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MĀ WAI E KAWEA TAKU KAUAE KI TĀWHITI?

Utilising mātauranga Māori to convey us into the future

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Abstract

Traditional knowledges are not homogeneous or tidy; they often contain hidden meanings and tensions. In some cases, they are contradictory and therefore understanding them requires careful analytical and critical thought. The marginalisation and exclusion of Indigenous knowledges in contemporary contexts has perhaps been (falsely) justified because they do not easily translate into non-Indigenous ways of knowing. The purpose of this article is to critically examine traditional Māori knowledge and epistemology in relation to modern challenges and meaning-making. Indigenous conceptual frameworks allow for Indigenous interpretation of our experiences on our own terms. A key argument presented by this article is that to utilise mātauranga Māori in genuine and transformative ways, we must first strip back layers of misunderstandings caused by colonisation to develop indigenised understandings that empower us to harness the colour, the contrast and the complexity of Indigenous knowledges in our contemporary contexts.

Keywords

education, epistemology, knowledge, mātauranga Māori, research

Introduction

The Indigenous people of Aotearoa New Zealand are collectively and politically known as Māori. Hapū and iwi are organised through shared genealogy, each often striving to maintain their tribal sovereignty and uniqueness. While iwi Māori are independent and diverse, we acknowledge our shared experiences as colonised people, and like many colonised or politically marginalised peoples, we are often forced to present, and are frequently represented, as homogeneous in a range of sociopolitical contexts. The term "Māori" is used here to differentiate the Indigenous people of Aotearoa from non-Indigenous people; it is not intended to imply homogeneity. Many of the ideas discussed throughout this article have been developed through life experience and a research project involving knowledge from various hapū and iwi of the author. Many Māori will have differing, contrasting and equally valid perspectives of traditional knowledges and of the histories recounted here. Dominant power structures have devalued multiplicity, whereas our own Indigenous worldviews enable us to navigate, manage and engage

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with multiplicity as a natural and normal human activity.

Conventional Western education systems have taught Indigenous peoples to mistrust not only the wisdom of our ancestors but also our own instincts, inspirations and creativity (Battiste, 2008). Alarmingly, social networking platforms are also increasingly breeding mistrust by engendering and encouraging individualised sets of "facts" and "knowledge" that appear to be "truths" through constant exposure to information that relentlessly reinforces individuals' opinions (Orlowski, 2020). This modern phenomenon is anti-intellectual as it positions evidenced-based critical thought as elitist (Orlowski, 2020). Consequently, opinions become facts, and information is confused for knowledge. The elevation of collective knowledge bases, proven over long periods of time by groups of people, is argued for in this article. Traditional, cultural knowledge has the potential to combat the disorder caused by individualised sets of knowledge that constantly reinforce uncritical sameness in thought.

This article seeks to contribute to the search for solutions to long-standing and ongoing issues in Aotearoa caused largely by a tenacious colonial education system, by emphasising the empowering, creative potential of mātauranga Māori. This article maintains that Indigenous knowledge is epistemology—the science, philosophy and practice of knowing about existence based on the lived histories of Indigenous peoples (Dei, 2011).

First, this article will critically discuss Māori epistemology to highlight that reclaiming traditional Indigenous knowledge in research and education is crucial in challenging ongoing injustice as it has powerful potential to solve complex contemporary problems. Second, nuances in mātauranga Māori, specifically knowledge from the kauae runga and the kauae raro will be analysed to illustrate the complexity and diversity of Indigenous knowledge. According to Meyer (2008), "We must develop new theories from ancient agency so we can accurately respond to what is right before our eyes" (p. 217). This article will argue that this might be achieved through critical analysis of epistemological frameworks and knowledge inherited from our ancestors.

Ka tiritiria: Powerful epistemic knowledge

Rapua ngā aho tapu. Ka tiritiria,
ka poupoua ki a Papatūānuku,
ka puta ki te whei ao, ki te ao mārama.
Seek the sacred threads.
They fall and become pillars on Earth,
so that we may emerge first into the dawn,
then into the world of light.
—He tauparapara tawhito

Hegemony is the domination of one entity by another (Gibson, 1986). Traditional Western research has performed the tasks of maintaining hegemonic sociopolitical power relationships in Aotearoa. An important aspect of conceptual frameworks grounded in Indigenous knowledge is to challenge myriad inequities perpetuated by Western research. The tauparapara above reinforces Meyer's (2008) view that knowledge is limitless, vast and subjective. This tauparapara charges humanity with the responsibility to perceive all types of knowledge; to search it out, to interpret, analyse and critique; then establish and embed it for the use and prosperity of humanity. This process causes a transition from ignorance into enlightenment, and then finally into a state of understanding and full consciousness.

