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Whakarongo



An Exhibition report presented in partial fulfilment of the requirements for the degree of

Masters of Māori Visual Arts

At Massey University, Manawatu, New Zealand.

> Maihi Potaka 2021

Abstract

The symbolic characteristics and elegant design of kōwhaiwhai pique my curiosity, through the expression of kōwhaiwhai I have recognised the beauty in the nature of its composition. I believe the values seen in the compositions of kōwhaiwhai are aesthetic and give pleasure when viewing the patterns therefore, uplifting the well-being of the viewer. I propose that my kōwhaiwhai designs have healing properties through the visual senses, in the same way that rongoā māori covers senses including, sound – taonga pūoro that is used in a healing context, taste – digestion of herbal remedies, touch – the application of ointment on skin, and scent – the use of oils for our sense of smell.

This exhibition report sheds light on the functions of kōwhaiwhai within a rongoā māori context. Over the course of this Masters research, I have envisioned and created a series of works that invoke a positive state of mind based on the feel of the colours and patterns with hopes of them being utilised as a form of rongoā māori. These patterns are intended to assist in the connection between the many aspects of our well-being with the hope that the shapes and patterns can help re-balance and strengthen our people to blossom to their full potential. "Whatu" is a methodology I created for producing kōwhaiwhai designs that create pleasure and enjoyment when viewed. Te mauri o te manawa, whakaaro pai, hangarite, taurite, korikori, and hononga are the values included in this methodology. These values, as well as my creation process, act as a basis and are reflected in my show "Whakarongo". My creation process mimic five different states of mauri, these are as follows:

- Mauri noho inactiveness, broad ideas
- Mauri oho awakening of an idea
- Mauri rere drafts of the physical manifestation of the idea
- Mauri tau completion of composition based on the idea
- Mauri ora fabrication and execution of the idea

The techniques and dynamics used within my exhibition to achieve aesthetic kōwhaiwhai designs are abstraction, symmetry, contrast, and visual metaphors.

As a result, these techniques demonstrate how kōwhaiwhai can connect with rongoā māori. I believe there are definite connections in this exegesis that relate to the elevation of well-being when viewing my kōwhaiwhai works, thus recognising kōwhaiwhai as a form of rongoā māori.

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Tēnā koutou Katoa,

Ko Ruahine te pae maunga,

Ko Rangitikei te awa,

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Ko Ngāti Hauiti, Ngāti Manawa, Te Ātihaunui-ā-Pāpārangi ōku iwi,

Ko Tamatereka te hapū,

Ko Rata te marae

Ko Maihi Potaka ahau

At the time of the emergence of my ideas around my exhibition, my iwi was undergoing a settlement claim for the Waitangi tribunal. This brought up a lot of grievances from the past for my people and from this I saw a lot of pain and hurt. Tired of seeing this I was needing a source of positive inspiration, something that would be more healing for my people rather than a stance of Māori activism. With most of my peers focusing on Māori activism and bringing awareness to issues and conflict of colonisation, I wanted to create something that instead of invoking anger, sadness and frustration invokes positivity.

Throughout my post-graduate diploma, I had the honour of working on Te Whaiao o te Matauranga, a marae based on the Wellington Massey campus. Through this project I was introduced by my mentor Ngatai Taepa to the world of kōwhaiwhai. It was through my four years on this project that I fell in love with the art of kōwhaiwhai. I recognised its beauty and aesthetic and the values it held and wanted to share the same beauty and aesthetic with Aotearoa, and the world. With the skills I learnt from the marae project I decided I would continue on with the inspiration I was now a participant of to create my own exhibition solely with kōwhaiwhai. The works that followed were created with aroha in mind to allow us to see the best in ourselves and to acknowledge that Māori art, kōwhaiwhai can have the power to uplift our well-being. The main purpose of this report is to give an insight as to how I perceive kōwhaiwhai in

the hopes of opening the mind of the audience to different perspectives when viewing the work.

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Chapter 1: Introduction and Overview

This exegesis presents an exhibition report highlighting my show Whakarongo held at Palmerston North's Thermostat Art Gallery, 2020. Within this exhibition, I attempted to produce works of beauty that were harmonious in composition and provided satisfaction when viewed, with the hopes of boosting the well-being of the audience and serving as a form of rongoā māori. The principles interwoven within these works are contrast, colour, symmetry, abstraction and visual metaphors. In this exegesis, I explore the link between rongoā māori and kōwhaiwhai by looking at Māori health models. Dr Rangimarie Rose Pere's (1991) Te Wheke Hauora model, and Sir Mason Durie's Te Whare Tapa Whā, assist my own methodology for creating kōwhaiwhai designs.

I propose that my kōwhaiwhai designs have a sensorial healing impact in the same way that rongoā māori covers senses including, sound – taonga pūoro used in a healing context, taste - digestion of herbal remedies, touch - the application of ointment on skin, and scent - the use of oils for our sense of smell. As I could not locate any local narratives or information on the impacts of visual stimuli via kōwhaiwhai, I decided to rely on external resources and scientific results related to neuroesthetics and link the findings to kowhaiwhai to support my claim. According to the museum of Te Papa Tongarewa (n.d), the concept of a traditional Māori healing system is known as rongoā māori, which includes the use of plants, massage, and incantations that have been passed down through many centuries. Te Papa also states, "Ailments are treated holistically in traditional Māori medicine with spiritual healing, the power of karakia, the mana of the tohunga (expert), and by the use of herbs" (para. 2). Furthermore, rongoā māori as defined by John C Moorfield (2021) "natural remedy, traditional treatment, Māori medicine". Hence, based on these definitions, visual stimulation could in fact fit into these categories.

Overall, the design of kōwhaiwhai came to my attention due to their symbolic characteristics and elegant design. As such, further investigation of kōwhaiwhai allowed me to recognise the beauty in the repetitive patterns and symmetry. Therefore I chose to focus on my exhibition and research on kōwhaiwhai.

In chapter two, the literature review examines past texts that discuss aspects of kōwhaiwhai patterns. Here, I attempt to create a link between the concept of kōwhaiwhai and Māori wellbeing, and what their functions are within te ao Māori. Also, focusing on the naming and implementations of customary and creative representations, as well as their symbolic meanings.

In chapter 3, I explore frameworks that informed this research, especially those that prioritise Māori well-being (e.g. Pere's Te Wheke Hauora model and Durie's Te Whare Tapa Whā). With the help of these frameworks as examples and aesthetic design studies, I showcase my own methodology "Whatu" for constructing kōwhaiwhai designs that produce pleasure and enjoyment when viewed. As mentioned above, te mauri o te Manawa, whakaaro pai, Hangarite, taurite, korikori, and hononga are the values included in this methodology. These ideals will serve as a standard for all of my efforts to develop what I think a successful aesthetic kōwhaiwhai is. In this chapter, I break down each of these aspects as well as sharing my creative process.

In chapter four, I analyse my exhibition and discuss details which talk about the techniques and dynamics used within my Whakarongo exhibition that use techniques such as abstraction, symmetry, contrast and visual metaphors. These techniques work in conjunction with my methodology I created.

In the final chapter, I provide a brief conclusion and discuss a few final thoughts.

