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Ko te Kōauau:

**Its historical journey, aspects of construction, socio-cultural
relevance, and performance**

A thesis

**submitted in partial fulfilment
of the requirements for the Degree**

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Abstract

In recent years there has been a revival of interest in traditional *Māori* musical instruments, including the *Kōauau* (sometimes called a “flute”). Most of the information on record is from *Pākehā* perspectives of music and culture. This thesis studies *Kōauau* in a *Māori* framework, giving weight to traditional *Māori* knowledge and practices, while bringing together much scattered information. The research links the origins/*whakapapa* of the *Kōauau* to the gods and their natural world, especially *Hineraukatauri*. The thesis analyses the materials used for *Kōauau*, the circumstances under which materials were acquired, their significance, design and methods of construction, and the tools employed in making *Kōauau*. The study discusses techniques for playing *Kōauau*, including its range of sounds, occasions on which they were played, and for what purposes they were used. Reference is made to the story of *Hinemoa* and *Tūtānekai*, with the suggestion that more knowledge can be drawn from *pakiwaitara* and *pūrākau*. As part of the research, several *Kōauau* available in the Auckland Museum were examined, showing that close inspection of these *taonga* significantly extended the information on them held by the Museum. Despite the constraints of the research in terms of time and other resources, the thesis makes an important contribution to knowledge, by collating widely distributed documentation into a concise form, by placing the *Kōauau* into a *Māori* perspective, emphasizing the spiritual dimensions of the instrument in its origins and its function, and by indicating what kinds of further research will assist in strengthening the revival of the *Kōauau*.

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*Ko Puhunga Tohora te maunga,
Ko Punakitere te awa,
Ko Ngāpuhi te iwi,
Ko Ngāti Ueoneone te hapū,
Ko Okorihī te marae,
Ko Ngātokimatawhaorua te waka,
Tihei mauri ora.*

*Ko Rangiuru te maunga,
Ko Kaituna te awa,
Ko Tapuika te iwi,
Ko Ngāti Tuheke te hapū,
Ko Makahae te marae,
Ko Te Arawa te waka,
Tihei mauri ora.*

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Nō reira,

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Tēnā koutou,

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2.1	<i>Whakatūwheratanga</i> – Introduction _____	11
2.2	<i>Nā wai i hanga, ā, nā wai i whakatangi te Kōauau?</i> - Who were the makers and players of Kōauau? _____	14
2.3	<i>Ko te take-ā-hītori, ā-tikanga hoki o te Kōauau</i> - Historical and socio-cultural significance of the Kōauau _____	14
2.3.1	<i>Ko ngā Atua me ngā Kaitiaki o te Kōauau</i> – Gods and Guardians of the Kōauau _____	15
2.3.1.1	<i>Hineraukatauri / Hinerakataura</i> – Goddess of Flute Music __	15
2.3.1.2	<i>Tāne-mahuta rāua ko Tāwhirimātea</i> – God of the Forest and God of the winds _____	17
2.4	<i>He aha ngā tū rauemi hanga Kōauau?</i> –What were Kōauau made from? _____	17
2.4.1	<i>Pounamu</i> – Greenstone _____	18
2.4.2	<i>Kōiwi Toroa</i> – Albatross bone _____	18
2.4.3	<i>Kōiwi Tangata</i> - Human bone _____	19
2.5	<i>Pūrākau me ngā kōrero Kōauau</i> - Various accounts of the Kōauau _	21
2.6	<i>Ko te hononga o te Kōauau ki te Patupaiarehe</i> – Kōauau connections with Patupaiarehe _____	25
2.7	<i>Ko te wairua o te Kōauau</i> – Spiritual Aspects of the Kōauau _____	27
2.8	<i>Whakarāpopototanga</i> - Conclusion _____	30
	<i>Wāhanga Tuatoru: Chapter 3</i> _____	31
	<i>Ko te Hanganga o te Kōauau:</i> _____	31
	The construction of the Kōauau _____	31
3.1	<i>Whakatūwheratanga</i> – Introduction _____	31
3.2	<i>Ko te āhua o te Kōauau</i> - The design and shape of the Kōauau _____	31
3.2.1	<i>Ko ngā taputapu hanga Kōauau</i> – Tools used in making Kōauau _____	32
3.2.1.1	<i>Ko te Toki</i> – The Māori Axe _____	33
3.2.1.2	<i>Ko te Whao</i> – The Māori chisel _____	34
3.2.2.3	<i>Ko te Tūāwiriwiri</i> – The Māori Drill _____	35
3.3	<i>Ko te hanganga o te Kōauau</i> - Kōauau construction _____	37

3.3.1	<i>Ko ngā huarahi tūturu hanga Kōauau</i> - Traditional construction techniques _____	38
3.3.1.1	<i>Kōauau Rākau</i> – Wooden <i>Kōauau</i> _____	38
3.3.1.2	<i>Ko te Arearenga</i> – The Bore _____	40
3.3.1.3	<i>Kōauau kōiwi</i> – Bone <i>Kōauau</i> _____	41
3.3.1.4	<i>Kōauau kōhatu</i> – Stone <i>Kōauau</i> _____	42
3.4	<i>He aha ngā tū whakairo?</i> What are the types of carvings? _____	43
3.5	<i>Ko ngā whakanikoniko wera, harakuku hoki</i> - Burnt and etched designs _____	45
3.6	<i>Ko te whakaoranga taonga</i> - Preservation techniques _____	46
3.6.1	<i>He whakamārōtanga</i> - Burnishing _____	46
3.6.2	<i>Kōkōwai</i> – Red Ochre _____	47
3.6.3	<i>Horu</i> – Volcanic Red Ochre _____	47
3.6.4	<i>Ko te hinu o te tinana</i> - Natural body oil _____	48
3.6.5	<i>He Whakamārōtanga nā te ahi</i> – Heat Treatment and Fire Conditioning _____	48
3.7	<i>He whakakai Kōauau</i> – <i>Kōauau</i> as adornments _____	49
3.8	<i>Whakarāpopototanga</i> – Summary _____	52
	Wāhanga Tuawhā: Chapter 4 _____	54
	<i>Ko te mahi Whakaatu:</i> _____	54
	Use and Performance _____	54
4.1	<i>Whakatūwheratanga</i> – Introduction _____	54
4.2	<i>Ko te Hou Mataaho</i> – Acoustics: The Magic of Sound _____	54
4.2.1	<i>Ko te Taiao</i> - The Natural Acoustic Auditoriums and Concert Chambers of the Māori _____	55
4.3	<i>Ko ngā Tikanga Whakatangi Kōauau</i> - Stance, blowing, and playing techniques _____	57
4.3.1	<i>Tūnga</i> - Stance _____	58
4.3.1.1	<i>Me Tū Ake</i> (you should stand) _____	58
4.3.1.2	<i>Kore he Pōtae</i> (no hat or headwear) _____	59
4.3.1.3	<i>Kore he Hū</i> (no shoes) _____	59

4.3.2	<i>Ko ngā tikanga pupuhi, whakatangi Kōauau hoki - Techniques of blowing and playing Kōauau</i>	59
4.4	<i>Ka whakatangihia te Kōauau i hea, āhea hoki? - Where and when are Kōauau played?</i>	68
4.4.1	<i>Hei pōpō i te mamae – To soothe pain</i>	69
4.5	<i>Ko te tito waiata – Composition: music and songs</i>	72
4.5.1	<i>Te taiao - The natural world: Sources of inspiration</i>	73
4.5.1.1	<i>Te Haurere o Tangaroa – The Rhythms of Tangaroa</i>	74
4.5.1.2	<i>Te Pūmanawa o Rūaumoko – The Beat of Rūaumoko</i>	75
4.5.1.3	<i>Te Korutanga o Haumia-tiketike – The Notation of Haumia-tiketike</i>	76
4.5.1.4	<i>Te Hīrangi o Tawhiri-matea - Tawhiri-matea: The Bearer of tunes</i>	77
4.5.1.5	<i>Te Hautangi o Tāne-mahuta – The Chorus of Tāne-mahuta</i>	77
4.6	<i>I hopukina te reo o te Kōauau e whakatangi tūturuhia ana - The last to be recorded playing the Kōauau traditionally</i>	78
4.7	<i>Whakarāpopototanga – Conclusion</i>	80
	Wāhanga Tuarima: Chapter 5	81
	He kōrerorero mō ngā Kōauau e pupurhia ana i Tāmaki Paenga Hira:	81
	Discussion of Kōauau held at the Auckland War Memorial Museum	81
5.1	<i>Whakatūwheratanga – Introduction</i>	81
5.2	<i>Ko ngā Kōauau e pupurhia ana i Tāmaki Paenga Hira - Kōauau held at the Auckland War Memorial Museum</i>	85
5.3	<i>He kōrerorero whānui mō ngā Kōauau e pupurhia ana i Tāmaki Paenga Hira - General discussion about the Kōauau held at the Auckland War Memorial Museum</i>	92
5.4	<i>Whakarāpopototanga – Conclusion</i>	93
	Wāhanga Tuaono: Chapter 6	94
	He Tirohanga Whakamuri me ngā Whakakitenga:	94
	Reflections and Recommendations	94
6.1	<i>Whakatūwheratanga – Introduction</i>	94

6.2	<i>Ko te hāngai o te rangahau e pā ana ki te aranga ake anō mai o ngā mātauranga taonga pūoro</i> - Relevance of the research in relation to a resurgence of interest in Māori instruments _____	95
6.3	<i>Ko ngā kōpīritanga o te rangahau</i> - Limitations of the research _____	97
6.4	<i>Me he rangahau kei te haere</i> - Recommendations for future research _____	97
	<i>Whakapuakanga</i> _____	100
	References _____	100

Rārangi Ripanga

List of Tables

<i>Table 1: Kōauau held at the Auckland War Memorial Museum</i>	82
<i>Table 2: Kōauau held at the Auckland War Memorial Museum</i>	84

Rārangi Whakaahua

List of Figures

<i>Figure 1: A range of Kōauau made from different materials</i>	x
<i>Figure 2: Hineraukatauri is depicted in the whakairo (carvings)</i>	16
<i>Figure 3: An example of Kōauau toroa</i>	19
<i>Figure 4: A Kōauau kōiwi tangata</i>	20
<i>Figure 5: The longest place name in Aotearoa</i>	24
<i>Figure 6: Tamateapokaiwhenua shown playing a Kōauau, Ihenga whare nui, Rotorua</i>	24
<i>Figure 7: Two types of Pūtōrino</i>	27
<i>Figure 8: Examples of Pūrerehua</i>	29
<i>Figure 9: Hineraukatauri – The Case moth and a Kōauau that assumes the shape of Hineraukatauri.</i>	32
<i>Figure 10: An example of a toki</i>	33
<i>Figure 11: An example of a toki upside down</i>	34
<i>Figure 12: Example of a whao with interchangeable heads</i>	35
<i>Figure 13: A Māori using a Tūāwiriwiri</i>	36
<i>Figure 14: Other examples of a tūiri drilling device</i>	37
<i>Figure 15: Image showing the kōwenewene knuckle placement theory</i>	37
<i>Figure 16: A Kōauau rākau</i>	39
<i>Figure 17: An example of a Kōauau Kōhatu</i>	43
<i>Figure 18: Kōauau kōiwi tangata showing mokomoko carvings</i>	43
<i>Figure 19: Kōauau showing rhythmical spiral pattern from Te Taitokerau</i>	44
<i>Figure 20: Kōauau rākau showing burnt designs</i>	45
<i>Figure 21: Kōauau kōiwi toroa showing etched designs</i>	46

<i>Figure 22: Kōauau rākau showing burnt designs</i>	46
<i>Figure 23: Kōauau showing an example of horu and awe ngārahu colouring</i>	47
<i>Figure 24: Kōauau with taura, and a human finger bone toggle</i>	49
<i>Figure 25: A Pūkāea</i>	56
<i>Figure 26: Te Kiwi Amohau (Ngāti Whakaue) demonstrating both the mouth and nose blowing techniques</i>	63
<i>Figure 27: A Ponga ihu</i>	65
<i>Figure 28: Examples of Pūmoana</i>	74
<i>Figure 29: A Pūtātara which belonged to King Tawhiao</i>	75
<i>Figure 30: Pītau Aruhe – Bracken fern fiddleheads</i>	76
<i>Figure 31: Examples of the Rōria</i>	78
<i>Figure 32: Mrs Paeroa Wineera with her Kōauau</i>	79
<i>Figure 33: Image showing examples of Kōauau, with a Nguru at the top left</i>	99

Karakia Tīmatanga - Opening Prayer

*Tō tiakinga māramatanga e te Atua
Mō tō mātou Kīngi, mō te kāhui ariki,
Mō ngā tinana e māuiui ana tae noa ki a mātou katoa i te rā nei,
Āe, nāu te korōria,
Nāu te korōria,
Nāu te korōria,
Rire, rire hau,
Paimārire.*

Figure 1: A range of *Kōauau* made from different materials



Photo: Jo'el Komene

Wāhanga Tuatahi: Chapter 1

He Whakatūwheratanga ki te rangahau nei:

Introduction to the research

1.1 *Whakatūwheratanga - Introduction*

Since the year 2004 and my introduction to *taonga pūoro*, my love has grown for the instruments and their spiritual and ancestral sounds. As I began to learn more and more about them, I also began constructing them from both traditional materials where possible and from contemporary substitute materials. I soon became hungry for more knowledge and began to seek written evidence about things I had learned. To my surprise, I found that the written information was limited and repetitive. In addition, nearly all of the information was scattered among numerous books and publications.

My focus is on archival research analysing both published and unpublished works, myths and legends, oral narratives, images of *Kōauau*, compact discs and video. This study will offer a *Māori* perspective on the *Kōauau* by considering its historical and socio-cultural significance, journeys of the *Kōauau* in *pūrākau*, and its various *iwi*, *hapū* and *whānau* connections. I will also discuss its connections with *Patupaiarehe*, *tapu* restrictions and guidelines, prohibitions and spirituality, the construction of the *Kōauau*, usages and performance criteria, and song composition. Material held in public collections will also be examined, and renowned players from the past and contemporary artists will also be considered.

The larger implications of the findings in relation to a resurgence of interest in *Māori* instruments and the *Kōauau* are that the relevant knowledge is still alive, so that we can take note of and respect the ways and traditions passed down to us from our ancestors and follow those ways. This research provides a beginning to fill the gaps in regard to the many *Māori* instruments that are commonly misunderstood and used incorrectly. Despite the high numbers of *Kōauau* in New Zealand museums and around the world much of the knowledge surrounding them

is still a mystery and in accordance with *Māori* oral traditions, much of this knowledge resides in the minds and hearts of our *koroua* and *kuia*. My concern is that this knowledge will be lost with our elders and it is necessary for it to be written in order to provide an accurate and concise record of knowledge and understanding. This research is therefore a beginning with the intention of encouraging further research to acquire and record those living memories.

1.2 *Ko ngā pakirehua rangahau* – Research questions

The following are the central research questions:

1. Why is the *Kōauau* one of the most significant *Māori* instruments?
2. How, and of what materials, were *Kōauau* made and what does their design and construction tell us about their significance within traditional *Māori* society?
3. What are some of the surviving stories about the *Kōauau* and what do they tell us about their historical and socio-cultural significance?

1.3 *He aha hoki te Kōauau?* – What exactly is a *Kōauau*?

It is important to define exactly what I mean by the *Kōauau* as there are many discrepancies in defining what is a *Kōauau* and what is not. A number of *Māori* flutes are outlined below.

A *Kōauau* is a cross-blown flute that is smaller than a *Pūtōrino*. This instrument was traditionally made of wood, bone or a species of kelp.

A *Kōauau Ponga ihu* is a gourd flute made of tiny gourds with the neck removed, and played with the nose.

A *Pōrutu* is a long flute with three to six finger holes near the bottom end.

A *Rehu* is a long flute with a closed top and a transverse blowing hole with finger holes like a *pōrutu*.

A *Nguru* is a short, semi-closed, cross-blown flute made of wood, bone or stone and played with the mouth and nose.

A *Pūtōrino* is the largest of the traditional flutes, usually made of wood.
(Moorfield, 2008)

The *Kōauau* is important because it is the most widely known instrument of the *Māori*, and many examples still survive, not only in museums but in the possession of young and old. Alive, still to this day, are stories that help to remind us of the *Kōauau* and provide us with examples of usage and various themes associated with the instrument. As one observer commented: “The *Kōauau* is celebrated in Maori folk lore, and was highly prized, not only as a musical instrument, but as a heirloom, and as an ornament, being often worn suspended around the neck from a thong” (Kennedy, 1931, p. 12).

1.3.1 *Ko te kōrero taketake o te Kōauau - Origin Story of the Kōauau*

Irawaru began life as a man, but was turned into the first dog by Māui-tikitiki-a-Taranga. In Māori mythology, Irawaru is the origin of the dog (however there are also other versions of the origin of the kuri Māori). He is the husband of Hinauri, the sister of Māui. Māui becomes annoyed with Irawaru and stretches out his limbs, turning him into a dog. In some stories, Irawaru as a dog eats faeces. When Hinauri asks Māui if he has seen her husband, Māui tells her to call “Moi! Moi!” whereupon the poor dog runs up, and Hinauri, learning the truth, throws herself into the sea (Tregear, 1891, p. 107).

After Irawaru throws himself into the sea his remains (dog bones) become a raw material and resource for making a *Kōauau* as the rear leg bones of a dog (*kurī Māori*) are suitable for this instrument. In order to get revenge on *Irawaru* for committing suicide and hurting *Māui's* sister *Hinauri*, *Māui* makes a *Kōauau* from the hind leg of *Irawaru* (as a dog) to keep the love of *Hinauri* alive through the tunes of the *Kōauau*

Versions differ as to the cause of Māui's annoyance with his brother-in-law. In some, he is jealous of Irawaru's success at fishing; in others, he is angry at Irawaru's refusal to give him a cloak, or disgusted at Irawaru's

greedy nature. In traditional Māori society, the relationship of brothers to their sisters was close, and many stories deal with the tension and rivalry between brothers-in-law. The story accounts for the characteristics of dogs: they share human homes and food, they respond to commands, but they also have some habits that people find disgusting (Tremewan, 2002, pp. 95-96).

To begin, I will set out the names of the parts of the *Kōauau* in both *Māori* and English so as to be clear from the beginning on the terminology and exactly what part is being written about.

From the top of the *Kōauau* or the blowing end we have the *puare* or the embouchure. This is where the lips of the player meet the *puare* and sound and music is initiated. From this point until the other extreme end is the *tinana* or body of the instrument. The end of the instrument where the breath is expelled after travelling down the *tinana* (body) is called the *waha* or mouth of the instrument, and is literally called this in relation to the mouth of a human. As the mouth of a human produces sound and song using the body as the instrument, so does the mouth of the *Kōauau* in the same way. The three stop holes, in order from *puare* to *waha*, are called: *Māui-taha*, *Māui-roto* and *Māui-mua*. These names will be discussed further.

Beattie quotes one of his informants (who he does not identify) as saying that one particular *Kōauau* has 3 stop holes: “It had koroputa e toru (three holes)” (Beattie, 1994, p. 483). Here, *koroputa* is another word used to describe the stop hole on a *Kōauau*. The word *koroputa* applies here when referring to one stop hole or many.

Other names for the parts of the *Kōauau* are *wenewene*, *kōwenewene* and *wenewene purunga ringa*. These three terms are names for the stop holes found on a *Kōauau*. They have no reference to a specific hole, only to the stop holes in general. A *wenewene* is a hole in a *Kōauau* and the *wenewene purunga ringa* is defined simply as a finger hole. *Purunga ringa* simply means that the hole is blocked or stopped by the finger or hand.

Beattie gives another two words which are used for the holes in a *Kōauau*, stating 'rua' and 'puta' are used for describing the stop holes (Beattie, 1994, p. 258). 'Rua' is simply a hole. This word is also used for the holes dug in the ground for the storage of *kumara*, the sweet potato. These holes are called 'rua kumara' or *kumara* pits. 'Putā' is the word used for opening or hole, but with this word the emphasis is on the air escaping from the main bore, appearing and sounding off, rather than focusing on the holes in the wall of the *Kōauau*. Beattie further lists the following words that describe the finger holes of the *Kōauau*:

Ruarahi (big hole)
Ruaiti (small hole)
Ruaitirawa (very small hole)
(Beattie, 1994, p. 259)

There is no explanation to say which hole these words are describing, whether top, middle or bottom finger hole. Other words used for describing and naming the finger holes are:

kaiwhakakaha - name of the top finger hole of a *Kōauau*.
kaiwhakahī - name for the middle finger hole of a *Kōauau*.
kaiwhakangāwari - name of the finger hole of a *Kōauau* nearest the lips.
(Moorfield, 2008)

However, if we take a closer look at these names it is evident that a mistake has been made in definition. In fact, the *Kaiwhakangāwari* is the stop hole furthest from the lips of the player or the *puare*, being the easiest note to achieve. Then, working our way up the *Kōauau*, there is *Kaiwhakahī*, which has been correctly defined as being the middle stop hole and is slightly harder to produce a note from than the *Kaiwhakangāwari*. Last is *Kaiwhakakaha* which is the strongest note and the hardest to produce.

Other words that have been used to describe the stop holes are *Māui-taha*, *Māui-roto* and *Māui-mua*, in order from *puare* to the *waha* of the *Kōauau* (Best, 2005, p. 238). These names are the brothers of the famous *tipua* and ancestor of *Māori*,

Māui-potiki (the youngest sibling), also known as *Māui-tikitiki-ā-Tārangā* (*Māui* who came from the top knot of his mother *Tārangā*) and *Māui-tinihanga* (*Māui* the trickster), who is well known for his dangerous and heroic feats of fishing up *Te Ika a Māui* (the North Island of New Zealand) with the jaw bone of his grandmother *Mahuika*, slowing down *Tama-nui-te-rā* (the sun) giving us longer light in the day, stealing fire potential for man in the fingernails of his grandmother, and many more well known deeds and accomplishments.

Looking closer into the three brothers of *Māui-potiki* (*Māui-taha*, *Māui-roto*, *Māui-mua*), we can see that the nature and personality of the three brothers as individuals are directly related to the difficulty and temperament of the stop hole names of the *Kōauau* and the effort required to make the individuals sing their song. This brings to the forefront the *whakapapa* (genealogy) of the *Kōauau* and where it fits in relation to the creation of the world.