The epistemic language used in the tauparapara above connecting the cosmological to the physical world in the context of the dawn illustrates that becoming fully conscious is not merely the development of mental intelligence but a process of mediating the intellectual *and* the spiritual by engaging all of the senses, to operate at full capacity. One way of achieving this seemingly idealistic feat is through research that draws on epistemologies that deviate from dominant Western discourse and empower alternative perspectives and "fuel[] dreams of alternative possibilities" (L. Smith, 2012, p. 201).

Research for Māori, like it is for the rest of humanity, is not a new concept. In the tauparapara above, "rapua ngā aho tapu" is a reminder from tohunga to search, re-search and analyse the physical and esoteric spaces around us. Māori scholars of the ancient academy were immersed in praxis, in that action and analysis were an inseparable (L. Smith, 2012) and continuous process in informing the lives of our people. Research became problematic for Māori when our epistemologies collided with those of Western Europe. From this juncture, research was used as a "tool of colonisation" (L. Smith, 2005, p. 116) in order to subjugate and invalidate Māori epistemologies and practices. In the chaos caused by this philosophical collision, Māori were repositioned as powerless, which impacted negatively on our own and others' perceptions of ourselves, our culture and our knowledges.

The dominant paradigms used in Western social research can arguably be organised into

three main categories: positivistic, interpretive and critical (Sarantakos, 1998). Historically, Māori have not benefited from research conducted about us largely because the paradigm that sought to understand us was that of positivism that claimed to be scientific, objective, neutral and, therefore, "true". L. Smith (2012) argues that empirical positivism, which forms the basis of traditional Western research on Māori, is in fact sets of values, conceptualisations and theories of knowledge that are culturally oriented, serving the purpose of objectifying, marginalising and colonising Māori (see also Cram, 2001).

Duran and Duran (2000) contend that the "objectification of science is nothing more than ongoing social control and hegemony" (p. 88). This type of research, heavily biased towards Western ways of knowing, has a dual effect on society. At systemic levels, those with political power utilise the findings of such research to develop and justify laws, policies and initiatives that maintain both unequal power relationships and systemic racism. On a personal, common-sense level, individuals and groups form ideas about what counts as real based on what has been "proven" by research (L. Smith, 2000, 2012). A particular danger of a positivist approach is an unwavering reliance on a singular definition of "knowledge" and "truth" that fails to acknowledge that all knowledge is contestable.

Elabour-Idemudia (2011) argue that knowledge production processes have been dominated by Western philosophical beliefs and worldviews that undermine Indigenous philosophical thoughts. "Ka tiritiria" in the tauparapara above describes a Māori philosophical view of knowledge production. "Tiritiria" refers to the way in which knowledge is passed from the spiritual realm into the physical—it falls as raindrops do to splash upon the earth (personal communication, Te Warihi Hetaraka, September 11, 2014). From this perspective, knowledge is produced externally on a spiritual plane; it is deciphered by tohunga through cosmology, then critiqued, constructed, reconstructed and internalised under tapu in the physical world.

This worldview perceives knowledge as an entity so vast and varied that a singular way of knowing is unfeasible. No one person or single group could ever behold it all—just as it would be impossible to stand in the rain and catch all the raindrops. L. Smith (2012) concurs that cultural knowledge systems contain multiple ways of knowing and multiple traditions of knowledge. Meyer (2008) also argued that Indigenous ways of knowing "expand[] the idea of what knowledge is supposed to be and in truth is—vast, limitless, and *completely* subjective" (p. 218). This worldview has been disregarded by Western philosophy, particularly in research, through positivism. Positivist methodology dictates that its own rules of knowledge production are "normal" and "correct", and that anything outside of positivist, Western criteria is barbaric and repugnant (L. Smith, 2012).

