

## *JWP Symposium: Why Give Up the Unknown? And How?*

---

*Carl Mika claims in the symposium's lead essay that we need more myth today. In fact, an "unscientific" attitude can potentially reorient the alienation from the world. For Mika, a philosophical mātauranga Māori incorporates such a way of being in the world. Through it, an unmediated and co-existent relationship with the world can be built up. Some of Mika's co-symposiasts invite Mika to substantiate aspects about this bold claim. Carwyn Jones nudges Mika to discuss the parallels between tikanga Māori—a system that seeks to incorporate Māori law—and the common-law tradition that is adopted in New Zealand today. W. Julian Korab-Karpowicz agrees with Mika that to understand the world through an indifferent "scientific" investigation is to understand the world only partially, while the Māori scientist Ocean Ripeka Mercier illustrates how she seeks to develop a third space in her work that reconciles the fear of the unknown with the propensity to control the world through knowing. Helen Verran invites Mika to think about whether, and how, his understanding of a philosophical mātauranga Māori can help to facilitate the cultivation of a naturalism that is able to generate a cosmopolitics in New Zealand.*

**Keywords:** mātauranga Māori; myth; scientific attitude; tikanga Māori; religion; Ancient Greece; fear, dismay; narrative myth; cosmopolitics

### **No—We Do Need More Myth: A Response to the Science/Mātauranga Māori Fear**

CARL MIKA

University of Canterbury, Aotearoa/New Zealand (carl.mika@canterbury.ac.nz)

If there is something that many academics fear, it is the a-rational, including its close cousin, spiritual thought. Much has been written about postcolonial fear generally, and I won't revisit that scholarship here, but the recent pejorative use of "myth" in discussions about mātauranga Māori (Māori knowledge) suggests an emotional, even scared, response to a stimulus. Dawkins' (2021) recent letter to the Royal Society of New Zealand, in which he rejects the idea that mātauranga Māori should be incorporated into NZ science curricula, calls for the protection of western science from any association with Māori myth. He is clear that there is only one brand of "science" and that adding any qualifier, such as "western," is wrong.

In this article, the version of science he is so protective of will be the one I refer to throughout the article: workable, rational, and "evidence-based not tradition-based" (his words). I am aware of other types of science, but it is the type he refers to which I will work with in this paper. Alongside the problem of linguistic and conceptual equivalence, though, this debate is about emotion and a subsequent position of any author. It seems to be as basic as that. We all have stimuli to which we react, and an "irrational" story is the one that lights the fire under the academic who cleaves tightly to rationality (incidentally, I tend to react to the assertion that mātauranga Māori is reducible to the term and concept "knowledge," see, e.g., Mika 2012). But in this article, I want to assure those diehard rationalists that we need myth now more than ever and it is fine to embrace it. I note here the fact that science/rationality only relates to a small part of human existence. I'm certain those academics will be aware of the limitations of science and rationality and have very little against that proposition. What is called for in these bizarrely fractured times,

though, is something quite different that can go some way to mending that fracture instead of opening it up further. Here, so-called “myth” steps in.

At this point, I want to deal with the parameters of this complex topic. I will not discuss whether mātauranga Māori is “myth” or not because I am fine with the term in a certain way. I take “myth” to be reaffirming of our philosophically sophisticated understanding of interrelationship. The terminology is not disparaging (even if it is intended to be) if viewed in terms of a particular understanding of the interconnection between all things in the world. In other words, underpinning the apparent “indigenous bollocks” (Dawkins 2021: n.p.) lies a field of thought that works in the opposite direction to science/rationality but is no less advanced for that. Also, I will not visit whether science does all those things that Dawkins (2021: n.p.) avers: that it apparently “is evidence-based not tradition-based; [...] incorporates safeguards such as peer review, repeated experimental testing of hypotheses, double-blind trials, instruments to supplement and validate fallible senses etc.” (Dawkins, 2021: np). While those are all undoubtedly controversial and up for debate, they are a distraction from the more foundational aspects of the discussion, which is where I want to focus.

Although tendencies and positions of the individual are important aspects to consider in any debate, the most effective way to deal with this current debate is philosophically, not through the too readily available tools of science itself. In that light, I prefer Stewart and Tedoldi’s approach, which advocates “the opportunity for good philosophical discussion about categories and definitions” (Stewart and Tedoldi 2021). We have to step outside of science, which cannot get to the root of its being by its own means, for some resolution. Even here, though, “philosophy” may not be the correct term because it assumes the sovereignty of the human (I come to human-centrism later). Furthermore, while analytic philosophy can iron out inconsistency in terms and arguments, it often does not assume that the self and the external world are one. Thus, the type of philosophy called for here is both critical and highly speculative.

This paper, directed towards both Māori and non-Māori scholars, centers on two main facets: the incompatibility of science and mātauranga Māori, and the emotional quagmire inhabited by those who reject “myth.”

## 1 The Emergence of Two Forms of Mātauranga Māori

Let me state upfront that I believe Dawkins is right when he asserts that Māori “ways of knowing” (also known as mātauranga Māori) are not science. Mātauranga Māori is only incidentally “knowledge,” too, if “knowledge” is taken to ultimately be a human disposition. Science is not mātauranga Māori, either. There is not, or perhaps *should* not be, anything remotely scientific about mātauranga Māori. In fact, I have argued previously that mātauranga Māori prefers the inaccessibility of things (Mika 2017) to the extent that they are fundamentally unknowable. If there is a systematic approach of any sort to mātauranga Māori, then I argue it lies in speculating on that very fact—the tendency of the world to escape our full understanding.