1.3.2 *Ko te whakapapa o te Kōauau - The genealogy of the Kōauau*

The *whakapapa* of the *Kōauau* is essential in defining the *Kōauau*. Below follows a version of *whakapapa* that begins with *Te Kore* and descends to *Hineraukatauri* who is the goddess of flute music until this day.

According to *Māori* popular belief, the world began many aeons ago with *Te Kore*, the realm of potential being or The Void. As time progressed, so began the creation of the universe. Then came *Te Pō*, the great darkness, and out of the great darkness came *Rangi-nui-e-tū-iho-nei*, the Sky father, god of the sky, and *Papatūānuku*, Earth mother and husband of *Rangi-nui-e-tū-iho-nei*, from which union originate all living things. From *Rangi* and *Papa* came many off-spring, one of which is *Tāne-mahuta*, the *atua* of the forests and birds. From *Tāne-mahuta* came *Hineraukatauri*, who is the *atua* of flute music and is personified in the common Bag moth or Case moth that hangs from the branch of a tree and sings her lament which is as audible as forest sounds (Brown, 2005, p.84).

While *Hineraukatauri* is regarded as the goddess associated with flute music (Brown, 2005, p.84), *Tāwhirimātea* comes into the picture as the god of wind, air, and breath which travels from the atmosphere into our mouths and lungs, then is

expelled from the lungs to the lips, and grants us the potential and ability to produce music. *Hineraukatauri* and *Tāwhirimātea* are present in all *Kōauau*. Then there are other gods and guardians involved in a *Kōauau* that is made from alternative and different materials such as *Hue* or Gourd (*Lagenaria siceraria*), *pounamu* or greenstone, and *kōiwi Toroa* or Albatross wing bone. In these instances, *Hinepūtehue*, daughter of *Tāne-mahuta* and *Hine-rauāmoa*, is the originator of musical instruments made from the gourd, which produces soft soothing sounds (Melbourne, 1994, p. 4). *Hinepūtehue* comes into effect for the *hue* with her soothing peaceful characteristics, gathering together and holding on to the wrath, hate and anger of the children of *Rangi* and *Papa* because of the separation of their parents, and thus providing a calm and peaceful world for us as humans.

1.3.1.1 *Ko ngā tikanga o te kupu Kōauau - Definitions of the word Kōauau*

In the following section, a brief analysis of the term *Kōauau* will be presented.

If I take the word *Kōauau* itself and break it up into all the possible meanings that could be understood, it may provide a range of results. In the first definition of the word ‘*Ko*’ provided below, you will notice that the vowel ‘*o*’ in ‘*ko*’ has no macron above it, signifying that it has a short sound. This is consistent with the story of *Māui*, *Hinauri*, and *Irawaru*, where *Irawaru* reveals himself by saying “*Ko au, ko au*”. I will elaborate on this story later in the thesis.

- 1) **Ko** (i), a particle used before proper names, pronouns, and common nouns preceded by a definitive. (Williams, 2000, p.121)

The second definition below also relates closely to the *Kōauau*. It is written exactly the same as the ‘*kō*’ in *Kōauau* but with reference to the sound and song of a bird. The *tikanga* of the *Kōauau* in this context is to imitate birds in song and to take inspiration from birds: their singing provides us with inspiration and a platform for tunes and composition.

- 2) **Kō** (iv). 1. v.i. *Sing, as birds*. (Williams, 2000, p.121)

The first definition of the word ‘*auau*’ provided below refers to the sound of barking and the barking of a dog. This is an onomatopoeic term where the word sounds like the barking sound of a dog, and is also a compound word where ‘*au*’ is the base word and is doubled or repeated, but pronounced as one, to indicate repetition and an ongoing bark of the dog. The word also relates directly to the story of how the *Kōauau* got its name which I have alluded to in the first explanation for the word ‘*Ko*’.

- 1) **Auau.** II **au** so therefore:
Au (iv), v.i. *Bark, howl* (Williams, 2000, p.21)

The second definition for the word ‘*auau*’ provided below is rather interesting. Definition 2a) for the word ‘*auau*’ refers to frequency and recurrence. This property is found in the sound of a *Kōauau* when played. If you analyse the sound, you find that a skilled player uses vibrato to produce a mature and pleasant sound, the same as a mature singer manipulates his or her voice.

- 2a) **Auau.** 2. *Frequently repeated, again and again*
- 2b) **Auau.** 3. Ad. *Frequently* (Williams, 2000, p.21)

The definition 2b) above for the word ‘*auau*’ refers to the physical characteristics of the sound in terms of frequency, pitch, and tone, with a focus on the physics. Nevertheless, this is another connection between the literal meanings of the word *Kōauau* and what it actually does when played. The word ‘*Kōau*’ is defined as:

Kōau = kawau. 1. n. *Phalacrocorax varius, shag.* (Williams, 2000, p.123)

The *Kōau* or *Kawau* bird, also called the Black cormorant or great cormorant, is associated here with the second definition for the word ‘*kō*’ and the singing of birds. Although it is a variation from one dialect to another, it is the sound that gives it away, because *Kōau* and *Kawau* sound very similar in pronunciation. However, this is another connection to the birds and children of *Tāne-mahuta*

through examining the components of the complete word *Kōauau*. The word ‘*Koa*’ is defined as:

Koa 1. a. *Glad, joyful.*

Koa 2. v.t. *Rejoice over* (Williams, 2000, p.121)

The first three letters of the word *Kōauau* give us the word ‘*koa*’. *Koa* in all its definitions is the result of what the *Kōauau* does to a listener. It will make you feel this way by amazing you, enlightening your spirit, and creating a feeling of delight. These are the meanings and understandings that can be extracted from the word *Kōauau*.

1.4 *Ko te kōrero i muri i te rangahau - Background to the research*

As *Pākehā* explored, discovered and settled upon the shores of *Aotearoa*, they encountered a *Māori* people that were very different to themselves and whom they largely misunderstood. This misunderstanding was also reflected in their comments about music of *Māori*, including musical instruments as can be seen in the following quotation from the account of a *Pākehā* trader of the 1830s: “The native instruments scarcely deserved the appellation” and “the sounds elicited from them are very inharmonious” (Polack, 1976, pp. 172-3). These comments are examples of what I believe to be one of the many misunderstandings between *Pākehā* in relation to *Māori* music. To describe *Māori* music as “inharmonious” and to say that the musical instruments “scarcely deserved the appellation” does injustice to the beauty and depth of *Māori* composition and playing. Simply, the music of the *Māori* is different to the music of *Pākehā*.

1.5 *Whakarāpopototanga – Conclusion*

There are many types of flutes of the *Māori*. The *Kōauau* is a short flute with a conical bore that is open at both ends. It generally has three *wenewene* (stop holes) but may have more and its edges are rounded at the *puare* (the blowing end) for ease of blowing. There are a number of names for the *wenewene* and most commonly known as *Māui-mua* (the stop hole closest to the *puare*), *Māui-roto* (the middle stop hole) and *Māui-taha* (the stop hole closest to the *waha* or opposite end to the *puare*). Other names include *Ruarahi*, *Ruaiti* and *Ruaitirawa*;

also *kaiwhakakaha*, *kaiwhakahī* and *kaiwhakangāwari*. *Hineraukatauri* is regarded as the Goddess of flute music and is a child of *Tane-mahuta* who is a child of *Rangi* and *Papa* (sky father and earth mother). There are a number of meanings that can be extracted from the word *Kōauau* itself when breaking it up that relate directly to the use and meanings of the *Kōauau*. *Māori* music and the *Kōauau* were largely misunderstood by *Pākehā* exploring this corner of the world until recently.

Wāhanga Tuarua: Chapter 2

He āta tirohanga ki ngā tuhituhinga mō te Kōauau:

Critical review of literature on *Kōauau*

2.1 *Whakatūwheratanga – Introduction*

In the journal *New Zealand Spirit Aotearoa*, Bernard Makoare (*Ngāti Whatua*) wrote an article entitled “Ngā Taonga Puoro”. In this article he states:

In a traditional Maori understanding sound is connected to most things, through whakapapa or genealogy. Instrumental music was generally used to enhance ritual and sacred activities and to aid healers in the act of healing. Very seldom if at all was instrumental music used for entertainment by the Māori. This highlights an immediate conflict with western concepts of music and some misunderstandings about ngā taonga puoro which endure to this day (Makoare, 1998, p. 49).

McLean has tried to relate the different scales achievable on a *Kōauau* to rohe (regions) in *Aotearoa* (McLean, 1982, p.137). In so doing he has attempted to make *Kōauau* conform to western concepts. From a traditional *Māori* musical perspective, these factors (i.e., scaling and regional differences) are not as important as a focus on the spiritual, ritualistic event. Makoare alludes to the importance of the spiritual and ritualistic aspect of *Kōauau* in his definition of “hau” (Makoare, 1998, p. 49):

Hau – One of the fundamental concepts which is imperative to understanding traditional Māori instruments is hau. Hau can mean breath or wind in Māori. All traditional instruments require hau of some form to create their voice. Sometimes this is the hau or breath of a person, especially for instruments like the *Kōauau*, *Nguru*, *Pūtātara* and *Pūtōrino*. Other times hau refers to the wind that helps create the voices for

instruments such as the pūrerehua and poi awhiowhio. Hau also refers to elements that give life. So we can understand words like hauora and ha in association with mauri, or life force.

Hau is a very important principle within *Māori* music and the *Kōauau*; it is the hau of *Tawhiri-matea* that provides us with the breath and air to enable the production of the sound of the *Kōauau*. Without it there would be no such thing and no life on earth. *Tawhiri-matea* provides the life force and the *mauri* for breath and life of a human being and the life and voice of the *Kōauau* through hau.

A further important concept to understand the *Kōauau* is ‘*reo*’ or the voice. This is highlighted in the following definition of ‘*reo*’ in relation to the *Kōauau*:

Reo – Another important concept to understand ngā taonga puoro is reo or the voice. Māori understanding of traditional instrumental music is that each instrument has a voice rather than the ability to produce music. When this is understood the conflict between western or pākehā concepts of music are more easily reconciled. The concept of a voice which is produced by an instrument suggests that each instrument has its own individual character just like a human person. This means that the voice an instrument produces can have the qualities of a human voice. That is expressing happiness, sadness, anger, loneliness or joy. When this is understood it is easy to see how the environment the instrument and the player are surrounded by can affect the music, or voice that is produced.
(Makoare, 1998, p. 49)

These definitions highlight the difficulty of attempting to impose a system, scale or uniformity in construction. Each and every *Kōauau* is different and unique. No matter how small or great the difference is, each is still different. It will produce a ‘voice’ and not a ‘sound’. *Pākehā* instruments make sounds for the player, whereas *Māori* instruments, including the *Kōauau*, metaphorically guide the player, drawing power, inspiration and spirituality from the ‘voice’. The ‘voice’ here may be described as a ‘voice’ from ancient times, before humans and other

creatures walked the face of the earth, a ‘voice’ of *Papatūānuku*, our earth mother. The first instances of these ‘voices’ are recorded in *whakapapa Māori* which begin with the creation of the world according to old *Māori* epistemologies. These voices are *Te Kū* and *Te Whē*. *Te Kū*, *Te Whē* is also the name of one of Hirini Melbourne’s albums, and refers to the *kū* of the birds and the *whē* of the bugs and insects in relation to the sound each makes (Melbourne & Nunns, 1994).

Many researchers have tried to research, categorise, and theorise about our traditional *Māori* musical instruments (Andersen, 1934; Best, 2005; Hamilton, 1901). The *Kōauau* has generally been labelled as a flute by these early researchers. This is, as I will demonstrate in this thesis, a rather simplistic definition of *Kōauau*. I would, however, argue that a *Kōauau* is not a flute but in fact a *Kōauau*.

For example, during a *taonga pūoro* lecture at the *Whare Wānanga o Waikato* in 2007, in which I was a sessional assistant, one of the students presented this same argument to the gathering. He began by saying he would define the difference between a flute and *Kōauau*. He proceeded to demonstrate his skills in playing a native American flute. He then passed the instrument to another participant and asked him to play a short tune. In doing this, he proved that, no matter who played the instrument, the exact same note was produced by each person playing the same instrument.

Then he produced a *Kōauau* and played a tune that was rather harmonious. Once again he passed the *Kōauau* to another participant, and the result was that the tune produced by this person was very different to that of the first person. In essence, this small but significant experiment had proved that all flutes are played the same and produce the same notes. With the *Kōauau*, though, each individual plays it differently and so a different tune is produced. Therefore, applying the generic term “flute”, based on appearance and playing technique, would be, in my opinion, erroneous: the *Kōauau* does not conform to general westernised musical categorisations. Hence it would be inappropriate to classify the *Kōauau* as a flute.

2.2 *Nā wai i hanga, ā, nā wai i whakatangi te Kōauau?* - Who were the makers and players of Kōauau?

As there is next to nothing written about who made and played *Kōauau*, it is fair to assume that if one knew how to make a *Kōauau*, then he or she would know how to play a *Kōauau* and vice versa. I see these two very different but related skills come hand-in-hand, although more and more these days we see them becoming separated, where a maker of *Kōauau* will not necessarily know how or desire to play a *Kōauau*, and someone who knows how to play a *Kōauau* may not have the time, tools, skills and knowledge base to construct a *Kōauau*.

To the question, who were the makers and players of *Kōauau*? I will answer a *tohunga*, a word used to signify a person with great skill and expertise in a particular field. With regard to the *Kōauau*, he may be called he *tohunga Kōauau*, translated meaning a *Kōauau* expert encompassing making and playing, knowledge, experience, and wisdom.

2.3 *Ko te take-ā-hītori, ā-tikanga hoki o te Kōauau* - Historical and socio-cultural significance of the Kōauau

What is the significance of the *Kōauau* and why do stories which include *Kōauau* still live today? Firstly, I need to define the scope of the significance in terms of *hapū* and *iwi*.

In order to demonstrate this relationship I will retell the famous story of *Hinemoa* and *Tūtānekai*, as the *Kōauau* of *Tūtānekai* is a major symbol of *taonga pūoro* (traditional Māori musical instruments). To the direct descendants of this union, the *Kōauau* is a carrier of *mātauranga* (knowledge), *kōrero*, *whakapapa*, *tūāpapa pukenga* (skill base), and oral histories although it is regarded as a legend after Grey translated and adjusted the manuscripts of *Te Rangikaheke* (Grey, 1855, pp. 106-113). *Hapū* is defined as:

Hapū 3. n. *Section of a large tribe, clan, secondary tribe* (Williams, 2000, p.36)

At this hapū level, it is with great pride and esteem that the descendants of *Tūtānekai*, *Ngāti Tūtānekai*, claim their *mana* and tribal connections to the *rangatira* (*Tūtānekai*), *iwi* and *waka* (*Te Arawa*). Who exactly is *Ngāti Tūtānekai* in this day and age? Here, it is important to understand that *Ngāti Tūtānekai* does not actually exist now as a discrete *hapū* unit: they are numerous descendants of the couple, *Hinemoa* and *Tūtānekai*, and reside within the *iwi* confederation of *Te Arawa*. *Iwi* is defined as:

Iwi 4. *Nation, people* (Williams, 2000, p.80)

For the *iwi* of *Te Arawa*, this legend holds great significance. It displays the nature of love for another, shown through the large crowds that come to mourn those who have travelled beyond the veil on the many marae of *Te Arawa*. This demonstrates the power of the *Kōauau* and the underlying abilities of the *Kōauau* to convey love, and as an instrument to guide *Hinemoa* towards *Tūtānekai* waiting in hopeful anticipation. Being able to remember, recite and explain the happenings of ancestors generations before the living showed great skill. A particular mental hardness was required as the stories were seldom written down. So, it was imperative that one listened intently in order to, firstly, acquire the information correctly, and in sequence, then to remember the story, since sometimes it would not be for a month, a year or even two, but a life time before those memories would be drawn upon so that they could be passed on as *kōrero tuku iho* (oral histories).

2.3.1 *Ko ngā Atua me ngā Kaitiaki o te Kōauau – Gods and Guardians of the Kōauau*

2.3.1.1 *Hineraukatauri / Hinerakataura – Goddess of Flute Music*

Since *Hineraukatauri* has been identified as the *atua* of flute music, it is fair to assume that in every instance of a *Kōauau* her presence is felt. This is supported by the story about *Tinirau* and *Kae*, where the female relations of *Tinirau* went to identify and then capture *Kae* for the injustice of eating *Tinirau's* pet whale *Tutunui*. *Hineraukatauri* and her friends entertained *Kae* in order to make him smile and reveal himself by way of showing the distinctive teeth which identified

him (Grey, 1855, p. 95). During the entertainment, the *Kōauau* was played, along with the *Tokere*, the *Porotiti*, the *Pūtōrino* and many of the other *taonga pūoro*. In the original *Māori* account this reads: “Ka whakakitea nga mahi a Rau-kata-uri i reira, te waiata, te putorino, te koauau, te tokere, te ti ringaringa, te ti rakau, te pakuru, te papaki, te porotiti” (Grey, 1928, p. 30)

Figure 2: *Hineraukatauri* is depicted in the *whakairo* (carvings)



(Barrow, 1969, p. 145)



Carving of *Hineraukatauri*
by Rhys Shaw at Apakura
Campus, Te Awamutu

Hineraukatauri is mentioned in a *waiata tangi* (lament) by *Te Kohurehure* (Grey, 1857, p. 7). She is the sister of *Māui* and of *Hine-te-iwaiwa*, the goddess of child-birth and the art of weaving. Other sisters mentioned are *Hine-te-otaota*, *Hine-mare-kareka* and *Raukatamea* (The Polynesian Society, 1926, p. 334).

Hineraukatauri is recorded as leading a chant during the entertainment of *Kae* (Potae, 1928, p. 270), and mentioned again in an *oriori* (lullaby) as being the possessive one, the beautiful one and the exalted one (Ngata, 1959, p. 169), along with her sister *Raukatamea*, the goddess of arts and pleasure (Flintoff, 2004, p. 65). *Hineraukatauri* has been described as a “Hawaikian dancer and a game inventor of long ago” (Pomare, 1987, p. 69), and is also mentioned in a *whakapapa* (genealogical) table, but no explanation is given for the *whakapapa*. However, the *whakapapa* records *Hineraukatauri*’s parents as being *Nukutaimaroa* (male) and *Kaumea* (female), and her younger sister as *Raukatamea*. That *Hineraukatauri*’s sister is *Raukatamea* is consistent with other accounts, but in this particular *whakapapa* *Hineraukatauri* comes generations after *Māui* and his brothers and from a different lineage, showing inconsistencies in the connection of *Hineraukatauri* with *Māui*. Despite this, they are all related in some way or another and this *whakapapa* may be inaccurate. This leads me to two of the other significant *atua* of the *Kōauau*.

2.3.1.2 *Tāne-mahuta rāua ko Tāwhirimātea – God of the Forest and God of the winds*

Tāne-mahuta provides us with the material to construct *Kōauau* as the *atua* or god of the forest, trees, birds, insects and everything else living in the forest realm. *Tāwhirimātea* is the carrier of the sound and *wairua* within the sound to its destination. He plays a very important part here: *Hineraukatauri* offers the sound to the world, and *Tāwhirimātea* makes sure her intentions are fulfilled, transmitting the hidden message to the ear of human, animal, insect, or other living being.

2.4 *He aha ngā tū rauemi hanga Kōauau? –What were Kōauau made from?*

Traditionally, *Kōauau* were made from naturally occurring raw materials found in the environment close to where the *iwi* (tribe) would reside. For example, certain types of wood would grow only in particular regions of New Zealand, depending on climate and qualities of the earth, and birds would live in particular places, depending on their diet and migration patterns. Below I will consider some of these naturally occurring materials.

2.4.1 Pounamu – Greenstone

Pounamu or Greenstone is the rarest and newest of mediums. The *pūrākau* or ancient legend of *Poutini* as the *kaitiaki* (guardian) of *pounamu* and its *mauri* reveals the significance of this stone. To *Māori*, the west coast of the South Island is known as *Te Tai Poutini*. *Poutini* was a *taniwha* (water spirit), protecting both the people and the *mauri* (spiritual essence) of *pounamu*. *Poutini* as protector of the stone is the servant of *Kahue*, an *atua* (God). *Poutini* once abducted a woman, *Waitaiki*, from the North Island and transformed her into his own spiritual essence of *pounamu*, and she became the mother lode of all *pounamu*. In the act of sounding a *Kōauau*, we return our thoughts to this story, especially when playing a *Kōauau pounamu*, and the story gives us a platform for the sound to be produced, thinking of its *mauri* or spiritual essence, *Poutini* as a great *kaitiaki* or guardian, and the *mana* of *Kahue* embedded in the *pounamu*. A *Kōauau pounamu* produces a unique sound, with ringing tones from the density and hardness of the stone which may only be achieved by the hardest of woods. This material has been used for *Kōauau* only in the recent past with the availability of appropriate tools, and is seldom seen. I have, however, been privileged to play a *Kōauau* of this type: it was of simple construction, without *whakairo* or carvings, but still made in accordance with the shape of the *whare* of *Hineraukatauri* and *wenewene* placement theories. The sound was like no other *Kōauau* I have played. Its ringing sound could be heard from literally miles away and left my ears resonating as if I had been at a concert and standing next to the speakers. The *wairua* I felt at the time was amazing, overwhelming, and empowering: it was the *mauri*, *mana*, and *wairua* of the *pounamu* that had taken me to a spiritual place and provided me with the state of mind to play a sweet tune. The same may also be said with a *Kōauau Toroa*.

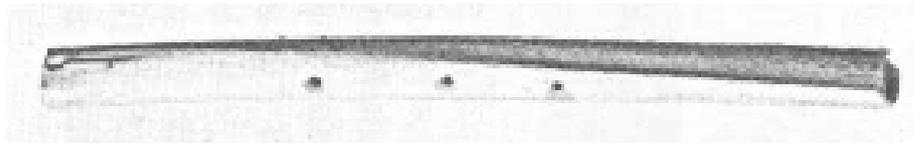
2.4.2 Kōiwi Toroa – Albatross bone

Another medium is the *Toroa*. Albatross is present if the *Kōauau* is made from the wing bone. The University of Waikato has a fine specimen in a *tukutuku* panel sitting on a central pillar on Level 2 of the University Library. It was gifted by *Kotuku Arts and Crafts*, Hastings, to the University in October 1996. The explanatory plaque that sits near this panel reads:

Tradition says that the albatross (*Toroa*) came from the islands carrying a kumara plant in its mouth. The Maori saw the kumara and snatched it from the *Toroa*'s beak. *Toroa* now had no food and, disappointed by the greedy action of the Maori, *Toroa* began to cry and still cries to this day. *Roimata Toroa* is a reminder to us all not to be greedy.