Dei (2011) contends that it is not possible for marginalised groups to ask dominant groups to merely make space for alternate knowledges to co-exist. Instead, we must challenge hegemonic power structures, such as those found in academic discourse. Dei (2011) insists that simply asking for space will affirm the continued dominance of particular forms of knowledge. Utilising Indigenous knowledges in research is a resistance strategy. Conceptualisations, epistemologies and philosophies of ancestors provide logical and robust theoretical space from which to conduct research.

Battiste (2000) contends that shared dialogues between academics and Indigenous peoples will assist in challenging dominant Eurocentric discourses that continue to misunderstand and marginalise Indigenous knowledges. Using Māori-centric, Indigenous and te ao Māori conceptual frameworks in research will contribute to transformative dialogue that illustrates a conscious attempt to challenge academic discourses, which continue to privilege Western knowledge (L. Smith, 2012) and refute the validity and depth of theoretical knowledge contained in the whakapapa and discourse of ancestors.

Kauae runga: Reclaiming spiritualised ideologies

Wairuatanga, a dimension of kauae runga, was the lifeblood of my ancestors; it was the conduit through which they interacted with, and in, the world. Every aspect of traditional life was weighed, measured and read against aspects of spirituality (Edwards, 2010; Hiroa, 1982; Whatahoro, 2008). Many Māori continue to perceive the physical world as immersed in the spiritual realm (Pere, 1982). Dei (2011) explains that a spiritualised view of humanity is one characteristic of indigeneity—that for many Indigenous peoples there is no space between non-material and material. The inseparable link for Māori between the spiritual and the physical is illustrated time and again by narratives linking cosmology to biology. There are innumerable Māori histories that repeatedly link the science of the properties of the universe to human biology. This is perhaps to serve as

a reminder that, first, humanity is inseparably linked to the wider environment and universe; in this sense, there is no space between the physical and spiritual.

Dei (2011) refers to the "mind, body and soul nexus" (p. 9), which constitutes an integral part of Indigenous knowledge. Incorporating Indigenous knowledges and philosophy of spirituality in research and in the academy is one example of seeking to repair the physical, material, emotional and spiritual damage caused to marginalised groups through practices of colonisation (Dei, 2011). A Māori conceptual framework starts with wairuatanga and is driven by the necessity to rapua ngā aho tapu—search for the sacred threads that bind the spiritual and physical. The belief that knowledge is constructed and reconstructed under tapu provides a philosophical foundation from which to critically engage with ideas of methodology without being subjected to the continued "epistemic colonialism" (Duran & Duran, 2000, p. 86) caused by positivist research methodologies.

Learning from the kauae runga took place under tapu to preserve the knowledge for longevity. The whare wānanga was the site of Māori scholarship, of mātauranga and pedagogical practices restricted to men and women specifically chosen as young children (Hemara, 2000) by tohunga and kaumātua. Higher order Māori academy has been in existence for generations and yet, in the search to rectify current educational and wider social inequities experienced by many Māori, the spiritualised ideologies of the kauae runga are not reflected in contemporary curricula, pedagogical practices or policies. A possible reason for this is that many Māori did not have access to this level of scholarship, as it took place in isolation from everyday life. Another reason may be that so much of our traditional forms of education in both kauae runga and kauae raro were entrenched in societal structures and ways of living that have been denigrated through colonisation.

Marsden (2003) argues that the Platonic dualistic perspective of the universe that partitions life into the secular and the spiritual was a position reinforced by Enlightenment scientific philosophies. The isolation of knowledge from spirit is reflected in modern New Zealand education, which is founded on the notion of free, secular and compulsory education for all (non-Māori) children as prescribed by the original Education Act of 1877. Since the earliest Māori encounters with Western education, "the unifying thread, the spiritual dimension had been withdrawn" (Marsden, 2003, p. 43) forcefully and purposefully by colonial forces that came to control our education. The epistemic perspective that knowledge is bound to spirit permeates Māori language, and yet modern education continues to compartmentalise and isolate knowledge from wairua and, increasingly, isolate knowledge from understanding.