However, I have recently revisited my categories and reconsidered whether it is in fact the broad rubric of mātauranga Māori I want to discuss here. It seems that many of my Māori colleagues consider mātauranga Māori as if it were rationality/science, and perhaps there is nothing irksome about that because mātauranga Māori would now merely be a linguistic translation of science. The proponents of this version of mātauranga Māori provide concrete examples, largely as if the theoretical properties of those things to which those examples relate have been sorted out; however, the ground of thought (philosophy) that is meant to connect with those examples is most often only mentioned very quickly. This would mean that we are comparing different species, and so my want is to migrate towards a field of thought that allows me to compare like with like. By that, I mean it has become clear that those who want to label science “mātauranga Māori”

based on empirical examples can. But I cannot engage with that discussion because, as a Māori who works in philosophy and metaphysics more specifically, I am inclined to amplify the Māori worldview component of that more ontic/concrete approach to mātauranga Māori. In other words, where most other proponents of the mātauranga Māori/science crossover are arguing for some equivalence in character and property between them—mainly through arguments of know-how—my analysis of their (mātauranga Māori’s and science’s) deeper assumptions does not lead me to the same conclusion at all.

For this reason, I will address two versions of mātauranga Māori that I see emerging: one I shall call *scientific* mātauranga Māori, which appears to take the view that mātauranga Māori can be equated with science mainly through workable examples based on assertions about method or inquiry, or that there are evident workable aspects of science within mātauranga Māori; the other I refer to as *philosophical* mātauranga Māori, which is the version I mainly address in this article and which understands that all things in the world are one and are perceived as such on that basis.

## 2 The Basis of that Approach

The Māori worldview is holistic (Mika and Southey 2016), taking the most fundamental view that all things in the world are interconnected, with the human inseparable from all else. According to some scholarship, the human *is* the non-human (Yates 2018). Flowing from that view is that all things in the world have animacy, not just humans and other animals. But it is that more basic position—that all things in the world are one—which is the most important for Indigenous peoples generally and appears in Indigenous scholarship frequently.

It is against this fundamental premise, I argue, that all subsequent assertions must be measured. In my view, scientific mātauranga Māori would have to leave behind its commitment to science to align itself with that holistic origin, and so it tends instead to advance arguments which emphasize the *method* or workability of mātauranga Māori. These are know-how versions of knowledge, although they may have at their back some holistic explanation. They tend to highlight mātauranga Māori as a way or method involving how the human deals with (mostly) the natural environment. There may be some valid argument there for the notion and act of “inquiry” being the most basic unit of science—which, scientific mātauranga Māori proponents argue, mātauranga Māori shares. However, as I have noted elsewhere, even “inquiry” is a fraught notion (Mika 2021) from a Māori perspective, because it assumes that the human being alone is responsible for the act. Science would likely disregard any proposition that the non-human “inquires” in its own way and is moreover responsible for the inquiry that a human undertakes. Therefore, from the philosophical mātauranga Māori perspective, even those activities that seem to originate from the human mind and extend outwards—method, observation, and inquiry in the scientific mātauranga Māori camp—are activities populated with the All and are hence not scientific. My argument there is based on the idea that the unspoken, more-than-human *context* of traditional human activities these writers recount so pragmatically is just as important as the activity described.<sup>1</sup>

I prefer instead to look at the other version of mātauranga Māori which addresses philosophical areas more deeply. Philosophical mātauranga Māori is less pragmatic, looking instead to more abstract first principles and leaving discussions about use and practicality for later. The reason that those pragmatic discussions are deferred with philosophical mātauranga Māori is that there are certain theoretical issues to be cleared up before practicalities such as method, observation, and inquiry can be discussed. These involve the following: what the nature of interconnection between things in the world is; what the nature of the relationship of the human self with the apparently external world is; what role language and other forms of expression play in those relationships; how colonizing first principles take form,<sup>2</sup> and so on. These are abstract desiderata, only drawing incidentally, if ever, on the same things as scientific mātauranga Māori.

Most proponents of philosophical mātauranga Māori, therefore, would be skeptical of the rush to define mātauranga Māori as “science” before its theoretical foundations have been fully established.

### 3 Why is Philosophical Matauranga Māori Not at All Scientific or Rational?

The term “philosophical” is the best of a bad bunch. It can, however, incorporate some foundational principles within its inquiry into the nature of reality. Traditional Māori would likely never have distinguished between metaphysics, phenomenology, ontology, and existentialism, and I likewise will think of them as incorporated with each other in what follows.

It is in its radical interconnection that philosophical mātauranga Māori differs so markedly from science. The term “whakapapa,” for instance, can mean genealogy at a very superficial level but it also can refer to the immersion of things in the world within a foundational ground that is yet non-foundational (Mika 2017; Yates 2018). In that light, our perception of the world is contingent on the withholding of something’s full qualities. Things become blurrier with philosophical mātauranga Māori, not clearer. Something will be highlighted by a realm of being that exists for language, but then other things become the main focus, and the original theme of discussion conveys the hint of those other entities. And time and space may be understood in terms of what is “now” (Kidman 2021), not of the present and future. All these characteristics can be interpreted from the idea that all things in the world are one.

This drive to confer “oneness” on things in the world, and to then discuss them as if they are indeed one, makes philosophical mātauranga Māori troublesome for many. For science and rationality advocates especially, philosophical mātauranga Māori must surely run counter to what they hold dear to in their work, which is to clarify and single out phenomena. While we can engage with individual objects, in fact they are not “individual” as such. Philosophical mātauranga Māori thus privileges the collective over the individual, although it can be explained in relation to individual perception.

Perhaps the most confounding matter for those who propose the equivalence between science and mātauranga Māori generally is the radically different position of the inquiring human self in relation to an object. Science can only occur if there is a fundamental freedom involved—of the self from the object(s) being inquired into. In philosophical mātauranga Māori, the exact opposite holds true, where the self is immediately constituted by the object and vice versa. We are related to the so-called external world and its objects, not distinct from them. We can therefore never gain the distance from them that science calls for. However, this is not a negative thing. Many Māori will see it as a privilege to be able to claim a lack of distinction between self and other. Of course, again, those proponents of the science=mātauranga Māori argument can argue that the self-object amalgamation occurs in their version of mātauranga Māori; however, I reiterate that the intricacies of that unity are not obvious in the discussions and in any case need to be fleshed out further in the scientific mātauranga Māori camp.