This short story provides us with a starting point when playing a *Kōauau Toroa*, a sad and tearful sound as the *Toroa* cries, releasing its sorrow over the greediness of man. This theme is also related to the raw material of *kōiwi tangata* (human bone).

Figure 3: An example of *Kōauau toroa*



(Moyle, 1990, p. 50)

2.4.3 *Kōiwi Tangata* - Human bone

According to one scholar, “Fallen enemies often provide the materials for various items including musical instruments” (Starzecka, et al, 1996, p. 48). This statement indicates that not just any bone was used; it would be a bone of significance, not always an enemy, perhaps an ancestor, or a dead friend, or slave, someone whose relationship had been of sufficient importance to warrant immortality. What do I mean when I say immortality? By making an instrument out of the remains of a living being, human bone in this instance, the material will carry with it some or all of the traits of the person. This is similar to the case with names. If a child is named after an ancestor, it is crucial that you know about the ancestor and what he or she was like while alive in terms of personality and persona, as the name will carry with it the qualities of that person. By making a *Kōauau* from human remains, attributes of personality are kept alive, and what a great way to do so. It is important to be very careful when doing this, as bad things may come upon those whose heart is not in the right place. An

ethnomusicologist has noted that “a few celebrated flutes were even given personal names” (Moyle 1990, p.51).

Figure 4: A Kōauau kōiwi tangata



(National Museum of New Zealand, 1989, p. 35)

Why use human bone? In *Te Ao Māori*, although not practiced these days, it was acceptable to eat part of the enemy to acquire the *mana* of the enemy. This is termed ‘*kai tangata*’ and the people of *Tapuika* (Te Puke) were renowned for this. For example, if it was knowledge you wanted, you would eat the brain, if it was speed and agility, you would eat the legs, and so on. This is emphasised by Marsden, noting:

When a warrior fell in battle, especially if he was of aristocratic lineage, he was regarded as a person who, because of his rank and the tohi rites he had been subject to, was a person of great *mana*, as well as of *ihi*. So the conquerors cooked him and ate certain selected portions of his body where they believed his *mana* resided. By eating his flesh they consumed his *mana* and *ihi*, and thereby replenished their own (King, 1992, p. 127).

In the instance of the *Kōauau*, human remains still hold the *mana* of the person. Because of this it was common practice to hide the human remains in places where they would never be found, such as in hollow trees, in swamps, sand dunes, caves, and in *tapu* or restricted areas which had a *rāhui* (ban) placed upon them, such as *urupā* or cemeteries. It was believed that a supreme insult was paid to a defeated enemy, an ultimate defilement of his personal cosmological power (*mana*), by fashioning a flute from one of his bones usually the humerus (Moyle 1990, p. 51).

Mana is defined as having four components: *mana atua*, *mana tūpuna*, *mana whenua*, and *mana tangata*. *Mana atua* is defined as “the very sacred power of the gods known as the ahi kōmau which is given to those persons who conform to sacred ritual and principles”; *mana tūpuna* is “the power of authority handed down through chiefly lineage ; that is, from the paramount chiefs and others who possessed it”; *mana whenua* is defined as “the power associated with the possession of lands; it is also the power associated with the ability of the land to produce the bounties of nature”; and *mana tangata* is “the power acquired by an individual according to his or her ability and effort to develop skills and to gain knowledge in particular areas” (Barlow, 1991, pp. 61 - 62). Each of these terms directly relates to the *Kōauau*. *Mana atua* is the *mana* of *Hineraukatauri* and the other gods that are involved in the playing and making of the *Kōauau*, such as, *Tāwhirimātea*, *Rūaumoko*, and *Haumie-tiketike*. *Mana tūpuna* is the *mana* of our ancestors who carried the *Kōauau* physically and spiritually, hence the existence of *Kōauau* today; *mana whenua* for providing the resources for making *Kōauau* such as wood, bone and stone, and *mana tangata* is the ability of a person to make, play, and gain *mātauranga* (knowledge) about the *Kōauau*.

Wood is another medium for the *Kōauau*. I will consider this usual medium in a later section of the thesis. As can be seen from the different traits and personas of the three materials discussed above it is important to keep in mind the relevant stories which in turn will be expressed in the sound and music of the *Kōauau*.

2.5 Pūrākau me ngā kōrero Kōauau - Various accounts of the Kōauau

This section will look into *pūrākau* and various accounts where the *Kōauau* is employed to achieve an end. I will also comment on the underlying messages portrayed by the *Kōauau* in relation to its usage and meaning.

Firstly, there is a story about *Tama-te-kapua*, the *kaihautū* (captain) of *Te Arawa waka*, *Ruaeo*, and his wife *Whakaotirangi*, who was whisked away on the *Te Arawa waka* leaving *Ruaeo* behind. *Ruaeo* then boarded *Pukeatea-wai-nui* and reached *Maketu* before the *Te Arawa waka*. When the *Te Arawa waka* landed upon the shore with all the crew asleep, *Ruaeo* hid himself under the *waka* and played a tune on his *Kōauau*. This woke his wife, and she realised it was him

playing. She looked and saw *Ruaeo* under the side of the *waka*. *Ruaeo* then tells *Whakaotirangi* to go back to *Tama-te-kapua* and say that she had a dream about *Ruaeo* playing his *Kōauau*. *Tama-te-kapua* became angry and struck *Whakaotirangi*, giving her an excuse to flee and reunite with *Ruaeo* (Grey, 1855, p. 110).

This story shows us the power and seductive properties of the *Kōauau*. Once she had heard the sound, *Whakaotirangi* was able to create a situation through which she could return to her previous partner, *Ruaeo*. The love felt in the sound was genuine and caused a reunion of the lovers. One of the underlying messages in this story is that there is an element of deceit when the message in the sound is true love, and so the *Kōauau* was used to fool *Tama-te-kapua* and make him angry.

The *Kōauau* has a strong erotic association in both sound and design. When a *Kōauau* is sounded, it is common for people and animals to stop and take note of the sound. This is the power of the sound. The sound will capture one's ears, and will be understood by those for whom it is intended. The other listeners will not understand the message in the sound, and will interpret it simply as a sound, without meaning. The design of the *Kōauau* with regard to *whakairo* is that the human-like figures depicted on the *Kōauau* are commonly those of a female exposing her genitals, although most designs are neutral. This links to the *atua Hineraukatauri* being female and to the connection between player and instrument, so that the instrument is played with love and tenderness, such as a woman may be treated, the instrument not blown but kissed with love and as a witness to the *waiata* (song) within.

In the story of *Hinemoa* and *Tūtānekai*, we learn that *Tūtānekai* guided *Hinemoa* across the *Rotorua* lake (*Rotorua-nui-ā-Kahumatamomoe*) to the island of *Mokoia*. In this story, *Hinemoa* acted of her own accord, without the permission of her elders and father, to sneak away from the tribe at night to be with *Tūtānekai*. The themes found in this story that relate to the *Kōauau* are love and deceit. The messages of love that *Tūtānekai* communicated through his *Kōauau* playing were heard, and therefore answered, when he and *Hinemoa* met *kanohi ki*

te kanoahi (face to face). *Tūtānekai*, on the other hand, had assumed that he would never be allowed to reach out to *Hinemoa* because of the circumstances of his birth, and because of *Hinemoa*'s stature as a *puhi*, an unmarried high born female with ritual responsibilities. On both sides, we see an element of deceit, with hidden messages in the playing of the *Kōauau*. *Hinemoa* sang as she waited and “wagged her close-cropped white head, and imitated the sound of the playing of the koauau with the breath of the nostrils, and at the same time the nasal long-drawn chant” (Cowan, 1930, p. 97).

The Flute Song for *Hinemoa*

(Māori)	(English Translation)
<i>Na-a te waka ra-a</i>	In yon canoe at Te Kopua's shore
<i>Kai te Kopua-a</i>	Thou'lt paddle to Mokoia's isle.
<i>Hai-i wa-aka mai mo-ou</i>	From heaven art thou,
<i>Ki-i Mokoia-a.</i>	From heaven's crimson light,
<i>Kai rangi na koe-e</i>	O darling of my heart!
<i>Kai rangikura-a te tau e-e!</i>	See yonder lonely form
<i>Ko'ai ra-a i runga i-a-a Iri-iri-Kapua?</i>	On Iri-iri-Kapua rock,
<i>Ko Hinemoa pea-a</i>	Perchance 'tis Hinemoa,
<i>Ko te-e tamahine o-o Umukaria-a;</i>	The maiden daughter of Umukaria
<i>Hai tau naaku ki te whare ra-a.</i>	A loving wife of mine thou'lt be.

Here, we see that *Kōauau* were played with words as accompaniment. *Tūtānekai* may not have been able to hear the words being chanted by *Hinemoa*, but he was able to feel the *wairua* of the words flowing across the water, encouraged by the ripples. The unison of chant and *Kōauau* playing shows another connection, a spiritual connection of the two primary characters in the story.

Playing the *Kōauau* with themes of love is also seen in the story about *Tamatea pōkai whenua* and is incorporated in the longest place name in *Aotearoa* (New Zealand): *Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu*. If I break this up it is actually a sentence in itself: *Taumata-whakatangihanga-Kōauau-o-tamatea-turi-pūkaka-piki-maunga-horonuku-pōkai-whenua-ki-tāna tahu*. It may be loosely translated as: The summit

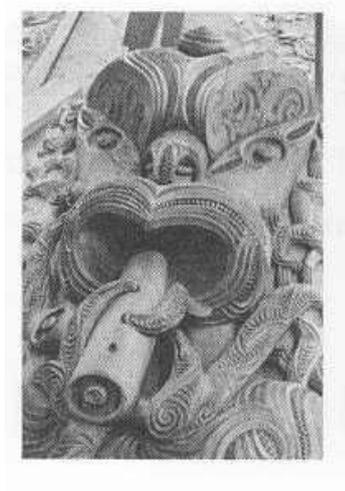
where *Tamatea*, the man with the big knees, the climber of mountains, the land-swallower who travelled about, played his *Kōauau* to his loved one. *Taumata* is a mountain in the *Kahungunu* tribal region of *Aotearoa* and is where *Tamatea* sat on the summit to play his *Kōauau*.

Figure 5: The longest place name in Aotearoa



(Meldrum, 2007)

Figure 6: *Tamateapokaiwhenua* shown playing a *Kōauau*, *Ihenga whare nui*, Rotorua



(Grant, 2007, p. 99)

In this story, and in the *Tūtānekai-Hinemoa* story, both *Kōauau* players utilise height to help project the sound of the *Kōauau*, with *Tamatea* on top of *Taumata maunga* (mountain), and Tūtānekai on top of his *pourewa* (elevated platform) at the top of *Mokoia* Island. It is unclear who *Tamatea* was actually playing his *Kōauau* to. Some say it was a lover of his (a female), and other accounts say he was playing to his brother who was killed in the battle of *Matanui* by the *Ngāti Hine* tribe from *Taitokerau* (northern region of the North Island of *Aotearoa*). Despite this discrepancy, the theme of love is still apparent. Whether it is a passionate love for the opposite sex or a sorrowful lament for a lost sibling, the depth of spirituality is equivalent, with feeling pouring out and communicated through the sound of the *Kōauau*. The *Kōauau* also relates to the spiritual being of the *Patupaiarehe* (fairy folk or fair-skinned mythical people who live in the bush on mountains) who are known to use the *Kōauau*.

2.6 Ko te hononga o te Kōauau ki te Patupaiarehe – Kōauau connections with Patupaiarehe

This section looks at *Patupaiarehe* and some of the accounts where the *Patupaiarehe* have used *Kōauau*. *Patupaiarehe* is defined as:

Patupaiarehe, paiarehe, patuparehe, parehe, n. *Sprite, fairy, malign or beneficent* (Williams, 2000, p. 272)

The following story is an account by Hoani Nahe, elder of *Ngāti Maru* (*Hauraki*), about the *Patupaiarehe* and the use of the *Kōauau*.

Now listen. When the migration arrived here they found people living in the land – Ngati Kura, Ngati Korakorako and Ngati Turehu, all hapu or sub-tribes of the people called Patupaiarehe. The chiefs of this people were named Tahurangi, Whanawhana, Nukupori, Tuku, Ripiroaitu, Tapu-te-uru and Te Rangipouri. The dwelling places of these people were on the sharp peaks of the high mountains – those in the district of Hauraki (Thames) are Moehau mountain (Cape Colville), Motutere (Castle Hill, Coromandel), Maumaupaki, Whakairi, Kaitarakihi, Te Koronga, Horehore, Whakaperu,

Te Aroha-a-uta, Te Aroha-a-tai, and lastly Pirongia, at Waikato. The pa, villages, and houses of this people are not visible, nor actually to be seen by mortal (Tangata Maori) eyes – that is, their actual forms. But sometimes some forms are seen, though not actually known to be these people ... Sometimes this people is met with by the Maori people in the forests, and they are heard conversing and calling out, as they pass along, but at the same time they never meet face to face, or so that they mutually see one another, but the voices are heard in conversation or shouting, but the people are never actually seen. On some occasions also, during the night, they are heard paddling their canoes ... At such times are heard these questions: ‘What is it?’ ‘Who are the people who were heard urging forward their canoes on the sea during the night?’ or, ‘Who were heard conversing and shouting in the forest?’ The answer would be as follows: ‘They were not Tangata Maori, they were atua, Patupaiarehe, Turehu, or Korakorako’ (Nahe, 1894, pp. 27–35).

Stafford in his book *Te Arawa* provides us with a direct connection between the *Kōauau* and the *Patupaiarehe*.

The hill belonged to the Patupaiarehe, or fairy folk, and they had a pa on the summit which was called Te Tuahuoteatua. He (Ihenga) heard them (the Patupaiarehe) playing musical instruments such as the *Pūtōrino* and the koauau, so Ihenga thought there must be men living there (Stafford, 2002, p. 34).

In both the accounts given above, there has been no sighting of the *Patupaiarehe*, only music and voices of mysterious origin being heard. In both cases, on the other hand, there are references to the *Patupaiarehe* as being mystifying and baffling beings that live high on the summit of a hill or mountain. What is the significance of this in relation to the *Kōauau*? It shows that the *Kōauau* was an instrument that is recorded as being older than the existence of *Māori* people upon the lands of *Aotearoa*, and the fact that *Patupaiarehe* dwell upon elevated areas shows the importance and connection to the *atua*, physically being closer to the heavens.

2.7 *Ko te wairua o te Kōauau – Spiritual Aspects of the Kōauau*

My first experience with *taonga pūoro* was in 2004, when I was a member of Rangiiiria Hedley's (*Tūwharetoa*) *taonga pūoro* class and we had just finished a lecture that had included the *Pūtōrino*. I really wanted to learn how to play one after a demonstration and explanation. I then asked Rangiiiria if I would be allowed to borrow a *Pūtōrino* to take home and learn how to play it. She agreed and I went home with this *Pūtōrino* similar to the one shown to the right in the following image. I later found out the *Pūtōrino* was called *Amokura* which is a native bird to *Aotearoa* (*Phaethon rubricauda*), and had been a part of Hirini Melbourne's collection as a prized possession. It is prized because it is a double *Pūtōrino* with a long and beautiful *Amokura* tail feather sitting between its two chambers. The *Amokura* bird is highly prized by *Māori*, showing the prestige of the instrument.

Figure 7: Two types of *Pūtōrino*



(Barrow, 1964, p. 31)

That night I sat down to play and what happened was overwhelming. As I blew on the *māngai* (mouth), the sound came out straight away. I had already learned the *tikanga* of the *Pūtōrino* earlier that day, and tried to make a sobbing, sad sound to go with that of *Hineraukatauri*. Instantly a crying sound came out, and I realised that *Hineraukatauri* was alive and present. I then kept blowing, and this magnificent sound or mourning took over me. I blew and blew, and I thought about my mother who had passed away about ten years before, dying of cancer. Tears began to flow, and I kept blowing. More tears came, and the *reo* of *Hineraukatauri* came out providing me with a release of old, deep seated feelings, feelings that I thought had been resolved. The release that took place through this experience was life changing, and I felt as light as a feather. In fact, I had invoked the spirit of *Hineraukatauri* in sound, spirit, protocol, truth and body.

Later on in my conversations with Rangiiria, I found out that Hirini Melbourne had had a similar experience in his encounters with a *Pūtōrino*. My first experience with a *Pūtōrino* triggered an upheaval of significant, deep emotions and memories. This can also be said for a *Kōauau*, as I have had a number of experiences when the sound will trigger memories, having received comments from listeners such as ‘that sounds like someone is crying’, ‘I remember that sound when I was just a child’ (said by an old *kuia*), and ‘that sound is deep.’

These comments all relate to love. Love can be happy and love can also be sad. At *tangihanga* or funerals, we see people crying, the falling of tears, and the flowing of mucus. These are signs of great love and loss, but the origin of this sadness is immense love for him or her who has passed on.

Then there is happy love, as in the instance of *Tūtānekai* playing his *Kōauau*: at the end of the story it is happy love, for he played his *Kōauau* with all his heart as a tool of seduction and therefore eased the love pains of *Hinemoa* in her pursuit of the great *Kōauau* player.

Whether love is happy or sad, the invoking of spirits and feelings is inevitable when a *Kōauau* is played. *Māori* musical instruments are also devices to

communicate with ancestors and gods (Brown, 2005, p. 85). If I am playing a *Kōauau*, my spirit and all those spirits who walk with me guide both me and the sound, so that whatever is felt in my heart is portrayed and communicated through the *wairua* of the sound and instrument. The sound then reaches the listener's ear and is interpreted by the ear and travels to the brain and heart, triggering old feelings or bringing memories to surface.

This also happens when sounding the *Pūrerehua* or Bullroarer, a largely misunderstood instrument because of its use in the film *Once Were Warriors* and in the television series *Makutu*. It is said that whatever is in the heart of the person sounding the instrument travels from the heart of the player down his or her arm, along the *taura* or string, and reaches the body of the *Pūrerehua* and sounds out. *Tāwhirimātea*, the god of the air and winds, then carries the sound and message of the player to the intended recipient, and when these are heard by the ear of the recipient, they travel to the heart and trigger a feeling or memory that is the same or similar to that intended by the *kaiwhakatangi* or player. This process is the same with *Kōauau*, only the instrument and technique of sounding the instrument has changed.

Figure 8: Examples of *Pūrerehua*



Photo: Jo'el Komene

2.8 *Whakarāpopototanga - Conclusion*

All traditional instruments require *hau* of some form to create their voice. Sometimes this is the *hau* or breath of a person, especially for instruments like the *Kōauau*. The Māori understanding of traditional instrumental music is that each instrument has a *reo* or voice rather than the ability to produce music (Makoare, 1998, p. 49). A number of researchers have tried to apply western music constructs to the *Kōauau* analysing their scaling systems and tonal manipulation for written music and labelling the *Kōauau* a flute. In fact it is correctly named a *Kōauau*. Makers of *Kōauau* were also players of the *Kōauau* through having an in-depth knowledge of its construction that helps with playing technique, and they may have been called *tohunga Kōauau*. The *Kōauau* holds significance for particular *hapū* (sub tribe) and *iwi* (tribe) in *Aotearoa*. *Hineraukatauri* is regarded as the goddess of the *Kōauau* and appears in a number of accounts exhibiting the *Kōauau*. *Tāne-mahuta* provides us with the raw materials for the construction of the *Kōauau* and *Tāwhirimātea* provides the *hā* or *hau* (breath or wind) to play the *Kōauau*. Traditionally *Kōauau* were made from raw materials and naturally occurring resources found in the environment close to where the *iwi* (tribe) would reside, such as *Toroa* bone (Albatross), a number of types of wood such as *Tōtara*, *Maire* and *Porokaiwhiria*, and human bone; *Pounamu* is however a relatively new material to be used. The *Kōauau* features in a number of *pūrākau* also, providing us with examples and themes of its use and meaning, including happy love, sorrowful love in mourning, revenge and traces of deceit. *Patupaiarehe* also have been recorded as using the *Kōauau* but never seen as they are a mystical being living in the *ngahere* (forest) and this tells us that the *Kōauau* is of a very old origin, perhaps before the arrival of people to the shores of *Aotearoa*. Spiritually the *Kōauau* is very deep, invoking feelings, returning a person's thoughts to significant events in life and drawing upon the spirit and strength of ancestors and communicating a message in the sound.

Wāhanga Tuatoru: Chapter 3

Ko te Hanganga o te Kōauau:

The construction of the *Kōauau*

3.1 *Whakatūwheratanga – Introduction*

This chapter focuses on the construction of the *Kōauau*, how it was and still sometimes is constructed, looking at what traditional construction techniques and tools were employed in its manufacture. In the following, I will provide an explanation about construction techniques, tools, and preservation techniques.

To look at a *Kōauau*, it is fair to assume that it would be reasonably easy to construct. This is true in these times of modern tools, but if we turn back time to before the arrival of the *Pākehā* and their introduction of the use of iron, advanced tools, and new techniques, we will see that the traditional construction of the *Kōauau* was highly developed, with tools made from naturally occurring materials. Before looking at these tools, it is important to understand the basis for the design and shape of *Kōauau*.

3.2 *Ko te āhua o te Kōauau - The design and shape of the Kōauau*

The *Kōauau* design and shape is based on the cocoon of *Hineraukatauri*, the Case moth or Bag moth (*Liothula omnivorous: Psychidae*) which builds itself a cocoon out of small leaves for a home and camouflage, where the female element remains within, eventually dying. According to popular belief, *Hineraukatauri* loved her *Kōauau* so much she entered her *Kōauau* and lived inside it (Flintoff, 2004, p.24). The *Kōauau* assumes the shape of *Hineraukatauri* and consequently her cocoon: from the *puare* of the *Kōauau*, it bulges out and slowly tapers towards the *waha* of the instrument, mimicking the shape of *Hineraukatauri*'s cocoon.

Figure 9: Hineraukatauri – The Case moth and a Kōauau that assumes the shape of Hineraukatauri.