Sharma (2005) argues that structural practices "persist in otherising certain minority spiritual ideologies, values and sacredness" (p. 154). In the New Zealand context those structures have been built by forcing underground higher order knowledge in Māori communities. The traditional security surrounding the knowledge of the kauae runga perhaps made for an easier othering process because, in a relatively short period of time, tohunga and their teachings became not just othered, but subterraneous, feared and ridiculed in wider New Zealand society. Meyer (2008) contends that, worldwide, the weight of hegemony and forced assimilation collapsed the higher orders of Indigenous knowing; for Māori this process has put so much pressure on kauae runga knowledge, and on our abilities to access, manage and understand it, that it has become an often misunderstood rarity.

Modern education, and literacy, has been viewed as a means of power that can be used to control society and the environment (Jenkins, 1993). By this definition, knowledge is power; it is profitable and can benefit us personally. An argument presented by traditional Māori knowledge holders emphasises the responsibility attached to attaining knowledge: knowledge from the kauae runga is earned (Hetaraka, 2020). While it is tied to whakapapa, it is not a birthright, nor a commodity of the elite. The process of attaining this knowledge is difficult, which ensures that the knowledge is respected. Mead (2012) concurs that mātauranga Māori is a specialist field, highly regarded by those who do not have it. In a modern society that always expects instant gratification and access to all knowledge, at all times, the notion that one must *earn* the right to learn some things may be incomprehensible.

Meyer (2008) contends that knowledge that endures is driven by spirit; it is a life force connected to all other life forces. This is the power of knowledge from the kauae runga. Despite the persistence of Western knowledge and culture, some people retain this level of knowledge and are respected for it (Mead, 2012). However, the fragmentation caused by deeply entrenched structural practices that have successfully othered our spiritual ideologies has left the general Māori population with only pieces of knowledge from

the kauae runga. Many of us desperately attempt to piece together the fragments so that we might be closer to understanding the workings of the universe according to our ancestors. That we know this higher order knowledge still exists just beyond our consciousness is evidence of its powerful and enduring connectedness.

Kauae raro: Collective knowledge of human activity

The kauae raro is the domain of practical, scientific and socio-ecological knowledge; it constitutes the knowledge we need to know in order to function, be productive, be successful and socialise in the physical world (Hetaraka, 2020). Meyer (2008) argues that knowledge such as this is a unifying wisdom as it is embedded in function, awareness and usefulness. This is the knowledge that all members of a society are entitled to, as it is essential to development, socialisation, sustenance and cultural reproduction. The cultural milieu of an iwi is instilled in children not through formal schooling but through their living and participating in all aspects of their community, over a long period of time (Marsden, 2003; Rangihau, 2011).

The function of the kauae raro as a means by which to reproduce and modify cultural and social knowledge is the reason the term "mātauranga tuku iho" was chosen by the influential and powerful chiefs of Te Whakaminenga in 1835 to describe the cultural knowledge that would be handed down from one generation to the next, as Māori experienced greater contact with other cultures (Hetaraka, 2020). Mead (2012) describes mātauranga Māori as having a past, present and future, a concept exemplified in the thinking process of Te Whakaminenga.

Te Whakaminenga understood that Māori culture would evolve with ongoing contact with other cultures, and they maintained the power to decide what aspects of our culture would be vital to retain so that Māori could continue to prosper and be proactive within a changing social landscape. Significantly, in 1835 these chiefs also identified aspects of the new Western knowledge they had encountered to be included as mātauranga tuku iho. This illustrates their intention to broaden Māori knowledge bases to include useful aspects of other cultures, and evidences their perception that Western knowledge belonged to the kauae raro, which therefore entitled all Māori to attain it in order to function effectively in our changing social circumstances. However, aggressive assimilationist policies and racist attitudes towards Māori were used to prevent us from fully accessing Western knowledge and participating in the positive aspects of New Zealand society (Hetaraka, 2020).

Ka poupoua: Engaging deeply with pillars of knowledge

Education did not arrive in Aotearoa with Europeans; it is an inherent building block in the foundations of our culture. Education was carefully nurtured and expanded as our ancestors traversed the Pacific, ensuring the spiritual and physical needs of the people were met on the ocean, and in new lands. Mātauranga Māori is taken for granted here as the basis of a dynamic and valid education system that collided with an equally dynamic knowledge system. Developing a sense of the depth of knowledge that once existed within Māori education and society may influence greater understandings as to why the social, education and political systems imposed on Māori have been, and continue to be, problematic for so many.