### 4 Don’t Be Miffed at Myth

Having taken the position that mātauranga Māori and science bear no resemblance to each other at an ontological level, I now turn to the benefits that philosophical mātauranga Māori can bring. At this point I return here to the introduction, where I observed that an almost galvanizing reaction from academic colleagues can be observed when science and mātauranga Māori, or any other Indigenous knowledge for that matter, are mentioned in the same breath. An existential aspect of

philosophical mātauranga Māori arises here, for we are now dealing with a collective anxiety—a facet of existence that many Māori are only too familiar with.

But to more lofty ambitions first: philosophical mātauranga Māori (and its like) can reorient currently alienating existence towards an immediate, co-existent relationship with the world. This is probably its strongest attribute. It possesses the language to do this, unlike science or rationality, which can only talk about the entities that it highlights for observation or discussion. Currently, we are facing imminent extinction along with the natural environment, and while science brings huge benefits—as Dawkins (2021) identifies, it “works: [it] lands spacecraft on comets, develops vaccines against plagues, predicts eclipses to the nearest second, reconstructs the lives of extinct species such as the tragically destroyed Moas”<sup>3</sup>—it cannot look broadly and deeply enough at the origin of that existential threat, which is the idea of the distinct, godlike human self. It cannot repair that problem because it is founded on it. Where rational orderings of things in the world encourage a divorce, though, philosophical mātauranga Māori and other Indigenous philosophical thought can introduce a reconciliation.

Relatedly, philosophical mātauranga Māori can reintroduce the idea that the human is only very weakly “knowing.” This humility is a mainstay of Māori worldviews generally and is a characteristic that science does not engage with. With the fading into the background of “knowledge,” one becomes a co-creative inhabitant, only able to regard the outer world in terms of its overall mystery. Inevitably, leading on from that is the possibility that the human self is in a constant state of vulnerability. At the same time, other modes of being are opened, too, such as a renewed engagement with common ways of talking in which we can *disrupt* any sort of language that has become too banal. Dealing with and inquiring into objects, the selfhood that philosophical mātauranga Māori advocates is de-emphasized. The cognitive, objectifying dominance of science and rationality is hence moderated.

These sorts of reconciliations with the natural environment are crucial for the survival of our planet. Philosophical mātauranga Māori can instigate a renewed, fresh language to describe our reliance on the (apparently) external world; it can reinforce that reliance through its critique of modernity, its philosophy of language and of the human self and the environment, and its deep skepticism of the dominant human self. For those reasons alone, whether philosophical mātauranga Māori is included as part of a science classroom (and see Dawkins [2021] again for commentary on this) or not is not really the issue, although I agree with Dawkins that it is probably better off being kept apart, but due to the limits of science’s ability to delve and illuminate in the way that philosophical mātauranga Māori does. Indeed, a full and abiding philosophical mātauranga Māori would likely call for the dismantling of current institutions, as it is inimical to what many of us (Māori and Pakeha alike) have been colonized into believing is normal.

## 5 Conclusion and Postscript: Discomfort as Ceremony

Really, it is as if the rationalist cannot relax in these situations. Do they fear the smoothing of a dying pillow, to repurpose the words of Dr. Isaac Featherston? By that metaphor, I don’t mean that rationality is necessarily on its way out but that the *scientist* may feel that s/he/they are threatened or at least that their discipline is under attack. Philosophical mātauranga Māori proponents could simply say in response: you do not have to accept the local stories that are the surface layers of myth, but you should take note of the depth of thought and its language that those stories illustrate. Keep it out of the classroom if you prefer—this is probably the best course of action for the philosophical mātauranga Māori proponent, too—but, urgently, find some means of teaching children and yourselves how to repair your relationship with the external world. In Britain, the source of that thinking could indeed be Celtic/Anglo-Saxon, which Dawkins mentions and thus indirectly acknowledges is there for drawing on. Relatedly, when philosophical

mātauranga Māori is given full scope, then Māori ourselves can also find our ways to further embrace that same relationship, which is not through science.

There is another, more existentially related issue here, and it is probably the most overlooked by both current mātauranga Māori proponents and scientists. The most acute sign of vulnerability of the rational academic, from the philosophical mātauranga Māori perspective, is the defensiveness that lurks beneath our ideas. To repeat the introduction: we all have it; it is simply part and parcel of defending a position. However, philosophical mātauranga Māori is more open about it than science or rationality would allow. Defensiveness, then, is a close cousin of myth. The defensive academic and the culture that prefers myth abandon the rational or scientific in favor of a form of expression that the rational or scientific simply cannot imitate.

Recently, then, Griffin identified that “while the academics [dissenters to the idea that mātauranga Māori and science are equal] see themselves as defenders of science, they should have taken a closer look at the society’s code of conduct, which requires members to be ‘respectful to other people, including acting with cultural intelligence and intellectual rigor (pūkenga), and respecting diverse values and communities (manaakitanga). A rational argument can still cause offence” (Griffin 2021: n.p.) While respect is absolutely necessary, philosophical mātauranga Māori would simply say those academics are acting on their impulses. They are really, when all is said and done, reacting on the basis of their feelings, to exactly the same degree as we see in our own people when we perform our traditional ceremonies. To our way of thinking, they are in a much more authentic, pre-rational garb when they are emotionally alive. They have emotion at their back, which is good to see and may signal that they are on their way to acknowledging their emotional fragility, which myth is so wonderful at acknowledging.<sup>4</sup>

#### *Postscript*

I have recently revisited my categories and have made some further distinctions. There appears to be an occasional confusion in categories when mātauranga Māori is being discussed in close proximity to, or indeed in direct translation of, another specific Māori phrase: te ao Māori (Māori worldview). Often, Māori writers and policy documents will mention both as if they are interchangeable. I have undoubtedly contributed to that confusion myself in the past. Here I return to my earlier comments about mātauranga Māori simply being a translation of “science,” in much the same straightforward way that “whare” is taken to mean “house.” If mātauranga Māori is to be thought of as scientific in any measure, then my argument above implies that it does not have any particular basis in te ao Māori due to it now being “science.” Thus, on reflection, “scientific mātauranga Māori” is a redundancy, and my category of “philosophical mātauranga Māori” is more aptly named “te ao Māori.”

