally reflected, the reflected facial features seem to also lock the other design elements in place. The *takarangi* behind Cooper's head is also centred on the vertical axis, reaffirming the importance of bi-lateral symmetry in the structure of the design. The gestalt laws of closure and *prägnanz* (simplicity) play a part in the interpretation of a symmetrical structure, particularly when looking at the elements of the body. While only one side of the body is shown, the alignment of the fingers and torso with the central vertical axis suggests that these design elements are reflected on the other side of the image. The law of *prägnanz* asserts that in processing visual information the mind intuitively seeks the simplest available configuration. Thus, while certain design elements are hidden, the simplest interpretation here is that these are reflected beneath the *kākahu huruhuru*.

The Māori design principle of *tātai rahinga* is seen in the very large scale of Cooper's head, and portentous gaze, where tension is heightened by the use of white pupil-less eyes. The eyes, rendered in this way, give Cooper a mythical quality while expressing the principle of *mana wahine* (the female element). This important Māori design principle underlines the spiritual role of women in Māori society. The spiritual significance is related to the dual roles that women have as givers of life (through the process of birth) and bearers of death (as seen in the Māui and Hine-nui-te-Pō narrative). The rendering of the *tara* on Cooper is also a critical design feature that reasserts this design principle and is also symbolically associated with Māori notions relating to the different states of human existence.



Figure 117. *Eighteen Ninety Five*. Portrait of Dame Whina Cooper. http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Nineteen Nineteen (Sir Edmund Hillary)

Perhaps the world's most famous beekeeper, Sir Edmund Hillary was better known for being the first man to conquer Mt Everest. Born in 1919, Hillary was raised in Auckland and began his climbing career by scaling many of New Zealand's majestic peaks. While his day job was as a beekeeper, Hillary travelled throughout the world knocking off mountains and had climbed 11 peaks in the Himalayas before making his attempt on the world's tallest. At 11:30 on the morning of May 29, 1953, Edmund Hillary and native Nepalese climber Tenzing Norgay were the first to reach the summit. In the following years he did much to improve the lives of Nepalese people, helping to build clinics, hospitals and more than 20 schools through his Himalayan Trust (Barnett, 2012). His importance to New Zealand's history is reflected by the use of his image on the five-dollar note since 1990.



Figure 118. Details from Nineteen Nineteen. From left to right, ice-pick, icicle, poutama cloud, bee and honeycomb.

In *Nineteen Nineteen*, there are a number of references to Hillary and Tenzing's conquest of Mount Everest. Three of the more obvious examples are the naturalistically rendered flag, ice-pick, and the beanie hat, which is now synonymous with the image of Hillary (figure 118). Within the image of Hillary, and in the broader context of the *poutūārongo*, the flag is a poignant symbol of New Zealand. Another naturalistic reference to Everest is the icicles forming on the arms, shoulders and face of Hillary. Finally, this image also features a mountain range in the background. The cloud design incorporating *poutama* pattern combines figurative and non-figurative modes of representation. The *poutama* pattern references the cosmo-genealogical narrative of Tāne ascending to the heavens while alluding to Hillary's superhuman achievement in scaling Everest (Smith & Whatohoro Jury, 1913). A reference to Hillary's life as bee-keeper is seen in two specific design elements, the naturalistic bees, and the honeycomb pattern applied to his arms and legs.

The proximal arrangement and grouping of *tiki* in *Nineteen Nineteen* is an example of the principle of *tātai whakapapa*. In customary carving, this demonstrated the significance of *whakapapa* and the connection between deity and humankind. Here, the arrangement of subsidiary *tiki* and large *tiki* expresses the intimate bond between Hillary and Tenzing. These two figures are also unified by

overlapping planes where Tenzing's hand grasps Hillary's arm. The hand of Tenzing on Hillary also connects figures on disparate planes, demonstrating the principle of *tātai mokowā* (spatial interconnectedness). The principle of *tātai mokowā* is used to express unity between the different design elements and levels of relief through overlapping planes. Additionally, this spatial connection alludes to the inseparability of the material and spiritual realms.

Examining the symmetry within *Nineteen Nineteen*, both *tātai hangarite* and *tātai mokowā* have been abandoned for asymmetry apart from Tenzing's face and torso. By using asymmetry a dynamic composition that expresses the turbulent weather conditions faced by Hillary and Tenzing as they climbed Everest is referenced. The pose of Hillary was based on *poupou* figures seen on the front wall of the Te Oha Pātaka, carved in 1825. Here, simultaneity and aspective approaches to representation are employed. The hands of Hillary and Tenzing, which feature an inverted palm, were informed by *poupou* forms on the Te Tairuku Potaka *pātaka*, which was carved around 1770. Commenting on this design convention Jahnke (2006) wrote, "This convention of simultaneity, while perceptually illogical in a Western aesthetic sense, is conceptually logical from a tribal perspective" (p.100). By using these customary models a better understanding of Māori design conventions was gained while at the same time grounding the work in a lineage of Māori artistry.