Tohunga were scholars within the academy of the whare wānanga, their role making them arguably the most revered and respected members of society (Gudgeon, 1907). One role of tohunga is to interpret and disseminate knowledge—physical and practical, as well as esoteric and spiritual knowledge (Marsden, 2003). The following analysis of mātauranga Māori considers the position, shape and survival of traditional knowledge in modern contexts. Distinctions are made in the analysis of traditional Māori knowledge—mātauranga from the kauae runga, which is esoteric, spiritualised, philosophical knowledge, and mātauranga from the kauae raro, which is practical, scientific, social knowledge—and the intricate link between the two that ensures they co-exist as parts of a comprehensive whole.

Mead (2012) explains that the Māori religious system forms the philosophical underpinnings of traditional mātauranga Māori and therefore provides ethical rules about notions of tapu and noa. On this foundation, Māori identity, culture, language and social structures were developed. The perspective that all knowledge is tapu formed the basis of the first iteration of formal Māori education in Aotearoa. The differentiations between tapu and noa also provide the basis for differentiated knowledge types. Traditional Māori knowledge can be categorised into tapu knowledge from the kauae runga, the upper echelons that formed the curriculum of whare wānanga; and knowledge from the kauae raro, the noa sociocultural and environmental knowledge required for successful survival, growth and development.

Many traditional narratives and histories

exemplify the differentiations between types of knowledge, and repeatedly link epistemology to human biology. Lee (2005) posits that Indigenous narratives are not mere myths and legends; they are in fact creative representations of the lives and actions of our ancestors, designed to preserve ancestral knowledge and to reflect worldviews. The Māui narratives are used here to illustrate the knowledge preserved by ancestors, which is accessible by examining beyond the often outrageous surface of the narratives to critically analyse the deeper messages. Māui is an ancestor common throughout the Pacific whose numerous innovations and groundbreaking theory testing continue to be taught within Polynesian cultures.

Lessons from Māui, the weaver of knowledge systems

Māui is remembered as an ancestor whose accomplishments enabled the growth and prosperity of civilisation throughout the Pacific. Māui was able to achieve feats that to our contemporary minds appear to be impossible, and he is therefore known as a demi-god. By utilising a Māori conceptual framework to analyse narratives and histories passed down through generations, it becomes apparent that Māui had in-depth understandings about the physics of the universe, which can be attributed to his education.

According to some histories, Māui was raised separated from his mother and siblings. This enabled his first education to be conducted in an esoteric, tapu space under the tutelage of his supernatural ancestor, Tāne-nui-a-Rangi. This education began when Māui was an infant, and the curriculum he was taught may have been informed by takutaku, kawa and wairuatanga. That Māui was taken by Tāne-nui-a-Rangi to the upper realms to compete this education is symbolic—this is the knowledge of the kauae runga, literally “the upper jawbone”.

Many today cannot definitively identify the curriculum taught to Māui during his time with Tāne-nui-a-Rangi because knowledge from the kauae runga was highly protected by tohunga, passed on in very specific ways, to people identified by tohunga as having the characteristics and eminence to continue to protect it while simultaneously using it to strengthen their hapū and iwi. Kauae runga knowledge was a powerful tool that allowed Māui to perform tasks beyond the capabilities of ordinary humans. He used this knowledge to gain access to spaces, resources and people that would assist him in changing the future of his people, who would become the peoples of the Pacific. While his knowledge of the kauae runga was powerful, his education was not completed until he had inherited kauae raro knowledge from his human elders. This is again a symbolic representation of ancient Māori philosophy, in that highly spiritualised knowledge becomes powerful when translated into practices that benefit human endeavour, and vice versa.

In some histories Māui violently and unceremoniously rips the lower jawbone from his grandmother Murirangawhenua. In others Māui stealthily finds her to tell her he would like it for its magical properties: Murirangawhenua then gifts the lower jawbone she has been holding specifically for him (Alpers & Hanly, 1996). In all Māui narratives it is Murirangawhenua’s lower jawbone that allows Māui to complete many fantastic deeds. Murirangawhenua’s lower jawbone is a personification of knowledge from the kauae raro.

