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FORUM

Mātauranga Māori, tino rangatiratanga and the future of New Zealand science

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All peoples develop their own academic traditions: philosophies grounded in their experiences over successive generations, and theories for growing knowledge and wisdom. Mātauranga Māori (mātauranga) is the Indigenous knowledge system of these lands. It is dynamic, innovative and generative. The mātauranga continuum is the knowledge accumulated through this system. Government policies and systems have marginalised mātauranga and prioritised Western science, and the past 100 years have seen a slowing in the expansion of the mātauranga continuum. Unless the survival of mātauranga is prioritised, it will cease to flourish. Māori have discussed and written extensively about the ongoing impact of colonisation on mātauranga and tikanga Māori. This paper builds on those discussions, arguing for tino rangatiratanga, including Māori ownership of mātauranga, fulfilment of the government's obligations to Māori, and the reinstitution of mātauranga as a primary knowledge system in Aotearoa. It explains why mātauranga revitalisation is important and outlines some of the steps towards this goal. We are calling for Western academics to support mātauranga revitalisation, with the vision of two functional knowledge systems operating that are unique to New Zealand.

Keywords: Indigenous knowledge; Māori; mātauranga Māori; mātauranga revitalisation; self-determination; tino rangatiratanga

Terminology

In this paper, mātauranga refers to Māori knowledge and all that underpins it, as well as Māori ways of knowing. Mātauranga is in our stories, our environments, our kawa and our tikanga. Mātauranga includes 'language, whakapapa, technology, systems of law and social control, systems of property and value exchange, forms of expression, and much more' (Waitangi Tribunal 2011a, p. 22). It is passed between generations and developed through our arts and technologies. Rāwiri (2012, p. 20) describes it as a 'theoretical and applied values and knowledge creative activity base'. Mātauranga has expanded in response to exploring, theorising and understanding at local whānau, hapū and iwi levels. As an experiential system, it emphasises relationship-based learning using whānau and hapū

understandings in our own environments. It is a complete knowledge system that includes science.

This paper refers to the currently dominant knowledge system as Western epistemology, and its science as Western science. Western science incorporates knowledge from non-Western epistemologies. However, the structures of Western science—such as the specific compartmentalisation into disciplines, the hierarchies organising knowledge within those disciplines, and the types of knowledge that are excluded or included—reflect Western philosophical traditions.

Pūtaiao, which refers both to Western science when taught in te reo Māori and to a subset of mātauranga most recognisable to Western science (Stewart 2007), is not discussed in this paper. Dividing mātauranga into science and non-science,

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or any of the compartments that Western knowledge systems use, is inappropriate. Mātauranga is its own system with its own organisation, and it is this system and organising that we want to prioritise.

Tino rangatiratanga and mātauranga

The rationale for mātauranga revitalisation arises from tino rangatiratanga and the need for mātauranga to flourish if Māori are to survive as Māori. Mātauranga is currently treated as knowledge to be exploited, but not supported. Rauna Kuokkanen (2007, p. 72) states that Western academics typically treat Indigenous knowledge systems as supplementary to real knowledge ‘relevant only to the extent that they have something to offer existing theories and discourses’. This is consistent with the Waitangi Tribunal’s (2011b, p. 571) assertion that ‘scientists work well with kaitiaki whose mātauranga is of clear benefit to their projects, but research based on mātauranga itself is being neglected’. Mātauranga must not be dependent on its value to Western academics, but rather on its value to Māori.

The ongoing privileging of one knowledge system and suppression of the other has left Western epistemology so dominant that it can now seem like the only possible framework. Western epistemology is the key to Western culture, to living and developing as a Western nation. Likewise, mātauranga is the key to Māori living and developing as Māori. ‘Through learning te reo me ōna mātauranga, we retain values and ways of life central to our identity and existence. In doing so, we create our world and assure our survival as a people’ (Rāwiri 2012, p. 1). As mātauranga is developed and practised by whānau and hapū through relationships with local environments, in order for that mātauranga to thrive, whānau and hapū must also be thriving. For the continuum to expand, mātauranga must be practised by the people to whom it is inextricably linked through kawa and tikanga, and within the environment from which it has grown. Māori only have access and decision-making authority over limited parts of our environments. For mātauranga to flourish, the relationships between

whānau, hapū and iwi and their environments must be restored.

The primary mechanism through which these relationships can be restored is tino rangatiratanga. Tino rangatiratanga has never been ceded by Māori (Jackson 2007, p. 63) and is affirmed in Article 2 of the reo Māori text of the Treaty of Waitangi. It includes sovereignty, decision-making power and Māori control over things Māori.