The principle of *tātai rahinga*, or scale arrangement, accounts for the very large head of Hillary. The exaggerated scale is used to immediately draw attention to the head, establishing it as the most important design element. As Jahnke has written, "the head to body ratio connotes the sacrosanct nature of the head and its conceptualisation with tribal culture as a vehicle for communication with deity and its efficacy (*mana atua*) as a pathway for inter-dimensional communication" (2006, p.100).



Figure 119. Nineteen Nineteen. Portrait of Sir Edmund Hillary http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Nineteen Forty Two (David Lange)

Born in Ōtāhuhu, South Auckland, David Lange was a union man who worked at the freezing works to pay his way through university. In 1984 he went on to become New Zealand's youngest Prime Minister. A skilled orator with a quick wit, he met challenges head-on, facing his first major foreign policy crisis within a year of election after the French bombing of Greenpeace's Rainbow Warrior in Auckland. His diffusion of this situation and ensuing apology by the French was to set the tone of his international diplomacy. In his two terms in Government, he championed New Zealand's anti-nuclear policy, made gay sex legal, and gave *Te Reo Maori* official language status (McClean, 2012).

References to Lange's nuclear policies are reflected in the use of the dove motif. This is seen in the background, and as an element forming the spirals on his body. The dove is a symbol associated with the peace and a nuclear-free ideology. The New Zealand flag motif, while connecting the image of Lange with Hillary, expresses Lange's pride as a New Zealander. The most poignant example of this nationalism was seen in the Oxford debate where he went head to head with America over the policy of nuclear weapons.

The suit and large frame glasses are distinguishing features of Lange's real-life appearance. Here, these naturalistic references help identify the figure as Lange. The application of the naturalistic glasses to the stylised *wheku* head also creates a synthesis between Māori and Pākehā modes of representation. The meat workers apron, layered over Lange's suit, demonstrates that Lange was a man who understood and represented all levels of New Zealand society. It also alludes to his time spent working within the freezing works.

The principle of *tātai rahinga* can be seen in Lange's oversized head. This exaggerated scale highlights the head as the most significant element of the human body. Through *tātai rahinga* attention is also directed to the important elements of the head, the eyes and the tongue. In terms of scale, the spirals, arms and hand of Lange are also significant.

As with the portrait of Hillary, the principle of *tātai hangarite* has been abandoned for asymmetry. This asymmetrical emphasis allows for a more dynamic arrangement of design elements. The sinuous curve of the body and the hand passing under the leg are design conventions found within the Taranaki carving region. Though Lange has no affiliation with Taranaki, the carving techniques from this region proved to be an excellent model for developing an asymmetrical composition. The principle of *tātai manawa*, or the heart pulse of the carving is created by the curve of the right leg and the torso drawing our attention up towards the head of Lange.



Figure 120. *Nineteen Forty Two*. Portrait of David Lange http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Nineteen Forty Eight (William James Te Wehi Taitoko)

Born William James Te Wehi Taitoko in the small Waikato town of Leamington, Billy T James would grow up into the man whose cheeky giggle would be embedded into New Zealand's popular culture. A performer from a young age, James joined show band *The Maori Volcanics* in his 20s and began to tour the world. As a skilful comedian, guitarist and saxophone player, James shone on stage and soon pursued a solo career. The Billy T James Show, the sketch television show for which James would become famous, debuted in July 1981. He kept the nation laughing on the show and in a variety of films, including hit 1985 movie *Came a Hot Friday*. The next year, he was made an Order of the British Empire for services to entertainment. New Zealand's premier comedy awards, the Billy.T. awards, were founded in 1997 to continue his legacy. At the awards, top comedians vie for a yellow towel, James's trademark on famous sketch Te News.



Figure 121. From left to right, *tekoteko* from King Koroki's *whare*, head of Billy T as seen in Nineteen Forty Two, *uenuku* rainbow motif, head pattern design that is associated with Waikato and Hauraki carving.

A number of naturalistic design elements were used to help identify the figure as James. These included the design of the head and facial features, the use of his iconic yellow towel, and the black singlet (figure 122). A distinguishable feature of James's physical appearance was his thick moustache (figure 121, second from left). In searching for customary models a photo of King Koroki's *whare whakairo* (Phillipps, 1955, p.236) carved around the 1930's was found. The figuratively carved *tekoteko* and *epa* of this *whare* were used as models for James's head and facial features. While grounding the work within a *whakapapa* of customary arts practice, this design also connects James to another prominent ancestor from the Waikato tribal region.

The *uenuku* (rainbow) motif seen throughout *Nineteen Forty Eight* is significant for three reasons. *Uenuku* is a significant deity for Tainui with whom James has a shared *whakapapa*. Where customary Māori arts practices are concerned, one of the most important early carvings, *Te Uenuku*, is also from the Waikato region. Finally, the rainbow motif also alludes to one of James's most famous punch-lines "...somewhere over the rainbow". A final reference to Tainui customary art is the patterned background, which was created using a stylised head form. This head form, while more commonly associated with Hauraki carving, also appears in the Waikato region.

The design principles, *tātai hangarite* is prominent in *Nineteen Forty Eight*. Symmetry is reinforced by the placement of James on the central vertical axis. Here, the elements of the face and the large spirals are reflected across the central axis. The principle of *tātai hikuwaru*, or disrupted symmetry, is also seen here in a number of places. James's hair is arranged asymmetrically, the arms are arranged in varied positions, and the *uenuku* and cloud forms are distributed sporadically throughout the design. The 'disrupted' design elements within the larger symmetrical structure are associated with ideas about change and growth.

