

TE PŪNGĀWEREWERE PUKUMAHĪ

A research paradigm for within Te Ao Māori

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Abstract

Te Pūngāwerewere Pukumahi has been designed as a unified approach for research in Te Ao Māori that is applicable to all disciplines. It has been developed to guide researchers in creating a culturally safe space within which to undertake research collaboratively. While there are many excellent Māori research frameworks, we felt there was something missing: an all-encompassing research paradigm that embraces the underpinning values of Te Ao Māori. The identified values, our pou, consist of mātauranga, mana, manaakitanga, whanaungatanga, whakawhanaungatanga, kaitiakitanga, kotahitanga and rangatiratanga, with mauri at their heart and foundation. Our pūngāwerewere pukumahi, our industrious spider (the researcher), strategically weaves its research web, interacting, connecting and maintaining all pou through whakapapa. Our hope is that using Te Pūngāwerewere Pukumahi framework will help to broaden and strengthen the elements of research in Te Ao Māori.

Keywords

pūngāwerewere, Te Ao Māori research, mauri, whakapapa

Introduction

Research within Te Ao Māori can be fraught with tensions and dilemmas, especially for off-campus doctoral students. In addition to the support from our supervisors, as students, we formulated a group we named our tautoko rōpū. This enabled us to use a tuakana–teina approach, which allowed for free-flowing ideas and peer support (Guba & Lincoln, 1982; Shenton, 2004), in a relationship in which we could all share our expertise in a safe

space. Although we had different focus areas for our research investigations, we had mutual supervisors who encouraged our tautoko relationship, we embarked on our research journeys at the same time, and we had the major topic of kāinga sustainability underpinning our research.

The central focus for Rochelle was a case study of Te Rimu Ahuwhenua Trust (Te Araroa) and the challenges and opportunities of climate change adaptation. Rochelle has genealogical ties

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to Te Araroa. She is also a beneficiary of the Te Rimu Ahuwhenua Trust (Te Araroa, East Coast of Aotearoa New Zealand). Tepora's research project examined kāinga, kura and kai (based in Te Taitokerau, Northland Aotearoa) and the interrelationships between them on the journey towards food sustainability. Tepora's whānau comes from Waima, Kaikohe and the greater Hokianga region. Both projects also integrated the perspectives of climate change and Covid-19 as challenges within their kāinga.

We greatly appreciated the ability to access information from a wealth of scholars and their resources, such as Te Whare Tapa Whā (Durie, 2004), *Te Ara Tika Guidelines for Māori Research Ethics* (Hudson et al., 2010), Kaupapa Māori concepts (Panelli & Tipa, 2007; Smith, 2012), whakapapa methodology (Graham, 2005, 2009; Paki & Peters, 2015; Royal, 1998), Māori-centred approaches (Herbert, 2001; Moyle, 2014) and Whānau Tuatahi—Māori community partnerships (B. Jones et al., 2010), to name but a few. However, during the progression of our doctoral journey, it soon became apparent to both of us that, among all the resources we had access to or researched, something was missing: a unified approach for research in Te Ao Māori that is applicable to all disciplines and can be used by all researchers.

In this research paradigm, we refer to Māori communities as kāinga (also known as tribal marae, pā, pā-kāinga, papa-kāinga) (Tapsell, 2021). Kāinga in this context, as stated by Paul Tapsell (2021), “represents the fundamental genealogically ordered relationship of belonging—anchoring tāngata to whenua—in a universe organised by a system of ambilineal kinship and descent (whakapapa)” (p. 7). Tapsell (2021) also used an algorithm to define the term kāinga as follows: kāinga = tāngata + whenua + taonga (p. 51). To briefly explain these concepts, kāinga refers to villages, tāngata refers to Māori, whenua refers to the landscapes and waterways, and taonga refers to the treasured ancestral belongings and resources (Tapsell, 2021, p. 7). However, more importantly, Tapsell (2021) reminded us that kāinga are not just villages occupied by tāngata but are symbolic statements of mana (ancestral authority) over the surrounding whenua (p. 7).

Our reasoning for using the term kāinga is, as Merata Kawharu acknowledged, the impacts (social, environmental, cultural, economic) are found at the kāinga interface rather than at the iwi level and it is the kāinga that are the catalyst for change (Kawharu & Tapsell, 2022a).

The intent of this Pūngāwerewere Pukumahi

paradigm is to guide researchers and kāinga in creating a culturally safe space to undertake research collaboratively.

Within this body of work, we discuss the following aspects of this framework:

- the whakapapa of Te Pūngāwerewere Pukumahi
- te whare pūngāwerewere (the spider's house/web)
- te pūngāwerewere (the spider)
- mauri—centre of the web
- eight key pou
- the domain of the web
- the use of Te Pūngāwerewere Pukumahi
- presentation of research findings.

The whakapapa of Te Pūngāwerewere Pukumahi

“Whakapapa is the overlocking and overlapping strands of descent lines that look like tangled webs.” This comment was made by Anne Salmond at a Recloaking the Whenua Zoom presentation in 2021 (Rāngai, 2021). Salmond further explained that from her perspective, Māori view time in a spiral sense or in a circular approach rather than in a linear form. Salmond's kōrero sparked within us the concept of Te Pūngāwerewere Pukumahi (the industrious spider), from whence our research framework was born.