(Hineraukatauri, 2008)



(Best, 1941, p. 161)

Construction would start by saying a *karakia* or prayer in order to ask for permission from *Tāne-mahuta*, the god of the forest, to take and use one of his offspring for the purpose of creating a *Kōauau*, this being a tree or part of the tree. This practice or *tikanga* of reciting *karakia* is exercised before taking any one of the children of *Tāne-mahuta*, including the trees, birds and insects. This protocol is also exercised when taking from any of the other realms of the *Māori* world, such as seafood from *Tangaroa*, the god of the sea, *kūmara* from *Haumia-tiketike*, the god of uncultivated food, and *Rongomātane*, the god of cultivated food (Reed, 1963, p. 22). After the *karakia* is recited, and in this case for a *Kōauau*, *Tāne-mahuta* would grant permission for one of his children to be sacrificed (the tree), taken and used as desired. However, this does not mean abused, as what was taken was always taken for a reason and whatever was taken would be used. As natural conservationists with respect for the land which supplies us with life and sustenance, our *Māori* ancestors took only what they needed.

After fetching an appropriate piece of wood, construction would begin by cutting up the wood, then shaping and fashioning it by way of *toki* or adze.

3.2.1 *Ko ngā taputapu hanga Kōauau* – Tools used in making *Kōauau*

This section looks at the tools utilised in making *Kōauau* and how they were applied.

3.2.1.1 *Ko te Toki* – The Māori Axe

A *toki* is a Māori wood-working axe that is used initially to fell a tree or cut off a branch, to acquire the wood to be worked down to the general shape of the *Kōauau*. A *toki* is similar in construction to the *whao* and the *ūpoko* (head) itself ranges in size from very large (approximately 30cm in length) to small (approximately 5-10cm in length) depending on the task at hand. Commonly the *kakau* or handle was made from a hard wood such as *Mānuka* (*Leptospermum scoparium*) or *Kānuka* (*Leptospermum/Kunzia ericoides*) which could survive the vibrations of the *toki* hitting the wood without cracking or breaking. The *ūpoko* or axe head may be made from *Pounamu* (*nephrite jade*), *Pakohe* (*argillite*), or *Tuhua* (*obsidian*), all of which are stones that provide a strong, hard and sharp edge to cut (See Figure 3.2.2.1). The *ūpoko* and the *kakau* are joined by *herehere* (binding). This is explained in the next section, as it is the same for the *whao*.

Figure 10: An example of a *toki*



(Stone adze, hafted, Best, 1941, p. 579)

Below (in Figure 10), I have turned the previous image on an angle so it is easy to understand how the *kakau tuki* is acquired. If you can imagine a tree standing in an upright position where the head of the *toki* is, the handle is a branch growing in an upward direction out of the main trunk of the tree. This is where the *toki* handle is removed from the trunk, providing a natural angle of approximately 45 degrees. This part of the tree is good for the creation of a *kakau tuki* because the twisting grains in the wood make it very strong and unlikely to break.

Figure 11: An example of a *toki* upside down



(Stone adze, hafted, Best, 1941, p. 579)

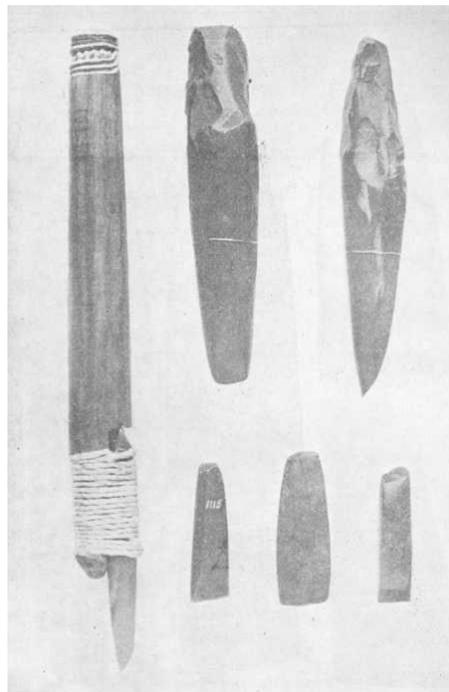
The larger *toki* is used to roughly remove the unwanted wood to achieve an overall shape which may be swung between the legs, and the smaller *toki* is then used to refine the overall shape. As the piece of wood gets smaller and the desired form starts to appear, a smaller *toki* would be employed. The smaller *toki* is used in a swinging action much the same as an ice pick is used during mountain climbing. Once the outer shape of the *Kōauau* is achieved and it begins to look like the house of *Hineraukatauri*, or her cocoon, which may be described as cylindrical with a bulge in the middle, a *whao* is then employed to carve the figures and patterns on the *Kōauau*.

3.2.1.2 Ko te Whao – The Māori chisel

A *whao* or chisel was the main tool employed to carve the outside of the *Kōauau*. A traditional *whao* consists of three components: the *kakau* or handle, the *ūpoko* or head of the *whao*, and finally the *herehere* (binding), made of *muka* or flax fibre from the *harakeke* plant (*Phormium tenax*). *Muka* is used to join both the *kakau* and the *ūpoko* as depicted in Figure 3.2.2.2. The *kakau* (handle) is commonly made of hard, strong wood such as *Mānuka* (*Leptospermum scoparium*), *Pūriri* (*Vitex lucens*), or *Maire Rauriki* (*Nestegis lanceolata*), and is fashioned into a straight handle. The *kakau* is then sometimes fired or lightly burnt or smoked to cure, further harden, and preserve the wood, ultimately making the wood swell, thus pushing all the air particles out of the wood which will stop it from cracking in time. Secondly, there is the *ūpoko* or head of the *whao*. This is made of stone such as *Pounamu* (*Greenstone*), or *Pakohe* (*Argillite*), a dark grey stone often used for weapons, chisels, and sometimes

musical instruments. The *herehere* is the binding element, bringing both the *kakau* and *ūpoko* together. *Muka* for the *herehere* is extracted from the leaves of the *harakeke* bush by using a scraping technique, and is then rolled. The *muka* is rolled individually at first, and then in pairs (this process is called *miro*) where each rolled strand grips upon the other to increase its strength, neatness and usability.

Figure 12: Example of a *whao* with interchangeable heads



(Best, 1941, p. 582)

The *whao* is then used by hitting it on the top of the *kakau* by a *pātuki* or *pao* (mallet), forcing the sharp stone head into the wood to achieve a carved design or figure. The *kōwenewene* then need to be drilled. This is achieved with the use of a *tūāwiriwiri*.

3.2.2.3 Ko te Tūāwiriwiri – The Māori Drill

A *tūāwiriwiri* consists of four major parts: pole, weight, flint and cords. An image of two examples is presented on the following two pages (refer to *Figure 13* and *Figure 14*). The upright pole is at the centre of the tool; below, half-way down the central pole, there is a rock or similar heavy weight; at the very bottom of the

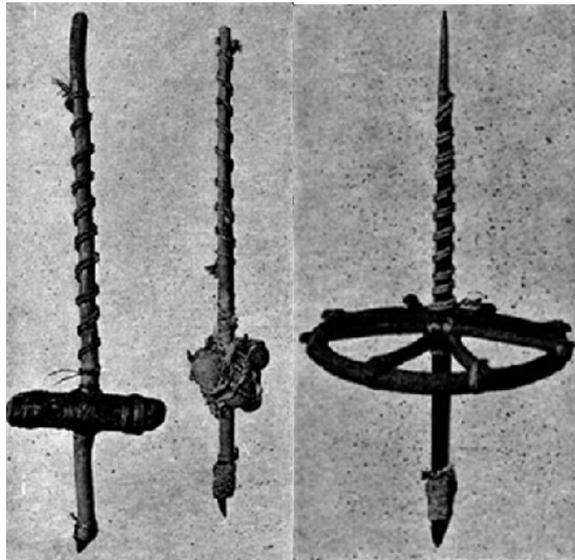
central upright pole is a flint of rock that acts as a drill tip (the piercing agent may also be a shark tooth depending on the substance being drilled); and the last part is the two cords attached to the central pole. The *tūāwiriwiri* works by winding the cords in the same direction around the central pole, then pulling the two cords in opposite directions. This causes the central pole to spin and therefore the flint attached to the bottom of the pole performs a drilling action. Once the cords are fully extended, the energy created by the initial pull then draws the cords back in again. It is the build up and release of the spinning action that utilises the energy from the last pull on the cord to set in motion the next cycle. This action is then repeated for some time until the bore of the *Kōauau* is complete. In theory this sounds simple enough to accomplish, but from my own experience in making and operating a *tūāwiriwiri*, there is a considerable degree of skill required in order to maintain its upright position during the spinning motion. To assist the flint, sand was incorporated to increase friction by way of abrasion. This is also a slow and painstaking task. Now I will state common dimensions for the *Kōauau* and the techniques used for its construction.

Figure 13: A Māori using a *Tūāwiriwiri*



(Best, 1941, p. 118)

Figure 14: Other examples of a *tūiri* drilling device



(Best, 1941, p. 117)

3.3 *Ko te hanganga o te Kōauau - Kōauau construction*

The *Kōauau* is commonly made with a bore of 1cm and up to 3 or 4 cm in diameter. Its length is dependent on the length of the fore finger from the base of the thumb of the person it is being made for. The *kōwenewene* or stop holes needed to manipulate the sound in its range and pitch are drilled into the *Kōauau* and determined by the distance between the knuckles on a person's fore-finger. As there are three knuckles on a human fore finger, these are consistent with the spacing of the *kōwenewene* on the *Kōauau*.

Figure 15: Image showing the *kōwenewene* knuckle placement theory



(Dashper, 1996, p. 20)

In his *Investigation of the open tube Maori flute or Kooauau*, McLean concludes the following about the construction of the *Kōauau*:

- The position of the finger holes was determined by various rules of thumb representing attempts at standard measurement.
- Pitch adjustments were made by enlarging the holes until they produced the notes wanted.
- Bone instruments were conventionally constructed to be blown from the ridged end.

(McLean, 1968, p.239)

With regard to McLean's first conclusion, standard finger position holes are found on museum *Kōauau*, with varying rules for *Kōauau* made from different materials, e.g. wood, bone, and stone. Pitch adjustments are made by increasing the size of the stop holes. An alternative to this is to completely move the position of the hole, blocking up the previous hole. The question to ask here is why would this occur? As one becomes proficient in playing one melody on the *Kōauau*, one yearns for more tunes to add to one's repertoire. However, the new tune is not possible on the *Kōauau*, so an alteration must take place to suit the new tune, rather than constructing another *Kōauau*, since a *Kōauau* is a treasured possession with prestige. A change in the position of one or more holes gives new life and spirit to the instrument, and it may play many more tunes to enlighten a person.

3.3.1 *Ko ngā huarahi tūturu hanga Kōauau* - Traditional construction techniques

There are a number of techniques utilised by the *Māori* for construction of a *Kōauau*. I will first talk about the construction of a *Kōauau rākau* and how the bore is achieved, and then about the *Kōauau kōiwi*. Following that, I will discuss the construction of a *Kōauau kōhatu*.

3.3.1.1 *Kōauau Rākau* – Wooden *Kōauau*

Construction of a *Kōauau rākau* starts with the collection of the tree, or a portion of a tree (as explained in section 3.2). Once permission is granted from *Tāne-mahuta*, the wood which has been acquired is taken back to the carving area and

shaping begins. Generally a whole tree would be felled at one time for making a large *taonga*, such as *waka*, *poupou*, *hoe*, or *rākau o te riri* (weapons). The off-cuts from these larger *taonga* would be utilised to make smaller *taonga* such as *Kōauau* in order to conserve what has been gifted from *Tāne-mahuta*. A *toki* is then used to cut away the unwanted wood until a cocoon shape starts to appear. As the carver gets closer and closer to the desired shape, he decreases the size of his *toki* accordingly so as to not take too much off, since what is removed cannot be put back on.

Figure 16: A *Kōauau rākau*



(Museum of New Zealand, 2004, p. 34)

There a number of trees native to *Aotearoa*, and it is important to note here that each and every type of wood has a sound quality of its own. If the wood is soft, such as *Rimu* (*Dacrydium cupressinum*), the sound will be dimmer as the body of the *Kōauau* will vibrate and release some of the air and sound through the wall of the instrument. Conversely, a *Kōauau* made from *Puriri* (*Vitex lucens*) will produce a crisper sound because the hardness of the wood will not allow the instrument to vibrate as would also be the case with one fashioned out of bone, because the air and sound is held within the body of the *Kōauau* and then projected out of the *waha*. The best wood is determined by the final sound desired, a sound that suits the individual. Just as different woods have different tones, so do humans aim for different sounds and thus seek a *Kōauau* which is personalised to suit him or her.

In some instances, much of the hard work is taken out of creating a bore by selecting a wood such as *Porokaiwhiria* (*Parsonsia capsularis*), which has a reasonably soft pith (the pith is the centre of the wood). Because of its soft attribute, the centre is easy to remove to attain a bore.

3.3.1.2 *Ko te Arearenga – The Bore*

For a *Kōauau rākau*, the bore achieved by two techniques. First is the burning ember technique, where a burning ember is put on the end of the *Kōauau* and left there to burn its way through the wood. *Wenewene* may also be achieved in this way for a *Kōauau rākau*: commenting on one *Kōauau*, an observer is noted that “All three holes have evidently been burnt through the walls of the flute” (Söderström, 1939, p. 54). The ember may go out, but this is expected, and another ember replaces it. As the ember makes its way through the wood, it is removed regularly to allow the clearance of the bore by blowing out the debris with the mouth. Care must be taken as small embers and ash may enter the eyes, nose and mouth. It is also important to note that the objective of the ember is to burn through the wood without flame, as there is limited control over directing a flame where to burn.

The second technique for creating a bore in a *Kōauau rākau* is the *tūiri*, *tūwiri*, *tūwiriwiri*, or *tūāwiriwiri* technique. This fascinating tool has been explained above in *section 3.2.2.3*.

The bore drilled by the *tūāwiriwiri* is rough. In order for a *Kōauau* to sound full, clear, and unmistakable, the bore must be of certain smoothness, otherwise the sound will be rough and hard to obtain. To achieve this level of smoothness, another technique is employed, in which a thick cord, usually *muka* fibre from the *harakeke* plant, is threaded through the bore of the instrument. Both ends of the cord are tied to two upright sticks stabbed into the ground. The *Kōauau* is then moved from side to side, all the while sliding against the cord which acts as a kind of sand paper. To increase friction, the cord is repeatedly charged with sand.

One example in the Auckland War Memorial Museum that has been made from the handle of a short, bone weapon such as a *patu parāoa* utilises another technique. This technique requires a chisel that is straight, making a start to the bore by gouging out the interior. As the hole becomes deeper, a conical shape develops within the bore, and the chisel then works away at the cone edges to achieve a straight bore as the hole arrives at the *waha*. This technique is also used

by other indigenous peoples; for example, the Aborigines use a similar technique in making their famous instrument, the Didgeridoo.

A *tūwiriwiri* is too heavy duty for inserting the *wenewene* into the wall of the *Kōauau*, since a mistake now might damage the instrument after all the hard work and effort in attaining the bore. So, for the *wenewene*, the same concept as a *tūwiriwiri* is applied, only in a much more controlled fashion. A pole or rod, much the same as that for a *tūwiriwiri*, is used. This may also have a weight attached nearer the bottom of the wooden rod. A smaller flint is used for a finer hole and *mako* or shark teeth work well here. There are no cords to pull; instead, the rod is spun by rubbing the hands together with the rod between. Downward pressure is also required to force the shark tooth through the wood and complete a *wene*. A good technique is to start rubbing at the top of the rod and rub downwards. When reaching the bottom start again at the top. A tell-tale sign of traditional tools being utilised is that the hole is somewhat countersunk. These days, a metal drill bit is used to drill the actual hole and another bigger drill bit or similar to countersink the hole. This countersunk effect makes it easy to feel where the holes are, and adds to the aesthetic appeal of the instrument.

A variation of the *tūāwiriwiri* is a long, skinny bone such as that of the *Toroa* or Albatross. The bone is not hollow in this instance. One end is sharpened to a point, and the tool is worked, as before, by rubbing the hands together with the bone in between the palms, causing it to spin and therefore drill a hole. This technique would have been used for more delicate hole drilling and on material softer than *Toroa* bone itself, such as wood. The depth of the hole to be drilled would be no more than 10-15mm as *Toroa* bone of this description is fragile. This technique is effective, but the point of the bone needs sharpening often.

3.3.1.3 *Kōauau kōiwi* – Bone *Kōauau*

Kōauau kōiwi have a naturally occurring bore (although not always straight and neat). Any hollow bone has ends with knuckles. These knuckles would be removed by breaking the ends off by hand or by bashing the knuckles against a hard surface such as a rock. This technique is applied for the creation of a *pūmoana* or conch instrument by smashing off the pointed end. The ends would

then be straightened and smoothed by grinding with sandstone. Human bone and *Toroa* wing bone instruments were made to be blown from the largest end of the bone or the ridged end. This determines which end is the *puare* and which end is the *waha* of the instrument. To create the *wenewene*, the holes are drilled in the same way and with the same tool as with the *Kōauau rākau* example (see section 3.3.1.1 *Kōauau rākau – Wooden Kōauau*). Similarly, the bore may be cleared and smoothed with the use of a cord charged with sand.

3.3.1.4 *Kōauau kōhatu – Stone Kōauau*

Kōauau kōhatu such as *Pounamu* (*nephrite jade*), *Pakohe* (*argillite*), and *Tuhua* (*obsidian*) are the most difficult of all types of *Kōauau* to construct because of the sheer hardness of the stone and the lack of harder materials to make tools which can be used in fashioning the stone. It is important to note here that no very early examples of *Kōauau kōhatu* exist in public or private collections and that those which are known are post-contact and of modern manufacture. Nevertheless, creating a *Kōauau kōhatu* was possible, and after multitudes of hours of fashioning a fine piece would come to hand. For the overall shaping of the body, a chipping technique is used. This technique is also used for the shaping and construction of *toki* or an adze, beginning with a process called flaking, where bigger chunks are removed by being hit with another stone in order to roughly shape the object. The next stage is called hammer dressing. This is a process that is long and slow, hitting one rock against another, chipping small fragments off and hacking away at the rock. After many hours, the *Hineraukatauri* shape is achieved. The final smoothing process for the outside of the body is accomplished by grinding the instrument against sandstone which has sandpaper type qualities. Water is also used as a lubricant during this process, which is similar to flaking. The *tūāwiriwiri* tool is used for both the bore and the *wenewene* in this instance, as it is necessary to use this heavy duty tool for the *wenewene* also because of the hardness of the stone.

Figure 17: An example of a *Kōauau Kōhatu*

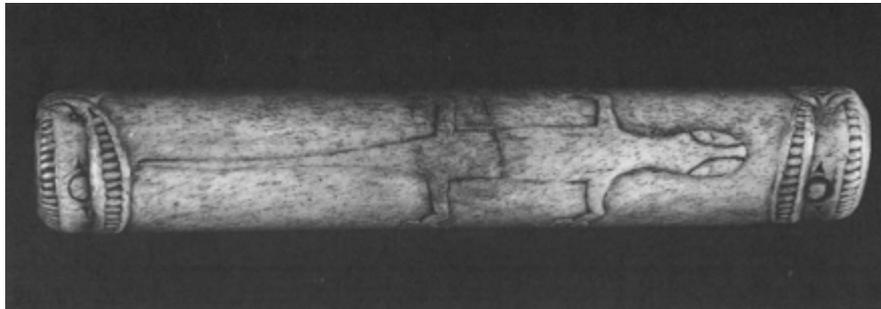


(Moyle, 1990, p. 50)

3.4 *He aha ngā tū whakairo? What are the types of carvings?*

Mokomoko or lizards have been found on one example of a *Kōauau*. Many tribes believed that the reptile was a symbol of death and misfortune (Starzecka et al., 1996, p. 48). This comment aligns with the *tikanga* of the *Kōauau* when used at *tangihanga* (funerals). On the other, hand *Mokomoko* were also regarded as *kaitiaki* (guardians), hence the reason for carving this figure on the *Kōauau*.

Figure 18: *Kōauau kōiwi tangata* showing *mokomoko* carvings

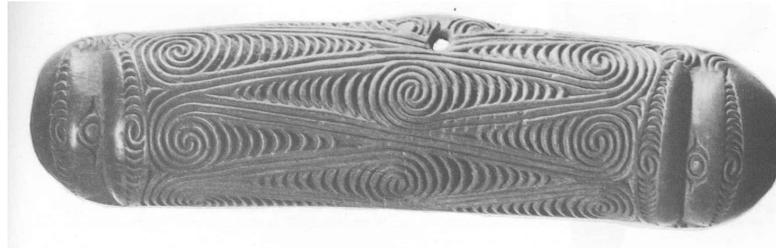


(Starzecka et al., 1996, p. 48)

In terms of carved figures, *Hineraukatauri* is commonly depicted, and her figure appears on many instruments (Starzecka et al., 1996, p.47). Carving a figure of *Hineraukatauri* on a *Kōauau* is no surprise as she is the *atua* of the *Kōauau* and of flute music generally, and her presence reminds the player of her stories, so that when playing, the player reads the carvings as a prompt to the memory about the *tikanga* (meaning) of the *taonga*. Another design commonly found on a *Kōauau* is the spiral (Furey, 1996, p.123). The spiral design from *Te Taitokerau* (northern regions of the North Island of New Zealand) is typical in Māori wood carving

from the classic period. The swirling spirals are suggestive of the long rolling waves and the rhythms of *Tangaroa* (God of the sea) as another source of inspiration from nature. One ethnologist has noted: “These spiral patterns suggest not only the Maori love for the sea but also the love of rhythmical and undulating movement in song and dance” (Barrow, 1963, p. 35).

Figure 19: *Kōauau* showing rhythmical spiral pattern from *Te Taitokerau*



(Barrow, 1969, p. 145)

Commonly, *Pāua* or (*Haliotis*) is used to adorn the *Kōauau* and such ornamentation visually stimulates the eye. When used around the *wenewene*, it also has a practical function to make it easier to feel where the holes are, as well as to *whakamana* and empower, to give effect and prestige to the *wenewene*. This allows the player to concentrate on his or her tune and not worry about where the holes are located (although this is not a problem when you are familiar with the instrument and the instrument is familiar with you).