Māui was entrusted with knowledge from Murirangawhenua and used it to navigate into and across the Pacific. Māui has been credited by Māori with fishing up, or more accurately discovering but not populating, Aotearoa New Zealand. The narrative of Māui using his grandmother’s lower jawbone to fish islands out of the vast ocean is one repeated throughout the Pacific, in both hemispheres, and is likely to be a recording of the discovery of the Pacific (Fenton, 1885). Māui’s abilities as a navigator and explorer were not extraordinary for people who, even during his time, must have been spectacular wayfinders. What is exceptional is the nature of his grandmother’s knowledge.

Murirangawhenua was an ancient, in some accounts blind, woman. How did she know the location of islands far to the south that had never felt human footfall? How could she know constellations to follow that were most likely in a different hemisphere to the one in which she lived? Murirangawhenua was able to instruct Māui on aspects of the kauae raro—navigational markers, geography, astronomy, physics and the nature of a vast unexplored ocean—without ever having had made the journey herself. One English translation of her name, “Furthest Boundary of the Land”, gives a potential clue as to how far away from Aotearoa, or even the Pacific, she lived, yet she knew that in lands never seen before, Māui would find resources aplenty to sustain his exploration and to ensure his safe return home. Māui sat at his grandmother’s knee and inherited her jawbone—her vital knowledge of the kauae raro in the form of geography, technology, environment

and science. He then expertly interpreted it based on his initial education in the kauae runga.

According to many Māori histories, Māui's education in many of the aspects of the kauae raro came under the instruction of the māreikura. His knowledge of fire came from his aunt, Mahuika, and Māui then shared this technology throughout the Pacific. He secretly followed his mother, Taranga, to Te Rarohenga to learn sciences, biology, weaving and netmaking. It was also through his observations of his mother that Māui came to understand the complexities of human relationships. Māui's female ancestor Hine-nui-te-pō taught him his final lesson about the nature of human limitations and mortality. She taught Māui that human survival is closely linked to our understanding and protection of environments and ecosystems. The ultimate lesson from Hine-nui-te-pō was that to ignore signs and warnings from nature that are made as clear to us as the incessant twitter of the fantail, and to persistently cause imbalances in our environments and relationships, will ensure our own demise.

Māui is an ancestor who weaves the layers of knowledge from the kauae runga and kauae raro. We remember Māui as a demi-god because he had the ability to balance highly spiritualised knowledge with practical, scientific and technological knowledge in such a way that he appears to be part human, part god. He exemplifies physical, spiritual and intellectual strength, and is also a notorious trickster. Māui operated using all his senses; he was a fully conscious demi-god. Māui was all these things because he had a complete education: he used the philosophical knowledge from the kauae runga to inform his pragmatic and experiential learning in the kauae raro. These layers of knowledge and their complex interfaces supported Māui's many achievements and adventures that fuelled continued knowledge production about the nature of the universe, the world around us, and ourselves, for generations.

The histories that have travelled with the Māui narratives have retained both kauae raro and runga knowledge that is not always immediately obvious to our modern, colonised minds. The examples of Māui constantly pushing the bounds of what is known and knowable, of testing information, of critiquing, and exploring provide us with a template for research that has the potential to connect deeply with diverse knowledges.

Mead (2012) maintains that mātauranga Māori as a pool of knowledge is inclusive and dynamic, as illustrated by the two distinct forms of knowledge discussed here which contribute to the wider context of mātauranga Māori. However, it appears that for many, the differences between the two are confused by modern contexts and by competing epistemologies—including traditional Māori, modern Māori, non-Māori, and religious epistemologies. The systematic degradation of traditional Māori knowledge, which endangered our language and removed our traditional social structures, began by disrupting the kauae runga, the philosophical, cosmological and spiritual mātauranga that underpinned Māori culture and social structure. Disrupting the epistemic understandings of any people will inevitably impact on kauae raro knowledge and the continuation of culturally sustaining practices. The following discussion will analyse these layers of mātauranga Māori in order to highlight the complex ways they interact to form a cohesive epistemology.