The strength of the spider's web is legendary. When Tawhaki (a supernatural deity) ascended to the tenth realm of the heavens to obtain the gifts of religion and knowledge, he did so by way of a spider's web. This was depicted by tohunga whakairo Pakariki Harrison on the pou te wharaua located in the whare whakairo Tāne-nui-ā-Rangi at the University of Auckland (see Figure 1) (Mutu & University of Auckland, 2008).

Te Whare Pūngāwerewere: The spider's web

Like all webs, Te Whare Pūngāwerewere can be defined as a complex system of interconnected elements. In our research paradigm, the web represents the skeletal whakapapa framework in which all entities are interconnected. Whakapapa helps to strengthen the connections between the strands. The woven layers of harakeke in Figure 2 symbolise the layers of whakapapa that are integral to all aspects of Te Ao Māori. Every tiny silk thread connects one entity to another, each playing a significant part within the web.

Without all the connecting threads, the web



Figure 1 Te Wharau

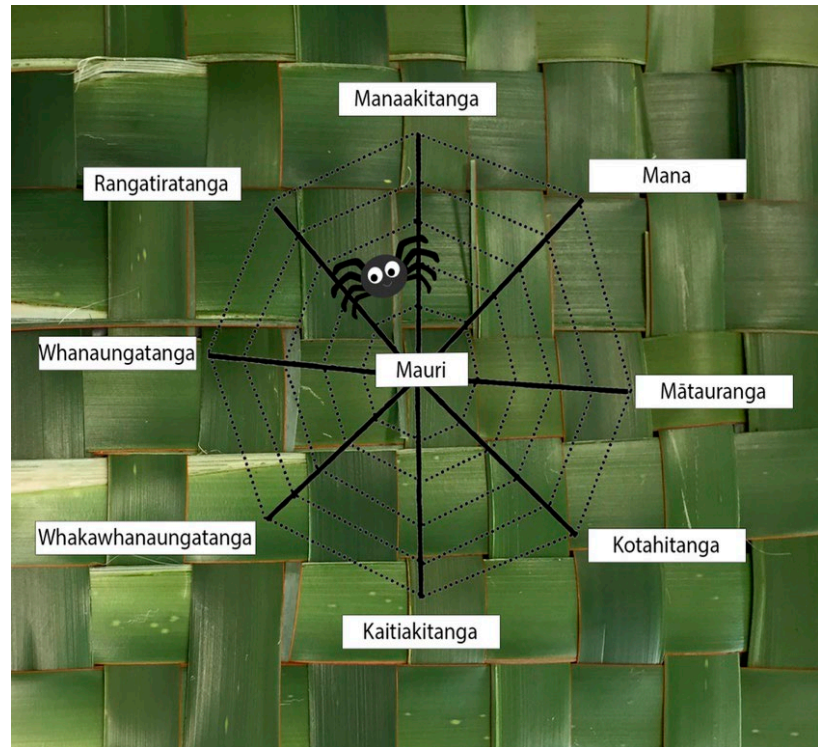


Figure 2 The web with eight focus strands

becomes somewhat compromised. Sometimes it might look as though the strands are all merging together. They do, as happens in a spider web, but sometimes it may be one strand and then another strand that merges; at another time it might be a different combination of strands. Each strand is both distinct and individual, yet at the same time merges to contribute to the entirety.

Each researcher's pathway is unique. Te ara o tukutuku pūngāwerewere is the pathway of the spider. Just like those of pūngāwerewere, our webs will all look different but the basis will still remain true; the strands and underlying mauri will always remain the same. The beauty of nature has often been the inspiration behind the creation, design and intricacy of Māori weaving and, according to Keane (2007), has been likened to "he whare pūngāwerewere". However, like our traditional tukutuku weaving, which is a symbolic representation of te whare pūngāwerewere, the patterns and designs will be unique to our rohe, kāinga, whenua and tīpuna, all of which are encompassed in our principles of whakapapa and mātauranga.

Te pūngāwerewere: The spider

Why the spider? Te Pūngāwerewere Pukumahi is the industrious spider that we refer to as the researcher. The spider-like researcher is able to "dance" across the web from strand to strand, making connections between each strand and using this ability to strengthen linkages. In contrast to this is the researcher who is unable to dance from strand to strand, operating as the fly. Although the fly's actions are often not deliberate and are usually unintentional, the fly may blunder into the web in a manner that both disrupts and can destroy sections of the strands that hold the entirety together. An example of a researcher as a fly is when the researcher undertakes research but has not collaborated with the research participants or kāinga and does their own thing without consultation.

Spiders play a critical role in keeping the natural ecosystem in balance. The researcher has the same job. At times, the spider treads cautiously across the delicate web, alert to its surroundings and keeping all pou (strands) in balance. In order for the web to remain secure, the researcher must ensure all these pou are equally upheld. If any of

these pou are neglected at any time, the structure of the web becomes weakened or unbalanced, which affects the mauri—the core of the web. The researcher needs to ensure that the key pou or strands of the web continue to be enacted by working collaboratively with the kāinga or research participants. If the researcher puts themselves first by doing their own thing, the web will break (Kawharu & Tapsell, Rotorua hui, personal communication, June 11, 2022).