Pāua is also accredited with being alive and possessing a *wairua* that is one to hold on to. When it is moved in the light, it changes colour, flashes and flickers. It is this effect that is perceived as having the quality of liveliness. It is one reason why *pāua* is also used for the eyes of carved figures, big and small, bringing the carving to life, and instilling in it a spirit that needs to be respected and maintained. *Pāua* eyes in carvings are therefore transferred to the figures and carvings found on the *Kōauau*, bringing it to life.

Less commonly, human milk teeth were used in the same way, that is, the initial teeth of small children that fall out and are replaced by the permanent set of adult teeth (Te Awekotuku personal communication, November 2007). Māori were firm believers of putting themselves literally into the object or instrument, by using

one's hair for the rope of a necklace, for instance, or by making the *Kōauau* out of human bone and rubbing the instrument against the skin to collect the natural body oils as an aid for preservation.

3.5 *Ko ngā whakanikoniko wera, harakuku hoki* - Burnt and etched designs

Some old *Kōauau* have designs burnt on them instead of incised carvings. This was achieved by heating a flint or similar fine piece of stone which was used to slowly burn the design into the usually wooden surface with a pattern formed by lines and a series of dots. On *Toroa* bone examples, it is common to find etched designs as the bone is too thin to carve and is heat sensitive. Shallow designs are then carefully etched and scraped into the bone's surface and sometimes filled with *awe ngārahu* (soot) causing a stained effect (Furey, 1996, pg. 123). The *awe ngārahu* brings out the design much as it does in *tā moko* (traditional Māori tattoo). This attribute is also seen in *Figure 23*.

Figure 20: Kōauau rākau showing burnt designs



(Hauser-Schäublin, 1998, p. 112)

Figure 21: *Kōauau kōiwi toroa* showing etched designs



(Moyle, 1989, p. 14)

Figure 22: *Kōauau rākau* showing burnt designs



(Kaepler, 1978, p.184)

3.6 Ko te whakaoranga taonga - Preservation techniques

A number of techniques were employed to preserve and increase the lifespan of a *Kōauau*. Following are explanations about these techniques.

3.6.1 He whakamārōtanga - Burnishing

Burnishing is achieved by rubbing a smooth, hard surface such as *pounamu*, *tuhua* or some *kōiwi* against the body of the *Kōauau*. This is applicable only to *Kōauau rākau* and *Kōauau kōiwi*. The process hardens the wood or bone by literally rubbing and squashing the air particles out of the material. Air left in the wood causes it to crack or warp in time, eventually making the material unusable.

3.6.2 *Kōkōwai* – Red Ochre

Kōkōwai is made from shark liver oil mixed with the red ochre earth or dirt. After thorough mixing, the oil and ochre is smeared on the *Kōauau* by hand (a process called *pāhanahana*), giving it a good covering, and is then left to dry for full day or more. The purpose of this is to re-nourish the wood by oiling it and stopping the air from getting into the minute gaps in the wood, since air may cause cracks.

3.6.3 *Horu* – Volcanic Red Ochre

Horu is made in the same way as *kōkōwai* but, instead of red dirt, a volcanic rock of the same or similar colour is used. This volcanic rock is hard but when it is rubbed it provides a fine chalk-like powder, which is ideal for mixing with shark liver oil. Some say the red earth which shows through on hillsides and cracks in the earth are the scars and tears in the skin of *Papatūānuku*. Thus, *Horu* is symbolic of her blood, and putting her blood on carvings and *taonga pūoro* gives the object the blessing and protection of our earth mother, also making it *tapu* or sacred.

Figure 23: *Kōauau* showing an example of *horu* and *awe ngārahu* colouring, Cambridge University Museum of Archaeology and Anthropology, Accession no. Z6619



Photo: Ngahuia Te Awekotuku.

3.6.4 Ko te hinu o te tinana - Natural body oil

Body oils are also effective in preserving a *Kōauau*. For bone and for wood, if worn touching the skin, the oil absorbed from the body will help to extend the life span of your *Kōauau*. In addition to this, one may wipe the instrument on the hairline, forehead, nose, behind the ears, armpits, breasts, or where ever oil collects, and utilise *hūpē* or mucus to oil the *taonga*. This technique is an ongoing process and extends the idea of physically putting oneself into the *taonga*. The more frequently you can practice this, the better your *Kōauau* will sound.

3.6.5 He Whakamārōtanga nā te ahi – Heat Treatment and Fire Conditioning

Over the years, I have attended *wānanga* with Bernard Makoare (Ngāti Whātua), Warren Warbrick (Rangitāne) and James Webster (Tainui, Te Arawa), and learned the techniques of heat treatment and fire conditioning. Fire conditioning or firing is a process of hanging or holding a *Kōauau rākau* above a flaming fire. The *Kōauau* is not held in the flame, but above it where the heat is warm and the smoke is thick. In old times, this may have been done in the *whare nui* above the central burning fire. These days it may be done simply above an open fire or by being hung in the chimney of a house. As the heat rises, it helps to shrink the wood, squeezing the air out of it. The smoke then comes into effect by filling the gaps with smoke particles which act in much the same manner as oils. This technique is also utilised for weapons to make them very hard and strong, inevitably increasing the life span of these objects. It does not work, however, for bone or stone examples. There is a suggestion also that a special fire was used for firing instruments made of *rākau* (wood). Because *Kōauau* were considered *tapu* like weapons such as *taiaha*, *tewhatewha* and *kotiate*, they were not put through this process in an everyday *noa* (common) location such as inside the *whare tupuna*. Instead, the firing may have been done outside the *whare tupuna* and where *kai* was not cooked, above a fire specifically lit for this purpose.

3.7 *He whakakai Kōauau – Kōauau as adornments*

Māori adornments were and still are worn every day and on special occasions. There is, however, a significance, a *tikanga* or meaning to all adornments. The Māori word for an ornament for the ear or neck (earring or necklace) is *whakakai*. A *Kōauau* may also be termed a type of *whakakai*, ornamenting and adorning the neck or worn as a necklace.

Figure 24: *Kōauau* with *taura*, and a human finger bone toggle, British Museum Collection, Catalogue no. 9359.



Photo: Ngahuia Te Awekotuku

Why wear a *Kōauau* as an adornment? This question has puzzled me for some time. If I delve deeply into this question, there are a number of reasons or *tikanga* to answer it. Not everyone would wear a *Kōauau*. If a *rangatira* wore a *Kōauau* for this purpose, it would signify not only chieftainship but a *tohungatanga* of specific skills like musical knowledge, playing technique, tunes, *pakiwaitara*, *kōrero tuku*, and the ability to weave a song and capture one's heart or mind, putting the listener into a trance-like state such as meditation. Also one may be seen as a *kaikawe waiata* or carrier of songs, as different *tohunga* would have

expertise in different areas. One would specialise in *whakapapa* or genealogy, another in *whakairo* or carving, one in *mau rākau* or weaponry, and so on. Each *tohunga* would possess knowledge and ability that was unique. His spiritual connectivity to the *atua* – *Ranginui* and *Papatūānuku* (Sky father and earth mother), *rangi* (heaven), *pō* (night, symbolic of ancestors and those who have passed) - would be strong and untouchable, for the price to pay for error or blunder was death.

Wearing a *Kōauau* as a *whakakai* also made it a very transportable object. Having a *Kōauau* in your possession with its many attributes in entertainment and as a tool, could be an advantage in times of need, such as when a *Kōauau* was needed on the spot for impromptu performances. Also, the *Kōauau* is a manageable size to be worn as a *whakakai*.

Not all *Kōauau* were *whakakai*, but if the material could be drilled for *wenewene*, then it could also be drilled for a suspension hole. Depending on the original shape of the material, it might or might not allow for a suspension hole to be drilled. If a suspension hole was desired, and it would still cater for design and form considerations and the overall aesthetic appeal of the *Kōauau*, then it would be achievable.

First I will consider human bone. Many of the human bone examples found in museums have a hole for suspension near the middle, allowing the *taonga* to sit comfortably hanging from shoulder to shoulder, but the suspension hole does not pierce the central bore. This is because the bone is of significant thickness and is capable of having a hole drilled into its wall. Whether it is a leg or arm bone, human bone is generally thicker than other bone because of the weight, movement and strain put on it from a lifetime of work and exercise endured during the human's life.

Next there is *Kōauau toroa*, made from the wing bone of the albatross. A bird such as the *Toroa* which spends most of its life at sea needs to be as light as possible, and for this reason its wing bone construction is light-weight, thin and hollow, allowing it to fly efficiently and to conserve energy. This provides us with

an appropriate material for *Kōauau toroa* construction. *Toroa* is a naturally occurring material that was hard to obtain because of the life patterns of the bird, and its isolation in specific coastal areas around New Zealand. Regardless of the thin wall of a *kōiwi toroa*, they were still worn as *whakakai*. However, in this instance the hole was not able to be drilled in the outside wall and central to the length of the bone without having an effect on the sound and quality of the instrument, so an alternative method was employed. The hole was then drilled near the end of the *Kōauau*, so close to the end that there was no effect on the sound and the hole had no capability of tonal manipulation. The *Kōauau kōiwi toroa* now sits hanging from neck to belly button.

This provided an alternative that served its purpose in two ways: first, holding the *taonga* in high prestige by wearing it as a *whakakai* and, secondly, by maintaining its integrity and *mana* through wearing it in a way which maintained it as a practical instrument while doubling as a *whakakai*. Still, *toroa* wing bone is lengthy, and this makes the instrument prone to damage from simple movement such as walking as the *taonga* will bounce upon ones chest or swing and collide with other objects, potentially causing damage during daily activity. This may well be the reason why a number of the examples of *Kōauau kōiwi toroa* held at *Tamaki Paenga Hira* (Auckland War Memorial Museum) are damaged and incomplete (See *chapter 5*).

Was the suspension hole drilled near the *puare* or the *waha* of the instrument? From the examples in the Auckland War Memorial Museum, it is very hard to tell. The *Kōauau toroa* examples that had a hole for suspension were incomplete at the ends, making it very hard to determine the *puare*. Following is some discussion about this issue.

If the suspension hole was drilled in the *puare*, or top end, of the *Kōauau*, it would then be worn in an upright position, the *puare* near the neck of the owner and the *waha* nearer the *pito* of the person. If he or she then needed to play the *Kōauau*, they either released the toggle and took it off, or played the *Kōauau* while still wearing it, provided that the *taura* was long enough. One problem comes to the forefront here: the suspension cord is now in an awkward position in

terms of blowing technique. The *puare* is not very big and it is necessary to insert ones lips into the *puare* to achieve a full sound. If the suspension cord is part of the *puare* also, it is restricting and increases the degree of skill required to be successful in sound production.

On the other hand, if the suspension hole is drilled at the *waha* or bottom end of the *Kōauau*, it is fair to assume the *Kōauau* is worn upside down with the *waha* near the neck and *puare* near the *pito*. Here it is possible to flip the *waha* end of the *Kōauau* (which is at the bottom) upwards to meet the lips for playing whilst still wearing the *taonga*, provided again that the length of the *taura* is long enough. In this instance the *puare* is left free of obstruction.

With a *Kōauau rākau* or wooden *Kōauau*, the problem of the walls being thick enough is not present. It is up to the *tohunga whakairo* to leave enough wood on the *Kōauau* to ensure that a successful suspension hole can be put in place if this is his/her intention. If it is planned, it is very easy to effect, but once so much wood has been shaved off, this option must be abandoned. However, not all *Kōauau* were *whakakai* as there are many examples that do not possess a hole for suspension.

Kōauau kōhatu or stone *Kōauau* by all accounts were not worn as adornments. A reason for this is that stone in pre-European times was hard to work and fashion for lack of advanced tools, although it was still possible to make a simple *Kōauau* from this material.

3.8 *Whakarāpopototanga – Summary*

In summary, the *Kōauau* design and shape is based on the cocoon of *Hineraukatauri*, the Case moth or Bag moth. A *toki* is used to initially fell the tree or cut part of a tree, and then to attain the rough overall shape during fashioning. A *toki* consists of three components, the *ūpoko*, the *kakau*, and the *herehere*, and is used in a swinging action between the legs or like an ice pick while climbing. The *whao* consists of three components as well, the *ūpoko*, the *kakau*, and the *herehere*, and is used to refine the outer shape of the *Kōauau* and to complete surface design such as patterns and figures. The *whao* is used by hitting the top of

the *kakau* with a *pātuki* or *pao*, forcing the *ūpoko* through the surface of the wood. The *tūāwiriwiri* has four major parts: the central pole, a weight, the piercing agent, and the pull cords. It is put into action by winding the cords around the central pole in the same direction, then pulling the cords in opposite directions, causing the pole to spin in a drilling motion, and the action is then repeated. This tool is used for drilling the *wenewene* and sometimes the bore; otherwise a type of wood with a soft pith is used. Construction of the *Kōauau* would start with a *karakia* or prayer. Each timber has a *reo* (voice) of its own. With *Kōauau kōiwi*, the knuckles at the ends of the bore are removed, and the bore is cleared out, drilling the *wenewene* with the use of the *tūāwiriwiri*. Stone *Kōauau* are fashioned by using a chipping technique and a scraping technique for refinement. *Hineraukatauri* is often depicted in the carving figures and spiral patterns are commonly found relating to the rhythms of the sea. *Pāua* is used for the eyes in the figures and sometimes around the *wenewene* for practicality and to add life to the *taonga*. A *Kōauau* is preserved by burnishing, *Kōkōwai*, *horu*, natural body oil, and heat treatment, and is sometimes worn as an adornment or necklace, although not in the cases made from stone.

Wāhanga Tuawhā: Chapter 4

Ko te mahi Whakaatu:

Use and Performance

4.1 *Whakatūwheratanga – Introduction*

This chapter focuses on use and performance: stance, holding position, blowing and playing techniques, where and when *Kōauau* are played, and song composition.

4.2 *Ko te Hou Mataaho – Acoustics: The Magic of Sound*

Acoustics of the *Kōauau* are important because the sound carries a great distance. Acoustics is defined as:

Acoustics *n.* **1.** (*functioning as sing.*) the scientific study of sound and sound waves. **2.** (*functioning as pl.*) the characteristics of a room, auditorium, etc., that determine the fidelity with which sound can be heard within it. (Collins Concise English Dictionary, 1992, p.10)

I will now relate this definition to a *Kōauau*. Every material possesses its own qualities and attributes with regard to acoustics, so it depends on the type of *Kōauau* you hear. Here I will talk about the acoustics of the most common type, *Kōauau* rākau. The sound of a *Kōauau* rākau can be described as strong, full, high, mesmerising, unique, distinctive, and soulful. In *Māoritanga* (Māoridom), there are two terms for sounds, *pūoro* and *pūoru*. *Pūoro* is simply a sound that is heard and the listener knows exactly what is making the sound: for example, you may hear a bird singing in the trees and you know exactly what type of bird it is. This is described as *pūoro*. Conversely, *pūoru* is an unfamiliar sound from an unfamiliar source: for example, hearing a sound similar to the call of a *Kākā* (*Nestor meridionalis* – a large native forest parrot) but not know the exact origin of the sound.

Three terms are used to describe a sound wave: wavelength, frequency, and amplitude. The wavelength “is merely the distance between two successive peaks or two successive troughs” (Greated, 2001). The frequency is “the number of complete vibrations or cycles occurring per unit of time” (Randel, 2003, p. 334), and the amplitude “is simply the amount of the disturbance, from the undisturbed state” (Taylor, 2001, p. 766). Sounds and sound waves differ in three ways, in pitch, in volume, and in quality. Pitch is defined as “the perceived quality of a sound that is chiefly a function of its fundamental frequency – the number of oscillations per second” (Randel, 2003, p. 661). For example, the more oscillations inside the *arearenga* (bore) of the *Kōauau*, the higher the pitch, and vice versa, or a *Weka* has a high pitched call, while a male *Kōkako* has a low booming call. Volume and quality of sound is self explanatory.

From these definitions, a *Kōauau* can produce both noise and sound. The energy in its sound is strong, and is generally high in pitch, which indicates that it has a lot of energy as it is loud, especially indoors. Although this is true, the *kaiwhakatangitangi* or performer may wish to make not a loud sound but a sound that is full but still calm and tranquil. This may be achieved by lowering the volume and therefore the energy blown into the instrument. In this instance the pitch may be maintained.

The second definition of acoustics relates to the qualities or characteristics of a room, auditorium, stadium, etc., that determine the audibility or fidelity of sounds in it (Collins Concise English Dictionary, 1992, p.10). In this sense of the word it is not the actual sound of the instrument that is in concern, instead it is the environment in which the instrument is sounded.

4.2.1 *Ko te Taiao* - The Natural Acoustic Auditoriums and Concert Chambers of the Māori

For Māori, the auditorium and concert chamber was simply the fertile environment. This included a water element in near proximity, for instance, a roto, awa, or moana (lake, river, or sea). Water is an excellent vehicle for carrying sound. This is shown in the *Hinemoa* and *Tūtānekai* story, as the sound produced by *Tūtānekai* on his flute carried well over the lake to the mainland (a distance of

approximately 2km from Owhata / Hinemoa point to Mokoia) and achieved its purpose as a guidance tool to direct *Hinemoa* to her final destination. I have personally experienced the sound-carrying abilities of the water on Lake Rotorua. One night, standing on the shore of the sacred lake, I mused about *Tūtānekai* and *Hinemoa*: what was *Tūtānekai* thinking about at nights when he would play? Deep in thought, I began to play and a sweet tune was produced. The sound wafted across the water, travelling a noteworthy distance.

Height is another factor that would usher the sound a great distance. Many accounts have been documented in which sound was required to travel a significant distance, such as the sound of the *Pahū*, a slit gong used to *whakaaraara pā* or alert the tribe, as well as the *Pūkāea* that was used for the same purpose. These, along with the *Kōauau*, were more than likely played on an elevated watchman's platform called an *ahurewa* (Williams, 2000, p. 4) or on top of a rise, hill, or mountain, in order to take advantage of the natural acoustics in the valleys, gorges, and water occurrences below.

Figure 25: A Pūkāea



Photo: Jo'el Komene

Tāwhiri-matea is the Māori god of the winds, weather, and the breath that fills our lungs. If his winds are blowing, and blowing hard, the sound in conjunction with the naturally occurring acoustic aspects may be carried a much greater distance to the listener or to an ear which just happens to catch the sound. Rain, also, will

obviously affect and obstruct the travelling capabilities of the sound. However, if it is a *rangi paki*, or fine day, there will be minimal obstruction and the sound will glide a distance with ease.

In times of stillness, motionlessness, and quietness, as seen in the mist and fog that hovers upon the land during the winter months of the year in the Waikato region or in a forest setting, it is the airiness that will encourage the sound projection, and again the water in the air that carries the sound to its destination.

A particular theory that comes to mind is the ability of the human to appease the gods by somehow pleasing them. To exemplify this, I will offer the example of a *matau* or hook used for fishing and *Tangaroa*, the god of the sea. If time and great effort was put into the carving and beautification of the hook, aesthetically, practically, and emotionally, this would be witnessed by *Tangaroa* when the hook was thrown into the sea to catch a fish. If *Tangaroa* was then happy with what he saw, he would offer a great catch to the fisherman on the other end of the line.

The same circumstance applied to *Hineraukatauri* in a musical sense. If a beautiful *Kōauau* has been fashioned, carved, and preserved, then a melodious and sweet sound will come to fruition. The underlying concept in this is respect, honour and distinction. If these qualities are displayed, then they will be reciprocated by the gods and the world will revolve correspondingly.

4.3 Ko ngā Tikanga Whakatangi Kōauau - Stance, blowing, and playing techniques

This section will look at the way a person stands while playing a *Kōauau*. Here I will explain some of the rules and concepts behind the protocols. Then I will look at how one would hold the *Kōauau* in the hands, or the hold position, and to link these actions I will explain and offer some discussion about how a *Kōauau* is blown, and the playing techniques with regard to fingering and air flow manipulation by the tongue.

4.3.1 *Tūnga* - Stance

There are some general principles associated with playing the *Kōauau*. These are: (i) *Me tū* (you should stand), (ii) *Kore pōtae* (no hat or headwear), and (iii) *Kore hū* (no shoes).

4.3.1.1 *Me Tū Ake* (you should stand)

When a person is about to sound the *Kōauau*, he or she should first stand. Why? It is basic physiology: when standing the diaphragm and lungs are released and opened, enabling a comfortable and effective body stance for the control of the breath. Standing is also a sign of respect not only to the instrument, but also to the *atua* (gods) from whom we seek guidance. To me, it is the equivalent to a *kaiwhaikōrero* or a skilled orator who stands to deliver a speech, showing his knowledge and experience. He stands to show respect to all entities that are greater than himself, and to be closer or to have a stronger connection to the *atua* giving *mana*, *ihi*, and *wehi* to the spokesman. According to Māori belief, when a *kaiwhaikōrero* stands to speak, it is not the physical person speaking but the gods who use the *kaiwhakōrero* as a vehicle to communicate to the living from the spiritual realm. Literally, there is a physical connection from the heavens to the top of the speaker's head. *Mana*, *ihi*, and *wehi* then travels from the head to the *tuara* or backbone of the person, flowing on to the ribs, and so on throughout the body. This is much the same as the flow of knowledge throughout a *whare nui* (traditional meeting house), and this is another reason why Māori perceive and treat the head of a human as *tapu* or sacred. It also respects the word or *te reo Māori* (the Māori language), for it is the word at the end of the day that will enable us to grow, communicate, and live long.

Other reasons why a person should stand to sound a *Kōauau* are to call attention to one's self, and to distinguish the speaker within a crowd, similar to the American Indian talking stick, where whoever holds the stick has a chance to talk without interruption. Once the talking stick is handed on the next person, he or she speaks, and the remainder will listen, showing the same respect in silence. This protocol is exercised in the Māori world as well.

On a practical level, it is correct to stand and speak to be heard, for if the word is not heard, then what is the aim of sharing your thoughts and expressions. To support the word issued by the heavens and expressed through you, the body will talk as well. The body language of a person will convey a significant amount of the intended message, so it is very unusual to see a performer standing still while playing a *Kōauau*. The wairua will run through the veins of the performer and his or her body language will accompany the tune and meaning of the song being played.

4.3.1.2 *Kore he Pōtae (no hat or headwear)*

This encompasses all types of headwear and directly relates to the physical connection to the *atua* (gods) and *rangi* (heavens) previously explained.