This is a bold statement to make, and it evolves partly from a counter-colonial need to develop our platform for thinking before we dive into any equivalences. To develop a method for explaining phenomena in the world—such as how a taniwha (supernatural creature) protects the environment, for instance—we need to create a philosophical foundation allowing for the idea that thought, perception, and ultimately knowledge are not human (science would assert they are) but have their origin in the non-human, within mauri (life-force), wairua (spirit), kore (nothingness), and so on. The eyes we use to look at the world are not entirely our own. If this is true, the term “mātauranga Māori” may *then* be reintroduced to describe this completely unscientific method, as it would have evolved from an awareness of the origins of science and te ao Māori respectively.

- 
- 1 If a mātauranga Māori proponent is unsure which camp they fall within (philosophical or scientific), then they may wish to take the mischievous, perverse, but entirely valid step of considering a change in emphasis. They should ask themselves how they would react if a scientist declared what they do is “mātauranga Māori” or science itself is mātauranga Māori. If said proponent reacts vigorously to that scenario, then they likely fall within the philosophical mātauranga Māori camp.
  - 2 Colonizing first principles are those that have been inculcated into Māori thought through various means. They include, among other things, the assumption that the human self is fundamentally separate from the non-human world.
  - 3 I take Dawkins’ reference (extinct species) here to be a tacit jibe at precolonial Māori who, according to many, rendered the moa (large flightless bird) extinct. The beauty of philosophical mātauranga Māori is that it does not pretend to enact specific traditional ways that were necessary for survival (note, *not* for capitalist want or enjoyment that is not particularly concerned with the planet’s survival) in ancient times. Rather, it theorizes on a notion of global balance. Disturbingly, the human being’s continued existence may not eventually figure in that more holistic picture.
  - 4 While Griffin thought that “Richard Dawkins’ foray into the NZ science curriculum isn’t helpful,” on the contrary I found it extremely useful as it injected the phenomenon of overt emotion into the debate.

## Response to Carl Mika “No—We Do Need More Myth: A Response to the Science/Mātauranga Māori Fear”

CARYWYN JONES

Te Wānanga o Raukawa, Aotearoa/New Zealand (carwyn.jones@vuw.ac.nz)

Carl Mika’s paper identifies some interesting conceptual dynamics within the ongoing discussions related to mātauranga Māori and its relationship with western science. Mika helpfully explores some aspects of the philosophical foundations of mātauranga Māori and suggests that, while those foundations may not be compatible with those of western science, the holistic approach grounded in te ao Māori (the Māori world) might offer ways of reorienting and repairing relationships with the external world.

While broadly agreeing with Mika’s conceptualization of mātauranga Māori, I think that there is a need to challenge some of the framing of the current science/mātauranga debate. I also suggest that there may be parallels to be drawn with issues currently being grappled with in the field of law in Aotearoa.

### 1 What is Mātauranga Māori?

Mātauranga Māori is often translated as Māori knowledge, or, as Mika points out, sometimes used as a Māori word to mean “science.” However, neither of those translations is satisfactory. Mātauranga Māori is better understood as Māori knowledge and knowledge systems, or Māori ways of knowing that are grounded in te ao Māori. Mika’s articulation of “scientific mātauranga Māori” and “philosophical mātauranga Māori” helps to provide a fuller explanation of the nature of mātauranga Māori.

Te Ahukaramu Charles Royal, a Māori researcher and teacher of Indigenous knowledge, has described mātauranga Māori as follows:

The phrase mātauranga Māori does not refer explicitly to any particular kind of methodology or a set of explicit actions and goals, as is the case with kaupapa Māori theory. Rather, mātauranga Māori is a modern phrase used to refer to a body or a continuum of knowledge with Polynesian origins, which survives to the present day albeit in fragmentary form. Mātauranga Māori labels this body of knowledge. (Royal 2012: 33)

Within te ao Māori, mātauranga Māori is understood to derive from the acquisition of the three baskets of knowledge. These baskets of knowledge are said to have been acquired by either the deity Tāne or, in some traditions, the demi-god Tāwhaki. Whatarangi Winiata has noted that the acquisition of the baskets of knowledge is also inherently linked to the establishment of whare wānanga (houses of higher learning), as part of the explanation of “knowledge acquisition, storage and transmission” (Winiata and Luke 2021: 145). Winiata’s description of whare wānanga gives some indication of the nature of some aspects of mātauranga Māori:

Whare wānanga were exceedingly tapu institutions; they were responsible for teaching such esoteric knowledge as the relationships between gods and humans. In addition to this content, whare wānanga were concerned with historical traditions, tikanga [Māori protocols and practices] and other material important for the maintenance of Māori society. (Winiata and Luke 2021: 147)

Mika identifies two different ways in which mātauranga Māori is discussed and suggests that these can be thought of as “scientific mātauranga Māori” (or perhaps simply, “mātauranga Māori”) and “philosophical mātauranga Māori” (or “te ao Māori”). I agree that one can identify these two different strands within the discourse. I am not so sure that these represent two fundamentally different conceptualizations of mātauranga Māori. Mika suggests that to ascribe scientific elements to mātauranga Māori takes one away from the philosophical basis of mātauranga Māori, grounded as it is in te ao Māori. We cannot, he suggests, equate mātauranga with science based on workable examples of method and inquiry because, despite some superficial similarities, the fundamentally different worldviews at play mean that mātauranga Māori and science are driving at completely different objectives and proceeding on different sets of assumptions.