There will be moments when the spider displays controlled movements, creeping forward into the past, gazing back into the future or waiting patiently in the present. The spider will sit patiently and titiro, whakarongo and then kōrero (Cram, 2001; Smith 1999). At times, the spider will disappear into the background and sit and observe, quietly taking in all that surrounds it. Another example of this patience is the recognition of the time it takes to build the relationships between the researcher and the kāinga, if not already established. We liken this to the researcher spending time showing that they know how to use the business end of a tea towel in the whare kai; it is often here that many important relationships are formed. The spider acknowledges the importance of intergenerational knowledge by moving forward into the past, reflecting on customary mātauranga while gazing back into the future, thinking about the future generations, while remaining in the present, interweaving customary knowledge with contemporary knowledge and creating new knowledge. As stated earlier and discussed by Paul Tapsell (Stirring the Pot, 2021), the spider has a role to continually regenerate and rebalance old knowledge with new observation, giving birth to new knowledge.

Mauri—Centre of the web

In the context of this research paradigm, the mauri (depicted at the heart of Te Whare Pūngāwerewere) acts as a nucleus that binds or joins the eight key pou together. In order for the mauri to be able to bind the eight pou together, the mauri must remain balanced, strong and firmly intact. The mauri is strengthened by maintaining a state of balance (mauri tau) in which key pou are equally respected and upheld throughout the entire research investigation. If any of the pou are ignored, the mauri becomes somewhat unbalanced. This will ultimately have a roll-on effect on other pou, causing the web to spiral out of control and eventually break, resulting in major implications for the research investigation. We suggest that it is always crucial to not only self-reflect but also peer review

the steps being taken throughout the research process. This peer review format can be with fellow researchers, kaumātua and supervisors. This will assist in ensuring the researcher has respected and upheld the balance of the mauri.

Mauri also encompasses the health and well-being of the research participants or kāinga. The decisions and processes of the researcher should have the research participants' well-being at the heart and the research participants should always be treated with respect. Having said that, the research participants or kāinga must not exploit the researcher. Mauri demands balancing of the different layers of relationships that the researcher encounters in their research investigation, whether that be with research participants, kāinga, supervisors, colleagues, kaumātua or organisations.

Cleve Barlow (1991) described mauri as a special power to bind or join (p. 83). For instance, “when a person dies, the mauri is no longer able to bind those parts together and thereby give life—and the physical and spiritual parts of a person's being are separated” (Barlow, 1991, p. 83).

There is a reason the mauri is located at the centre, representing the heart of the web. The mauri is like the human heart breathing life as it beats, and it affects everything else. It encompasses not only the physical but also the spiritual dimensions of the pou. When the mauri is absent or unrecognised, there cannot be a harmonious balance. Hence, mauri links with all eight pou.

Eight key pou

The word pou can be understood to mean a post or supporting pillar, and within this body of work, we consider the pou to act as metaphoric symbols of support. There are eight key pou in Te Pūngāwerewere Pukumahi framework. The key pou are mātauranga, mana, manaakitanga, whanaungatanga, whakawhanaungatanga, kai-tiakitanga, kotahitanga and rangatiratanga. The eight pou do not work in isolation but rather are interconnected and fluid, and complement one another. Thus, one is not more important than any other. The mauri keeps the pou connected. Without the mauri, all the pou or strands of the web would collapse. The pou should be approached in a balanced way; therefore, the researcher must pay attention to all eight pou and act accordingly. So, what does each pou mean and how does it guide the research process?

Mātauranga

Historically, the word *mātauranga* did not exist; instead, words like *kōrero tuku iho*, *pūrākau* and

wānanga were used (Matamua, 2021). However, the word *mātauranga* emerged in more recent times and is now commonly used (Mead, 2022). While various definitions exist of *mātauranga*, it is often referred to in its broadest sense as “Māori knowledge” or “a body of knowledge originating from ancestors” (Te Aka Māori Dictionary, n.d.). Charles Royal (2009) provided a detailed definition of *mātauranga*:

Mātauranga Māori is a modern term for a body of knowledge that was brought to these islands by Polynesian ancestors of present-day Māori. Here this body of knowledge grew according to life in Aotearoa and Te Wai Pounamu. Despite an initial period of change and growth, the arrival of European populations in the 18th, 19th and 20th centuries brought major impacts to the life of this knowledge, endangering it in many and substantial ways. (p. 31)

While there are many definitions of *mātauranga*, there are some key commonalities. First, as noted by Tapsell (2021), *mātauranga*, or the Māori knowledge system, differs from one *kāinga* to the next. This is supported by Sir Hirini Mead (2022), who stated, “While there might be a commonly shared base among all the tribes of the nation, there were bound to be portions of knowledge that were unique to each community, be they *whānau*, *hapū*, or *iwi*.” Researchers undertaking research in their own *kāinga* may tap into their own knowledge systems through *pūrākau*, *waiata*, *tohu*, *whakataukāki/whakataukī*, place names, ancestors’ names and landmarks that are unique to their area. Hence, the Māori knowledge system is diverse and may include *mātauranga-a-iwi*, *mātauranga-a-hapū* and *mātauranga-a-whānau*.

Mātauranga acknowledges the loss of portions of customary knowledge due to Aotearoa’s colonial history. *Mātauranga* recognises the customary knowledge of our *tīpuna* and holds on to those traditions. Their wisdom has much to offer us today. Another critical element of *mātauranga* is that it is evolving, synthesising how these traditions can be applied today. Hence, *mātauranga* encompasses revival, innovation and progression in the spaces in which it operates (Stirring the Pot, 2021).