4.3.1.3 *Kore he Hū (no shoes)*

As we must show respect to the entities that are spiritually greater than us as humans and are generally above us physically and in concept, we must, conversely, pay homage to our earthly mother, *ko Papatūānuku*. In doing this, we remove our shoes, socks, and any other type of footwear to be bare footed, and to have once again a physical connection to the earth and *Papatūānuku* herself. It is believed that misfortune may happen to those who do not abide by these matters.

4.3.2 *Ko ngā tikanga pupuhi, whakatangi Kōauau hoki - Techniques of blowing and playing Kōauau*

In *The Coming of the Maori*, Buck states: “The *Kōauau* was structurally a shortened form of the *whio* and differed from the *pōrutu* or *rehu*, not only in length but in being open at both ends” (Buck, 1950, p. 264). This supports the theory that the word and name *Kōauau* cannot be applied to other instruments such as the *rehu*, *whio*, *pōrutu* and instruments that are structurally similar but in other ways different. This also defines it as different and therefore unique. Buck then says that the *kōauau* is played with the nose by blocking one nostril with the thumb and blocking the *puare* of the *koauau* with the upper lip where the nostril then protrudes forward and uses the first hole or hole closest to the *puare* to produce the sound (Buck, 1950, p. 264). Andersen considered this blowing technique a myth, as on most *Kōauau* examined by him, the first hole is too far

from the *puare* to execute this method (Andersen, 1934, p.230). However, this technique has been found in a number of Polynesian islands, with bamboo instruments blown in this manner, and has therefore been applied to the use of the *Kōauau*. Migration patterns throughout Polynesia support this technique, but, for some reason, when *Māori* arrived in Aotearoa the culture changed and evolved, new natural resources were available, and the arts and culture developed to a new level. The arts became more complicated, intricate, aesthetically pleasing, complex, and elaborate, enabling change and improvements in technique and process. This is what has happened with the nose blowing technique for the *Kōauau*: the availability of much larger trees and a greater selection, offered many more uses and attributes which were superior for the construction of a *Kōauau* compared to those trees native to other parts of Polynesia.

In *An Investigation of the Open Tube Maori Flute or Kooauau*, McLean concludes the following about the playing method of the *Kōauau*:

The instrument was not, as often supposed, a nose flute, but was blown with the mouth as an open tube. It was held from the point of view of the player, slightly downward and to the right, with the right hand edge of the blowing end resting on the lips. This put the left hand edge a little distance from the lips and it was the stream of air striking this edge which caused the instrument to sound. It may have been possible, using this playing position, to suggest words while playing the instrument, but it is very doubtful if this technique was very effective. Pitch could be varied not only by fingering but also altering the manner of blowing. Some flutes, shorter than usual, were made without finger holes and were played entirely by this method and most flutes were too short to over blow (McLean, 1968, p.239).

The *Kōauau* was not commonly used as a nose flute. This is a theory that was assumed but not witnessed, and has so been disproved by McLean, who states that neither the *Nguru* nor the *Kōauau* were nose flutes (McLean, 1972, p. 27).

To add to McLean's conclusion concerning blowing technique, the air would then spiral down the open tube and oscillate (the Māori term for this is *tōrino* as in the *Pūtōrino*). The air that exits the *waha* of the *Kōauau* then offers another point of manipulation of pitch, the more the *waha* is covered, the lower is the sound produced. This, however, requires a further manipulation of the lips and a softer stream of air to achieve a very low sound. It is possible to cover the entire *waha* by inserting the little finger in the *waha* so no air will escape, or simply cover a portion of the *waha* to produce the desired note.

As for the player suggesting words while playing the *Kōauau*, McLean is very doubtful whether this technique was effective (McLean, 1968, p.239). In *Maori Love Legends* (Riley, 2003, pp. 28-32) there is a story titled *The Magic of the Kōauau*. In this story, a Taranaki captive of a Waikato war party is summoned to death to satisfy a claim to utu or revenge for past injustices. His name was *Kōmako*, the same as the melodious Bellbird. His partner had also been held captive, and her life was spared because she possessed great skill in *raranga* or weaving. As *Kōmako* was to be put to death in front of the entire village, he was offered one last request, and he chose to play a tune on his *Kōauau*. In his song, he flute-sang. His partner, who was also present, heard the words being produced by *Kōmako* and the *Kōauau*, directing her to escape and meet him later on at a location identified in the tune. In the end, *Kōmako* himself escapes by putting the tribe into a trance-like state, and while they were mesmerised, he made his dash and got away. Soon after, his wife also stole free, followed the instructions given in the tune and chant, and met up with her husband for a picturesque ending.

This story demonstrates the power and effectiveness of flute-singing. This technique is still alive today, where songs are imitated by the *Kōauau* to an extent that the words jump out at you with instant recognition of the song and words, when the songs are well known and widely spread.

Altering the manner of blowing is the most important means of achieving a sweet and tuneful song. As you can imagine, with commonly only three holes on the *Kōauau*, the range in pitch is limited. Māori, being very intelligent and creative, found ways to achieve many notes on the *Kōauau* by manipulating the air stream

from the lips of the player to the inside edge of the *puare*, where friction and sound is initiated. This air stream may also be manipulated through the raising and lowering of the tongue in the mouth, similar to the action when whistling in the high and low extremities. This practice supports McLean's conclusion about playing technique for a *Kōauau* without stop holes. One more aspect of technique is to partially cover the finger holes, similarly to covering the *waha*, as described above. In this instance, however, you may have your finger touching the *Kōauau* and partially covering the stop hole or you may place the finger above the hole where the air hits your finger and disperses. With the utilisation of these techniques, the range of notes possible from a *Kōauau* is wide, and enables a greater number of songs to be produced on the same *Kōauau*.

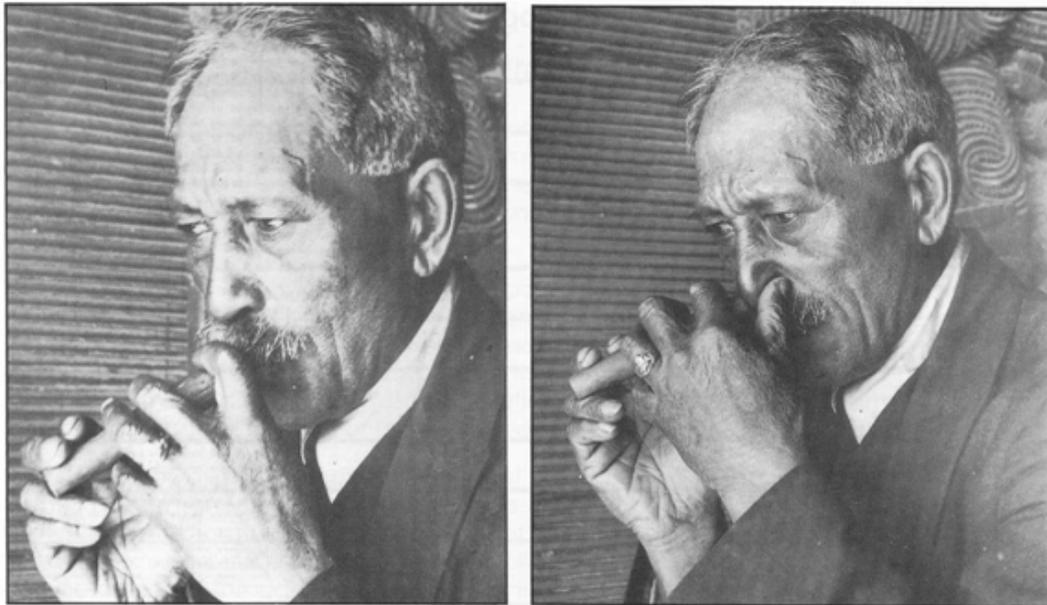
On most *Kōauau*, it is not possible to over-blow. This is to blow somewhat harder so as to produce an overtone instead of a fundamental tone. On *Kōauau Toroa*, however, this is possible where the bone is much longer and is therefore capable of producing an overblown note.

In order to explain how to blow a *Kōauau*, it is advantageous to explain exactly how a *Kōauau* works. For sound to be produced, a certain amount of friction needs to be present. It is the friction that becomes the sound. In the circumstance of a *Kōauau*, the player's lips cover the *puare* and create a shape similar to that of a quarter moon. At this opening the sound is created from a small opening having to let in a constant flow of air, the breath of the person. Once contact of breath to the *puare* is initiated and the breath is consistent, a long sound may be produced: the air is pushed down the bore of the *Kōauau* in a spiralling motion which carries the initial sound and resonates while travelling down the bore until it is shot out the end and passed on to *Tawhiri-matea*. He will carry the tune or song to its destination, ultimately the ear.

Cross blowing (with the mouth) is the most common blowing technique for the *Kōauau*. With the cross blowing technique, the head is tilted slightly to the side, at about a 45 degree angle, while the player is standing in an upright position. The lips are placed upon the *puare* of the *Kōauau* and blown. How exactly is this accomplished? The lips are placed in a whistling position; at this point, a very low

whistle is advised, or as low as you can manage, as this is the easiest position to achieve a sound and not just a noise. Whilst in this position, the lips cover most of the *puare*, creating a small gap where friction can take place. A smooth, consistent air flow is blown which will hit the inside edge of the *puare* and a sound will come out, hence the whistling position of the lips to create a specifically directed air flow. Once you become familiar and confident in producing a sound, it is then possible to manipulate the angle where your breath hits the *puare*, and therefore manipulate the pitch of the note produced. On the other hand, it is also possible to change the position of the tongue in the mouth while maintaining the whistling position of the lips. Much the same as when you whistle, your tongue rises to change the amount of air that passes over the tongue and is squeezed out between the lips where friction is initiated and sound is produced. This will also change the note played on the *Kōauau*. As a result, even though there are commonly just three *wenewene* on a *Kōauau*, the range of notes possible is wide, incorporating flats and sharps in *Pākehā* musical terms.

Figure 26: Te Kiwi Amohau (Ngāti Whakaue) demonstrating both the mouth and nose blowing techniques



(Dashper, 1996, p. 30)

Whether or not the *Kōauau* was played by the nose or nostril is still a controversial subject. The *Nguru* is a type of traditional Māori flute played in a similar manner to that of a *Kōauau* (see Figure 33). McLean concludes that both *Nguru* and *Kōauau* were played with the mouth and not with the nose (McLean, 1972, p. 27).

Figure 27: *A Nguru.*



(Te Papa Tongarewa, 2003)

Leaving aside the debate, it is however still possible to blow the *Kōauau* and the *Nguru* via the nostril. The following explanation may apply for both instruments. The only condition that stands is that the bore of the *Kōauau* must be approximately 10mm in diameter, give or take a little more or less depending on the size of your nose and nostrils. It is up to you which nostril you choose to use, but remember, that as this technique will be new and unfamiliar to many to begin with, try and use the same nostril all the time, to become accustomed to the instrument and to build confidence in your tunes and songs. First, block one of your nostrils, usually with the thumb as this enables the rest of the hand and fingers to be free to hold the *Kōauau* comfortably, as discussed previously.

Now the same concept is applied here to blowing with the nose as to blowing with the mouth. Place your open nostril on the edge of the *puare*, and blow. It may take some time to obtain a sound, but aim to have a consistent air flow across the inside edge of the opposite side of the *puare*, and then try and change the angle in which the air flows across the inside edge of the *puare*.

As you begin to create sound, you will find a spot where the sound is strong and at its clearest, loudest, and fullest. Remember this feeling and position, as this is where it will always be. If you lose it, find it again and again and you will soon be able to pick up your *Kōauau* and play it with your nose with ease.

While playing via the nose, the sound will seem weaker than when played with the mouth. This is expected, as the amount of air you can expel through a single nostril is half that compared with expelling air through both nostrils together or through the mouth. Even though this is the case, the sound will be sweeter and smoother. This is best demonstrated with the *Kōauau ponga ihu* made from a very small hue or gourd which has had the top removed and holes ranging from one to four having been drilled where the circumference is greatest.

Figure 27: A Ponga ihu



Photo: Jo'el Komene

Why is a smoother sound produced with the nose? One reason for this, according to a Māori world view, is that the mouth is mainly used for eating food, which is a *noa* or common substance, and on a second level for talking, utilising the voice box, throat, tongue, and mouth to produce sound and language. On a third level, the mouth is used for breathing. The nose, however, is used solely for breathing

and through a ritual called a *hariru* at the end of a *pōwhiri* or welcoming ceremony where each member of the *tangata whenua* (home party) will face to face greet each of the *manuhiri* or visiting party by shaking hands and *hongi* (to press noses in greeting). This ritual consists of shaking hands and a *hongi*. The *hongi* is a pressing of noses and foreheads to share in the physical connection of minds and spirits. Whilst pressing noses, you may inhale to share a breath with a newly acquainted friend, for it is the breath that we breathe which is the essence of who we are, and to share in the same breath with someone else is empowering and uplifting. This same concept is also applied to the nose blowing technique of the *Kōauau*. In other words, the nose breath of a person is held in high esteem and is treated as *tapu* or sacred. The full head is also considered *tapu*, being the location of the brain or central processing unit of the body, and the place on the body where our spiritual connection to the heavens and gods is at the very top of the head.

Furey writes:

McLean found by experimentation that a number of notes can be obtained from a bone *Kōauau* without holes by varying the manner of blowing, and that the shorter the instrument, the greater the range of notes obtained. A bevelled finish on the blowing end also had an effect on the sound produced (1996, p.125).

This observation is correct. There are a number of variables that contribute to the range of sound of a *Kōauau*. These include: the length of the *Kōauau*, the bore size, the outer shape of the *puare* (whether it is bevelled or still has an outer edge), the size of the *kōwenewene*, the number of *kōwenewene*, the material which it is made of, and the preservation techniques applied (*kōkōwai*, burnishing or heat treatment). The last of these variables, and probably the most inconsistent, is the position of the lips and tongue. It is possible to manipulate each note solely by the mouth and lips, further broadening the range of notes achievable from each finger position. From this it is possible to keep in tune and somewhat bend the note to fit the song and suggest the words through the sound. Andersen states:

It was possible for the Maori to breathe the words of his songs into the short flute (Koauau): I have heard such a song whilst it was being recorded [on a wax cylinder]; but whilst I saw the movement of the old man's lips who was blowing into the flute, I did not know that the words as well as the melody were being recorded. It was not till more than a year later, when I reproduced the song for the sake of some Maori visitors to the Turnbull Library that I learned that the words had been recorded (1946, pp. vii – viii).

This technique of playing is very hard indeed. It requires a high level of intimacy with the *Kōauau*, the tune of the song, and the words. Not everyone is capable of playing at this *taumata* (level), as it requires a great deal of skill and understanding. Andersen also records that he asked the *Māori* visitors if this technique of playing is customary, and it was so agreed upon but one commented that “it is not easy and that is why a good flute-singer was so highly esteemed” (Andersen, 1946, p. viii).

Fischer states: “Te Rangi Hiroa also told me he understood the old people were able to speak on the putorino as well as the koauau” (Fischer, 1983, p.109). What exactly is meant by this? For many, this statement may sound like a prank, tale, or trickery. In fact, it is quite the opposite. During the years I have been involved with *taonga pūoro*, making them and refining my playing skills, I have learnt that this statement is accurate. While blowing the *Kōauau*, it is also possible to somewhat mouth the words to encourage the production of the words in the sound. This is demonstrated on the cassette *Asia Pacific Flutes*, entitled ‘Tihore’, by Hirini Melbourne, where the *Kōauau* is played as if the words were being produced by the *Kōauau* itself. It is from this that secret messages or codes have been communicated through the playing of the *Kōauau*; sometimes in love, sometimes in fear, but in all instances for a positive outcome. So you actually speak or recite words into the instrument. It is this style of playing that has been largely lost in contemporary use of the *Kōauau*, but through understanding and practice, it will remain with us forever more.

The following quotation from Fischer is an example of misunderstandings about *taonga pūoro* by those who have written about them and have therefore planted inaccurate ideas in the mind of readers: “In summary, it can be said that the flute is equally used by men and women in Polynesia (with the exception of New Zealand)” (Fischer, 1983, p. 109). This shows a lack of understanding about the *Kōauau* and guidelines for usage. Fischer makes no mention of *Hineraukatauri* and the fact that a female deity is the guardian of the *Kōauau*. Essentially, this circumstance gives both male and female the right to play the *Kōauau*.

4.4 *Ka whakatangihia te Kōauau i hea, āhea hoki? - Where and when are Kōauau played?*

In the section below, I outline the various locations and situations where *Kōauau* were traditionally and sometimes still are played.

The *Māori whare nui*, also called the *whare tupuna/tipuna*, *whare puni*, *whare maire* and *whare moe*, frequently translated as meeting house, is the centre of all occasions and gatherings for *Māori* people. The whare provides the conditions and environment for a comfortable life, protecting people from the weather and elements during the nights and providing warmth during winter. The *whare nui* is a highly respected building in the *Māori* world, and life revolves around her.

The *Kōauau* is able to sing its song inside the *whare nui*, outside on the *marae*, and all around the *pā tūwatawata*, translated as a stockade or fortified village. Why inside and outside? Inside the whare nui is a peaceful realm of many *atua* including *Hinenuitepō*, the goddess of the underworld, and *Rongomatane*, the god of peace. The *Kōauau* supports the principles of those *atua* through *tikanga* and truths about *Hineraukatauri*. For that reason, it is acceptable to play a *Kōauau* inside a *whare nui*, and indoors in general.

Conversely, you may also play a *Kōauau* on the *marae*. The *marae* or courtyard directly in front of a whare nui is called in full, *Te marae nui atea a Tūmatauenga*, the great courtyard of *Tūmatauenga*. The *marae* may also be called *Te umu pokapoka a Tūmatauenga*, the fiery ovens of *Tūmatauenga*. *Tūmatauenga* is the god of war and anger. This is true in times of heated argument, disagreement, and,

in old times, a physical fight, stirring up the ‘dust’, brandishing weapons of both distance fighting and close combat to resolve issues. Balance in this situation is required, as war, anger, and death cannot reign forever. Here, *Rongomaraeroa* comes to the forefront when the marae is peaceful and the ‘dust’ has settled. The presence of *Rongomaraeroa* and his connection to things peaceful through his ambassadorial traits allows the performance of the *Kōauau* in times of peace. This is again aligned with the *tikanga* and concepts of *Hineraukatauri*.

The home is the comfort zone for many, with expressions like ‘ko tēnei tōku tūrangawaewae’ (this is my standing place), and there is no doubt that the *Kōauau* was played at the home, if this was a separate place from the marae itself. In the home, the same *tikanga* and protocols are exercised, and if the situation called for the *Kōauau* to be played, if the attributes and abilities of the *Kōauau* were called upon, then playing it in the home is appropriate. Since it was transportable, easy to make, and a powerful tool in healing, by settling a person’s *wairua* with guidance from the *atua* involved, you can see how the *Kōauau* can be a must-have possession with many positive capabilities.

Other locations where the *Kōauau* would be played are the *Whare tapere* or the *Whare matoro* (the house where games were played). These locations are for socialising and entertainment, places for story telling, amusements, and game playing, venues where people are entertained and where performances entertainment by both sexes are presented (Best, 2005, p. 20). Therefore, the *Whare tapere* and the *Whare matoro* are proper places to encompass the performance of *Kōauau*, according to the *tikanga* (meaning or purpose) for which they were built.

When and in what contexts were *Kōauau* played? Following is a list of contexts, with explanations and examples of when *Kōauau* were and sometimes still are played.

4.4.1 *Hei pōpō i te mamae – To soothe pain*

The birth of a baby is a significant event in one’s life, but a painful one all the same. During the birth of a baby, the *Kōauau* is used in much the same way as

during *tā moko* (traditional Māori tattoo), to minimise the pain and distract the patient's attention from the pain (Te Awekotuku, 2007, p.55), and encourage things to happen naturally without tragedy or misfortune.

According to Te Awekotuku, "Music was also a factor in healing; flute music and chant poems soothed the pain of tattooing" (Starzecka et al., 1996, p. 49). This supports the concept of the healing powers of the *Kōauau*. The act of *tā Moko* with traditional *uhi* was no doubt painful. But how would the *Kōauau* assist in the alleviation of the pain? The pain is obviously physical, and the person can sense the pain. On the other hand, the sound of the *Kōauau* works in a different way. The *Kōauau* when played draws upon its *wairua* (spirit), and *mauri* (ethos), which it transmits to the person in pain. *Mōteatea*, or chanting, acts in a similar way, returning one's thoughts to ancestors, journeys, feats, triumphs, and sometimes hardship and death. It is this knowledge that is passed from generation to generation, and from it we draw power and control. In essence, it is achieved by raising the *wairua* of the person and triggering a mental state of mind that enables the person to endure the pain and to see the full procedure through to completion. This applies also with *tangihanga* or funerals, which are a very emotional time, and a time to grieve. Loved ones pass on and the younger generations blossom to walk in the same footsteps. This is best expressed by the following *whakataukī* (proverb):

Mate atu he tētē kura, whakaeke mai he tētē kura.

A fern frond dies, but another frond rises to take its place. Tētē kura, or fern frond, is also a symbolic term for a chief (Brougham et al., 1999, p. 27).

The *Kōauau* may assist in two ways at a *tangihanga*. Firstly, to help in the grieving process for those who still live as part of *Te Ao Marama, ngā waihotanga o ā rātou mā, te hunga ora* – the living. The interaction of the *Kōauau* with grieving is perceived as coming from the *atua* who uses the player and *Kōauau* as a vehicle for communication. The art form is then produced and expressed, or simply a sound is played and transmitted to the ear and listener, and

a supernatural power is received, encouraging the *pito mata* or potential in the person to be strong in times of anguish and adversity, and to be humble and respectful in times of success and accomplishment.

Secondly, the *tāhuhu* or main focus of a *tangihanga* is of course the *tūpāpaku* or the deceased. Although the *tūpāpaku* lies inside the *Whare nui*, his or her spirit has a great journey ahead. For myself, a descendant from *Tapuika* (Te Arawa waka), the spirit is accompanied by *Pare awheawhe*, a *kaitiaki* or guardian, via the ancestral river of *Kaituna* to the river mouth and coast. From here, they travel via the coast to *Te Rerenga Wairua* or *Te Rēinga*, where the deceased's spirit crosses from *Te Ao Marama* to the underworld of *Hinenuitepō* (Goddess of Death and Great Lady of the Night) forever more.