Tātai rahinga, as with the other compositions, is seen in the exgerrated scale of James's head. On viewing the work, *tātai rahinga* immediately draws our attention to the head as the most important design element. The other important elements, in terms of scale are the limbs of James, as well as the red towel and rainbow forms.

The principles of *tātai whakapapai* and *tātai manawa* are an inherent part of this image, though both are better understood when viewing *Nineteen Forty Two* within the *poutūārongo* of *Ko Aotearoa Tēnei*. For example, the *tātai whakapapa*, or proximal *tiki* arrangement can be seen where the limbs and design elements of Taitoko merge with the figures above and below him. This stacked arrangement of forms expresses *whakapapa* and unity between all people within the *poutūārongo*. The overlapping of design elements between the differing portraits also expresses the principle of *tātai manawa*, or the heart pulse of the carving. This overlapping creates a continuos line that runs from the bottom of the *poutūārongo* to the very top.

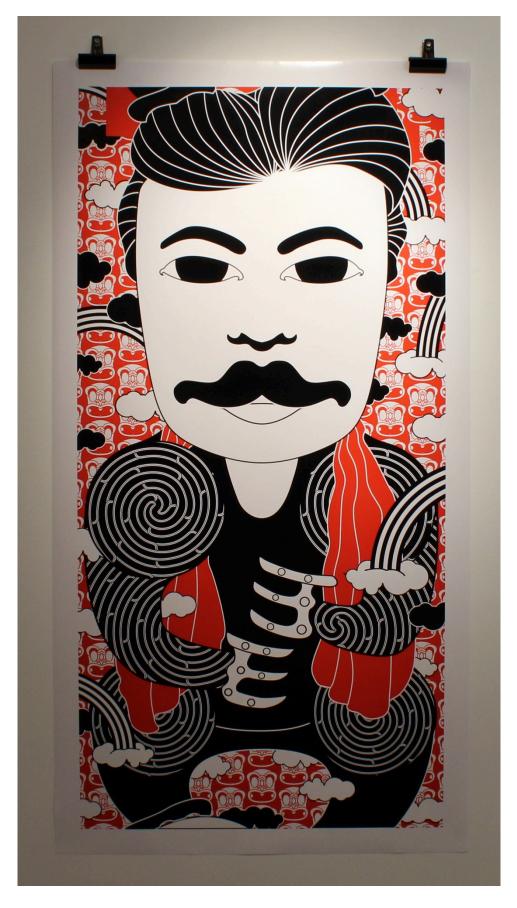


Figure 122. *Nineteen Forty Eight*. Portrait of William James Te Wehi Taitoko (Billy T James) http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Nineteen Fifty (Helen Clark)

As New Zealand's first elected female Prime Minister, Helen Clark ran the country as leader of the Labour Party from December 1999 till November 2008. Born into a farming family in the Waikato, Clark studied and lectured in political science at Auckland University before winning the Mt Albert seat for Labour in 1981. She took over the leadership in 1996, surviving an attempted coup to lead the party to victory in 1999. Her leadership style was level-headed, she pushed for human rights, and she shone at international relations. During her time in parliament she introduced the New Zealand Superannuation Fund, Kiwisaver, the Working for Families package, interest-free student loans, and increased the minimum wage by 5 per cent. She was a huge supporter of the arts, and her work as Minister of Culture and Heritage helped to preserve New Zealand's cultural history while encouraging new growth (McClean, 2012).

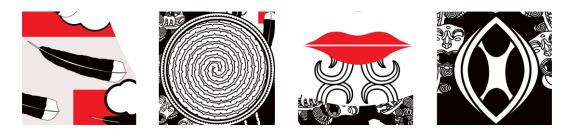


Figure 123. Details from Nineteen Fifty. From left to right, huia feather, taratara-a-kae spiral, moko kauae and tara.

The *huia* feather motif used within the background is significant as it alludes to Clark's role as a *rangatira* (chief) of New Zealand (figure 123, far left). Within Māori culture the feather, often worn in the hair, was a powerful symbol of chieftainship. Also a spiral form of *huia* feathers helps to draw attention to Clark's head. As the leader of a nation, this shows how Clark worked to pull New Zealanders together. Hence, the body is composed of numerous smaller *tiki*. Stylistically, the arrangement of smaller *tiki* is modelled on a number of single figure *pare* that feature *tiki* within the interstitial spaces. This design convention was particularly prominent in the Tairāwhiti carving region. Clark's larger than life hands embrace the sea of figures to protect them,

This arrangement of tiki is a powerful expression of *tātai whakapapa* (proximal *tiki* arrangement). Here, the interwoven *tiki* alludes to notion of *tātai kotahitanga* (unity) and the binding of all New Zealander's together. That expression of *tātai kotahitanga* (unity) is fitting considering the placement of Clark at the terminal point of the *poutūārongo* structure.