Mātauranga is much more than just a knowledge system. Māori academic Rangiānehu Matamua (2021) reminded us that *mātauranga* is also about living that knowledge. As researchers, we may examine *mātauranga*, but it is essential to think of ways that we can use that knowledge practically

in our everyday lives, to keep that knowledge alive and to pass it on to the next generations. That way, *mātauranga* does not just sit in books but is used to add value and understanding to our everyday activities. In agreement with Matamua, Hikuroa (2017) claimed that *mātauranga* is a tool, approach, method and framework to generate knowledge, and all of the knowledge generated according to that method (p. 6).

Mātauranga is the first stage of three levels of learning. The researcher undertaking *kāinga* research will develop a deeper understanding and connection to the *kāinga* through the research process if this is not already established. The researcher may progress through the different levels of learning. Briefly, the three stages are as follows: (1) *mātauranga*, (2) *mōhiotanga* and (3) *māramatanga*. Stage 1 is *mātauranga*, which may be defined as a body of knowledge, wisdom, understanding, ability and skills (Te Aka Māori Dictionary, n.d.). The second stage, *mōhiotanga*, signifies knowing, understanding, recognising, realising, comprehending and the interaction with the body of knowledge (Te Aka Māori Dictionary, n.d.). The third stage, *māramatanga*, refers to a level of enlightenment, insight or brainwave (Te Aka Māori Dictionary, n.d.). In the first stage, *mātauranga*, the researcher identifies a body of knowledge in which it may operate, such as Māori knowledge/*mātauranga-a-hapū* and *tikanga*. In Stage 2, the researcher builds upon this knowledge and develops a deeper understanding of it. In Stage 3, knowledge (*māramatanga*) becomes wisdom and, as described by Tapsell, the “light bulb moment” (Kawharu & Tapsell, Rotorua hui, personal communication, June 11, 2022). Tapsell further described this stage as the awakening stage, when researchers become more aware of themselves and of how they belong (Kawharu & Tapsell, Rotorua hui, personal communication, June 11, 2022). In Stage 3, the researcher may use the knowledge acquired and apply it to various situations or use it to create new knowledge for the benefit of their people.

Embedded in *mātauranga* is *tikanga*, values and ethics (Mead, 2016). *Tikanga* has been defined generally as a Māori concept integrating practices, behaviours and values from *mātauranga* (Mead, 2016).

Although there are common practices as to how a researcher should conduct themselves in a *kāinga* space when gathering *mātauranga*, the main point we would like to make is that the researcher must be in tune with their surroundings and the people within these spaces as to how

to best interact with them. This will form part of the initial research before they venture into the kāinga—in other words, they should make sure they understand the “lay of the land”.

Mana

Mana is a broad concept. According to Kawharu and Tapsell (2019), “Mana literally means ‘authority’, ‘control’, ‘power’ but more widely it is about defining a position or argument on something, asserting status or identity, and exercising rights-based arguments” (p. 8).

Within this research context, mana is attached to all involved in the research project: the research participants, the researcher, the supervisors and the kāinga. Mana is an essential research ethic of tikanga, and one must always respect and uphold the mana of all those who are involved (R. Jones et al., 2006). The researcher must always endeavour to preserve the mana of the participants throughout the research and beyond. In doing this, the researcher also preserves the mana of the wider group to which the participants are connected, such as the whānau, hapū, iwi and kāinga. The researcher should always remain humble and must not trample on the mana of the participants. Therefore, the spider must always tread very carefully on the web.

The researcher should not promote their own mana because this should be spoken about only by others, if at all. Mana can be preserved via the reciprocal relationship between the researcher and the research participants, and respect is at the core of this relationship. As stated earlier, the researcher does not undertake the research to enhance their own mana but rather to uphold the mana of the participants or kāinga. This will strengthen the mauri of the kāinga.

The same principles respecting mana apply when attending a hui. The question of who has a say at a kāinga hui may be asked. Depending on what the hui is about, we believe that a person who is not genealogically connected to the kāinga but has lived among the kāinga for years, formed authentic relationships and is accepted by the kāinga has a say at a kāinga hui. That said, does a person who does whakapapa to the kāinga but lives away from their community have a say at a kāinga hui? Regardless of whether they live away from the kāinga, they are still considered mana whenua. It is difficult to draw boundaries around who can and cannot speak because there are many variables to consider.

This relates to our comments concerning mātauranga in that each kāinga will have their

own customs and values and thus it is important for the researcher to familiarise themselves with this aspect before finding themselves in a situation in which they may unwittingly shake the foundations of the web. In other words, we encourage the researcher to kōrero with their supervisors or members of the kāinga to clarify the customs and values of the kāinga before attending. Allied to this is a need for the researcher to make sure they are familiar with the protocols involved with entering a marae for the first time.

Does your passion give you the right to trample upon tikanga? A term that has been discussed during our research journeys is “mana muncher”. This terminology was first used, and then explained, by a kaumātua during a hui in Northland. Subsequent discussions revealed it has become a frequently used phrase whenever members of the kāinga feel there has been a lack of respect shown to a speaker or a transgression against tikanga. A mana muncher is someone who intentionally tries to diminish someone else’s mana. This may be during hui via personal attacks, using an aggressive tone, using intimidating body language or using inappropriate behaviour to devalue a person’s mana. Researchers should be aware of what a mana muncher is, whether there are mana munchers in a kāinga and how these behaviours can affect others in the kāinga. Often, it is not what is said but how it is said that can be an example of mana munching. One must think carefully about how one’s message is being perceived. Mana munching occurs not only at hui but also on social media platforms like Facebook. At times, individuals give little consideration to the impact of their words on another and on the extended group to which they belong. Emotions can be heightened at hui, especially when political or sensitive issues are discussed; however, people must be respectful towards one another and put their message across in a calm and professional manner.