During the *nehunga* stage of the *tangihanga*, or burial ritual usually held on the third day, it is common to see *taonga* such as weapons placed with the *tūpāpaku*. The reason for this is to protect the deceased on the crossover journey to *Te Pō*. The *Kōauau* is drawn on in the same way, by comforting the spirit on its journey to ensure a safe and pleasant crossover.

In customary times, a skilled player of the *Kōauau* might be envied and spoken of spitefully, since they could be seen as having skills in wooing the opposite sex, acting as a type of human lure. The following is a *pepeha* (tribal saying / proverb) that illustrates this point:

Ka tangi te Kōauau, ka kanakana te karu hae.

When the *Kōauau* is played, the jealous eye stares wildly.

(Mead, 2004, p.187)

Andersen (1934, p.256) enlightens us with a translation and explanation of this *pepeha* by saying:

When the *Kōauau* is played, the jealous eye stares wildly. It was recognised that music charmed the women and thus the *pepeha* was at the same time a tribute to flute players and a warning to the men to be alert to

the effects of the music on the listeners. One observer (Baucke) said the flute player was both envied and hated.

A *Kōauau* player, then, was somewhat envied, and, at the high extreme end of it all, even hated, because he was seen to have skills that not all possessed. *Kōauau* players were different and respected because of their talents, they displayed qualities that are found in potential leaders, demonstrating skills that could result in a marriage union. This relates again to love, love being a strong tool in persuasion and acquisition of a partner, serenading the desired one with tunes of warmth and emotion.

The sound of the *Kōauau* was used as a guide during the amazing swim of *Hinemoa* across lake Rotorua to her desired partner *Tūtānekai*. As technology advances and becomes more sophisticated, using the *Kōauau* in this way has become obsolete, as people turn to the convenience of cell phones and mobile communication gadgets. However, it is fair to say that, these days, being a skilled *Kōauau* player would be a great pick-up line.

By contrast with a tangihanga, the *Kōauau* may also work in a positive situation cementing the wondrous occasion of unity in marriage, and it can, for example, be played for entertainment and celebration as part of the festivities that go with a wedding.

The *Kōauau* was used to settle a person who was depressed, frustrated, angry, irritated, discouraged or blocked. Generally, if any of these feelings are encountered, it is because something is not spiritually aligned. To help re-align the person's *wairua* (spirit) again, you may play or have played for you a tune on the *Kōauau*. This illustrates the capabilities of the *Kōauau* again as a *rongoā* (remedy, medicine), having medicinal purposes that are both physical and spiritual.

4.5 *Ko te tito waiata* – Composition: music and songs

This section will look at composition and the *Kōauau*. The *Kōauau* was used to carry the *rangi* or tune of the song. Seldom would a *Kōauau* be played by itself, but it would be accompanied by words. The *Kōauau* would *tautoko* (support) the *kupu* (words) and the *kupu* would *tautoko* the sound of the *Kōauau*. This is

reinforced by Robertson, who says *Kōauau* “were principally used as unison accompaniment to the singing of waiata (Maori songs)” (Robertson, 1991, p.12), but it is unlikely that Robertson actually heard the *Kōauau* being played.

Beattie, referring to information collected by Edward Tregear (1904), comments that one Otago *kuia* (elderly woman) said:

The tune of anything played or sung was called the *raki* or *te-raki-o-te-waiata*. This term is therefore used as another term for the *rangi* [*raki* = *rangi*]. The second of the two *taua* [*kuia*] also has been recorded saying ‘Kōauau, she thought, was a North Island name for the flute’ (Beattie 1994: 79).

Armstrong describes traditional music thus:

The old music was lengthy, flowing and chant-like, with little tonal variation. It progressed in gradations of such minuteness that they are not readily apparent to the European ear. The requirement of rhythm transcended all else. Rhyme was quite unknown, and certainly not sought after. Indeed the way in which the music was sung would have submerged any rhyming effect (Armstrong, 2005, pp.72-73).

Armstrong also reports Captain Cook’s observation, that Māori “sang a song with a degree of taste that surprised us, the tune was solemn and slow like those of our psalms, containing many tones and semitones” (Armstrong, 2005, p. 73).

These attributes of song composition may also be applied to a tune for a *Kōauau*. Mrs Paeroa Wineera, of Ngāti Toa, Ngāti Huia, and Ngāti Raukawa tribal affiliations, best demonstrates this method of playing when she was recorded in Porirua on 28 March 1963 playing a *pao whaiāipo* (a short, impromptu topical song to entertain a potential partner) on the *Kōauau*.

4.5.1 *Te taiao* - The natural world: Sources of inspiration

Notation drawn from the whenua may be a new concept to many in this day and age, but our ancestors truly took inspiration from the land and natural

environment in which they lived for creating song composition and tunes for music. I will attempt to develop this idea further by explaining a number of instances in nature where notation, rhythm, tunes, timing, and more occurs and is then shaped into musical composition.

4.5.1.1 *Te Haurere o Tangaroa – The Rhythms of Tangaroa*

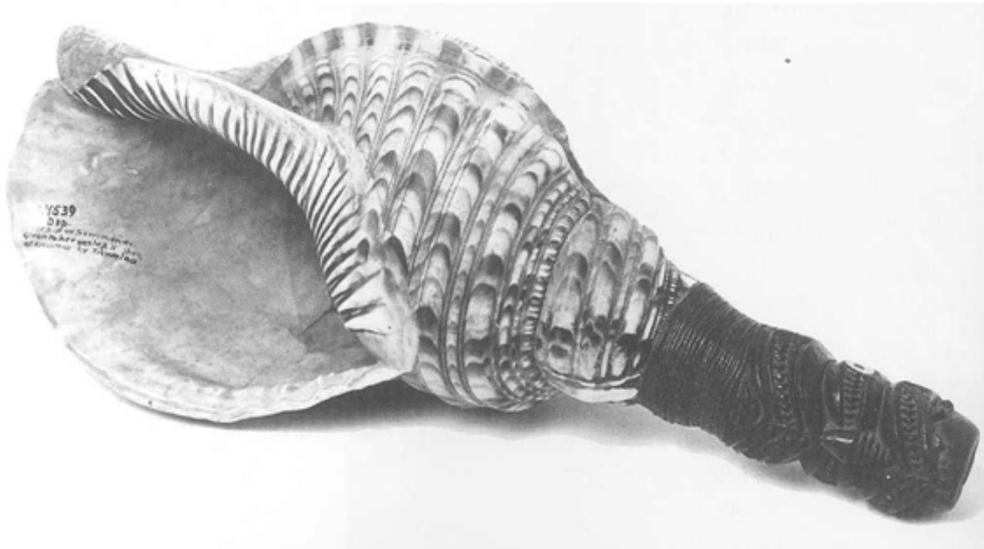
Tangaroa is the god of the sea and all things within. He is personified as the great mass of sea water that spreads vastly throughout the earth. *Tangaroa* had two partners. Which came first is debatable, depending on where you are from. One of the unions that *Tangaroa* had was with *Hine-moana*, who is personified as the goddess and guardian of the sea floor and all things that live in her realm, the realm from which originate the *pūmoana*, *pūtātara*, and *pūpakapaka* that all have large mouth shells. (These three instruments are variations of the conch shell used as a distance signalling tool.) According to other accounts, another union that *Tangaroa* had was with *Parawhenuamea*. She is personified as an immense flood that submerged a great part of the earth, providing us with rivers, lakes, streams, and glaciers. An alternative view is that *Kiwa* is the controller of the sea instead of *Tangaroa*, as the Pacific Ocean is named *Te Moana-nui-a-Kiwa* after *Kiwa* to support this idea (Reed, 1963, p.83).

Figure 28: Examples of Pūmoana



Photo: Jo'el Komene

Figure 29: A Pūtātara which belonged to King Tawhiao



(McLean, 1999, p. 362)

Despite inconsistencies in accounts of who was the first to hold the mana over the sea, *Tangaroa* or *Kiwa*, the qualities of the moana still remain the same. As the waves crash against the shore and the tides rise and fall, *Tangaroa* comes to life. He provides us with rhythm from the consistency in the waves and the regularity of the ocean currents and tides, as the water comes in and then goes out again, and although very slow, this motion is the underpinning principle for rhythm in traditional musical composition.

4.5.1.2 *Te Pūmanawa o Rūaumoko* – The Beat of *Rūaumoko*

Rūaumoko is the god of subterranean fire, and the cause of earthquakes and volcanic action and *pae maunga* (mountain ranges), as he moves beneath or within the body of his mother *Papatūānuku*. *Rūaumoko* is described as being the only unborn or stillborn child of *Papatūānuku*, and that is the reason he resides in the bosom of *Papatūānuku*. Both *Papa* and *Rūaumoko* provide us with the beat for timing. *Papatūānuku* has a heart beat that is found in the mountains which are more than alive. This heart beat is subconsciously felt by all of humanity, and is also linked to the beat of a human's heart, another connection between humans and earth. When *Rūaumoko* moves within *Papa*, creating volcanic eruptions and earthquakes to shake the land, another type of beat appears. This beat is random in terms of human time, but if we take into consideration the frequency of eruptions

and earthquakes over much longer time, there may be some regularity in frequency.

Notation may also be taken from the shape of the mountain range when viewed against the horizon. In this scenario, it is easy to see the ups and downs in the physical shape of mountains, and this provides us with a base for the increase and decrease in pitch for playing a *Kōauau*.

4.5.1.3 *Te Korutanga o Haumia-tiketike* – The Notation of *Haumia-tiketike*

Haumia-tiketike is the god of uncultivated foods and food that grows wild such as the *Aruhe* (*Pteridium aquilinum*), an edible rhizome of bracken-fern or fern root. As the *aruhe* is a prized food befitting a chief, and grows naturally under the surface of the ground, it is from the realm of *Haumia-tiketike*. However, the part of the plant that grows above the ground has a number of branches that vary in length. At the end of the branch, there is a *pītau* or *koru* (spiral) shape that looks similar to that of an upside-down musical note on paper, as shown in the accompanying figure below.

Figure 30: *Pītau Aruhe* – Bracken fern fiddleheads



(Van Lidth de Jeude, E., 2007)

It is from these fronds that we take our musical notation: a frond that is longer and therefore literally stands higher provides us with higher notation, and the lower fronds give us the lower notation in music.

4.5.1.4 *Te Hīrangi o Tawhiri-matea - Tawhiri-matea: The Bearer of tunes*

Tawhiri-matea is the god of the wind and storms. He is responsible for breath and enables us to breathe, giving us life and spirit. He is also the bearer of the sound, transmitting the sound from the instrument to the ear of the listener.

4.5.1.5 *Te Hautangi o Tāne-mahuta – The Chorus of Tāne-mahuta*

Tāne-mahuta is the god of the forest, including the birds, insects, and trees, and he provides us with the raw materials for making tools and the *Kōauau*. The birds, insects, and trees are very important for the *Kōauau* in particular. The birds that sing in the mornings broadcast their songs as the world awakens to another day. Some are sweeter than others, but all are wonderful. As the songs are heard, inspiration may be taken from the impromptu performance, either by imitation or by taking a part and working with it to create a tune or air.

Ngangara (insects) are important as well, firstly because *Hineraukatauri* is embodied as the Case or Bag moth cocoon, where she provides us with a touchstone for all flute music, and, secondly, the rest of the insect family gives us a number of other *taonga pūoro* such as the *Tūārōria*, a leaf that is folded in half and blown from the top end; the *Rōria*, a slither of wood which is plucked and resonated by the mouth similarly to that of the Jews Harp; and the *Kū*, a bowed like instrument, struck with a stick or similar and again resonated by the mouth, producing an intimate sound for the player and used to mimic the sounds of insects and lizards. All of these are used to imitate the *kū* of the birds and the *whē* of the insects. These terms are onomatopoeic words for the sound of the different groups of children belonging to *Tāne-mahuta*.

Figure 31: Examples of the *Rōria*



Photo: Jo’el Komene

4.6 *I hopukina te reo o te Kōauau e whakatangi tūturuhia ana - The last to be recorded playing the Kōauau traditionally*

An article in the magazine *Te Ao Hou* in 1952 commented: “Playing the koauau was always difficult, and it is now very nearly a lost art. The only person who can still persuade a melody from the little flute, is Mrs Ben Wī Neera, of Takapuwahia Pa, Porirua” (Ashton, 1952, p. 55). Paeroa Wineera grew up doing things the old *Māori* way, and learned the art of playing the *Kōauau* from her uncle Ngaherehere, who was known up and down the East Coast for his abilities on both the *Pōrutu* and the *Kōauau*. Mrs Wineera first learnt to play the *Kōauau* on a *Kōauau tutu* (*Coriaria arborea*). As she persisted, she was granted permission by Ngaherehere to graduate to a *Kōauau mataī* (Black Pine, *Prumnopitys taxifolia*) which was about sixty years old at the time the article was written, making it approximately 115 years old today.

Luckily, before Mrs Paeroa Wineera passed away some of her tunes on the *Kōauau* were recorded on 28 March 1963 at Porirua, and these recordings are available at the Archive of Maori & Pacific Music, Faculty of Arts, Auckland

University. The tracks are titled *Pao whaiāipo*, *Pao Played on Kōauau*, *Waiata Whaiāipo*, *Kōauau* and *Waiata Aroha Played on Kōauau*. Mrs Wineera also features on albums such as *Traditional music of the Māori: an historical collection* (originally a 33½ LP), where she plays the *Kōauau* and *Pūtōrino* and is interviewed and recorded by Dr T. Barrow. She features on tracks 17 – 21 of the recording with her picture on the cover. Another album in which she features is *Rangimoana*, where she plays a bone *Kōauau*. Listening to these tracks, it is apparent that the style of *Kōauau* playing of her time was somewhat monotonic, but if you listen closely you can hear the words to the pao or waiata being mouthed upon the *Kōauau*. She had obviously mastered the art of playing the *Kōauau* since learning to blow one from a young age. My love and respect goes out to Mrs Wineera, and may she rest in peace with the sound of the *Kōauau* to sooth her spirit.

Figure 32: Mrs Paeroa Wineera with her *Kōauau*



(Barrow, 1965, p. 2)

4.7 *Whakarāpopototanga* – Conclusion

This chapter has focused on the acoustics of the *Kōauau* and aspects of the natural acoustic auditoriums and concert chambers occurring in the environment, with consideration of the *tikanga* or guidelines for performance, such as when, where, why, and how to perform. It has discussed also the techniques of blowing and playing, with consideration of musical composition and the natural world as a source of inspiration. Finally, the chapter introduced Mrs Paeroa Wineera, the last known traditional *Kōauau* player before the recent revival of interest.

Wāhanga Tuarima: Chapter 5

He kōrerorero mō ngā Kōauau e pupurihia ana i Tāmaki Paenga

Hira:

Discussion of *Kōauau* held at the Auckland War Memorial Museum

5.1 *Whakatūwheratanga* – Introduction

Knowing early in the research that I wanted to inspect the *Kōauau* held at the Auckland War Memorial Museum, I spoke with Rangiriia Hedley (Ancestral Human Remains Facilitator at the Auckland War Memorial Museum and also a part-time lecturer at University of Waikato) to see if this would be possible. Having completed some work for the museum during the *Matariki* (the Māori New Year) period in 2005 with Ms Hedley, and therefore having become familiar with some of the *Māori* staff there, I was put in contact with Chanel Clarke (Curator *Māori*). I organised a visit to the museum with her first and met her on 13 November 2007, when she guided me to the *Kōauau* that were on display, and a short time was made available for inspection of the collection. We then moved to The Carving Store full of *taonga Māori* (*Māori* treasures). There, I was presented with the *Kōauau*, by Chanel Clarke, and she granted permission to touch, inspect, and play where possible, 16 different *Kōauau*. There were, however, a few *Kōauau* that were not available for inspection, since they were on tour as part of the *Ko Tawa* exhibition, and they were therefore not included in this research. These unavailable *Kōauau* included *taonga* such as the famous *Kōauau* that belonged to *Tūtānekai*, *Te Murirangaranga* of *Ngāti Tūtānekai* and *Ngāti Whakaue*, and *Peka Makarini* of *Ngāti Pāhauwera*. I was granted four hours to complete the inspection, helped by two others who wish to remain anonymous. Following is the data collected during my visit to the museum.

Table 1: Kōauau held at the Auckland War Memorial Museum. Note: all measurements are in millimetres (mm)

Accession #	16275	7983	16456.2	28112	21184	52270	5956	390 Whangarei	1909	28194
Length	90	60	81	81	105	133	160	152	149	124
Diameter	105	94	56	86	44	102	39	37	54	42
Diameter of puare	16	11	8 w, 12 lng	11 w, 18 lng	6 w, 11 lng	15	11.5 w, 11 lng	7 w, 9 lng	Broken	Broken
Diameter of waha	10	8	11 w, 13 lng	13 w, 16 lng	8 w, 12 lng	15	6 w, 9 lng	Broken	9 w, 13 lng	Broken
Inner condition	Rough	Clean cut	Rough	Unfinished, 2 chambers, blocked in middle	porous	Drill-ed	Clean and clear	Clean and clear	Clean	Broken
Outer condition	Handle of a mere / patu	Carved puare, smooth	Carved, smooth	Carved, smooth	Smooth	Carved	Smooth, shiny	Smooth, burnished	Smooth, etched	etched
Number of stop holes and size	2 holes on top, 3mm 3mm 3mm 2 holes at sides for rope feed for the patu. 5mm 5mm	2 holes 3mm 4mm	3 holes 11mm 12mm 31mm	2 holes, 4mm 4mm	2 holes, 2mm 2mm	3 holes, 7mm 7mm 5mm	3 holes, 1mm 1mm 1mm	4 holes, 2mm each, 2 pairs side by side	3 holes, equi-distant	3 holes, 2mm 2mm 2mm
The sound	Whati	Not played	Soft and sweet	Yes – karanga manu or Kōauau	Yes - high	Loud and soulful	Yes but hard to play-cracked	Broken – not played	Broken – not played	Broken – not played
Name	?	?	?	?	?	?	?	?	?	?
Shape	Kakau patu		Natural bone shape	Natural bone shape	Toroa bone shape	Straight	Natural bone shape	Natural bone shape	Natural bone shape	Natural bone shape

Table 1 (continued): *Kōauau* held at the Auckland War Memorial Museum. Note: all measurements are in millimetres (mm)

Material	White stone	Stone – pumice	Bone	Bone - solid	Bone - Toroa	Wood	Bone - Toroa	Bone - Toroa	Bone - Toroa	Bone - Toroa
Made with traditional tools or modern	Traditional	Traditional	Traditional	Traditional	Traditional	New	Traditional	Traditional	Traditional	Traditional
Age	?	?	?	?	?	?	?	?	?	?
Preservation	Tree gum for cracks Burnished	-	Oiled	Oiled and burnished	Oiled	Kōkōwai	Burnished	Burnished	Burnished	Burnished
Tribe, sub-tribe or whānau connections	?	?	?	?	?	?	?	?	?	?
Region	Taitokerau	?	?	?	?	?	?	?	?	?
A neck ornament?	No	No	No	No	No	Yes	Yes	No	Yes	?
Comments.	-cracked filled with tree gum -carved end of handle to patu -cracked during construction perhaps -yellow coloured -tapers towards the bottom.	-broken in half -carved puare -chipped -possibly a hole for suspension at the puare, else chipped -bore tapers towards the bottom	-stop holes in unusual place -brown colour -well worn	-unusual -slightly carved although hard to distinguish the carving patterns.	-broken, snapped off -incomplete -porous bore -possible buried and recovered -deteriorated	-made with new tools -straight bore -elaborated carvings -thick walls with strong sound -sanded puare & waha	-a number of cracks -hole at puare for suspension -stop holes relatively centred	-end broken -unusual stop hole placement	-etched -cracked -broken at end	-etched -broken at both ends.

Table 2: Kōauau held at the Auckland War Memorial Museum. Note: all measurements are in millimetres (mm)

Accession #	5481.e	309.e	643.e	29109	35702.A Lake Taupo	4466 Paeroa
Length	143	142	167	92	96	174
Diameter	66	71	85	50	41	94
Diameter of puare	14 w, 14 lng	12 w, 11 lng	13 w, 19 lng	9 w, 10 lng	6	15
Diameter of waha	8 w, 12 lng	14 w, 14 lng	21 w, 26 lng	5 w, 6 lng	6	10
Inner condition	Rough, porous	Smooth	Rough	Rough	Rough	Smooth
Outer condition	Carved well	Rough	Carved	Smooth, slightly carved	Fairly smooth	Finely carved
Number of stop holes and size	3 holes, 3mm, 3mm, 3mm	3 holes, 3mm, 3mm, 3mm	3 holes, 4mm, 4mm, 4mm	3 holes, 4mm, 4mm, 4mm	2 holes incomplete, Began with burning ember	3 holes, 3mm, 3mm, 3mm
The sound	Yes	Yes	Yes	Yes	No	Yes
Name	?	?	?	?	?	?
Shape	Natural bone shape	Natural bone shape	Natural bone shape	Natural bone shape	Straight	Straight
Material	Bone - human	Bone - human	Bone - beef	Bone - ?	Wood - whau?	Wood - ?
Made with traditional tools or modern	Traditional	Traditional	Modern	Traditional	Traditional – burning embers	Modern
Age	?	?	?	?	?	?
Preservation	Burnished, oiled	Rough	Oiled	Oiled	?	Kōkōwai
Tribe, sub-tribe or whānau connections	?	?	?	?	?	?
Region	?	?	?	?	Lake Taupo	Paeroa
A neck ornament?	No	Yes	Yes	Yes	No	Yes
Comments	-well carved top, middle and bottom -human bone -thick bone	-heavy -2 suspension holes completed with a third started	-modern -chisel carved	-stop holes not aligned -unusual brown colour -simple carvings on both ends	-very light wood -incomplete	-well carved

5.2 Ko ngā Kōauau e pupurhia ana i Tāmaki Paenga Hira - Kōauau held at the Auckland War Memorial Museum

In this section I will first include all the information held at the Auckland Museum with regard to each *Kōauau* inspected, and then offer some discussion about each taonga (the numbering refers to the Museum's accession number for each *Kōauau*).