International obligations and mātauranga revitalisation

The United Nations Declaration on the Rights of Indigenous People (2007) applies to ‘existing human rights treaties to the specific situation of Indigenous peoples’ (New Zealand Human Rights Commission 2010, p. 41). It articulates minimum standards for the realisation of Indigenous peoples’ rights, and government obligations to Indigenous peoples, and includes support for self-determination in Article 3. By announcing its support in 2010 (Power 2010, p. 10229), New Zealand has indicated to the international community that it intends to take steps to implement the declaration (with qualifications for established processes).

In Article 31, the declaration expresses minimum Indigenous rights in relation to mātauranga, including the right of Indigenous peoples to ‘maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures’. The government’s obligation in relation to mātauranga is expressed in Article 31(2) as: ‘In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights’. The realisation of these mātauranga standards is interrelated to other human rights standards, including rights to lands and resources, institutions, and the right to establish and control educational systems.

The government’s obligations include taking effective measures to prevent and redress rights violations, providing redress for intellectual property taken without consent, and consulting and cooperating in good faith to obtain the free, prior

and informed consent of Indigenous peoples before implementing measures affecting them. These obligations arise from national and international standards, and in recognition of the impact that successive government policies have had on the state of mātauranga.

Western epistemology and mātauranga

At the time of Pākehā arrival, Māori had been developing mātauranga for at least 600 years in this environment, building on the foundation of our Polynesian ancestors. With the arrival of Pākehā, there were two effective, fully formed knowledge systems that came together. The government, including its education system, research funding, broadcasting, and language policies, has almost exclusively supported Western knowledge. Meanwhile, mātauranga has been ‘systematically dismissed and erased ... as being worthless. Past legislative actions of the government have effectively resulted in a raupatu¹ over mātauranga Māori’ (Waitangi Tribunal 1999, pp. 47–48). Mātauranga has at times been neglected and starved of resources and opportunities for use and development (see for example Mikaere & Hutchings 2012; Hutchings et al. 2011). More commonly it has been actively suppressed, by banning the language that carries mātauranga, by criminalising practitioners, and by removing access to opportunities to practise it (Walker 1990). Imagine the state of Western science in New Zealand if English had been banned from schools and an Act banning Western science had been introduced.

Government funding policies continue to support Western science and marginalise mātauranga. An example of this is the introduction of the Performance-Based Research Fund, based entirely on Western research priorities. Its introduction resulted in Te Wānanga o Raukawa, a tertiary institution dedicated to mātauranga, losing nearly all of its research funding. Another example is the aims of the 2013 Ministry of Science and Innovation’s Vision Mātauranga Draft Investment Plan, which were focused on exploiting mātauranga. They included to: ‘facilitate a transfer of mātauranga from Māori to the scientific community’;

‘support and promote mātauranga research undertaken within a Western science research paradigm and criteria’; and ‘support and promote mātauranga research focused primarily on economic outcomes’. Although this document has now been replaced, the inclusion of these aims in a consultation draft authorised for distribution reveals the colonising mindset and actions of the ministry.

The government’s Vision Mātauranga approach has also restricted innovation across the breadth and depth of the mātauranga continuum. Mātauranga is broader than science. According to Mead, mātauranga ‘is a cultural system of knowledge about everything that is important in the lives of the people’ (Mead 2012, p. 13). However, successful funding applications to the government’s Vision Mātauranga Capability Fund have been overwhelmingly in the area of environmental science (Ministry of Business, Innovation and Employment 2014b,c). This must change if mātauranga is to be revitalised. Although environmental science is important, the future of mātauranga requires the rebuilding of *all* parts that make up the knowledge system.

Steps to mātauranga revitalisation

Effective mātauranga revitalisation requires at least three components: recognition of Māori rights, especially tino rangatiratanga and self-determination; government action to recognise and protect mātauranga; and knowledge relationships that support the realisation of Māori rights.

Tino rangatiratanga and self-determination

Mātauranga belongs to Māori. Rebuilding mātauranga cannot be determined or controlled by government agencies, it is work that only Māori can do. Māori have been leading revitalisation projects for more than 30 years, despite the dominance of Western epistemology and the imbalance in power between the two systems. Examples of revitalisation include Whakatupuranga Rua Mano from which Te Wānanga o Raukawa was established, and the national research group the Society of Māori

Astronomy, Research and Traditions. The chair of the society, Dr Harris, states:

Our role is to collate, preserve and revitalise traditional knowledge and share it with iwi, in the first instance, and the wider public over time. Ultimately, we want New Zealanders to have access to two valuable knowledge systems—the Mātauranga Māori system and the Western system—and to celebrate and use both. (Harris 2013)