What also needs to be considered is whether it is the right time and location to have that kōrero in front of an audience or whether it is something that is better sorted in private. Before making a claim, people should find out as much information as possible so they are well informed on both sides of the issue before voicing their opinion.

If mana munching happens, what should the researcher do? This depends on the researcher’s position within that community. If they are part of that community (living there), they may approach the matter differently from a researcher who does not. The relationship the researcher has with the community will influence what the researcher can

do or should do. Before any hui begins, appropriate tikanga (behaviour) should be reinforced and upheld regardless of the kaupapa. A respected Te Whānau-ā-Apanui kaumātua, Eruera Sterling, spoke about how we should talk on the marae: “Discuss things patiently, letting everyone speak without interruptions, moving along in a humble manner” (as quoted in Salmond, 2005, p. 224). This reinforces a guiding principle for Māori research, which is to not trample on the mana of the people: “Kaua e takahia te mana o te tāngata”.

Manaakitanga

Generally, the concept of manaakitanga means hospitality, kindness, support and generosity, and it widely concerns consideration of the needs and interests of others (Kawharu & Tapsell, 2019; Te Aka Māori Dictionary, n.d.). To gain a deeper understanding of the word *manaakitanga*, it can be broken down into three parts: *mana*, *aki* and *tanga*. The first part of the word, *mana*, broadly means power, authority, force, control and status (Te Aka Māori Dictionary, n.d.). The second part of the word, *aki*, can be translated as encourage, hold, support, urge or challenge (Te Aka Māori Dictionary, n.d.). The final part, *tanga*, is a suffix turning the word into a derived noun (Te Aka Māori Dictionary, n.d.). As Paul Tapsell explained, the two concepts mana and aki dance between themselves, interlocking and interlinking. Mana places entities in high regard and aki helps to endorse the position (Kawharu & Tapsell, 2022). One’s mana is upheld by hospitality, kindness and generosity (manaakitanga), while growing the mana of others by encouraging them to do the same (Kawharu & Tapsell). By uplifting others through showing them respect, we maintain the balance of our own mana.

Manaakitanga underpins all tikanga Māori (Mead, 2016). It is a customary Māori value intertwined throughout Māori society. Manaakitanga informs the way we think, behave, engage and interact with others. It is about how we develop, nurture and maintain relationships, thus is an example of how it is necessary to integrate the pou of both whanaungatanga and whakawhanaungatanga. We as researchers must remember manaakitanga is always important, no matter what the circumstance may be (Mead, 2016, p. 33).

In this paradigm, the researcher must always take good care of the research participants or kāinga and vice versa. Manaakitanga is a reciprocal process in which the researcher and the kāinga respect, support and take care of each other. This

may include the researcher accommodating the participants or kāinga around the interview, bringing kai to the interview or giving a koha to show their appreciation. For researchers, manaakitanga may mean being “on call” if the kāinga or participants need assistance.

The researcher has a duty to respect the relationship of the kāinga; simultaneously, the kāinga must not exploit the researcher in any way or vice versa. It is essential that reciprocity between the researcher and kāinga is equally maintained. Reciprocity in this context is not simple because it needs to be understood within the context of the kāinga and with individuals in that context. For instance, it may be appropriate to take a koha such as kai, money, vouchers or owing your time. The researcher will need to have an awareness of the participants and an appropriate koha for that particular person. This may involve doing some homework to find out what is appropriate for that person. From our experience, koha as kai, money, vouchers and owing of your time has been appreciated by some, but one person did not accept money because monetary value could not be placed on their knowledge. Therefore, the appropriate koha depends on the individual or the kāinga.

Whanaungatanga

Whanaungatanga is about relationships, kinship, descent and a sense of family connection (Te Aka Māori Dictionary, n.d.). This concept embraces the idea that one does not need to be genealogically connected to or whakapapa to a particular group to be considered whānau. Rather, people may be perceived as whānau because of their residence, their services or contribution, friendships or shared values and experiences. Associated with whanaungatanga is respect, trust, reciprocity, accountability and obligations to a particular group. Warren et al. (2007) considered whanaungatanga to incorporate family and relationships, and stated it was an essential aspect of Kaupapa Māori research methods.

In kāinga research, whanaungatanga may be viewed as the researcher’s genealogical connection to the kāinga, or their kin connection to that community. There may be instances when the researcher has no-kin connections to that kāinga or those research participants. This raises an important question: Do you have to be genealogically connected to a kāinga in order to do research in that kāinga? Our belief is that the answer is not necessarily no. The researcher does not need to be genealogically connected to a kāinga to undertake research in that community; however, when

a researcher has kin connections to the kāinga, it is easier to establish relationships because the kāinga may know who the researcher is or the whānau or hapū they are connected to. What is important to consider is whether the researcher has the necessary skills, knowledge and established trusted relationships, and has received permission (blessing) from the kāinga to undertake research in the community.