The *moko kauae* (female chin and lip tattoo) was applied to Clark as a mark of her significant *mana*. This binds Clark with the Māori whakapapa of the *poutūārongo*. However, the lips are rendered red, rather than black, acknowledging Clark's Pākehā ancestry. The other prominent Māori pattern within *Nineteen Fifty, taratara-a-kae*, can be seen on the shoulders and hips of Clark (figure 123). A decision was made to use this spiral because it relates to the narrative of Kae and Tinirau, and also to the deity Tangaroa (guardian of water realms). The connection to Tangaroa alludes to Clark's government's policies surrounding the foreshore and seabed. The jagged line created by the *taratara-a-kae* form was applied to the outer contour of Clark as a warning and reminder that even revered people such as Clark are not perfect.

The principle of *mana wahine* (the female element) is the most salient within this composition. In general it is expressed through the use of a female ancestor. More specifically, though, it is demonstrated through the practice of explicitly rendering the female sexual organ. The principle of *mana wahine* acknowledges that for eighteenth and early nineteenth century Māori the female form had dual connotations of both life and death; while life is associated with the process of birth, death was connected to the narrative of Māui and Hine-nui-te-Pō. Jahnke (2006), who described this duality as the generative and degenerative power of woman, added that this female element is symbolically associated with Māori notions about the different states of human existence. It is apt that the top figure is Helen Clark because she expresses the notion of *mana wahine*, connecting the top pou figure with the bottom where Hine-nui-te-Pō is shown crushing Māui. At the beginning and end of the *poutūārongo* the female form and power is reiterated.

Exploring the symmetry within *Nineteen Fifty*, the principle of *tātai hangarite* is apparent. There is correspondence in the size, form, and arrangement of the parts on Clark's body on both sides of the vertical axis of symmetry. The placement of the *huia* spiral on the vertical axis further highlights this as a point of reflection. The principle of *tātai hikuwaru*, however, sees this symmetry disrupted in a number of places, including the layer of colour within the background, the legs of Clark which are at set at slightly differing heights, and the arrangement of the smaller *tiki* which are organised sporadically across Clark's torso. The disrupted symmetrical element within the larger symmetrical structure of Māori art is associated with ideas about change and growth.

Tātai rahinga is used to draw attention to the important elements of Clark's body, the head, hands and genitals. As noted earlier, the *huia* spiral behind the head of Clark helps focus our attention here. The hands within this composition are particularly important, as they are shown holding the *tiki* figures in place. The vagina, as an expression of *mana wahine* and female spiritual power is connected to ideas of birth, menstration, *whare tangata* (the womb), and (*whare o aitua*) death.



Figure 125. Details from Nineteen Fifty. Portrait of Helen Clarke. http://madebyjohnson.co.nz/ko_aotearoa_tenei.html

Māori Alphabet Block Set

The Māori alphabet block project was chosen because it provided the chance to apply the Māori elements and principles of design within a commercial milieu. A challenge with commercial products is that a design may be fashionable one day and trash the next. Māori designers working with customary imagery, and images of *tupuna*, need to be able to imbue their design with Māori ideas and values, and with a timelessness that enables the designs to maintain a sense of integrity and value. An additional design challenge was to create products that not only resonated with Māori, but also were affordable.

The question of intellectual property rights, particularly where indigenous and Māori imagery is concerned was also a critical factor in developing the blocks. Nowadays, Māori are making attempts to protect *mātauranga Māori* and *taonga* Māori from appropriation and commercial exploitation. The recently released Waitangi Tribunal claim Wai 262 (2011) highlighted the need for New Zealand's Government to make pragmatic steps towards acknowledging and protecting Māori systems of knowledge, culture and art forms. While the 'right' to use certain Māori imagery is subjective topic it was rationalised in a number of ways within this project. Firstly, a decision was made to use imagery that has been within the public domain for a long-time and which is seen as stylistic archetypes rather than *hapū* specific forms; secondly I am a Māori designer; and thirdly, the blocks development was supported by Māori experts in both Toi Māori and Te Reo Māori.

The Māori alphabet blocks provided an opportunity for Māori children to learn the Māori alphabet while simultaneously becoming familiar with Māori visual culture. Growing up as an urban Māori, there was little within my house that visually acknowledged my ancestry or the fact that I was from a Māori and Pākehā family. Literally everything within our home environment was Pākehā. The Māori alphabet blocks were seen as great way to get Māori visual culture into the hands and minds of Māori and Pākehā children.

After deciding how many blocks would be in the set, and the placement of the letters of the Māori alphabet on the blocks, a decision had to be made in terms of an appropriate Māori imagery. One of the most important cosmo-genealogical narratives in Māori culture is the separation of Ranginui and Papatūānuku by their son Tāne. The story of is fundamental to Māori epistemology, ontology and *whakapapa*. This story is one that all Māori should be familiar with, and presented the perfect opportunity to familiarize children with the narrative at an early age.

To reference this narrative a decision was made to design a series of *pou*-like figures based on the sons of children of Rangi and Papa. The figures chosen were the deity Tānemahuta, Rongomātāne,

Haumiatiketike, Tangaroa, Tāwhirimātea and Tūmatauenga. Each of the deities is associated with specific earthly realms. For instance Tangaroa is associated with the ocean, lakes and river, while Tānemahuta is associated with forests. These differing realms guided the types of imagery created to support the figures. The story of Rangi and Papa, along with information about the figures, was placed on an artist's card provided with the alphabet block set (figure 124).