But science does not encompass all western knowledge and ways of knowing. Similarly, mātauranga Māori may draw on a wide range of different methods and modes of inquiry. The close observation of the natural world that contributes to mātauranga Māori may have elements that are consistent with, or similar to, a western scientific approach. It may be that the distinct drivers and assumptions that underpin mātauranga Māori mean that it does not make sense to equate mātauranga Māori with western science. But it does not necessarily follow that these “scientific” aspects of mātauranga Māori are incompatible with te ao Māori as a Māori philosophical framework. That is to say, I am not sure that scientific mātauranga Māori ought to be understood as separate from te ao Māori. However, this does not take away from Mika’s point that identifying comparable or similar methods and know-how within western science and mātauranga Māori does not necessarily mean that these are equivalent knowledge systems with equivalent bodies of knowledge.

I agree with the fundamental premise that systems of Māori knowledge are predicated on fundamentally different ways of understanding the world than are western knowledge systems. I think there does need to be some thought given as to the choice of language. As always, terminology here is not merely descriptive but frames subjective choices. It makes sense to speak of western science and mātauranga Māori. Neither knowledge system is neutral and both traditions developed from the context of their own particular social, cultural, and historical circumstances. To refer simply to “science,” assuming that its western origins are implied, does not acknowledge the social, cultural, and historical context in which it developed. Such specification is necessary because it may well be possible to speak of “Māori science” and “mātauranga Pākehā” (Marsden 2003a). Māori science might capture some of the “know-how” and methods deployed in the development of mātauranga Māori. “Mātauranga Pākehā” might encompass the bodies of knowledge and the various knowledge systems, including western science, that inform Pākehā understandings of the world.

Mika is comfortable with the terminology of “myth.” He explains why, despite its intended use as a pejorative term in this context, it need not be, in fact, *should* not be understood as disparaging. Similarly, Mika appears comfortable with Dawkins’ reference to the extinction of the moa (Dawkins [2021]), despite recognizing Dawkins’ intention was to make “a tacit jibe” at Māori. While I do not disagree with the conceptual claims Mika makes here, I cannot help but think that we need to find different terminology in order to ensure that we do not accept terms which have a long history of being used to undermine and belittle Indigenous knowledge systems. This may reflect my own emotional response and perhaps my own defensiveness.

The researchers who have may well be acting on their impulses, but, I would suggest, that bears no relation to mātauranga Māori. Mātauranga Māori is grounded in experience and principle and reason. It incorporates knowledge and knowledge systems, built up and developed over generations. It is no more or less impulsive than western science. It would be generous to think that those researchers are “on their way to acknowledging their emotional fragility” (Mika 2022a: 106) They may be displaying their emotional fragility for others to see, but I am yet to see any sign of self-reflection. Both western science and mātauranga Māori could help with this self-reflection,

but it would require a shift away from the defensive positioning that seems prevalent. I would dispute the suggestion that defensiveness is “a close cousin of myth.” Both may reflect a shift away from the rational ideal of western science, but while myth can open up different ways of talking about and understanding the world, defensiveness only closes off possibilities for different ways of knowing.

It may be that science and mātauranga are entirely distinct and cannot be easily addressed together in a class/programme that is focused on science. Though even that may be open to debate. But, in any case, it is not necessarily problematic that mātauranga Māori is not taught *as* science. Instead, the problem is that western science is privileged over, and at the expense of, mātauranga Māori. And so, the debate is not really about whether mātauranga Māori is science or the equivalent of science; it is about the privileging of a western system of knowledge over an Indigenous system of knowledge. We ought to be careful not to mistake the debate for a good-faith discussion about the conceptual basis of mātauranga Māori and/or science. Regrettably, countering this colonial orientation to knowledge and knowledge systems often requires a deliberate rejection of terms that have been used to undermine the validity of Indigenous knowledge and knowledge systems, even when such terms may be able to be defined in more helpful ways.

## 2 Parallels with the Law/Tikanga Discussion

Mika’s argument suggests some interesting parallels with legal philosophy and particularly the inter-relationship between tikanga Māori (a system which may be understood to incorporate Māori law) and the New Zealand state legal system, grounded as it is in the common law tradition. There has been much debate within the discipline of law as to the nature of tikanga Māori and whether it can or ought to be described as law. As with mātauranga Māori, tikanga Māori derives from te ao Māori. That is a very different philosophical foundation than that which gave rise to the common law tradition.

Perhaps law is more readily recognized as being a social construction than the natural sciences. Legal scholars are generally comfortable with the fact that there are different legal traditions. Even within a tradition such as the common law tradition, different societies will develop different legal systems. For example, New Zealand, Australia, Canada, and the USA all have different legal systems, even though they all have their roots in the common law tradition. What is more, those different legal systems create different substantive laws as well as distinctive processes for creating, debating, contesting, and applying those laws. As I say, the existence of different types of law and legal systems is perhaps more widely accepted than the possibility of different types of science and systems of scientific knowledge because law itself is perceived to be a social rather than natural construct. Although it certainly was not always the case, there is now broad recognition that all societies create systems of law to manage social relations and minimize social harm. The New Zealand courts are now comfortable with understanding tikanga Māori as law (or at least as incorporating a system of law even if the broad concepts of tikanga and law are not exactly co-extensive).

Yet there remain some issues in the discussion about tikanga and law that are similar to those engaged in the discussion about mātauranga and science. Even if tikanga incorporates a system of law, is it sensible, or even possible, to deploy tikanga within a common law system that has such fundamentally different sets of drivers, assumptions, and processes? The common law prioritizes the liberty and autonomy of the individual and emphasizes the protection of private property rights. This is in stark contrast to tikanga Māori, which prioritizes the collective and, in fact, conceptualizes the individual as part of the collective with rights and obligations defined in relation to the collective. The interconnected nature of te ao Māori also means that property rights

are nonsensical, at least as they denote ownership. Land and the natural environment are part of a broader kinship network; one would not own one's kin.