What does permission look like in a kāinga context? Permission is received from a respected authoritative leader or group within the kāinga. It does not necessarily mean everyone in the kāinga has to give permission, but letting the kāinga know about the research before it begins is recommended. If the researcher is genealogically connected to the kāinga but resides outside the kāinga area, they may be seen as an “included researcher”—a researcher who is one step removed. They are actively participating in the kāinga affairs but also have the ability to step away from the research context. If the researcher is not familiar with the kāinga or does not reside in the kāinga, they need to observe the relationships within the kāinga because the relationships can be complex and dynamic, which may have a direct or indirect impact on the research investigation. The key values that uphold whanaungatanga will guide the research processes; these include building or maintaining relationships, manaakitanga, cooperation, collaboration, networking, reciprocity, shared vision, expectations, rights and obligations with that group.

Whakawhanaungatanga

Whakawhanaungatanga is about an ongoing process of establishing and maintaining relationships (Te Aka Māori Dictionary, n.d.). This concept also embraces relating well to others, power sharing, dialogue, positioning, collaboration and cultural practices (Rata & Al-Asaad, 2019). Whanaungatanga should not be confused with whakawhanaungatanga because there is a clear difference. Whanaungatanga is based on relationships, kinship and people who we treat as our own family, whereas whakawhanaungatanga is about the process of establishing and strengthening relationships. When the researcher has established relationships within the kāinga, they must continue this relationship even after the research investigation is completed. This may include by visiting the kāinga or helping the kāinga in any way that they can. The simple power contained in picking up a tea towel or a broom cannot be underestimated! At a hui, the toilets will need

scrubbing and mattresses or furniture may need moving and stacking. The simple everyday tasks are how you build relationships and become part of the kāinga ... This is whakawhanaungatanga in action. In our personal experiences, we have found that some of our most productive kōrero has occurred at the kitchen sink.

Kaitiakitanga

Generally, the term kaitiakitanga refers to guardianship, stewardship, trusteeship or trustee (Te Aka Māori Dictionary, n.d.). In Te Pūngāwerewere Pukumahi framework, kaitiakitanga refers to the researcher as the kaitiaki of the research investigation. The researcher’s role is to conduct the research investigation in a respectful and appropriate manner. There are a number of ways this can be done. The researcher’s job is to walk alongside the kāinga or research participants to learn and understand their perspectives, aspirations and lived realities but not to tell them how to live their lives or what is best for them (Tomu’a, Zoom kōrero, personal communication, September 15, 2022).

The researcher may often be seen as the kaitiaki of the knowledge produced in the research investigation or may be viewed as belonging to the knowledge in which the researcher has kaitiaki for the whole kin group (Kawharu & Tapsell, Rotorua hui, personal communication, June 11, 2022). The kāinga has put trust into the researcher that they will look after the information or knowledge. Hence, the researcher and kāinga should have important discussions at the beginning of the research about the knowledge in the study in terms of who owns the knowledge, who will use it, who will access it, who will maintain it, the purpose for which it will be used, how it will be stored, what knowledge should be included in the study and how the knowledge will be presented.

Kaitiakitanga in practice can be exemplified in the way the researcher demonstrates transparency, robust consultation, fair processes and good decision-making throughout the entire research investigation.

Kotahitanga

Broadly, kotahitanga is defined as unity, togetherness, solidarity and collective action (Te Aka Māori Dictionary, n.d.). The word kotahitanga can be broken down into three parts, which helps us to understand its meaning. Trevor Moeke, a Māori community leader, provided an explanation (Global Oneness Project, 2007). The word *tahi* means one and *kotahi* means single or one in particular. The suffix *tanga* acts as a noun.

By deconstructing the word, we can conjecture “unity”. We can gain a deeper interpretation of kotahitanga by looking back at Māori customary times. In traditional Māori society, tribal unity underpinned daily functions and activities fundamental to the survival of a tribe (Barlow, 1991). The community worked together planting food or harvesting, supporting one another giving everyone equal shares of the resources; no one was excluded (Barlow, 1991).

In the Pūngāwerewere Pukumahi framework, kotahitanga is demonstrated through unity and togetherness while working towards a common goal or collective action. The kāinga is involved from the beginning. Throughout the research investigation, the researcher and kāinga converse and consult about the different aspects of the research through hui, kōrero (transcripts), analysed data and results. There may be times when the researcher and kāinga or research participants do not concur on some aspects, but it is essential that both parties work together to achieve an agreed solution. Kotahitanga will develop naturally through the other pou.

Rangatiratanga

A broad definition of rangatiratanga, given by Sir Hirini Moko Mead (2016), is “political—sovereignty, chieftainship, leadership, self-determination, self-management; individual—qualities of leadership and chieftainship over a social group, a hapū or iwi” (p. 398). Kawharu and Tapsell (2019) noted that rangatiratanga derives from the word *rangatira*, meaning esteemed leader, and *tanga* refers to qualities and characteristics; therefore, rangatiratanga translates as qualities of an esteemed leader (p. 24). Other aspects linked to rangatiratanga are mana whenua, mana tangata and the Treaty of Waitangi. So, how does rangatiratanga relate to kāinga research?

Within a Māori research context, rangatiratanga is about Māori control, power and authority over research. The Ministry of Education (2024) has described how rangatiratanga can be seen and demonstrated through “problem-solving skills, persistence, courage, and assertiveness”. An example of this is a kāinga having the courage and determination to think outside the square in order to solve problems they may be facing).