A dynamic and multi-faceted epistemology

Presenting mātauranga Māori dimensions of the kauae runga and kauae raro separately is not intended to give the impression that they operate in isolation from each other. A key feature of the kauae runga and kauae raro is that, while the pedagogies and audiences were different, they were interconnected by wairua and by action. In defining differences between Kaupapa Māori theory and mātauranga Māori, Royal (2012) asserts that "mātauranga Māori . . . is used merely to label a body of knowledge. It does not tell us what we might do with this body of knowledge" (p. 33). If knowledge from the kauae runga and knowledge from the kauae raro are viewed as separate entities or, conversely, rolled together as one entity without definitive layers, rather than being viewed as essential parts of a broader context, this conclusion is understandable. However, if we understand that each dimension plays a specific role in this overall body of knowledge, then mātauranga Māori begins to look more like a combination of theory, kauae runga, and practice, kauae raro. In Kaupapa Māori theory, G. Smith (2012) describes the interface between theory and practice as praxis.

Kauae raro can be understood as the knowledges attached to human activity that are accumulated, reflected upon and adjusted as each generation invents new innovations in the times and environments they face (Mead, 2012). In this way knowledge from the kauae raro can be seen as "how" we do things, with the "why" embedded in the kauae runga. For example, the tikanga (which are an aspect of kauae raro) attached to the

construction of a new whare deems the building be constructed by men, then opened at dawn, with the first person entering the building being a puhi. Kawa (an aspect of the kauae runga) provides the rationale attached to the tikanga, which is a complex acknowledgement of the interaction between the physical and the spiritual, and the balance between the sacred roles of both men and women.

According to traditional Māori knowledge, the opening of a building is symbolically linked to childbirth. Women are restricted from the building process because of their sacrosanct role in childbirth. The men's role is to construct; the women's role is to give life to that construction. The opening of a new building must happen at dawn to re-enact the process of passing through the dark birth canal, into the world of light. The ancient takutaku that are recited during the opening rituals tell of the ancestor Tāne-nui-a-Rangi travelling to the furthest reaches of the universe and retrieving all conceivable energy forces to imbue them into the heart of the new building. The only person capable of ensuring the building is infused with those energies gathered by Tāne-nui-a-Rangi, or to give life to the building, is a puhi, the highest-ranking virginal female. This is not to say we believe the building is alive; it is an acknowledgement of the energy in the environment that went into the making of the new structure. The philosophy links the physical practices to deeper spiritual energies of the universe. It is a sign of respect to those elemental forces that have protected, and will continue to protect and give sustenance, and is also an acknowledgement of the reciprocity between humanity and our environment. With the environmental challenges we currently face, our collective futures depend on us remembering these ancient philosophies and practices.

This is a very abridged version of the "why" of one small aspect of human activity, used simply to demonstrate the link between the kauae runga and the kauae raro. It also serves to illustrate how in modern times our "why" is often absent from the "how" because of the degradation of mātauranga Māori. When mātauranga Māori is perceived singularly, absent of layers, devoid of the essential element of analysis that once had its foundations in the kauae runga, the problem is not one of having a label for the body of knowledge with no instructions as to what to do with the knowledge, as Royal (2012) argues. Conversely, it essentially becomes a body of knowledge that *does* tell us what to do, but we are not given reasons as to *why* we are doing it. Our actions become meaningless, and our energies disconnect from the energies of the rest of the universe. Just as G. Smith (2012) argues that action without analysis is dangerous to Kaupapa Māori theory, in understanding mātauranga Māori, separating action in the form of kauae raro from theory and/or analysis in the form of kauae runga is also dangerous.

The differential forms of knowledge were in constant dialogue with one another through the social structure of traditional Māori society. Ariki, tohunga and rangatira were educated through whare wānanga and therefore had access to epistemological and spiritualised understandings of the workings of the universe. Their role was to analyse ancient bodies of knowledge in relation to their current contexts; they interpreted the flow of information, processes and events of the universe (Marsden, 2003), and they discerned what knowledge would be disseminated more widely, and when. This information continually informed the actions and developments of hapū and iwi, ensuring that all action, whether our modern perspectives perceive them to be good or bad, were informed by an analysis of wairua and the wider universe. Members of whānau, hapū and iwi were then responsible for the knowledge and languages distinct to each region, and for developing and passing on linguistic, scientific, socio-ecological and contextual knowledges from the kauae raro.