Chapter Two: Literature Review

The function of Kōwhaiwhai, and its relation to Māori well-being

In past literature, there is little discussion concerning the function and importance of kōwhaiwhai and its relation to Māori well-being. It seems logical that the connection of rongoā māori and Māori well-being exist in the same context. This seems particularly relevant as rongoā māori covers senses including, sound, taste, touch and scent, therefore, the visual senses should be included in this conversation as well. This line of thought has led me to ponder, what is the connection between Māori art, in particular kōwhaiwhai and Māori well-being?

In this literature review, I look at the connections between kōwhaiwhai and its connection to Māori well-being, as well as how they work within te ao Māori, while also highlighting the naming and implementations of customary and creative representations. Additionally, symbolic meanings through Māori and non-Māori writers are discussed, as well as customary and contemporary Tohunga Whakairo and painters. These include Pakariki Harrison, John Taiapa, Gyorgy Doczi, Sandy Adsett, and Frank Davis, to name a few. I also touch on Māori well-being principles, such as Te Taha Wairua, Whānau, Hinengaro, and Tinana, and how they relate to patterns seen in kōwhaiwhai designs.

It is the function of well-being that is explored by Frank Davis (1976), where he states:

In fact, the ancient Polynesian belief was that an artist was a vehicle through whom the gods created. Art, in fact was sacred. The decoration had symbolic meaning and historical significance that added to the power or efficacy of the article and its user. Art was not merely an ornament-it added to one's potential for achievement. At the same time, it has the power to announce the extent of that power and potential to others. The traditional arts of pre-Pakeha times-carving in wood, bone, and stone; painting; tattoo (moko) was devoted to enhancing mauri and mana (p. 24).

Davis (1976) goes on to explain that mauri is "the life force, living essence, or principle of vitality and fruitfulness of not only living beings but also inanimate objects. This life force could, at times, be focused or embodied in a material symbol or talisman" (p.24).

These reflections by Davis highlight how artists can be seen as conduits to the root of creation, where they use art to communicate their artistic expression, which in turn is derived from the Atua. This also explains work by artists under the influence of "tapu," which are typically described as being influenced by powerful spiritual powers. These artistic forms of spiritual expression are seen in everyday environments for Māori. For example, many Maori wear these symbols in various ways, such as jewellery, ta moko, and pendants.

Barrow described mana as one's "spiritual nature" (cited in Davis, 1978, p.12), and if Davis' view of pre-pakeha art is that they strengthen one's spiritual essence, then all Māori already have this spiritual bond, which they can practice through the medium of visual narratives. According to Barrow (1978), "the major arts, such as woodcarving, were regarded as supernatural activities valuable to society in communication with the spirit world." He also states, "Tribal welfare depended on a good relationship with the occult and esoteric powers, and the arts served as to link mankind with the unseen world" (Barrow, 1978, p.12). If the divine right was exercised by sculpture, the fundamentals of the designs, structures, and shapes that were formed had to be of a language that could be understood by both the invisible and the seen worlds. Hence, the link between kōwhaiwhai patterns and a person's well-being also shares a relationship with aspects of spiritual wellbeing, which can be found in studies done by Durie (Ministry of Health, 2017). Durie created a prominent Māori health model Te Whare Tapa Whā. More importantly, this model has also been adopted by various other disciplines outside of health, such as education as it resonates well with both Māori and tauiwi. In short, the model is made up of four principles and include:

 Taha tinana (physical health) The capacity for physical growth and development.

- Taha wairua (spiritual health) The capacity for faith and wider communication.
- Taha whānau (family health) The capacity to belong, to care, and to share where individuals are part of wider social systems.
- Taha hinengaro (mental health) The capacity to communicate, to think and to feel mind and body are inseparable" (Ministry of Health, 2017).

In this model, Durie states that the "Taha Wairua holds the capacity for faith and wider communication," which can relate to what Barrow (1978) is suggesting about tribal welfare being dependent on good relationships with esoteric powers.

According to Neich (1994), perhaps the names of the designs reveal the roles and purposes of kōwhaiwhai. For instance, in Painted Histories, Neich says, "in none of the older designs is there any obvious attempt to depict the actual plant or animal named" (Neich, 1994, p.33). Furthermore, Neich's ideas about the depiction of names are supported by Buck as he quoted Haddon, stating "links that have been found establishing a connection between a recognizable though conventional representation of motif and a geometrical figure that is unrecognizable" (Buck, 1921, p.467). Here, Buck suggests that one use of the kōwhaiwhai pattern is to bring life to objects such as waka huia, calabashes, hoe (paddles), Whare Tupuna, and Tombs and Monuments. In addition, other examples of these patterns are shown by Roger Neich in *Painted Histories* (Neich, 1994).

The narrative of any woven, painted or geometric pattern is often translated into something tangible so people can relate more closely to the patterns. Also, Buck (1921) notes that consequently in Māori heke embellishment, "the most important clue to the origin of the motives to be obtained by oral information is the name, with its meaning" (p.467). Here, Buck argues that across the majority of tukutuku designs, the pattern comes first, and the name shortly after, and that this occurs "mainly as a result of Maori aptitude for naming places and objects resemblances seen or attributed by his mythopoetic imagination" (p. 467). In contrast, Neich (1994) argues that "each division of the Māori arts – tattoo, carving, weaving, tukutuku and painting - has a rich vocabulary of

specific names for individual designs, with very little overlap of duplicated names between divisions. Kōwhaiwhai is no exception to this" (p.33). Neich also believes that a large number of the kōwhaiwhai design names of known rafter patterns describe forms from the natural world. Literal translations of these patterns and motifs were gathered from Best, Colenso, Richmond, Stack, Williams, and other various museum files. An example of these names and images of the motifs are printed in Painted Histories by Neich (1994, p.33).

The names referenced above may be valuable resources from nature which enriches all aspects of Durie's Te Whare Tapa Whā. For instance, these names and their correlation to certain values are as follows:

- Patiki-Flounder was a source of nourishment for the people (Te Taha Whānau) and is also a star recognized by Māori, which is a connection to Rangi-atea (heavens) showing us value to the Taha Wairua aspect (Best, 1922, p.33).
- Mangopare Hammerhead shark references to strength and courage (taha hinengaro) (Neich, 1994, p.33).
- Rautawa-Tawa leaf can be a source of Rongoā (medicine) for Māori (Te Taha Tinana) (Neich, 1994, p.33).

Sandy Adsett (1992) claims that Māori used charcoal and red ochre to depict forms of mammals, fish, birds, human beings, and supernatural beings on rock overhangs and limestone shelter walls. Geometrical and curvilinear shapes were also used, as well as chevrons, spirals, and circular curved lines. Consequently, it is evident that these environmental objects and their translations demonstrate a relationship to the Māori holistic view of well-being (*Te Whare Tapa Whā*).

William Colenso (1879) was deeply amazed by the "ideality" of Māori the adoration of genuine form and the "fine perception of the beautiful, the regular" as well as they appeared "prompt and genuine, open and fearless to criticisms" (p.80). Here, Neich (1994) accepts that Colenso had a more refined view of the relationships between named Kōwhaiwhai designs and natural forms, as in his

later work, Colenso (1892) stated that the names originated from "real or fancied resemblances – correlations, as it were of the Māori mind" (p. 460).

Davis (1976) believes that "artists are a vehicle of whom the gods created" (p. 24). This perspective encourages us to think freely about how patterns from atua are manifested, and it allows us to recognize that the patterns transcribed into symbolic representations are only brought into Te Ao Marama by these artists, and by no other means. This is particularly relevant given Davis' concept of an artist, which is to be understood to be a the vessel that the gods constructed (Davis, 1976). Hence, if the artist is a medium who is used as a mangai/prophet to whom these patterns are offered, it implies that the artist is a medium. These trends can also be seen in Doczi's (1985) work, which mentions "evidence of the relatedness of all things" (p.1).