Figure 124. Artist Card and Information Sheet

As visual learning aids, it was not enough to simply teach this narrative. It was imperative that children were informed about the regional carving styles found within Aotearoa New Zealand. This was particularly important because most New Zealanders associated Māori carving with the 'classical' style apparent in the fully carved houses from the Te Arawa tribal region or that from Te Tairāwhiti. Tactically the children of Rangi and Papa were rendered in six different carving styles, Tūranga, Taranaki, Whānau-ā-Apanui, Te Tai Tokerau, Hauraki and Te Arawa. It is important to note that these styles contain a mixture of tribal and regional names because certain terms have several applications. For example, Taranaki refers to an *iwi*, to a region and to a carving style. This selection process was not without its problems as it is inevitably exclusive and the omission of some carving styles like that of Whanganui to which I have *whakapapa* was troublesome. However, a selection was necessary because it would not be possible to represent all of the carving traditions within the limitations imposed by the design brief.

In assigning carving styles to deity, regional characteristics were also examined so as to align deity appropriately with specific regions. For example, Tangaroa (deity of water realms) was assigned with the Te Whānau-ā-Apanui style found within Te Moana-ā-Toi region. This region, through name, and through a number of important *pātaka*, is associated with Tangaroa. As the Tai Tokerau region is home to the giant kauri trees, it was appropriate that the style of Tāne should be connected to this region. In addition to this, each deity was given an object associated with the nature or realm in which they belonged. For instance, a *kotiate* (bone club) is placed in the hand of Tūmatauenga, the deity associated with war and humankind (Grey, 1899, p.294). A *kūmara* was placed in the hands of Rongomātāne (deity of peace and *kūmara*), while a *hei matau* (fish-hook pendant) was placed around the neck of Tangaroa.

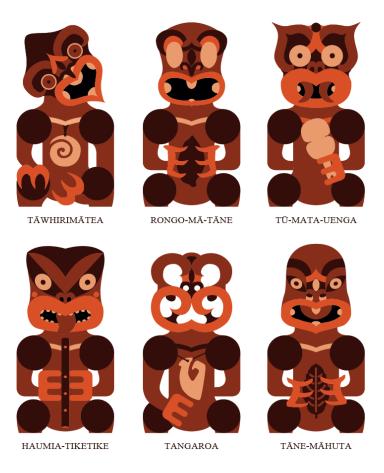


Figure 125. Finalised designs for Māori alphabet block figures.

The *tukutuku* pattern known as *poutama* was applied to a number of blocks to compliment the stylised *poupou* forms. When this *tukutuku* is placed between the *poupou*, children are able to imitate the arrangement within *whare whakairo*, where *tukutuku* is placed between the *poupou* figures. The colours for the *pou* figures were determined by the need for a contemporary look that still reflected customary carving practices. The final colours selected, orange, tan, black and white, were inspired by the colours in *Hotunui*, a Ngāti Awa *whare whakairo* carved during the eighteen seventies (now in the Auckland Memorial Museum).

With regard to the Māori elements and principles of design, the principle of *tātai rahinga*, arrangement by scale, was used to demonstrate unity between the figures that are all similar in size. *Tātai rahinga* is also used to emphasize the important elements of the body, the head and the hands. In each figure the head is roughly the same size as the torso. The exaggerated scale of the head expresses the sacrosanct nature of this body part is particularly salient as the figures denoted are deity. In considering *tātai rahinga* and the elements of the body, design considerations had to account for the need to encompass all the anatomical details within a two-block combination.



Figure 126. Final product shots of Māori alphabet block set.

In terms of symmetry, *tātai hangarite* (symmetrical arrangement) is prominent. This is reinforced by the placement of the *pou* figures on the central vertical axis of the alphabet blocks. Symmetry makes the images easier to read, as each half is reflected across the central axis. *Tātai hikuwaru*, or disrupted symmetry, is seen in the poses of Tāwhiri, Tū and Tangaroa. These asymmetrical elements while adding a more dynamic rhythm to the overall structure of these figures, also alludes to the notion of change and growth inherent in customary carving. The asymmetrical pose, particularly that of Tū, alludes to *haka* and *wero*.

The principle of *tātai whakapapa* (proximal *tiki* arrangement) is expressed through the arrangement of *tiki* one above the other. I designed the *poupou* figures so that when stacked atop one another the figures appear to be in a continuous like figures seen in *poutūārongo*. Overlapping as a technique was used to denote *whakapapa* and unity between the figures. In the Māori alphabet blocks, overlapping occurs at the head and feet of each *tiki* unite the *tiki* in a vertical structure. This interconnection between *tiki* also expresses the principle of *tātai manawa*, or the heart pulse in the design. When placed one above the other there is a continuous line of movement through the tiki.

The Māori alphabet blocks, a collaborative project with American company *Uncle Goose*, were officially released in October 2012 (<u>http://unclegoose.com/products/mori-blocks/</u>).