Distance and separateness are features of common law processes. In a court hearing, evidence and arguments are presented to an independent judge by advocates representing opposing sides in an adversarial contest. The disinterested judge determines who will win and who will lose, and their decision carries the force of law by virtue of the office they hold. All of this would be jarring in te ao Māori. Connections and relationships are central in te ao Māori, and the idea that the decision-maker would be someone who was *not* connected to the parties would make little sense. Tikanga, like all healthy legal systems, includes mechanisms for the interpretation and application of law to be challenged and contested, but the common law's adversarial process is not well-suited to consensus-based discussions in the form of wānanga. The common law also has particular and defined ideas about standing and who has the right to participate in legal proceedings, whereas the interconnected and holistic foundations of te ao Māori mean that tikanga conceptualizes those with a connection or an interest in an issue quite differently.

Do those differences mean that the effective recognition of tikanga Māori is incompatible with the common law? Perhaps. But it does not mean that tikanga Māori is incompatible with the concept of *law*. Some people would argue that it is unnecessary and perhaps unhelpful to describe tikanga Māori as law or to identify the legal dimensions of tikanga Māori. The argument is that tikanga Māori is best described as tikanga Māori. It does not need to be slotted into the terminology of law. And seeking to identify the legal dimensions of tikanga Māori so that it can be addressed as law is to engage in the type of separating out that is inimical to te ao Māori. As I understand it, this reasoning bears some similarities to the argument advanced by Mika. That is, by applying western modes of thinking to a system which has its philosophical foundations in te ao Māori, the elements of that system that are most consistent with those western modes of thinking come to define the Māori system (of knowledge or of law, as the case may be) in ways that are inconsistent with te ao Māori.

The New Zealand Council for Legal Education has resolved that the core courses taught in the LLB degree will be required to have a te ao Māori or tikanga component. There is also a major project currently underway which aims to encourage New Zealand law schools to take further steps to decolonize and indigenize. The question as to whether tikanga should or even could be taught in law schools remains live. Interestingly, most of the concerns and cautions about this have come from Māori. There has been some defensiveness expressed by legal academics, along similar lines to those who object to incorporating mātauranga Māori into the science curriculum—that is, ostensibly expressing support and respect for tikanga Māori, but just not as the proper subject of research, learning, and teaching for a law school. But, in general, there is a great deal of enthusiasm for this move, though some anxiety about how it will be implemented. Māori, including Māori legal academics, have tended to be more cautious. There is concern that law schools do not properly comprehend the nature of the differences between the philosophical underpinnings of tikanga Māori and those of the common law. Those philosophical differences mean that the relevant tikanga dimensions cannot simply be dropped into the LLB curriculum. This cannot be viewed as simply the addition of another module to existing courses. Instead, there would need to be a critical review of pedagogy to ensure that the substantive tikanga content would be delivered in ways which are consistent with its grounding in te ao Māori.

Tikanga Māori does not just contain a different set of substantive rules than New Zealand's common law-based state legal system, but it represents a legal system that has developed from a different worldview and different historical circumstances. The mechanisms for creating, changing, and interpreting and applying tikanga Māori are different to those that have developed in the common law tradition.

As one small example, tikanga Māori does not apply precedent in the same way as the common law. The common law operates on a fundamental principle of *stare decisis*. This is the

principle that the courts will adhere to precedent. Essentially, if a case has facts which are the same in material respects to a previous case, the court must follow the application of the legal rule laid down in the earlier case. The common law has, therefore, developed a whole set of processes and methods to apply the principle of *stare decisis*. In common law systems, there exists a hierarchy of courts whereby decisions of the courts at the top of the hierarchy create binding precedent for those lower down. For example, in the New Zealand hierarchy of courts, decisions of the Court of Appeal create precedent which binds the High Court but does not bind the Supreme Court, which sits at the apex of the hierarchy. Legal argument is often directed at demonstrating the facts of a case are materially the same as a previous case with a favorable precedent or are able to be distinguished from a case with an unfavorable application of a legal rule.

While past practice is relevant to the application of tikanga Māori, the philosophical foundations of tikanga mean that this operates in quite a different way to the principle of *stare decisis* in the common law tradition. At a very basic level, the emphasis on relationships and interconnection within te ao Māori leads to a much broader understanding of what might be understood to be relevant context for determining the correct application of tikanga than would be the case under common law. Within te ao Māori, it is relationships above all else that determine rights and obligations. The holistic nature of te ao Māori requires more flexibility, and therefore values become much more of a key driver in the application of tikanga than fixed legal rules. The common law itself has a degree of flexibility built into it, allowing it to adapt to changing socio-cultural values. However, this is a different kind of flexibility than can be seen in tikanga Māori, which is driven by identifying values demonstrated by ancestors and determining the best way to give expression to those values (Jones 2014). Mead has noted the importance of recognizing that the practice of tikanga is not always a perfect expression of the underlying values (Mead 2003). The approach may, therefore, be described as one based on virtue ethics, rather than centered around rules. Precedent, while an important reference point, is therefore only part of the framework for interpreting and applying tikanga Māori within te ao Māori. The philosophical mismatch explains why it is not possible, nor, perhaps, desirable to deploy tikanga Māori content within forms of legal reasoning that derive from the common law tradition. It may be possible to identify particular rules or practices of tikanga Māori that look like rules or practices within the common law, but they cannot be used as strict rules of precedent without disconnecting them from the philosophical foundations of te ao Māori.