According to Harrison (1988) The Takarangi, Makaurangi, and pitau open spirals, as well as the Rauru, Maui, Ponahi, and Whakairo nui surface spirals, are the most essential spirals. There are several theories as to how these patterns came to be, ranging from the inspiration of the fern frond to the navigator's wrapped ropes, as well as many other objects from the artist's daily life. He also lists these spirals into three main areas: 1) single spirals, 2) double interlocking spirals, and 3) multiple spirals. In doing so, Harrison highlights how they symbolize energy, both latent and potential, which are in turn connected to "the life principle, light, and enlightenment" (p. 19). Similarly, Doczi says that more recently, it was revealed that some of the most microscopic and essential components within live cell structures (such as red and white blood corpuscles) arrange together in double spiral patterns. It's difficult not to conclude that we're seeing at one of evolution's most fundamental pattern-forming mechanisms. (Doczi, 1985, p.28). More associations with the spiral demonstrate the living cell systems that Doczi mentions and how they resemble the Māori carving of the "Takarangi" (Harrison, 1988, p.20) on a molecular basis. The same designs can be seen in painted kowhaiwhai patterns, even though these are carved whakairo patterns. Similarly, Augustus Hamilton's (1896) set of Māori rafter patterns contains examples of these spirals. Five of Hamilton's kōwhaiwhai patterns have spirals, and one of them is called "Rauru." Another is known as "Te Pitau a Manaia," which is a figurative kōwhaiwhai design of a manaia

(spiritual guardian), and an example of which can be seen on the maihi of the meeting house, Te Poho-o-Rawiri in Kaiti, Gisborne, 1849 (p. 121-122). Despite Neich's belief that this may only be a nod to the Manaias' carved counterpart.

As pointed out by Doczi (1985), "Mana and Tapu (Mauri) are expressions of the Maoris... and it is "Their sense of relatedness and oneness with the universe around them, just as the Native Americans express this feeling with spiral patterns, so do the Māori. These patterns reveal the energy creating power of symbols suggested by the word dinergy" (p.25) Here, the meaning of spirals as mana and tapu principles, which are a type of law to Māori, is explored by Doczi in this quotation. As such, it demonstrates the significance of these symbols and how they are linked to vital beliefs, which in turn influence well-being as mauri and tapu are essential components within each individual.

The concept of kauae runga and kauae raro is referenced by Whatahoro in The Lore of Whare-wananga Whatahoro (1913). Whatahoro demonstrates a connection between spirals and Dozci's teachings. Essentially, some of these spirals can also be used as two sections of kauae runga and kauae raro, which is only one of the dualities found in Māori culture definitions. Whatahoro writes:

1. Te Kauwae-runga

2. Te Kauwae-raro

(the simple translation of which is, the upper-jaw, and the lower-jaw). These branches were also sometimes designated, Te Kauhanga-runga, and Te Kauhanga-raro. The expressions had a clear meaning to Māori, with the first representing everything pertaining to the gods, the heavens, the origin of all things, the creation of man, the science of astronomy, and the record of time. Whereas, the second (Te Kauwae-raro) deals with the history, properly so-called, of the people, their genealogies, migrations, the tapu, and all knowledge about terrestrial matters. We may thus say that the first represents 'Celestial things,' and the second 'Terrestrial things'; though, as will be seen, the distinction is not always adhered to (Whatahoro, 1913, p.79).

Evans shows a physical representation of a spiral representing a figure can be seen on a maihi of a pataka in Te Kaha carved by John Taiapa (Evans, 1979, p.69). The motif is the top and bottom jaw of a whale in the shape of a spiral Here, his depiction reflects Tohunga Whakairo John Taiapa's perspective on the visible and invisible worlds. This also ties in with the Dozci's principle, when he says that Māori have a sense of connectivity and oneness with the cosmos around them, and like Native Americans, they express this emotion through spiral designs. (Doczi, 1985). This text shows similarities with Whatahoro in as he says that the Māori, the expressions had a definite meaning, with the first symbolising everything related to the gods, the skies, the genesis of all things, the creation of man, the study of astronomy, and the record of time (Whatahoro, 1913).

According to Davis, the decoration had symbolic value and historical importance that contributed to the article's influence or effectiveness (Davis, 1976, p.11) These texts suggest that metaphysical energy creates and provides power to the user.

Similarly, when addressing various applications of kōwhaiwhai in other contexts, Neich (1994) contemplates the inheritance of transferrable power. Other important kōwhaiwhai expressions can be found on monuments and tombs of illustrious people, in addition to meeting houses. Neich (1994) states that "this connotation is clearly to descent and inherited authority since these are attributes that define the person as being important" (p.38). He goes on to claim that Rangatira's vessels were adorned with kōwhaiwhai patterns, while ordinary people's gourds were left unadorned. Other kōwhaiwhai embellishments were seen on gourds that held a high-ranking baby's placenta. Here, Neich concludes that "again, the connotated meaning is clearly to ideas of inherited power and authority" (p. 38). Hence, these past discussions give us new insights into how kōwhaiwhai was used, as well as a clue to its functions for Māori.

In modern-day artworks, koru and symbols for natural forms are often used in reference to current or past events, locations, and persons, traditional or supernatural, with attention to repetition and balance (Adsett, 1992, p.24).

Whereas previously stated by Neich, "none of the older designs is there any obvious attempt to depict the actual plant or animal named" (Neich, 1994, p.33). this shows a difference between contemporary and traditional composition. Understanding basic facets of construction, according to Adsett, can contribute to better control over the components, media, and resources and that "colour and tone can be used to develop positive and negative shapes, formal and informal balance and concepts of Tapu/Noa" (Adsett, 1992, p.24). This thought process within the contemporary art realm and artists is comparative to that of the 1960s, where the kōwhaiwhai was commonly being used in the whare whakairo with little or no given subject, or for any clear meanings that the patterns had. But rather, for the appealing design aspect as Damien Skinner (2016) explained. When coping with tapu and noa, the contrast reveals a difference across time periods, where all design considerations concerning modern day art typically consider the artist's and audience's safety.

Traditional kōwhaiwhai have been explored and innovated upon over the years, which explains the need to develop a better understanding of these arts. According to Adsett (1992), kōwhaiwhai work was easier to create and complete because the interpretations and patterns became less important and the focus shifted to the aesthetic result of the art, therefore, allowing for faster production. Temporary kōwhaiwhai were put on the veranda at the opening of the Te Aranga Māori boys Hostel in Christchurch in 1968, creating a paepae, a border or barrier, which converted the room at the front of the house into a marae ātea, the tapu zone in front of the meeting house, where essential rituals occurred, according to photographs from Te Ao Hou magazine. Skinner (2016) aptly sums this up by stating, "This was not just a case of Māori art being used as decoration. Kōwhaiwhai made this site ready for the activities about to take place there, and allowed the people taking part to express their identity as Māori" (p. 148).

Contemporary kōwhaiwhai can be seen on a variety of design pieces, allowing Māori to articulate their māoritanga and identity, thereby improving their overall well-being. An example of this was evident when Labour party politician Whetū Tirikātene-Sullivan was elected as a member of parliament for the southern Māori in the late 1960s, and kōwhaiwhai could be seen outside of architecture.