Government action to recognise and protect mātauranga

Mātauranga revitalisation is no longer at the government's discretion, it is obligated to take steps to recognise and protect mātauranga. Presently, the government is controlling and limiting mātauranga development through funding priorities. That development must be led by Māori. Despite the Waitangi Tribunal's recommendation that agencies in the science sector 'make mātauranga Māori a strategic priority in its own right' (Waitangi Tribunal 2011b, p. 571), the Vision Mātauranga Capability Fund is a miniscule 0.45 per cent of the Government's Research Investment Funding over the next 10 years (Ministry of Business, Innovation and Employment 2014a, p. 18). This fund only supports collaboration between Māori and non-Māori institutions. Māori must compete with Western institutions to access other science investment funding, and the Draft National Statement of Science Investment 2014 forecasts that little will change for mātauranga Māori support through Vision Mātauranga over the next 10 years. This is insufficient to meet the government's obligations to mātauranga and to Māori.

To fulfil its obligation, the government must agree with Māori on a mātauranga revitalisation strategy. This could include implementing the tribunal's recommendation that science sector agencies make mātauranga a strategic priority, and funding the development of a Māori agenda. That agenda must be developed by Māori. It would probably include prioritising mātauranga revitalisation, and pathways to meet the diverse aspirations of Māori for mātauranga revitalisation. The

government should then support funding the agenda, at an equitable and sufficient level.

The right to mātauranga cannot be separated from other Indigenous rights. The government must take steps to recognise and protect our knowledge and systems that will ensure that mātauranga survives. Our education systems, our reo, our institutions and the restoration of our environments, are indivisible from mātauranga revitalisation. They must all be recognised and protected.

Relationship between mātauranga and Western epistemology

Western knowledge has taken much from Indigenous knowledge systems (Kuokkanen 2007, p. 150). Western academics must consider how they will give back to mātauranga. The relationship between Western epistemologies and mātauranga is currently one of domination, power and control. Those who have benefited most from this unequal relationship should support mātauranga to develop equally and independently.

Although there will be opportunities to work together, that is not the goal of revitalising mātauranga. The goal is not partnership; it is tino rangatiratanga and reinstituting mātauranga as a primary and independent knowledge system. Future relationships will be between equals.

This approach has implications for innovation and generating new knowledge. Exposing all New Zealand academics to mātauranga will reveal the presuppositions underlying Western knowledge systems, and expand their thinking beyond those limits. This could inspire new conceptions of knowledge and approaches to creating knowledge. It will also assist in developing skills that promote conversation and learning from different knowledge systems. Lakota writer, Luther Standing Bear (1978, p. 236) wrote: 'While the white people had much to teach us, we had much to teach them, and what a school could have been established upon that idea.' Teaching multiple knowledge systems gives us the ability to experience the world in different ways, to recognise how those systems affect our perception and

understanding, and to extend our understandings (Kuokkanen 2007; Stewart 2007).

Conclusion

The government has attempted to erase mātauranga, and science has been complicit, benefiting from and at times leading the erasure. Mātauranga is still often treated as simply information rather than a knowledge system, and Māori working with that system treated as informants rather than collaborators, colleagues or experts. This marginalises mātauranga, and it also excludes opportunities to learn from each other. If this continues, we will lose mātauranga. If we focus on revitalising mātauranga, in the same way as we have with te reo Māori, our children will have access to both systems; we will all benefit.

Mātauranga revitalisation must no longer be left to government discretion, nor to Western academic priorities. Māori have the right to be and develop as Māori, and mātauranga is implicit in that development. The government must take urgent action to recognise tino rangatiratanga and protect mātauranga. Mātauranga revitalisation must address government systems, and Māori must be enabled to exercise self-determination and decision-making power. Mātauranga revitalisation must happen in conjunction with the reconnection of Māori with our environments, our systems, our institutions and te reo Māori and tikanga Māori revitalisation. All require the restoration of self-determination and tino rangatiratanga—Māori control over things Māori. This requires support from Western academics. The impetus for mātauranga revitalisation does not arise only if a benefit to Western science can be proven. Tino rangatiratanga and self-determination are in themselves sufficient rationale for revitalisation and this approach has support from the international community.

Effective mātauranga revitalisation must be Māori-led and include:

- recognition of tino rangatiratanga and self-determination;
- an equitably funded and Māori-controlled strategy for mātauranga development;

- restoration of land and resources, education, systems and institutions; and
- prioritising projects that are most likely to support whānau, hapū and iwi to develop and practise mātauranga.

Despite government and Western academic resistance or ambivalence, Māori continue to innovate, with Kōhanga Reo, Kura, Wānanga and whānau-, hapū- and iwi-led projects practising and growing mātauranga. It is time for all that Māori have contributed to be recognised, and for tino rangatiratanga and Māori control over mātauranga to be affirmed and supported by Māori and non-Māori.

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Note

1. Confiscation by force.

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