Using the layering process of whakapapa by actively incorporating aspects from all of the strands in Te Whare Pūngāwerewere allows the researcher to both recognise and contribute to rangatiratanga.

A growing number of Māori research

frameworks have contributed to Māori self-determination, such as Māori-centred approach, Kaupapa Māori research and whakapapa research frameworks, to name but a few (Macfarlane & Macfarlane, 2019; Marsden, 1992; Royal, 1998; Smith, 2012). These paradigms provide a lens for understanding Māori aspirations, Māori knowledge, Māori practices and Māori realities. Each of these is covered within the pou of Te Whare Pūngāwerewere; furthermore, the underpinning mauri enables the researcher to successfully address other issues, such as robustness, reliability, trustworthiness and accountability (Bryman, 2004; Mutch, 2005; Shenton, 2004). Reflexivity, turning back on oneself, is also critical for researchers to ensure that they are consciously aware of their philosophies and actions and how these can affect the research processes. Throughout the entire research process, the researcher must evaluate their actions. This may be done using a reflective journal, supervisors or peer support. Davies (2008) pointed out that reflexivity plays an important role for both the researcher and the research results through recognition of the connection between the researcher and the research focus.

The concept of rangatiratanga in Te Pūngāwerewere is likened to the researcher who works alongside and within the kāinga seeking empowerment, enrichment and enlightenment for a common research purpose. Power sharing is an essential part of the research relationship between the researcher and the kāinga.

Each whānau, hapū, iwi or kāinga will often have rangatira (leaders) who guide the group. At the core of the rangatira’s decisions is the mauri (well-being) of the people and their environment. When researchers work with kāinga, there may be rangatira who guide the kāinga. Issues can arise when kaumātua or those in a position of leadership feel their voices have not been heard or that they have had no input. They feel powerless when this happens because it undermines their mana. Including these kaumātua in the kōrero can validate their feelings of empowerment and participation in the research process.

The researcher should be aware of who the rangatira are in the kāinga and observe how they operate and guide their people because they have a massive influence on the kāinga. It is recommended that the researcher introduces themselves to these leaders so that they are aware of the research investigation and the intentions of the research that is occurring in the kāinga space.

The domain of the web

The domain of the web is a space of service to the people or the kāinga rather than for the researcher's own personal gain. Service to the people has always been an integral part of kāinga harking back to customary times, when rangatira or tohunga demonstrated service to their wider kin, and at times, at the cost of their own lives (Tapsell, 2017). For many Māori researchers, service to their people still applies today. This was reiterated by Fiona Cram (1993):

For Māori, the purpose of knowledge is to uphold the interests and the mana of the group; it serves the community. Researchers are not building up their own status; they are fighting for the betterment of their iwi for Māori people in general. (p. 28)

The ultimate aim of research within the kāinga is about what we, the researchers, can give back or contribute to the community. What value is our research otherwise? What is the point of it? Another important aspect of the researcher's service to their people is that once the research project is completed, they do not simply walk away from the kāinga because their work is done. The researcher will carry that relationship they formed for the rest of their life (Kawharu & Tapsell, Rotorua hui, personal communication, June 11, 2022).

The web domain is also a space of negotiation between the researcher and the kāinga or research participants. The researcher should have a good understanding of how the kāinga space (community context) operates, especially if the researcher resides away from their community. In the kāinga space, there will be key negotiators (rangatira or kāinga leaders) who lead or speak on behalf of the kāinga. The researcher should be aware of the negotiators in regard to who they are, their goals, aspirations or intentions, their influence in the community and how the key negotiators operate within the kāinga space. This links to all aspects of the pou. Also operating within this space may be the push and pull of different group dynamics and relationships that may affect what the researcher can do, cannot do or should do. Participation in duties around the marae or community activities may provide some insight into the interplay of these groups and already established relationships that may help the researcher negotiate this space more effectively. We suggest that this is actually crucial if you are not living within your research kāinga because it underpins your whakawhanaungatanga—your relationship building. From our own experiences, we understand how difficult it

can be when you live away, especially if you no longer have whānau in the rohe to establish and maintain those relationships. Once again, we cannot emphasise enough the importance of picking up the tea towel!

The use of Te Pūngāwerewere Pukumahi framework

In order for Te Pūngāwerewere Pukumahi to be used effectively, it must be implemented appropriately. From our perspective, it relies on the researcher's ability to operate confidently in both Māori and Pākehā cultures as someone who is able to make connections and have a good understanding of the kāinga and the environment where the research is taking place. Even then, this may not always be enough. The researcher must be prepared to immerse themselves in the Māori world that they are entering, which leads to one of the biggest factors with Te Whare Pūngāwerewere: There is deep strength within the framework when all aspects are approached with mauri at the heart. Without this, it is possible to blunder on in and damage or break a strand. This could be irreparable. This framework can be used to underpin your research planning.

Presenting of research findings to kāinga

The research findings should be presented to the research participants or kāinga in a relevant and engaging way. Sometimes research may be presented as a thesis as a requirement of a tertiary university qualification; however, this is not always an effective or relevant approach when sharing findings with kāinga. The Pūngāwerewere Pukumahi framework urges researchers to think carefully about how to best present the findings to the kāinga. Otherwise, in the words of our supervisors and mentors, we end up asking, "So what?" Handing over a written thesis often will not be an effective form of feedback within our communities. Among the multiple ways we have observed the research information and findings being presented or delivered are oral presentations at hui, pictorial presentations, and musical and dramatic presentations, to name but a few. Other forms of feedback we are aware of are websites that can be built and shared, booklets, books, posters, charts and videos.