In addition, Whetū's fashion was renowned for showcasing beautifully crafted kōwhaiwhai designs by some of the most famous Māori artists of the period. Or as Skinner (2016) puts it, "By wearing kōwhaiwhai, Tirikātene-Sullivan could make a striking visual claim about who she was, and who she represented" (p.149). This shows the function of kōwhaiwhai serving as a strong sense of self identity. Skinner (2016) also previously stated that "in the 1840s the waka taua was being steadily replaced by European boats, and so its symbolic role as the main expression of group pride was being eroded" (p.126). Simultaneously, the whare whakairo was beginning to emerge as the primary emblem of community identity. Overall, these instances effectively demonstrate that for Māori to be self-confident, they must have a sense of identity, and as these past examples show kōwhaiwhai was an important part of that movement.

It is important to note that as some of the meanings in the patterning of Māori culture have been lost, or become part of abstract or non-figurative designs, the connections may not always be immediately evident. While also giving consideration to how connections must be made with an open perspective of the possibility of the meanings behind the symbols.

In this literature review, I have looked at kōwhaiwhai and its connections with well-being and identity, as well as how they work within te ao Māori, focusing on the naming and implementations of customary and creative representations, as well as their symbolic meanings. The literature that is referenced stems from both Māori and non-Māori writers, customary and contemporary tohunga whakairo, and painters including Pakariki Harrison, John Taiapa, Gyorgy Doczi, Sandy Adsett, and Frank Davis, to name a few. I also touched on Māori well-being principles, such as Te Taha Wairua, Whānau, Hinengaro, and Tinana, and how they relate to patterns seen in kōwhaiwhai designs. In this chapter, I have attempted to establish correlations between kōwhaiwhai and Māori well-being within the context of this research study. However, while many of these writings refer to Māori well-being, there relationship to kōwhaiwhai are less clear. Hence, this chapter has taken this into consideration and provided a critical analysis of how their ideas may be comparable ideas. Yet, perhaps researched from a different perspective in order to gain a clearer

outcome. What is evident, however, is that more study into what links kōwhaiwhai to Māori well-being is required to strengthen the connection between these two aspects.

Chapter Two: Methodology

The frameworks I used to develop my own methodology for creating kōwhaiwhai designs as mentioned above are Pere's Te Wheke framework and Durie's Te Whare Tapa Whā, as well as certain neuroaesthetic design principles. The framework I constructed is used as a point of measure to produce joy and satisfaction when looking at my kōwhaiwhai works.

My framework "Whatu" takes the form of an eye (figure 1). The reason for this is because this work is based on bringing awareness to the visual senses. Also, the eyes can control which influences we allow ourselves to see by simply closing our eyelids. Whakaaro pai and te mauri o te manawa are interlinked to this as they are the major conceptual themes, which act as the eyelids in this analogy. These two values revolve around the aesthetic characteristics of the framework, and they include hononga, taurite, hangarite, and korikori. Hence, these characteristics are used in order to create a desirable outcome for the design composition, which is to invoke calmness, satisfaction and pleasure when viewing the works, therefore uplifting the viewer's well-being.

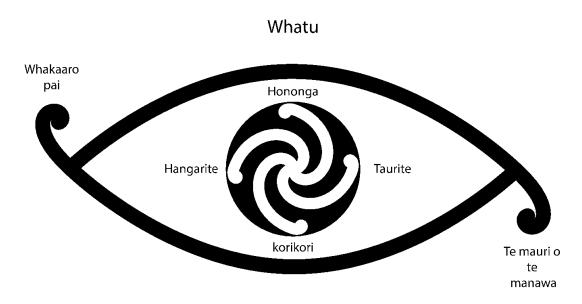


Figure 1: Whatu framework: Maihi Potaka 2021

The aesthetic characteristics mentioned are explained in more detail below:

1. Whakaaro pai – Good intentions throughout the process, a strong kaupapa

Keeping a positive mindset from the beginning to ending of the project includes minimising any negative influences that could affect your work. Ensure that the kaupapa chosen is strong as this will create the basis for a greater conceptual work. This aspect can relate to Te taha Hinengaro in both Te Wheke (Pere, 1991), and Te Whare Tapa Whā health models (Ministry of Health, 2017) as this aspect is exercising your mental capacity. This principle is linked to te mauri o te manawa where it can then be formed based on the research of the kaupapa.

2. Te mauri o te manawa – The essence/rhythm of the work

The manawa of the design within kōwhaiwhai is basically the essence of the kaupapa. It is the heartbeat that sets the tone for the entire appearance and feel of the piece. This is significant since it informs the pattern's overall composition and structure. Mauri is the life force in people and objects. In Pere's (1991) framework she states "Mauri is an in depth term and is one that can pertain to a talisman, the physical symbol of the hidden principle that protects vitality and fruitfulness" (p.12). This aspect also speaks to the te taha wairua aspect in Durie's model (Ministry of Health, 2017).

3. Korikori - Movement

It is critical to create the appearance of movement within a still piece, as this can help to catch and mesmerise the viewer's attention. Movement in still designs, for example, can be seen through the use of curvilinear designs. Curves have a stronger dynamic effect in an image, rather than straight lines and are also more visually attractive in general as the spectator links them with softness (e.g. curved lines in photography can provide graded shadows when combined with soft-directional lighting, resulting in a highly harmonious line structure within the image. Curves are classified into two types: basic "C" curves and sinuous "S" curves) (David, 2015). The movement aspect can be closely related to the following aspect of my design principles, hononga.

4. Hononga – Connections and relationships made within the work

Connection between the kaupapa and the aesthetic design is needed to create a stronger conceptual work. One way of doing this, for example, is through the use of visual metaphors. Making the proper link between the subject of the matter and the depiction of the concepts through the material and pattern will also be part of this effort. This aspect of my methodology relates to the dimensions of Whānaungatanga and Te Taha Whānau in Pere (1991) and Durie's (Ministry of Health, 2017) frameworks. It is also important to create pitau/koru within the work, which have a relationship with each other visually. These connections are then related to the taurite aspect of this framework.

5. Taurite – Balance

The general distribution of visual weight in a composition is referred to as balance. A well-balanced composition is pleasing to the eye. This value is based on my experience when composing kōwhaiwhai. There are various ways or compositional strategies to produce a sense of coherence within an artwork. A piece of art, for example, is considered to be aesthetically attractive to the eye if the components within it are organised in a balanced, compositional fashion (Dunstan, 1979). A well-balanced composition does not allow for too many components and ideas as too many elements may jeopardise the overall composition of the work. Too many components can also generate conflicting dynamics within the piece, which is counterproductive to what I am attempting to do.

6. Hangarite – Symmetry

The visual attractiveness of symmetry is simple to comprehend. Biologically, it is crucial for predator detection, prey placement, and partner selection because all of these exhibit symmetries in nature. It supplements other concepts about the discovery of information-rich items. Furthermore, evolutionary scientists believe that the proclivity for symmetry stems from the biological association of asymmetry within

infection and disease, which can lead to poor mate selection (Ramachandran, 1999). The most common forms of symmetry used in kōwhaiwhai patterns are bilateral symmetry, and bifold rotation (across more than one axis and slide reflection; this is when a form and its mirror image alternate along a line) (Neich, 1994). The overall design does not have to be symmetrical, instead, aspects of the work can have small parts of symmetry.