Conclusion

Social and functional knowledges are more readily accessible and visible, even between social groups, so aspects of the kauae raro tend to be seen and more readily understood in contemporary contexts. Mātauranga Māori, in the broad sense, is made up of two distinct types of knowledge that constantly communicate with each other and form the basis of Māori epistemology and culture. This depth of understanding was the context from which Māori engaged with new cultures and technologies. It was against mātauranga Māori that decisions were weighed as leaders navigated their people into the future. It was mātauranga Māori that also came to be the target for extermination—first by missionaries, then by colonialists and educationalists (Hetaraka, 2020). Like other Indigenous and marginalised peoples, ours is not a narrative of subordinate natives dominated by the West; rather it is a history of complicated and nuanced relationships backed by powerful but often competing epistemologies.

This article advocates for research that utilises Indigenous conceptualisations and epistemologies that challenge Western worldviews that have dominated academic discourse and maintained

power relationships. According to Dei (2011), when Indigenous knowledge and indigeneity are reclaimed, marginalised and colonised peoples gain intellectual agency and become the subjects of their own experiences, histories and stories. Māori ancestral philosophical beliefs provide a space from which Māori can describe and interpret our experiences. Reclaiming mātauranga Māori as a valid epistemological framework for knowledge production has the potential to contribute to the transformation of hegemonic power structures within research and education.

The conceptual framework discussed in this article is inherently Indigenous; it works with and validates Indigenous systems. Deep analysis of our histories and narratives must result in propagating a belief that we are philosophers, theorists, scientists, practitioners—that we are human beings with profound understandings about the workings of the universe. This article has highlighted that engaging deeply with mātauranga Māori and traditional Indigenous knowledges provides a valid approach to research and should be used in research practice to conserve and continually replenish a resource that has long been pillaged by the Western inquiry processes.

Glossary

aho	cord, thread; umbilical cord
aho tapu	sacred cord, thread
Aotearoa	New Zealand
ariki	highest rank in traditional Māori sociopolitical structure
hapū	sub-tribe, smaller tribal grouping
he tauparapara tawhito	an ancient incantation
Hine-nui-te-pō	goddess of death
iwi	larger tribal grouping
ka poupoua	to establish
ka tiritiria	to disseminate, spread
kauae raro	socio-cultural, scientific, pragmatic knowledge; lit. “the lower jawbone”
kauae runga	philosophical, theoretical, esoteric, cosmological, spiritual knowledge; lit. “the upper jawbone”
kaumātua	elders (both male and female)
Kaupapa Māori	Māori research theory
kawa	invariable socio-ecological conventions based on highly spiritualised understandings of the conception of the universeMahuika
Māori	Indigenous peoples of New Zealand
māreikura	knowledge holders who have female energies
mātauranga Māori	Māori knowledge
mātauranga tuku iho	inherited knowledge
Māui	in this context, a significant Māori ancestor
Mā wai e kawea taku kauae ki tāwhiti?	“Who will carry my chin tattoo into the future?” Whakataukī asking who will continue the whakapapa represented by a moko kauae; on an epistemic level it refers to the survival of mātauranga Māori and the advancement of Māori far into the future
moko kauae	chin tattoo worn by Māori women
Murirangawhenua	a grandmother of Māui
noa	unrestricted state of being
puhi	high-ranking virginal female
rangatira	chief in traditional Māori socio-political structure
rapua ngā aho tapu	seek the sacred threads
takutaku	ancient/pre-colonial incantations
Tāne-nui-a-Rangi	in this context, a significant Māori ancestor Also known as Tāne Mahuta
tapu	specific spiritual and physical conditions and restrictions enforced to ensure safety
Taranga	the mother of Māui
tauparapara	an ancient incantation; saying that contains hidden meanings
te ao Māori	Māori world; Māori worldview
Te Rarohenga	the underworld, but not the underworld as understood by non-Māori; Rarohenga is likely to be a location south or below where the storytellers lived
Te Whakaminenga	The Gathering—collective name of a specific group of influential chiefs in the early 1800s
tikanga	variable, context-dependent sociopolitical guidelines

tohunga	experts/scholars of the ancient Māori academy
wairua	spirit
wairuatanga	spirituality
whakapapa	genealogy
whakataukī	proverb
whānau	family grouping; to be born, give birth
whare	house
whare wānanga	ancient Māori academy
whenua	land; placenta

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