Whakarare – Māori Display Typeface Project

The impetus for designing a Māori typeface arose as a project because there are no typefaces designed by Māori for Māori. When looking at a page of printed Māori text, whether it is set in Helvetica, Times New Roman or any other typeface, nothing about that page relates to being Māori (apart from the use of the Roman typefaces in *wharenui* beginning in 1842 with Te Hau ki Tūranga). Therefore, the Māori typeface project, *Whakarare*, not only offered an opportunity to trial the Māori elements and principles of design, but also to break new ground in terms of both Māori and New Zealand design practice. Considering the immense task of developing a typeface from scratch, a decision was made early on to develop *Whakarare* as a display typeface. In general, display typefaces are intended for use as heading text rather than body copy text.

Preliminary research into Māori typography revealed that Māori have a long history of interfacing with type; from early hand-written letters, printed bibles and newspapers, to painted and carved type, and everything in between such as gang insignia, through to Shane Cotton paintings and protest signs. However, despite this engagement with type there does not appear to have been any attempts by Māori to actually design or create usable typefaces. Useable typefaces are those destined for use in print or the screen. Typefaces identifiable as 'Maori' generally fit within two distinct categories; those where Māori iconographic elements such as the *koru* are attached to established letterforms (Churchyard's, *Churchyard Maori*, 1983) or those where designers have attempted to digitise carved or painted type (Partington and McKirdy, Parihaka typeface, 2000).



Figure 127. Poster of Joseph Churchward's, Churchward Māori, typeface. Museum of New Zealand Te Papa Tongarewa.

However, each of these categories does not represent authentic Māori attempts to create typefaces. For instance, looking at Churchward's much lauded, *Churchward Maori* (figure 127), the typeface appears to have a generic roman typeface as a base. From this point, Churchward has attached the *koru* form to the serif and other interconnecting elements. Thus, Churchward did not attempt to create a wholly new typeface; he simply attached Māori design elements to an existing model. Churchward's lack of comprehension concerning Māori art practice is highlighted by the appearance of the roman typeface in many nineteenth century *whare* such as Te Hau ki Tūranga (1842), Te Mana o Tūranga (1882 and Hotunui (1878). At no point did carvers or painters find it appropriate to transpose the *koru* form onto letterforms.



Figure 128. Parihaka typeface designed by Aaron McKirdy and Neil Partington in 2000.

The other common approach to Māori typography today is to create digested versions of painted or carved type. McKirdy and Partington's Parihaka typeface (figure 128) is an excellent example of this approach. While their typeface is well designed and appropriate to the Parihaka book for which it was created it is still a digitised version of hand-created type, rather than a typeface derived from a consideration of the elements and principles of Māori design evident in customary Māori art. While the aim for McKirdy and Partington was not to create a new typeface their design represents contemporary approaches to Māori typography.

The design of Whakarare

In light of contemporary approaches to Māori typography the key challenge was to create a typeface that resonated with a 'Māori' design aesthetic or was imbued with an element of 'Māori-ness' without using stereotypical elements from customary Māori art. As the above examples demonstrate it is not enough for a Māori typeface to simply have elements associated with Māori art. In addition, the literature review and *pare* analysis revealed that the elements of Māori design are part of a visual language that in itself is used to transmit cultural messages and meaning. To transpose elements from this visual language and attach them to letter forms is not only mundane, but also senseless.

In order to solve the problem, how to create a Māori typeface that is not reliant on visual cues from customary Māori arts, I undertook research into historical Māori uses of type. In particular, I looked at carved and painted type found within nineteenth and early twentieth century *whare*. The aim of this research was two-fold. Firstly, to find whether or not there appeared to be any kind of design consistency or typographic preferences where Māori first began to use and create type designs. It was hoped that such preferences could then be translated into the development of a modern Māori display typeface. The second reason for this approach is that it grounded the new typeface within a history of Māori uses of type, thus, giving *Whakarare a whakapapa*. Two of the most significant *whare* in this research were Te Hau ki Tūranga (one of the first *whare whakairo* to include extensive uses of type) carved around 1842, and Rongopai (1887), which included extensive uses of painted type. In each of these, text was a key component of the overall design aesthetic. Commenting on the appearance of typography within *whare* Jahnke has written:

Te Hau ki Tūranga is one of the earliest ancestral houses to employ carved ancestral names. The use of names to identify ancestors or to promote genealogical narratives was an intrinsic part of Māori negotiation of the 'trans-cultural' context of colonisation from the 1840s – 1930s appearing in houses associated with Te Kooti Arikirangi Te Turuki (Jahnke, 2006, p.235).

Importantly, Jahnke emphasised that text within *whare* was first used to identity ancestors and promote genealogical narratives. In Te Hau ki Tūranga, the names of ancestors were carved above the heads of the *tiki* forms on the base of the *heke* and across the necks of ancestors on the *epa* figures on the rear wall of the *whare*. Within the Ngāti Kahungungu carving region, there are also numerous examples of *poutokomanawa* figures with text across the chest (figure 129).



Figure 129. *Poutokomanawa* in front of Heretaunga at Taradale Photo taken in by William Williams in 1889. Ref: 1/1-025857-G. Alexander Turnbull Library, Wellington, New Zealand.