The process to the creation of my kōwhaiwhai follows five states of mauri (Massey, n.d). These states are an insight into the step-by-step process of creating works. In short, they are:

- Mauri noho broad ideas
- Mauri oho awakening of an idea
- Mauri rere manifestation of the idea
- Mauri tau completion of the composition based on the idea
- Mauri ora execution of the composition

However, it is important to note that each of these five steps represent the creation process that I used to successfully uphold my Whatu methodology, which are explained more fully below:

 Mauri noho/languishing vitality – inactive, disconnected, alienated, sedentary

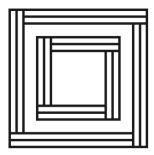


Figure 2: Mauri noho depiction – Maihi Potaka 2021

This graphic depicts the inactivity of one's mauri, such as being stuck or moving slowly. This square-based design does not allow for the free flow of active energy that a circular design allows. The contrast between rolling a dice and rolling a ball for example may be seen in the naturalness of the directions they roll. When I begin my creative process, I am usually pondering on broad ideas for my kaupapa. It may take some time to consider what the most essential things are to investigate, but for the most part I begin as broadly as possible. For my Whakarongo exhibition, I thought about my life in general.

2. Mauri oho/activated; engaged – awakening, activating



Figure 3: Mauri oho depiction – Maihi Potaka 2021

We can perceive an awakening in this design. As the inside circle moves, it interacts with the circle around it causing movement to occur within the outside circle similar to a chain reaction. During this procedure, I pinpoint which specific kaupapa I choose and I plant the seed of the idea and allow my subconscious to contemplate/meditate on the issue. Meditating may mean thinking about the kaupapa and allowing me to ponder about possible visual concepts while doing everyday tasks (e.g. commuting to work or cooking). For this part of the production of my exhibition I identified experiences in my life that have impacted me for better or worse.

3. **Mauri rere/unsettled; distracted** – unbalanced, distracted, unsettled

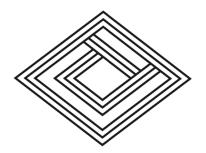


Figure 4: Mauri rere depiction – Maihi Potaka 2021

This design reflects the uneven and restless nature of this state of mauri. The diamond is not properly grounded since it is sitting on its tip. The asymmetry of the design where energy is obstructed at certain spots, reveals the shape's imbalance. During this stage of the process I select specific parts of the research that I believe are significant areas of value and I attempt to translate them into a visual form. Choosing the right features of each korero is challenging and translating these concepts into suggestible symbols may be frustrating as well. These forms might be anything from made-up, pre-existing shapes or rough patterns that I believe depict the kaupapa appropriately. The difficulty in doing so is in generating an aesthetic pattern that is unique while still holding the korero. The medium in which I choose to deliver these ideas are also questioned in this part of the process. My framework principles are also in mind in this state of creation.

4. **Mauri tau/in balance; settled** – in balance, open to renewal and rejuvenated.

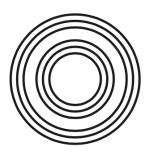


Figure 5: Mauri tau depiction – Maihi Potaka 2021

This design highlights the ability to create balance and serenity. In a condition of tranquillity, this form is free of any movement and is an open book in terms of what it may accept. It is a completely new form that can be moulded into any form of Mauri since it is open to renewal. At this point in my development process, I settle on the designs that I choose to use. Within the concepts the composition should include the core values in my Whatu framework.

5. Mauri ora/flourishing vitality - vital, well, meaningfully engaged, active



Figure 6: Mauri ora Depiction – Maihi Potaka 2021

As the above descriptions illustrate, this design is built on activity and engagement as seen by the movement of energies pointing inward but also outward, giving you a sense of wholeness and well-being. When we envision this design circulating and flowing, we perceive a healthy cycle of energy folding upon itself and moving organically.

This stage involves making the concepts into the art form. In the case of my exhibition, the mediums are painting and printing. For me, this is a therapeutic process, and it is also the easiest phase of my production approach as all of the more difficult work lies in the conceptualisation and composition of the design. As all of the planning has been completed, I am not required to think or problem solve, all that is needed is to follow the planning of a design. On completion of a project, I get a sense of achievement which uplifts my own well-being, bringing me to a state of mauri ora.

Chapter Three: Whakarongo Exhibition

The kōwhaiwhai in this show are intended to assist in the connection between the many dimensions of our well-being. As the space I had designated for the pieces did not enable the larger works to breathe, I constructed two separate spaces within this show. The presence of the huge kōwhaiwhai panels in their own area allowed these works to breathe as the scale and patterns of the works demanded presence. The initial area where the panels are situated pays respect to customary kōwhaiwhai by keeping them all with the exception of one inside the confines of a panel similar in shape to that of a heke in a meeting house. Within the second area I made digital print works to demonstrate the evolution and innovation of how I perceive kōwhaiwhai and how I believe kōwhaiwhai can be taken to the next level of invention.

Kaitiaki - 2.4 m x 400 mm enamel on MDF



Figure 7: Kaitiaki – Whakarongo exhibition piece – Maihi Potaka 2020



Figure 8: Angled profile of Kaitiaki – Whakarongo exhibition piece – Maihi Potaka 2020

The Huia is one of many kaitiaki (guardian) for my iwi Ngāti Hauiti. In order to honour the direction this kaitiaki provides me on a daily basis, I developed a

design that symbolises the spirit of this kaitiaki. Throughout my youth, I thought of a kaitiaki as a protector, something that made me feel comfortable so naturally I imagined my kaitiaki to be Batman, a famous superhero that protected everyone. While I utilise the huia motif in this design, I also made a second more bold representation of the batman symbol that depicts this aspect of kaitiakitanga, where you feel a sense of security. This pattern is vaguely seen in the middle of the design. Creating pop culture allusions like this exposes an audience of all ages to the realm of art. This pop culture reference in the show is a ploy to pique the curiosity of young people and inspire them to explore and appreciate the art of kōwhaiwhai and also show them you can create work with fun kaupapa as-well.

"He Taniwha!" - 2.4 m x 400 mm enamel on MDF



Figure 9: "He Taniwha" – Whakarongo exhibition piece Maihi Potaka 2020



Figure 10: Angled profile of "He Taniwha" – Whakarongo exhibition piece – Maihi Potaka 2020

This design is a food reference, calling into question our everyday intake of what we digest in our lives, not only through our sense of taste, but through all of our senses. A taniwha is a "(noun) water spirit, monster, dangerous water creature, powerful creature, chief, powerful leader, something or someone

awesome" (Moorfield, 2003). In this artwork, there is a repeating closed pattern that relates to a face. The face is made up of a variety of designs, including kape and puhoro. These themes are arranged in such a way that a whēku emerges. I created a whēku that isn't recognisable to just one iwi as it is hidden within the dense patterning and flow. The concept of taniwha was the inspiration for these whēku as it is something that will return your stare if you look it in the eyes. The phrase "He Taniwha!" is what I see myself saying as a younger child to warn my older self about the influences in my life that I should allow in and those that should be avoided. It is a phrase that if said, I would be aware and alert. This work is a reference to the realisation of what we consume and whether it is healthy for our well-being or not.