During our PhD journey, we were involved in watching a number of presentations to kāinga from a range of speakers (scientists, kāinga leaders, government representatives). From these presentations, we noted key aspects that we consider

essential in constructing and delivering an effective presentation to kāinga.

1. *Preparation before the presentation.* A speaker does not go into a kāinga setting without having some background knowledge about the audience they are presenting to. It is important to know who the audience is, their expectations and their views about the topic you are discussing. For example, you never want the community or kāinga to feel that you are coming in as “the expert” who has not worked with or listened to the community but has grabbed the information they want and is just presenting as a “here is what is wrong” or “what needs to happen” in your community. The speaker may even meet before the presentation with interested parties to have a kōrero regarding their expectations and areas of interest.
2. *Background of the speaker.* When the speaker begins, it is important for the kāinga to know who the speaker is, where they are from, who they work for, the purpose of the research and how the investigation was undertaken. This helps to provide transparency between the speaker and the kāinga.
3. *Information is easy to understand.* If the speaker presents a PowerPoint presentation, the information must be simple and easy for the kāinga to understand, especially scientific information. Photos, images and short videos are a good way to engage with the kāinga. If statistics or graphs are used, the speaker must think about how that information is presented so that the kāinga can easily comprehend the data, especially technical data or information. Quite often the audience can become overloaded with information, so key messages are important. Additionally, the speaker must use terminology that the audience can understand even if this means explaining certain concepts.
4. *Clear and loud voice.* The speaker must have a clear, loud and confident voice so that the audience can hear what they are saying. The speaker must also have an engaging voice that fuels their message. If the speaker uses a monotone, the audience may disengage.
5. *Length of the presentation.* Presentations that are long and boring can tend to lose the interest of the kāinga. Keeping the presentation short helps to hold the kāinga’s attention and prevents the speaker from overloading the kāinga with too much information.

In summary

Having gone through the process of kāinga research in our own communities, we have begun to build an understanding of the complexities that are involved. In some cases we had similar experiences while at other times they were completely different because each kāinga operates in their own way. Therefore, this framework is not an exact guide for kāinga research but consists of underpinning values that help guide research processes. Other researchers studying in their kin communities but residing away could help test the parameters of this framework.

So where do interactions such as hui, kōrero and wānanga, for example, sit in relation to the web? Every single interaction contains all aspects of the pou. The underpinning mauri is shown in many ways, for example, by employing karakia and waiata to recognise, respect and demonstrate features of mātauranga, mana, manaakitanga, whanaungatanga, whakawhanaungatanga, kai-tiakitanga, kotahitanga and rangatiratanga.

We hope that sharing our experiences and knowledge through Te Pūngāwerewere Pukumahi framework, will help to broaden and better present and understand the elements of research in Te Ao Māori.

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Glossary

ara	pathway
hapū	kinship group
harakeke	flax
hui	gathering, meeting
iwi	extended kinship group, tribe
kai	food
kāinga	village, settlement
kaitiaki	custodian, guardian
kaitiakitanga	guardianship
kaumātua	elderly one, aged one
kaupapa	purpose, plan, proposal, initiative
Kaupapa Māori	Māori principles and approaches
koha	gift, offering, contribution
kōrero	talk, conversation
kōrero tuku iho	oral traditions

kotahitanga	unity, togetherness	waiata	song, chant
kura	schooling	wānanga	seminar, place of learning
mana	prestige, power, influence, status	whakapapa	lineage, layers of being or knowing
manaakitanga	generosity, hospitality, care	whakarongo	to listen, hear
mana tangata	human rights, power of people	whakatauākī/whakataukī	proverbs, significant sayings
mana whenua	jurisdiction over the land	whakawhanaungatanga	the process of establishing relationships
marae	tribal meeting grounds	whānau	family, may include friends with no kinship ties
māramatanga	enlightenment, understanding	whanaungatanga	relationships, a sense of family connection
mātauranga	knowledge, wisdom, understanding	whare	house, dwelling
mauri	life force, vital essence	whare kai	dining hall
mauri tau	absence of panic	whare whakairo	meeting house
mōhiotanga	knowing, comprehension, awareness	whenua	land
pā	home; fortified village		
pou	post, supporting pillar		
pou te wharaua	post supporting the ridge pole in the front wall inside a meeting house		
pukumahi	industrious, hardworking, diligent		
pūngāwerewere	spider		
pūrākau	ancient stories		
rangahau	research		
rangatira	esteemed, revered, chiefly		
rangatiratanga	qualities of an esteemed leader		
rohe	area of land, boundary		
rōpū	group of people		
tāngata	people		
taonga	a treasure, something of value		
tautoko	support		
Te Ao Māori	the Māori world		
teina	junior one		
Te Wai Pounamu	South Island		
tikanga	values; customs, the correct procedure		
tīpuna/tūpuna	ancestors, grandparents (Eastern/Western dialects)		
titiro	look, observe		
tohu	indications, distinguishing features		
tohunga	specialists		
tohunga whakairo	master carver		
tuakana	elder one		
tukutuku	ornamental patterns, lattice-work		

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