Research into the Māori use of text within *whare* during the nineteenth and early twentieth century revealed common approaches to typography. A preference for upper-case letterforms was apparent in most *whare* where type was found. Where lowercase letters were used, they were often set at the same height as upper case letters, or slightly lower. Type within *whare* also seemed to be composed in a broken rhythm. This was created by the use of a variable x-height. Broken rhythm was also created through the varying widths of the letterforms. One of the other prominent features was the use of high-contrast letters, where thick and thin strokes appear in each letter. This was probably a result of carvers using type found within early printed bibles and newspapers as models. A unique Māori typographic preference is the exaggerated height, low or high, of the cross-bar element particularly where the uppercase 'A' was used (see the *whare* Te Mana o Tūranga and Hotunui). In some instances, the cross-bar of the 'A' was also broken creating a downward 'v' shape. Here, it seems that carvers were applying the design principle of *tātai hikuwaru* (disrupted symmetry) within text.

After identifying these Māori typographic preferences, the design process began. However, there was a need to further ground the typeface in customary practices. To do this, forms in customary carving were examined to find something that might align with the Māori typographic preferences. It was noticeable that in the *rauru* spiral the *whakarare* element, which traverses rows of *pākati* was often pinched as it connected to the parallel rows of *haehae*. With the vocabulary of *whakarare* there appeared to be a design aesthetic that reflected the contrasting stroke widths in early Māori type within the *whare*. Stylistic ideas from the *whakarare* pattern informed much of the final design of the *Whakarare* typeface, seen in figure 130.

APIOU WANGTIPKM ĀĒĪŌŪ AEIOU WHNGRTPKM ĀĒĪŌŪ DI23456789

Whakarare Display

Figure 130. Complete Whakarare Typeface (2012).

A major challenge when creating *Whakarare* was how to incorporate the Māori elements and principles of design into the typeface. Ultimately, some design elements such as *tiki* or the female form could not be used, as this would undermine the goal of creating a Māori typeface not reliant on stereo-typical Māori design elements. However, the application of some of the Māori principles of design to *Whakarare* was possible, because the terms are not simply concerned with aesthetics, but also with important Māori concepts, such as *whakapapa*, *whanaungatanga* and *manawa*. For example, *tātai whakapapa* (proximal *tiki* arrangement) is not only about the use of *tiki*, it is about the expression of *whakapapa* and the importance of *whakapapa* within Māori culture. In the first instance, *tātai whakapapa* is seen in the grounding of the *Whakarare* within a history of Māori use of typography. Māori typographical preferences, discovered through an exploration of text within nineteenth century whare, also help to locate *Whakarare* within the history of customary art practice. In addition, the design *Whakarare* is informed by the carving pattern of the same name creating a direct link between *customary* and *contemporary* art practice.

One aspect of the principle of *tātai rahinga*, the use of deliberate use of scale contrasts, is also prominent in *Whakarare* in the use of thick and thin stroke widths. As noted earlier, this design preference was probably a result of Māori copying type from printed bibles in which the *Didone* (modern) style of typefaces would have been common. This is also related to the principle of *tātai hangarite* (symmetrical arrangement), where it was noted that a symmetrical structure was often overlaid with asymmetrical elements. In the *Whakarare* typeface, the eighteenth and early nineteenth century preference for asymmetry is accentuated through the use of narrow letter widths and a high or low placement of the cross-bar element. The principle of *tātai manawa* (heart-pulse) was an important principle when creating *Whakarare*. It was important that the letterforms fit together in a way that created a natural rhythm between positive and negative space. At the same time, this flowing rhythm needed to move the eye horizontally through the letterforms while in the act of reading.

In addition, a decision was made early on to only design letterforms used within the Māori alphabet. This was to deliberately limit the use of *Whakarare* in non-Māori texts. As a by Māori for Māori design project, the main audience for the typeface is Māori. This decision relates to the lack of control that the designer has over a design once it enters mainstream society.

Some important questions that occurred during the development of *Whakarare* included, can a typeface have *whakapapa*, or be connected to ancestors, and if so, what might this mean in terms of its application? When designing a typeface informed by *mātauranga* Māori, other pertinent questions include, is it appropriate to use a Māori typeface in places with specific cultural meanings, such as *kihini* (kitchens) or *whare kai* (dinning halls), *whare paku* (toilets) or *urupā* (graveyards)? Looking at packaging design, a question that arises is, is it appropriate for a Māori typeface to be used on alcohol or cigarettes, or on food products? By considering these important questions, it is possible to imbue Māori design with *tikanga* and *mātauranga Māori*, and to determine how Māori visual culture is applied within the broader Aotearoa New Zealand context. The use of macrons was also an important consideration in the design of *Whakarare* as a Māori typeface.

Whakarare meets the design challenge set out at the start to create a Māori typeface that exudes a certain 'Māori-ness' without relying on visual cues from customary arts practice while capitalising on the elements and principles of Māori design. As a display typeface *Whakarare's* use is limited for display or heading text purposes. The next challenge, in terms of Māori typeface design, is to develop a body copy typeface with better legibility more suited to large amounts of text.



Figure 131. Examples of Whakarare typeface in use (2012).