Herehere - 2.4m x 400 mm enamel on MDF



Figure 11: Herehere – Whakarongo exhibition piece – Maihi Potaka 2020



Figure 12: Angled profile of Herehere – Whakarongo exhibition piece – Maihi Potaka 2020

This kōwhaiwhai pattern reflects the incarceration rates of Māori. The sharp triangle forms are a likened to barbs and the basis of this composition is derived from the whakairo pattern, "Taratara a kai" (McEwen, 1966, p.411). One of my

whānaunga (relative) in particular while incarcerated, turned to te ao Māori to learn more about his own Identity and learn what he was deprived of while growing up, which was his identity. The discipline in which he learnt was whakairo. With Māori art forms, you don't only learn about the art but you get an understanding of tikanga and overall Māori values. This allowed him to change as a person for the better and live under the values of te ao Māori tikanga. The white space through the middle represents Te Ao Marama and the clarity you feel when learning about your own identity.

Wētā - 2.4m x 400 mm enamel on MDF



Figure 13: Wētā – Whakarongo exhibition piece - Maihi Potaka 2020



Figure 14: Angled profile of Wētā — Whakarongo exhibition piece — Maihi Potaka 2020

This kōwhaiwhai artwork symbolises Ranginui's brow and Papatuanuku's chin as they were forcefully separated to create a new world (Royal, 2007). While I was painting this piece, a wētā came in my studio and sat right next to it. This struck me as a tohu (sign), and I began to link the crescent waka forms with the front and rear pincers of the wētā, this experience also led me to name the work

Wētā. The paint texture on this piece has a rough surface, my aim was to produce a surface and feel similar to raw oxide pigments and rough terrain. These colours remind me of the crimson colours in the sky where I compare them to Ranginui's blood, and the red ochre clay oxides within the ground as Papatuanuku's blood through the separation process. The white space flowing through the middle of this pattern also represents Te Ao Marama and the beginning of the new world from Te Po (Royal, 2007).

Mutunga kore – 740 mm enamel on MDF



Figure 15: Mutunga kore – Whakarongo exhibition piece – Maihi Potaka 2020



Figure 16: Angled profile of Mutunga kore – Whakarongo exhibition work – Maihi Potaka 2020

This design was created as an infinity never-ending loop which features rotational symmetry. The idea behind this project was to create a never-ending pattern that could be repeated endlessly upon itself. The objective of this piece is to create the illusion of a kōwhaiwhai panel which is twisted into a circle. An example of this process is seen in figure 17. Changing the shape's boundary gives you a different perspective of the pattern. The continual evolution and growth of our patterns, as well as the tikanga changes that allow us to adapt to the times. This piece functions as a doorway to the area beyond this space and connects to Pito, which is the work located directly behind this wall. The connectivity of these spaces is significant because it signifies a bridge from the known space to the eventual innovation and development of kōwhaiwhai.



Figure 17: Example of rotational symmetry – Maihi Potaka 2021

Pito - 750 mm enamel on MDF



Figure 18: Pito – Whakarongo exhibition piece – Maihi Potaka 2020



Figure 19: Angled profile of Pito – Whakarongo exhibition piece – Maihi Potaka 2020

This design is inspired by my Scottish ancestors. As previously indicated in mutunga kore, Māori did not have a form of rotational symmetry, so I adopted a page from my Scottish ancestors, who utilised forms of rotational symmetry in their ancient rock carvings (Symbols, n.d). The aim of this particular work is to mimic the movement of the water within the process in an effort to create the illusion of movement. The colours are both of the colours represented in my clan tartan. This piece also marks the beginning of the pursuit of whakapapa into my Scottish heritage.

Tamariki – 720 mm x 520 mm Framed Print



Figure 20: Tamariki – Whakarongo exhibition print – Maihi Potaka 2020

This kōwhaiwhai shows the importance of children and how their energy can bring joy and happiness. Pere (1991) states that "Tama is derived from Tamate-rā the central sun, the divine spark; ariki refers to senior most status, and riki on its own can mean smaller version. Tamariki is the Māori word used for children. Children are the most greatest legacy the world can have" (p.4). With the birth of my first born child while I started the developments of this show, I was overwhelmed with a sense of aroha (love). This composition was made as a nod to the love I hold between my daughter and I. The white negative spaces you see are called "ngū" (Neich, 1993, p.45) and in this case are symbolic of kumara which also reflects Rongomatane (Royal, 2007). The main pattern being repeated within this design is "Ngutu Kura" (Neich, 1993, p.31), this to me is the symbolic representation of me holding my baby in my arms of embrace, kanohi ki te kanohi (face to face).

Iho - 720 mm x 520 mm Framed Print



Figure 21: Iho – Whakarongo exhibition print – Maihi Potaka 2020

This work refers to wharenui and demonstrates the link between the physical and metaphysical worlds. The spiritual realm is as real as the physical world in Te ao Māori (Pere, 1991). One path to realisation of one's identity can be through whakapapa. Whakapapa allows you to connect with your tupuna and gain a greater sense of identity. There are two stylised wharenui in this digital print, one for Te Taha Tinana and one for Te Taha Wairua. The figurative house at the bottom represents the wharenui where we connect as tangata whenua. When we enter a meeting house, it is personified by a common ancestor of the iwi or hapū, and we respect that tupuna with tikanga and kawa to protect both ourselves and the meeting house (Royal, 2007). The tupuna's incarnation in this house helps us to connect with this ancestor, forming a deep link with them and the world in which they now reside.

Pāpaka – 720 mm x 520 mm Framed Prints



Figure 22: Pāpaka – Whakarongo exhibition print – Maihi Potaka 2020

This kōwhaiwhai references the food chain and my childhood of catching crabs and flounder to eat. Pātiki is also the name of a popular kōwhaiwhai design seen in Neich's (1993) Painted History book. This design was based off the flounder and its importance to the iwi at the time as an important food resource. Pātiki was a source of nourishment for Māori people and is also a star recognized by Māori (Best, 1922, p.33). I hid a pāpaka within this design as the flounder is known to eat crabs and I thought it was ironic to highlight it's food source while creating this work to show an extension of the original Pātiki design.

Waka - 720 mm x 520 mm Framed Prints



Figure 23: Waka – Whakarongo exhibition print – Maihi Potaka 2020

This kōwhaiwhai references the innovation of transport in the last 300 years. The importance of waka within te ao Māori has changed dramatically since the introduction of horses and motor vehicles. Even now, some Māori construct traditional waka but the connection to this type of travel is limited. What was once important to us then is now becoming obsolete unless used in a traditional or ceremonial sense.

Chapter Four: Analysis/Discussion

As illustrated in the previous chapter, there are many levels of complexity evident in the exhibition pieces. For instance, each one of these works tells a different story of my experiences and the behaviour and patterns in nature and my environment. My hopes are that when viewing the works the audience can find a relatable detail that bonds them specifically to the work, enabling engagement with those thoughts as they connect with the pattern. These works highlight places and values in my life that I have become aware of and realise today to be of importance.

