

Mātauranga Māori and Science

Some thinking out loud

Te Ahukaramū

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Some Preliminaries

- Not a scientist
- **Research interest:** the ‘creative potential’ of mātauranga Māori
- Avoiding **the politics of ethnicity**
- Assess on their own merits, in their own terms and through their contribution to the world

Some Stereotypes about Mātauranga Māori

- **Primitive**, resistant to change, incapable of modernising and sophisticated thought
- **Collectively** owned, individual creativity is suppressed
- **Only** created through a religious/mythological/spiritual paradigm
- Tohunga make **closed, unchallengeable** declarations



A Place to Start

- What do we need to make sense of our world, to make our way?
- What does New Zealand need? What are our nation's knowledge needs?
- How do we create meaningful knowledge?
- How do incentivise creative people, creative moments?



Science

- A particular way of creating knowledge
- Rational, measuring
- Methodological emphasis, refinements
- Empiricism – what the senses tell me
- Verifiable statements, theory making, seeking universal truths, laws
- Skepticism



Mātauranga Māori

- Modern terms use to refer to knowledge:
 - With Polynesian origins
 - Grew and changed according to life here
 - Grew and changed again during initial encounter with European
 - Endangered considerably during colonisation
 - Fragments, portions (Māori language) remain with us, catalysing a new creative period



A Mixture of Knowledge types

- Religious knowledge
- Mythological knowledge
- Scientific knowledge
- Rational knowledge
- Tacit knowledge
- Explicit knowledge (codified particularly through literacy)



Contents of Iwi/Hapū Pools of Knowledge

- Fabrics
- Perfumes
- Cosmetics
- building materials
- cuisine
- art objects
- medicinal plants
- marine engineering
- Stories and storytelling, literature
- Music
- Dance
- Earthworks
- Rituals
- Building design
- clothing



Contents of Iwi/Hapū Pools of Knowledge

Perspectives on:

- knowledge,
- education, teaching and learning
- The nature of the expert
- Health and wellbeing
- Healing
- Environment (e.g. water, soil, seasonal activities)
- Dispute resolution



Creative Potential of Mātauranga Māori

- Positioning restoration and retention within **creativity**
- Potential **contributions** to our nation's life and culture
- Utilising existing fragments and portions to **create new** mātauranga Māori

The Challenge

- To create a methodology of knowledge creation which utilises aspects of mātauranga Māori, responds appropriately to modern needs, sits well with a scientific approach

Some Questions/Opportunities

- The place of **memory and orality** to knowledge creation and application
- **Collective knowledge enterprises** versus the individual creator
- **Indigeneity** – knowledge as a product of a profound connection with environment
- **Heritage** and knowledge creation

Disenchantment

- Progressive abstraction
- Sovereignty and autonomy of the individual creative mind
- Draining the natural world of the numinous
- Disenchanting our world

Mystical Participation

- Humans transforming themselves into elements of the natural world
- The 'gods' speak into human experience and understanding
- Tohunga emerge as the 'mouthpiece' (māngai) of a god
- No concept of knowledge
- Enchantment



A Middle Ground

- Phenomenological participation
- Gregory Cajete, University of New Mexico
- Maurice Merleau-Ponty
- Trying to avoid the excesses of a science which demeans the world

...reflects the human mind's pivotal role as vehicle of the universe's unfolding meaning...The human spirit does not merely prescribe nature's phenomenal order; rather, the spirit of nature brings its *own* order through the human mind when that mind is employing its full complement of faculties – intellectual, volitional, emotional, sensory, imaginative, aesthetic, epiphanic. In such knowledge, the human mind “lives into” the creative activity of nature. Then the world speaks its meaning through human consciousness. Then human language itself can be recognized as rooted in deeper reality, as reflecting the universe's unfolding meaning. Through human intellect, in all its personal individuality, contingency, and struggle, the world's evolving thought-content achieves conscious articulation

Richard Tarnas,

The Passion of the Western Mind

MAURIORA-KI-TE-AO

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