There may, therefore, be a good argument to refrain from including tikanga Māori in a program that is only concerned with the common law tradition. But, while law schools often focus on preparing students for a professional career within a specific legal system, they also aim, in both research and teaching, to facilitate an understanding of the broader discipline of law. It may be that tikanga Māori may well fit under the umbrella of law. There would still be complicating factors. Some might argue that any kind of disciplinary division is contrary to the holistic nature of te ao Māori. And yet, *tohunga* and *matenga* (those who hold special knowledge and expertise in te ao Māori) have always had specialist fields of expertise. Their expertise may emphasize relationships within their field and require an awareness of relationships between fields in a different way to the disciplinary divisions of a western university, but it is still possible to conceptualize particular fields of knowledge within the framework of *mātauranga Māori*. The issues at play in the *mātauranga*/science debate are obviously different in important ways from the issues in the tikanga/law discussion. Nevertheless, I wonder whether some useful parallels between the two sets of conversations could be teased out in ways that might helpfully inform both discussions.

## Philosophy as Engagement with the World. Why Do We Need to Understand Myth for Our Philosophical Revival? A Response to Carl Mika

W. JULIAN KORAB-KARPOWICZ

University of Opole, Opole/Poland (wjkk@uni.opole.pl)

This paper is my reply to Carl Mika's essay "No—We Do Need More Myth: A Response to the Science/Matauranga Māori Fear" (Mika 2022a). It is not the spiritual, a-rational, emotional that we contemporary humanists, who believe in the possibility of the full unfolding of human potential, should fear. What we should be really afraid of is the positivist thinking that reduces the richness of the life-world to an object of an indifferent observation, and thus impoverishes our reality, leading us to a disenchanted world. As a result, humankind becomes scientifically and technologically developed, but at the same time spiritually and morally impoverished, and thus we live in the increasingly dangerous environment of conflict and war. Is there any alternative? I shall argue that to place the world before us as an object of indifferent investigation can lead the world to be known only as an abstracted object and not as a whole. Yet under the surface of illusion that results from such investigation, there is a universal knowledge that arises from our devotional and affective engagement with the world. By departing from myth and the original philosophy, understood as the love of wisdom, modern individuals have concealed from themselves an intensely rich experience of life. In order to return to this primordial experience, as well as to a more sustainable and peaceful world, we need to understand myth more deeply and explore the origins of western philosophy and science. This may eventually bring us to a true philosophical revival and open new prospects for humanity. Philosophy, in its original sense, whose goal is to attain knowledge of the whole, presupposes an active engagement with the world.

### 1 Myth and Thou

Myths constitute a very complex and at the same time uncertain category (Kirk 1974: 38). To some scholars, they are traditional stories, the narratives that are told in archaic, non-literate societies. To others, they are sacred tales, revelatory and exemplary, because they represent either literal or symbolic representations of reality and determine exemplary models of human actions. Let me propose a definition that I introduced in my earlier work to express this complexity of myth: "Myth is a wholeness attuned to the world as a whole and disclosing the world in its completeness" (Korab-Karpowicz 2002a: 209).

In order to understand this definition, we need firstly clarify what I describe as "mythical attitude."<sup>1</sup> "Mythical attitude" is the way in which a member of a mythical society, one for whom myth is alive, relates to the world. For archaic or mythical human beings, the world is not what it is for us today in the west. They perceive the life-world as "thou" (Frankfort 1967: 4). The world has for them an unprecedented and unique character of a person, or even of a relative. Nature is the manifestation of the divine and is revered. Winds, rivers, headlands, mountains, springs, and animals are all personified. The natural world is permeated by forces which are depicted in divine and human terms. A member of a mythical society does not feel separated from, but rather engaged with, the world. Such a mythical attitude is exemplified in the Māori holistic worldview in which "all things in the world are interconnected with the human inseparable from all else" (Mika 2022a: 103).

"Thou" is not intellectually reflected upon, but rather experienced as life meeting life (Frankfort 1967: 6). Mythical attitude can thus be best characterized by the word "engagement." It is neither the attitude of a rational, disinterested observer nor of a self-interested individual, which can both be attributed to modern people. It is also not the attitude of a believer, based on

faith.<sup>2</sup> It is rather the attitude of an engaged devotee or a lover. Whether it is about the creation of the world, like the Māori creation story, or of an animal, or of an institution, a myth narrates something as if it would really happen. For the archaic or mythical human being, myths are true stories that concern themselves with realities (Eliade 1975: 15). Consequently, the world as “thou” reveals itself in myths firstly as a cosmological representation in which supernatural powers, miracles, and gods are believed to truly exist. This representation is real and sacred, but it is not objective. Being objective, which is related to the “scientific attitude,” is the way in which a contemporary scientist relates to the world. Objectivity presupposes an attitude of an indifferent, neutral, and impartial observer. But the mythical attitude is very different. It involves feelings. The cosmological representation of myth, while it is real, is based on devotional engagement.

For people for whom myth serves as a way of understanding and living, Nature or the life-world as a whole is not an object, but rather something magic, alive, and divine. This cosmological representation, which involves gods and supernatural powers, is neither objective nor based on mere faith, but is taken literally and considered real because of their engaged devotion.<sup>3</sup> Further, myth, the result of the revelation of “thou,” is always a whole for them. It is not a product of discursive or inductive reasoning. It is not created part by part. It is a result of the ecstasy, the supreme mystical experience of a revelation, that takes participants beyond the realms of the sensorial and rational and reveals the world as it is as a whole in a myth (Eliade 1975: 95). This experience of existence in its totality, which manifests the sacred, introduces new meaningful patterns upon people’s life and their world. Therefore, when I say that “myth is a wholeness attuned to the world as a whole,” I mean firstly that myth, the result of the revelation of the world as a whole, is completed already at its beginning by one who is the divine knower, the mystic or the inspired shaman, its receiver and creator. It is completed at the beginning; and yet, it may evolve. But it evolves as slowly as mythological society develops; that is, relatively slowly in comparison to the development of modern western societies. Myth’s evolution proceeds from revelation to revelation. Its steady progress can be stimulated by those few insiders, the mystics who would prove themselves to be divine knowers and who would understand the layers of meaning which constitute the wholeness of myth.