Orientation

When restricted to the space of a heke (painted rafter) in a Wharenui (meeting house), the shape and flow of the pattern is somewhat limited and informed by the linear space provided. This is highlighted by Hanson (1983) when he states, "rafter designs in linear composition; that is, designs that repeat themselves by translation by one direction only" (p.79). Also this exhibition uses different spaces for the pattern to grow and have freedom in a different direction compared to what we usually see in traditional meeting houses. While creating this exhibition, I made certain that the paintings were both at eye level and horizontally oriented. The goal was to improve the viewer's interaction with the work. For example, when a viewer travelled around the room, they could read the narrative of the kowhaiwhai much more easily as it appeared horizontally, rather than vertically (similar to reading a book). This horizontal orientation was also used with the hopes of making the viewer perceive it as a less formal work, demonstrating that such works could be displayed in any space, not just in a vertical and tapu context, as opposed to their carved counterparts, where they were traditionally restricted in tapu (Neich, 1993). Kōwhaiwhai is often seen as the less important discipline within the arts (Buck, 1921). As such, this motivated me to construct kowhaiwhai that could stand on their own as individual works rather than being taken for granted and viewed as a filler pattern.

Mauri

Some artists attempt to capture the spirit of something to elicit an immediate emotional response. In doing so, it is important to capture the essence of something, an artist emphasises the object's peculiarities, or what makes it distinctive, in order to highlight the vital characteristics and eliminate unnecessary information (Ramachandran, 1999). In the context of my work, the essence of an object or a person is often referred to as mauri. In contrast, Pere (1991) states that "Mauri is an in-depth term and is one that can pertain to a talisman, the physical symbol of the hidden principle that protects vitality and fruitfulness" (p.12). Regardless of the perspective, the components of aesthetics work to create a presence within the art itself, which draws in viewers, therefore creating its own mauri that has an effect on people.

Abstraction

Through the use of abstraction, I sought to create pleasure through the visual senses. In particular, the use of kōwhaiwhai can be related to abstract art as it is traditionally non-figurative (Neich, 1993). Also, the abstraction technique in art relates to hierarchical coordination, in which a general representation may be applied to numerous particulars, helping the brain to process visual inputs more effectively. Art externalises the functions of abstraction in the brain in certain ways and Zeki points out that there is a substantial difference in brain activity patterns while viewing abstract art vs representational art (Zeki, 2001). Here, perhaps the satisfaction in abstract art and kōwhaiwhai comes from trying to figure out what you are looking at, similar to visual metaphors and symbolisation.

Visual metaphors and symbolisation

The finding of an object after conflict is more gratifying than one that is immediately evident, which is related to the detection of contrast and grouping. This method aids in portraying elements that symbolise abstract concepts such as flight, fight and survival. Also, causing the spectator to keep looking until the discovery is made. From the standpoint of survival, this might be critical in the ongoing hunt for predators. This concept is called perceptual problem solving

(Ramachandran, 1999). As pre-European kōwhaiwhai are non-figurative (Neich, 1993), the viewer is free to interpret the art form however they please. The title of each exhibition piece offers a hint as to what these works are about and this is one key elements that influences a person's impression of the work. Here, the idea is for the audience to form their own opinion on what the work means, which also led to my decision to simply write the title of the works displayed. Overall, I think that in order to connect with the audience, an artist must produce something that the viewer can relate to. More importantly, by not writing a statement about the work, the viewer is able to discover something relevant in their lives and establish a connection to the work, therefore establishing a tangible connection to the artwork presented.

Aesthetic design

In terms of design and composition, it is believed by Shakurova (2020) that beauty is founded on proportions or composition ratios, as well as visual expressiveness and therefore, it is applicable to any item. Aesthetics is about more than simply what we see. This is because humans are essentially visual beings and as such, our sense of sight tends to dominate how we perceive things. So in art, as much as in everyday life, we unconsciously regard everything we see in a way that conforms to certain standards of attractiveness. The majority of specific shapes and combinations are based on physiology, where some are based on cultural experiences, but in the context of this exegesis, are based on nature and my environment growing up. According to NeuroReport (2012), the visual brain distinguishes between visual components such as brightness, colour, and motion, as well as higher order entities such as faces, bodies, and landscapes. These sensory systems are activated by aesthetic experiences. Hence, within all my designs composed for this show, I strived to include these aspects in order to entice the viewer. Gazing at Van Gogh's dynamic paintings, for example, elicits a subjective feeling of movement and activates visual motion regions, or the middle temporal visual area within the brain. Here, the motion creates "A neural mechanism for aesthetic experience" (NeuroReport, 2012, p.23). Also, the Merriam-Webster dictionary (n.d) also defines aesthetics as "a particular theory or conception of beauty or art: a particular taste for or approach to what is pleasing to the senses and

especially sight" (para. 2). According to this definition, you can experience pleasure through sight. In short, my show emphasizes these principles of aesthetics through kōwhaiwhai however I also think within traditional kōwhaiwhai these qualities naturally exist.

Symmetry:

Another way I explore the idea of creating healing through my work is with symmetry. In all my works (with the exception of the circular works), I use bilateral symmetry and bifold rotation as its visual symmetry is both attractive and simple to comprehend. Also, in terms of biological representation, the use of symmetry within art pieces can be crucial for symbolising predator detection, prey placement, and partner selection as all these concepts exhibit symmetries in nature. It also supplements other concepts about the discovery of information-rich items. The use of symmetry is prominent in kōwhaiwhai panels as seen in Hamilton's (1896) collection (p.121-122). However, although the pattern of the design is symmetrical, the colour throws off the overall symmetry of the design. Similarly, in my work, I purposefully mismatched the colours to create a break in symmetry to create a disruption throughout certain works. This technique has been traditionally used, where Hamilton states "Frequently in kōwhaiwhai patterns perfect symmetry is broken by non-symmetrical use of red and black colours" (Hamilton, 1896, p.182).

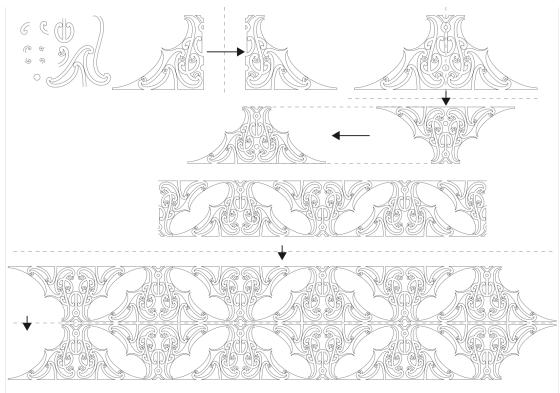


Figure 24: Example of symmetry used in Whakarongo exhibition – Maihi Potaka 2021

Contrast

Kōwhaiwhai naturally has contrast through its colour and pattern system. This adds to the sense of pleasure when viewing an artwork. Within my own process, I used vinyl to mask the paint as it was the cleanest most efficient way to create a contrast between the negative and positive sections within the design. Additionally, Torsten Wiesel (2005) note that the process of extracting contrast entails removing key variables and concentrating attention. Step variations in brightness, rather than uniform surface colours, are preferred by cells in the retina, the lateral geniculate body or relay station and the visual cortex in the brain. In other words, this means that smooth gradients are significantly more difficult for the visual system to perceive compared to segmented divisions of colour. Also, contrasts caused by edge development may be pleasant to the sight. Furthermore, they demonstrate the significance of the visual neuron's varied responses to the direction and presence of edges (Wiesel, 2005). There is much contrasting value in kōwhaiwhai patterns, which differentiate the

artform from other Māori art mediums, such as, tā moko, whakairo and rāranga as these designs focus on surface patterns to create the positive and negative illusions. Whereas, kōwhaiwhai focuses on using solid blocked out colours.