***Kōauau* 16275**

Accession no: 16275

Acquisition: gift, E. E. Vaile, 1931

Kōauau 16275 is a peculiar piece, a kakau or handle of a *patu parāoa* (a short club made of whalebone) which has departed the main striking blade of the weapon. This is obvious from the common carving pattern towards the waha end, from the outer shape of the *Kōauau*, and from the two holes present on either side pierced the entire way through. The purpose of this was to feed through a *taura* (rope) or similar to be wrapped around the wrist of a warrior to ensure that it is not dropped and lost in battle. It has then has been further worked into a *Kōauau*. As the handle of a *patu parāoa* is solid, it has needed to be hollowed out to create the bore. From my inspection, it looks to have been hollowed out in much the same way a didgeridoo is made (very rough interior), by first making a cone shape within the bore through gouging until the cone gets deeper and deeper within the bore, and eventually you are left with a cylindrical bore. During this process, it seems as if the *tinana* or body of the *Kōauau*, has fractured and then cracked. This has further been repaired by filling the cracks with *pia*, or *Kauri* tree gum. The transition from the *kakau* of a *patu parāoa* to a *Kōauau* that has cracked, shows that *Māori* would not waste anything. Whoever transformed this *taonga* and gave it renewed life definitely believed in this concept: *kia kaua e moumou*, translated means to not waste things, for we have been gifted these resources and we must treat them with respect. Also, there are two *wenewene* on the top of the *Kōauau*, and two on either side from the piercing of the original *taura* holes. These latter holes are, however, very big for *wenewene*.

Kōauau 7983

Accession no: 7983

Acquisition: gift, F. E. Powell, 1831 [date communicated from the Auckland Museum].

Provenance: found on Māngere Mountain.

Kōauau 7983 is made of sandstone or pumice. It has two *wenewene* present and the *waha* end has been lost. The interior is reasonably smooth. The *puare* end has been carved but has since worn down, and it is hard to see any definition in *whakairo*.

Kōauau 16456.2

Accession no: 16456.2

Acquisition: purchase, 1931

The next example examined is a good one, as it conforms to the theory of *wenewene* placement, for the holes are drilled according to the knuckle placement of the index finger of the maker. The instrument is made of bone, and seems to be very well worn, as it is of a strong brown colour for an originally white or cream coloured bone. Also, it has been carved its full length, including the top, bottom, and sides. These *whakairo* (carvings) are best read by running your finger over them to try and visualise the designs. No meaning can be taken from the remaining *whakairo*.

Kōauau 28112

Accession no: 28112

Acquisition: gift, Dominion Museum, 1946.

Provenance: found in Wharerata Ranges, Poverty Bay, by Moncrieffe Nutt in 1938

The outside of this *Kōauau* seems like a normal *Kōauau* with two *wenewene*. It has a hole also on the outside that does not pierce the inner bore for the suspension around the neck where the *taura* is now non-existent. Looking closer inside, the bore does not run from the *puare* to the *waha*. In fact the bore is

blocked between the two *wenewene* (when looking at it from the top) and when played, it could only achieve two notes from either end, reminding me more of a similar instrument in the process of construction, the *karanga weka*. The bone is thick, enabling *whakairo* on the outside. This *taonga* categorised as a *Kōauau* is either incomplete in construction or classified incorrectly. Again, the bone is a strong brown colour with well worn *whakairo*.

Kōauau 21184

Accession no: 21184

Acquisition: deposit, R. Buddle, 1932

This *Kōauau Toroa* with the *waha* end missing has two *wenewene* with the third (if it had a third, fourth or more) *wenewene* missing. I assume that the *waha* is missing, considering that it is usual to blow a *Kōauau kōiwi* of any sort from the larger end. The bone quality had somewhat deteriorated, suggesting that it had been buried and recovered some time later. This *Kōauau* has no surface decoration at all, but is still sound-worthy, producing a strong, high melody.

Kōauau 52270

Accession no: 52270

Acquisition: 1986, replica (attributed to James Edward Little)

This *Kōauau rākau* is beautifully and elaborately carved. It is intact, possessing a hole for suspension on the back but without the *taura* itself. There are no figures as part of the *whakairo*, only designs. *Kōkōwai* has been applied for preservation purposes, and with its thick walls it produces a strong sound which appealed to me at the time, as we sat amidst racks and shelves of different *taonga Māori tūturu*. That it has been made with modern metal tools is evident from the cleanliness and accurate straightness of the bore and the sanded *puare* above the *whakairo* where the lips would touch the *Kōauau*. Unusually, it has large sized *wenewene* of 7mm, 7mm, and 5mm consecutively.

Kōauau 5956

Accession no: 5956

Acquisition: purchase, 1914.

Provenance: Murdering Beach, Otago.

Kōauau 5956 is an intact *Kōauau Toroa*. It has three *kowenewene* of 1mm each in diameter, which are relatively central to the length of the instrument. A hole for suspension is located on the back, at the *puare*. Also at the back are two major cracks along the entire length of the *Kōauau*, making it hard to produce a sound. The surface of the bone is shiny, and has a number of scratches, suggesting that it was smoothed or rounded by rubbing it against a harder surface such as rock to fashion and coarsely sand the exterior. This observation is supported also by the *wenewene*, which show signs of being drilled by traditional tools.

Kōauau 390 Whangarei

Accession no: 390 Whangarei

Acquisition: gift, Mr G. Thorne, 1876.

Provenance: found at Pataua, Whangarei.

This *Kōauau Toroa* is very unusual. It has four holes that are placed in pairs side by side. I have never seen another *Kōauau* of this type, although there is another instrument that is similar in material and dimensions called an *Ororuarangi* where there is a single pair of *wenewene* side by side, similar in placement to the *māngai* of a *Pūtōrino*, but the holes are not joined. The rear of the *waha* is missing, broken up until the lower pair of *wenewene*. Otherwise, this *Kōauau* has a fine shine, symptomatic of burnishing techniques, although no sound was achievable.

Kōauau 1909

Accession no: 1909

Acquisition: no information

This is another example of a *Kōauau Toroa* which is exceptional in size. It has one small hole on the back located at the *puare* for suspension, and holds a number of etched designs, similar to cross hatching upon a smoothed surface and

then filled with a type of ink to bring out the design. It is broken at the *waha* and has three equidistant *wenewene* achieved with traditional tools.

Kōauau 28194

Accession no: 28194

Acquisition: gift, R. J. Fellowes, 1941.

Provenance: Otago.

This *Kōauau toroa* is in bad shape. It has remnants of three *wenewene* of 2mm each and is 124mm in length. The *puare* and the *waha* ends are broken, and definitely no sound is possible on this particular *Kōauau*. Etched designs by traditional tools are present, even though the *Kōauau* still holds its natural bone shape. Minimal information can be extracted from this *Kōauau* because of its ill repair.

Kōauau 5481.e

Accession no: 5481.e

Acquisition: gift, Percy Ward, 1911.

Provenance: found on sand dunes near entrance to the Hokianga River.

This *Kōauau kōiwi tangata* is a special instrument, since it was the first of its kind I played and examined. It is a heavy bone that is thick, holding a melody expressing *wairua* and memories of ancestors. The interior bore is rough, but the outside was once well carved, exhibiting figures on both the *waha* and the *puare* with signs of *whakairo* the entire distance between, although now somewhat worn down. It has three *wenewene* which align with the index finger knuckle *wenewene* positioning theory, and they have been drilled with traditional tools. Finally the *kōiwi* has been oiled during its life time.

Kōauau 309.e

Accession no: 309.e

Acquisition: no information

Kōauau 309.e is another example of a *Kōauau kōiwi tangata*. It is 142mm long, with three *wenewene* of 3mm each. The *wenewene* placement is again consistent with the index finger *wenewene* positioning theory. It retains its natural bone shape, and has been made using traditional tools, maintaining its heavy weight for its size. This *Kōauau* has, however, taken the hole for an extension cord to another level, having two completed holes and one half drilled hole, aligned in a row on a ridge on the side of the *Kōauau*. This technique for suspension is also seen in other *whakakai*, especially in older *whakakai*, where there are a number of holes to attach a *taura* for the purpose of aesthetic appeal and practicality, as three holes means three points of contact for a *taura* and thus there was less chance of it coming off and being broken, or lost or any other undesirable event.

Kōauau 643.e

Accession no: 643.e

Acquisition: gift, Mr Black, 1895.

Provenance: North Wairoa.

This is once again a *Kōauau kōiwi tangata*. It has a hole for suspension at the centre (lengthwise) of the back, and a portion of the *taura*, which has been broken at some point, remains attached. The bone is thick and allowed for a suspension hole to be drilled without piercing the central bore. It has been deeply carved, and the *whakairo* are very different to any other examples with a rough bore. The *wenewene* are relatively equidistantly spaced, and are 4mm each in diameter. This *Kōauau* is capable of being sounded. It has been made with modern tools dating back to at least 1895 and it is exciting to see a *Kōauau* of this type still intact and of such quality, well over a hundred years old.

***Kōauau* 29109**

Accession no: 29109

Acquisition: purchase, 1946.

Again we have a *Kōauau kōiwi*, although it is not clear exactly what type of *kōiwi* it is. From the ridge present on one side, it seems to be of human type, since a hole for suspension is drilled here, and suspension holes are commonly drilled here on *Kōauau kōiwi* examples. It is of a very deep brown colour, with three *wenewene*. The *wenewene* are not aligned but are spaced according to the index finger knuckle theory, and presents simple *whakairo* at both ends. The first hole closest to the *puare*, or the *kōwene* called *Maui-taha* is rather close to the *puare* itself, making it very hard to play but once the correct technique is applied it produces a very high sound with all *kōwenewene* open.

***Kōauau* 35702.A Lake Taupo**

Accession no: 35702.A Lake Taupo

Acquisition: no information

Provenance: Taupo

The Museum has no information about this example but, close inspection reveals significant detail. Both the *puare* and *waha* have been partially rounded, although very roughly. The wood is very light, like that of *Whau* (*Entelia arborescens*) or *Porokaiwhiria* (*Hedycarya arborea*), and has the beginnings of two *kōwenewene* made through the use of a small burning ember. Although not completed, it nevertheless demonstrates this technique as a means of forming *kōwenewene* as an alternative to the use of a *tūāwiriwiri* or similar. The bore has not been achieved by the burning ember method, but, having a soft pith, has been easily cleared out. At the *puare*, *Maui-taha* is very close to the top: if this had been put at the *waha*, it would not be capable of manipulating the sound at all.

Kōauau 4466 Paeroa

Accession no: 4466 Paeroa

Acquisition: gift, W. D. Nickolas, 1929.

The last *Kōauau* examined is made of wood and is elaborately and finely carved, and completed with *kōkōwai*. From the year 1929 alone, it is a fair assumption that it was made using modern tools. There are no figures in the *whakairo*, only patterns, and the instrument incorporates a hole for suspension at the back and approximately one third of the way down from the *puare*, but no *taura* remains. It is the longest example, measuring 174mm, with three *wenewene* of 3mm each in diameter that again conforms to the index finger knuckle theory. It is capable of being played with a *reo* (voice) that is deeper than the rest because of its length.

5.3 *He kōrerorero whānui mō ngā Kōauau e pupurihia ana i Tāmaki Paenga Hira - General discussion about the Kōauau held at the Auckland War Memorial Museum*

In the collection of *Kōauau*, there were many examples of issues discussed in this thesis. They included presentation of multiple positions of a hole for suspension; different materials - bone (human, *parāoa*, and *toroa*), stone (sandstone or pumice) and wooden *Kōauau*. Most had three *kōwenewene*. Some had surface designs that had been carved, burnt, or etched; one demonstrated a repair technique with the use of *pia* (Kauri tree gum), and alternative construction of the bore. Several provided confirmation of the index finger *kōwenewene* placement theory utilising the *tūāwiriwiri* drilling tool and equidistant *kōwenewene* spacing. The preservation techniques included *kōkōwai*, burnishing, and body oils. There was evidence of the use of sandpaper from modern construction, but also traditional sanding techniques with the use of a smooth stone, with some nonconformist examples examined.

To be able to touch, play, examine and feel the wairua of the *Kōauau tūturu* and ancestral voices being heard was overwhelming, considering there were *Kōauau kōiwi tangata* examples, the most *tapu* (sacred) of all, which would have still had DNA on them from the original owners and makers. For me this was an ultimate

experience, awakening the voices of the *Kōauau* which had remained dormant for an unknown period, hearing and feeling the emotions within the voice produced.

5.4 *Whakarāpopototanga* – Conclusion

Chapter 5 introduced my visit to the Auckland War Memorial Museum, and the procedure that was undertaken on arrival. It then provided descriptions of the *Kōauau* available at the Museum (16 in all), including accession numbers, how they were acquired and provenance information where possible. The Museum information was followed by some discussion about each *Kōauau* inspected in relation to construction techniques, materials, preservation techniques, possible tools used, *whakairo* (carvings), sound properties, ornamentation, *whakakai* considerations, and measurements of the *waha*, *puare*, *tinana*, and *kōwenewene*. The chapter ended with general discussion about the Museum's *Kōauau* collection.

Wāhanga Tuaono: Chapter 6

He Tirohanga Whakamuri me ngā Whakakitenga:

Reflections and Recommendations

6.1 *Whakatūwheratanga – Introduction*

As the title of this chapter suggests, I will be looking back at the research I have presented, summarising the findings and new knowledge that has resulted from this investigation and collating information about the *Kōauau*. Then, I will relate the new knowledge to the relevance of a resurgence of interest in Māori instruments, in particular the *Kōauau*. Following this, I will discuss the significance of the research, including the limitations of the study, and make recommendations for future research.

This thesis set out to research all elements of the *Kōauau* from a *Māori* world view. The purpose of the study is to add to the current knowledge in archival sources, therefore providing a resource to develop knowledge relating to the *Kōauau*. *Kōauau* are still common, not only in museums, but also in homes, and the owners may be able to play them, but not much is understood about the *Kōauau*. This research will help to return the knowledge to those who treasure *Kōauau*. The topic is a highly relevant one because of the revival of interest in and use of *taonga pūoro*, including *Kōauau*. It provides a resource for all who have not yet encountered *taonga pūoro* (traditional *Māori* musical instruments), and also for those who have already been made aware of *Māori* musical instruments and the *Kōauau* but who have not yet delved deeper into the *tikanga*, construction, and usage of the instrument.

Chapter 1 introduced the *Kōauau*, looking at the names for parts of the *Kōauau*, related origin stories, and the *whakapapa* of the instrument. In Chapter 2, the discussion centred upon who made and played the *Kōauau*, its historical and socio-cultural significance, related gods and guardians, what materials *Kōauau* were made from, and spiritual aspects. Chapter 3 considered the design of the

Kōauau, traditional tools used in construction, meanings of *whakairo*, and preservation techniques. Chapter 4 dealt with acoustics, *tikanga whakatangi* (playing guidelines), blowing techniques, and explored composition. It also encompassed sources of inspiration, and noted the last example of *Kōauau* to be recorded from *te ao tawhito* (the old world). In Chapter 5, the focus was on the collection of *Kōauau* held at *Tamaki Paenga Hira* (Auckland War Memorial Museum).

6.2 *Ko te hāngai o te rangahau e pā ana ki te aranga ake anō mai o ngā mātauranga taonga pūoro* - Relevance of the research in relation to a resurgence of interest in Māori instruments

This research is especially relevant as there is currently a resurgence of interest in Māori instruments initiated by the work of Hirini Melbourne and the group *Haumanu*, with the recent publication of *Taonga Pūoro: Singing treasures* (Flintoff, 2004) as a sign of the new enthusiasm. Earlier researchers, such as Andersen, Hamilton, and Best, had provided a beginning to research, but imposed western ideologies on the subject. With performances and other activity involving *Kōauau* happening frequently around *Aotearoa*, the research presented here will help to put the design, construction, and usage of the *Kōauau* back into a *Māori* context.

Where do you go to learn about *taonga pūoro* and the *Kōauau*? Generally it is hard to find people who know much about this subject. James Webster (Tainui/Te Arawa) holds *wānanga* (seminars) now and then, focusing on a different *taonga* each time, and *Te Whare Wānanga o Waikato* (The University of Waikato) has *taonga pūoro* classes taught by Rangiiiria Hedley, but both these options involve payment. Numbers of *Kōauau* and *taonga pūoro* are to be found in museums, but people there will not necessarily be able to explain the *taonga* or give them the fullest cultural context. This thesis, on the other hand, is readily accessible to all, from those who have just been introduced to the *Kōauau* to those who already have a fatter basket of knowledge regarding the *Kōauau*.

This thesis incorporates *mātauranga* (knowledge) I have been gifted during *wānanga* (seminars) and in personal communications I have had with *taonga*

pūoro experts and enthusiasts over the years. Since all this information has been organised into this one study, the thesis will assist both teachers and students, for parallel learning especially in understanding the perception of music where the *atua Māori* (*Māori* gods) and environment is paramount. Appreciating these matters will help to guide us in song composition, and most importantly in the *taha wairua* or spiritual aspect, as *Māori* people are very spiritual in everything that is done. What I have presented in this study will support the resurgence of *Māori* traditions, particularly with music and instruments that are still with us today but for which *tikanga* is not always followed.

Knowledge about traditional *Māori* musical instruments and many other facets of the *Māori* world were nearly lost and put to sleep by the introduction of new instruments, music, and musical styles. However, museums throughout the world have helped to store and preserve many complete *Kōauau*. From these *taonga* alone, the amount of information that can be extracted is impressive, using the old *Māori* ways of recording knowledge through the carvings and their meanings or associated stories. Then there is the oral word, passed from one individual to another, repeated again and again in order to maintain the correctness of knowledge being passed on. This type of knowledge passing and acquisition is also found in *Māori pūrākau* or *pakiwaitara*, commonly translated as myths and legends, but more correctly described as beliefs and ancestral history. These beliefs and oral histories provide us with a record and a basis for *tikanga*, taking from the stories examples of what to do, where to do it, who may do it and why, many of which are now written in books as if they have been scribed in stone for ever more.

The research presented in this study is a unique contribution to the knowledge because it gives a *Māori* perspective on the *Kōauau*, including the ways in which the sound produced incorporates *tikanga Māori* and *wairua Māori*. These insights provide us with a platform for the composition and performance of *waiata Māori*, for the sound is driven by the gods and underlying meanings within its individual *tikanga* for the *Kōauau*.

6.3 *Ko ngā kōpiritanga o te rangahau - Limitations of the research*

Having more time and money would have enabled me to broaden the scope of the research and visit more museums not only on a national level, but on an international level where more *taonga pūoro* reside in museums overseas than in the country of origin, *Aotearoa*.

It is important to keep in mind that the *Māori* culture is an oral culture. There are instances where information being documented is misinterpreted because of lack of understanding, and even prejudice. The true account is still alive in the minds of those who know stories and accounts of childhood memories. Interviews would have enabled some of this knowledge to be gathered and recorded.

6.4 *Me he rangahau kei te haere - Recommendations for future research*

Because *Kōauau* are scattered around the world, it is hard to collate information about them, especially when there is minimal information on record. This is also the case in many museums across *Aotearoa*: I contacted all of the museums in *Aotearoa* that hold *taonga Māori*, but many could only provide me with descriptive information, such as the dimensions of the *Kōauau*, the material it is made from, the number of *kōwēnewene*, and where it had come from. Besides these attributes, nothing else is generally known. This is a shame, but on the other hand it brings to the forefront the need for *Māori* to research ourselves in order to fill the gaps, and to establish and assert ourselves and our culture.

It is recommended that there be a collaboration of information of all *Kōauau* in *Aotearoa* found in museums, including an inspection and research of histories about them. Then, inspection of *Kōauau* in museums around the world, with the intention of broadening the information currently held in museum records to encompass who made them, whether the instruments themselves had names, their age, *iwi* connections, and the stories that come as part of the full history about the *Kōauau*.

We need to know the true story of how they ended up in the possession of the particular museum, and we need to play them with special consideration to the sound, in essence re-awakening their voices and fundamental nature as

instruments. Adding to the museum database information, it will be advantageous to carry out interviews with *kuia* and *koroua* to draw out their long living memories and *kōrero tuku* (stories handed from generation to generation), and to re-awaken those stories that cannot be found in books and other archival sources.

Additionally, this *kōrero tuku* (oral history) can be kept alive by working in partnership and holding *wānanga* (seminars) with other *Kōauau* enthusiasts to share ideas and provide nourishment to the art, for example, sharing with *kaiwhakairo* (*Māori* carvers), song composers, *Māori* environmentalists, *tikanga* advisers, *Māori* creative art performers (contemporary and traditional), *Kaihautū waka* (captains of canoes), and *kaumātua* and *kuia* from *marae*.

Some may say that there are parts of *tikanga* *Māori* and *kōrero* that have been lost. During a *wānanga* at *Te Kai Huna a Ihenga* (Kaihū), close to the *Waipoua* forest where the well known tree *Tāne-mahuta* stands, a group of us listened to Bernard Makoare saying that all is not lost: if we take note of our environment, and again become at one with *Papatūānuku*, then our questions will be answered.

This, I believe, is correct: the land holds all the *kōrero*, having been witness to everything that has happened upon her in the past. It is a matter of how you look at the land and interpret her meanings. However, although I strive to master this skill, it requires patience, waiting for knowledge to be revealed. Not only is this a limitation for myself, but for many of us who have become spiritually disconnected from the land and *atua* *Māori*, and it is for us to return to that full relationship with the environment. Nevertheless, *Pūrākau* and *pakiwaitara* provide us with examples of when, where, why, how, and by whom a *Kōauau* is played, so all is not lost. I like to think knowledge about these *taonga pūoro* and the *Kōauau* is only sleeping waiting for us to reawaken it and bring it back to full fruition, so that *Kōauau* are used on *marae* throughout *Aotearoa*, to heal our bodies, mourn our dead, and assert our culture again upon our great nurturer *Papatūānuku* and with the guidance of *Rangi-nui-e-tu-iho-nei*.

Karakia Whakamutunga - Closing Prayer

*Unuhia, unuhia,
Unuhia atu ki te uru tapu nui,
Kia māmā, kia wātea te ngākau, te tinana, te hinengaro i te ara takatū.
Kōia rā e Rongo whakirihia ake ki runga,
Kia wātea, kia wātea,
Āe rā kua wātea,
Rire rire hau,
Paimārire.*

Figure 33: Image showing examples of *Kōauau*, with a *Nguru* at the top left



(Barrow, 1964, p. 33)

Whakapuakanga

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