Chapter 6 Conclusion

Design pervades every part of modern society. However, while more and more Māori are taking up the tools of design, there is little to guide Māori designers in terms of *tikanga*, or principles for practising designers. The Māori elements and principles of design in this thesis were developed to help address this problem. A linear diagrammatical analysis of eighteenth and nineteenth century *pare*, informed by an extensive review of literature into customary Māori carving practice, helped reveal this Māori design language.

The *whakatauki*, *kia whakatomuri te haere ki mua* (to walk into the future, our eyes must be fixed on the past), highlights the relevance of customary models in development of contemporary Māori design. Eighteenth and nineteenth century Māori carvers used a common visual language to transmit important cultural ideas and cosmo-genealogical narratives. By unlocking the language of this communication system, it is anticipated that future Māori designers will be able to use art and design to communicate knowledge, ideas and values that are of significance to Māori.

While research into Māori art highlighted the need to centre this study within a Māori cultural paradigm, the research also revealed the absence of systematic examinations of form and aesthetics in customary Māori art. Consequently, this thesis prioritises and investigation of visual and perceptual aspects of Māori art. The aim of the study is to fill the void in knowledge and advance the study of Māori art by examining visual and perceptual aspects of Māori art within a Māori paradigm. A study of form is necessary because it contributes to the reading of narrative content.

The linear diagrammatical *pare* analysis demonstrated that a number of design conventions appear consistently not only in *pare*, but were applicable to other forms nineteenth century Māori carving. These were identified as the Māori design principles of *tātai rahinga* (arrangement by scale), *tātai mokowā* (spatial interconnectedness), *tātai hikuwaru* (disrupted symmetry), *tātai hangarite* (symmetrical arrangement), *tātai whakapapa* (proximal tiki arrangement), *mana wahine* (the female element) *tātai manawa* (heart pulse) and *tātai kotahitanga* (unity). Understanding these design principles is integral to grounding Māori design in customary practice. At the same time, the application of these principles within design projects facilitates the transmission of culturally important ideas, while perpetuating Māori methods of visual communication. A number of consistent design elements were also identified such as *tinana* (body), *manaia* (profile figure as one of a number of meanings associated with the term), *takarangi* (spiral) *tauira* (pattern) *ata* (light) and *atakau* (shadow). It is important to understand the concepts associated with each of these elements so that they can be used appropriately and with meaning. For example, notions such as *whakapapa* are inherently connected with the use of the *tiki*, and *manaia* elements.

The Māori elements and principles of design were trialled in three distinct design projects, a design exhibition (*Ko Aotearoa Tēnei: This is New Zealand!*), a Māori alphabet block project, and a Māori typeface project (*Whakarare*). While each of these presented uniquely different challenges, the successful transposition of customary models of practice onto a contemporary context is reflected in positive responses from both Māori and Pākehā to the outcomes. The design exhibition *Ko Aotearoa Tēnei: This is New Zealand* featured in the Dominion Post and Radio New Zealand. Thirteen of the prints were sold, including five to Pātaka Museum of the Arts and Culture in Porirua at the behest of the Director Darcy Nicolas. Two of these are on display in Museum of the Arts and Culture gallery. The Māori alphabet blocks gained support from Te Puni Kokiri who provided funding for the launch. The project featured on TVNZ's *Te Karere* and Māori television's *Te Kaea*, in the Whanganui Chronicle, the Gisborne Herald, the Manawatū Standard, and recently featured in *Idealog* magazine (http://www.idealog.co.nz/magazine/43/building-blocks). Feedback on retailer's websites and social media commentary threads were also overwhelmingly positive. The *Whakarare* typeface was a finalist in the 2012 Best Awards, held by the Designers Institute of New Zealand

(http://bestawards.co.nz/entries/graphic/whakarare). Megan Tamati-Quennell, curator of art at the Museum of New Zealand Te Papa Tongarewa in Wellington and Chanel Clark, Curator of Māori at Auckland Museum have both expressed interest in using *Whakarare* within their respective museums.

These design projects also brought to light some of the limitations of the Māori elements and principles of design. For example, in contemporary design practice it is not always possible or necessary to use Māori design elements such as the *manaia* or *tiki*. Design elements such of *ata* (light) and *ata kau* (shadow), are also renderer inconsequential in much graphic design where flat print surfaces prevail. However, the Māori elements and principles of design articulated in this thesis are not intended to be an inflexible framework for design practice. Instead, the Māori elements and principles of design should be viewed as guidelines that help designers to make informed decisions. When designers have an awareness of Māori design conventions, they are able to make innovations that are still grounded in *mātauranga Māori* and *tikanga Māori*, just as nineteenth century carvers did in *tikanga Māori*, *mātauranga Māori*, and customary art practice. This allows Māori designers to imbed

their work within a Māori world view, ensuring the longevity and relevance of their work for Māori and the world.

It is important to note that the elements and principles of Māori design presented here are a starting point of a research journey in developing a uniquely Māori approach to design rather than the culmination of one. Further research into customary carving needs to be undertaken to further strengthen our understanding of Māori visual culture. For example a study of Māori gestures evident in *haka*, *pōwhiri* and *wero*, will undoubtedly help shed light on the gestures found within customary carving. At the same time a systematic exploration of customary Māori notions about the body could advance our understanding of the anatomical conventions found in nineteenth century Māori carving.