Conclusion

In this exhibition report, I have examined and discussed the potential for kōwhaiwhai designs to contain healing properties via the visual senses, as well as what techniques can be used to create powerful works that can be utilised as a form of rongoā Māori. In this exegesis, Māori well-being has been explored through Pere's (1991) Te Wheke Hauora, and Durie's (2007) Te Whare Tapa Whā models as they align well with the overall purpose of this project. Hence, these frameworks, along with aesthetic design principles, allowed me to construct my own methodology for creating kōwhaiwhai works that produce a sense of pleasure when being viewed. Also, the aspects discussed in my Whatu framework make links between rongoā māori and kōwhaiwhai.

Connections to Māori well-being and kōwhaiwhai were researched in my literature review, where other art forms of te ao Māori were drawn on to support the connection with kōwhaiwhai as there were not any direct links made. In this review, the focus was on the naming and implementations of customary and creative representations, as well as their symbolic meanings. These subjects helped inform my decision making into how I approached creating motifs and names for my works.

The Whatu methodology that was created was inspired by various research and health models as mentioned above, but the process of applying my framework was represented as different states of mauri. The procedure of how I created my works flowed into the individual steps and states of mauri as my ideas went from conceptualisation to physical form. This structure has allowed efficiency in planning and time management, and as a result my Whakarongo exhibition was born with little to no stress. The reason I chose these mauri stages to symbolise the production style, was because they corresponded to my natural way of generating thoughts and composing works.

A brief breakdown of my Whakarongo exhibition was also explored. Here, a review of these works was discussed in more depth in Chapter 4, which provided further context behind the aspects as the techniques and dynamics used within the show were highlighted.

In conclusion, this exegesis makes explicit connections between the uplifting of wellbeing and kōwhaiwhai when viewing my works. Ultimately, these links are evident in Whakarongo as it uses the Whatu principles and techniques of aesthetic design. Here, certain values were made aware of, which relate aesthetic design more directly to kōwhaiwhai (e.g. orientation, symmetry, visual metaphor, abstraction, mauri, and contrast). Each of these values had correlations to both kōwhaiwhai and aesthetic design, thus recognising the pleasurable satisfaction a viewer feels when observing my kōwhaiwhai, and therefore recognising kōwhaiwhai as a form of rongoā māori.

Lastly, it is important to note that the expansion and innovation of kōwhaiwhai is never ending. Being informed by Māori history through this visual language has given me the pleasure of developing further on what my tupuna had already established. This age of technological advances has allowed me to further these establishments in a way that my ancestors could not, letting me reflect on the time that I live in today. Finally, it is my hope that the work produced from this exegesis regarding the dynamic complexity of kōwhaiwhai will aid other artists in their future endeavours.

Reference List

- Adsett, S. Graham, C. & McGregor, R. (1992). *Kowhaiwhai Arts*, Education Advisory Service. pp. 2-3
- Ancient symbols (n.d). *Celtic Symbols from Ancient times*. https://www.ancient-symbols.com/celtic-symbols.html
- Hamilton, A. (1896). Maori Art. Fergusson and Mitchell. pp. 121-182
- Hanson, F. A. (1983). When the Map is the Territory: Art in Maori culture. In D.K. Washburn (Ed.), Structure and Cognition in Art, Cambridge UniversityPress. pp. 73
- Harrison, P. (1988). *TANE-NUI-A-RANGI*. pamphlet, University of Auckland. pp. 1
- Hubel D.H, Wiesel T.M (2005). *Brain and Visual Perception: The Story of a 25-year collaboration*. Oxford University Press. pp. 106.
- Massey University. (n.d) *Toi Hauora Kōrero o te Wā*. Māori models of health and wellbeing to elevate mauri. In *masseyuniversity.ac.nz*, retrieved, July 2021 https://www.massey.ac.nz/massey/fms/Maori%20Students/New%20images/COVID19/Toi%20Hauora%20korero%20o%20te%20wa%202%20Mauri.pdf?DBB4B4EB473553C197A78C15FACCAD37
- McEwen, J.M. (1966). *Maori Art*. In A.H. McLintock (ed.), An encyclopaedia of New Zealand pp. 411

- Ministry of Health. (2017), Māori Health Models Te Whare Tapa Whā, one model for understanding Māori health is the concept of 'te whare tapa whā' the four cornerstones (or sides) of Māori health. In health.govt.nz.

 Retrieved, 2021 https://www.health.govt.nz/our-work/populations/maori-health/maori-health-models/maori-health-models-te-whare-tapa-wha
- Moorfield, J, C, Te Aka online dictionary, (2003-2021). *Rongoā.* In *maoridictionary.co.nz*. Retrieved, May 2021 https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=rongoa
- Moorfield, J, C, Te Aka online dictionary, (2003-2021). *Taniwhā*. In *maoridictionary.co.nz*. Retrieved, July 2021
- https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=taniwha
- Museum Of Te Papa Tongarewa. (n.d) Māori medicine Rongoā Māori

 In traditional Māori medicine, ailments are treated in a holistic manner. In

 Tepapa.govt.nz. Retrieved, June 2021, from

 https://www.tepapa.govt.nz/discover-collections/read-watch-play/maori/maori-medicine
- Neich, R. (1993) Painted Histories, Auckland University Press, pp. 31-45
- Pere, R. R. (1991) Te Wheke: A Celebration of Infinite Wisdom, NZ: Ao Ako. pp. 1-26
- Ramachandran. W. H. (1999 *The Science of Art: A Neurological Theory of Aesthetic Experience, in* Journal of Consciousness Studies. 6(6–7): pp. 15–51
- Royal, T. A. (2007) *Māori architecture, Whare Māori Te Ara* the Encyclopaedia of New Zealand, in *teara.govt.nz*. retrieved 16 July 2021.
- https://teara.govt.nz/en/maori-architecture-whare-maori/page-2

- Royal, T. A. (2007). Kaitiakitanga guardianship and conservation, Te Ara the Encyclopaedia of New Zealand, in teara.govt.nz. retrieved 16 July 2021. https://teara.govt.nz/en/kaitiakitanga-guardianship-and-conservation
- Royal, T. A. (2007). *Maori creation Traditions*, Te Ara the Encyclopedia of New Zealand, in *teara.govt.nz*. retrieved 16 July 2021 https://teara.govt.nz/en/maori-creation-traditions/print
- Royal, T. A. (2007). *Kūmara*, Te Ara the Encyclopedia of New Zealand, in *teara.govt.nz*. retrieved 16 July 2021 https://teara.govt.nz/en/photograph/17371/rongomatane
- Royal, T. A. (2007). *Papatūānuku the land Tūrangawaewae a place to stand,* Te Ara the Encyclopedia of New Zealand, in www.TeAra.govt.nz. retrieved july 2021 http://www.TeAra.govt.nz/en/papatuanuku-the-land/page-5
- Thakral, P.P, Moo L.R, Slotnick, S.D (2012). *A neural mechanism for aesthetic experience*. NeuroReport. 23(5), pp. 310–3.
- Merriam-Webster. (n.d.). *Aesthetic*. In Merriam-Webster.com dictionary. Retrieved March, 2021, from https://www.merriam-webster.com/dictionary/aesthetic
- Shokurova, K. (June, 2020). What Makes Something Beautiful and How To Use It In Design, in Shakuro, retrieved, July 2021, https://shakuro.com/blog/what-makes-something-beautiful-and-how-to-use-it-in-design
- Zeki, S. (2001). Essays on science and society. Artistic creativity and the brain". Science. 293 (5527): 51–2.