Myths are not simple and uniform. They are often multidimensional, endowed with different emphases and levels of meanings. A myth does not have mostly a fixed meaning, but a number of them. “Myth, like symbol, has its own particular ‘logic,’ its own intrinsic consistency which enables it to be ‘true’ on a variety of planes” (Eliade 1963: 426). When I say that myth is a wholeness, I also mean all the levels or layers of meaning that can be found in myth constitute a whole, and myths do not yield to one particular, partial interpretation. What is the whole cannot be justifiably reduced to any of its parts. Yet the different levels of meaning can be discovered. Their discovery corresponds to what can be called an expansion of one’s understanding or spiritual growth. Myths are considered to be sacred tales, revelatory and exemplary, because they reveal the structure of reality to the archaic human beings and supply them with exemplary models for their actions. They validate every custom and institution of a mythological society (Kirk 1974: 60). But, as he or she grows spiritually, a member of a mythical society, the shaman or mystic is able to understand new meanings which are revealed in myth. Understanding is not a mere intellectual or theoretical category here. Initiated into new dimensions on which “thou” is revealed in myth, people who live in a society animated by myth respond by way of their behavior and by their being.

The world as “thou” is then a life presence whose qualities can be articulated because the “thou” can reveal itself. Humanity’s original experiences in meeting this “thou”—the experiences of existence in its totality, in which “all things in the world are one” (Mika 2022a: 103)—are conveyed in myths. Myth perpetuates the revelation of the “thou.” It reveals the meaning of our existence in the world. The purpose of many myths is to revoke, re-establish, or re-enact the creative era in which the unique meeting of humans and the “thou” took place. The original experiences that lay at the origin of myths can be reclaimed. These experiences are contained in

different levels or layers of meanings that can be discovered in myth, and thus, recovered. Stories conveyed by myth are only its surface layers. Therefore, one “should take note of the depth of thought and its language” (Mika 2022a: 105). Through the thoughtful interpretation of the cosmological representation of myth which is mostly symbolic, human beings can then regain their primordial understanding of themselves in the world. They can disclose the meaning of their being, which is the human-being-in-this-world. When I say that myth is a wholeness disclosing the world in its completeness, I mean also that myth is a certain interpretative unit. Through devotional engagement with a myth, the unity of its different meanings can be recovered, and this can lead devotees back to the original experiences of humans meeting the world as a whole as “thou.”

## 2 The Emergence of Philosophy

According to a common view, there is a radical separation between mythos and logos, between myth and philosophy. Myths are associated with the mysterious and illogical; philosophy with the rational and logical. Myths are part of a way of life and present precedence and models for human actions; philosophy is a distinctive form of inquiry that asks generalized questions and relies on systematic reasoning. Myths are usually confined to a particular mythological society; philosophy is universal. And yet, on a very superficial interpretation only are myths illogical and deprived of rational thinking. Even if we accept that myths are results of the revelation of a “thou” and are often founded upon an original experience that reaches beyond the sensorial and rational, their analysis would show that many of them represent complex logical systems and are susceptible to logical interpretation. The actions of gods and heroes that they depict presuppose a keen analysis of given circumstances and are based on rational decisions. Further, if we look at the emergence of western philosophy in ancient Greece, we can discover a closer link between myth and philosophy than is usually acknowledged. Early Greek philosophy was preceded by rationalizing and systematizing of myths, for which an example can be Hesiod’s *Theogony* (Kirk 1974: 293). The process by which myth gave way to philosophy in ancient Greece extended over several centuries and can be related to the fact that the Greek myths would gradually lose their exemplary function, and this afflicted Greece with a religious and moral vacuum.

In a mythical society there are two kinds of events that take place in time (Eliade 1975: 37). First are those that can be called sacred and take place in a sacred time because they have a precedence in an exemplary pattern provided in myths. The second are those events that follow no exemplary pattern and are called profane. One of the most important functions of myth is thus to provide exemplary models for all significant human actions, to validate customs and institutions, to make them sacred. However, in the seventh century BCE, when western philosophy is born, the Greek myth could no longer satisfactorily perform this exemplary function. The original relationship of devotional engagement between humans and the “thou,” which is the foundation of mythical attitude, is, by the time of Homer and Hesiod, already seriously weakened. Once the separation between humans and the “thou” is initiated, volitional, aesthetic, and other profane elements enter into myth. The classical works of Homer and Hesiod represent the triumph of the literary work against myth. The gods whom both Homer and Hesiod describe are not only divine, but also show their undisguised human faces. They are moved by passions and commit abuses. When Xenophanes and later Plato accuse these great poets of attributing to the gods all the things which are shameful, they address an audience that is already convinced.<sup>4</sup> These ancient critics of classical mythology do not argue against Greek religion or myth as such, but in the name of a higher idea of the divine, they attack the shameful behavior of the gods as depicted by the poets.

The fact that Greek myths gradually lose their function as exemplary models for human behavior opens the possibility for the development of philosophy that is to provide a new guidance for our actions. The Presocratic thinkers are often believed to be not only the first western

philosophers, but also the first empirical scientists (Barnes 1979: 4). For Husserl, the rationality and generality of both their questions and answers is a sign of a “theoretical attitude,” which is for him the basis of science and which can be sharply contrasted with a “practical attitude” that refers to myth (Husserl 1970: 280–2). It is not my purpose here to argue that associating early Greek philosophy with empirical science and putting them under the label of natural philosophy may be misleading. Some scholars have already noted this. In his book *The Nature of Greek Myths*, Kirk shows that Thales, Anaximenes, and Anaximander continued to be strongly affected by mythical preconceptions (Kirk 1974: 295–300). My main argument here is that the way of inquiry that the Presocratic philosophy initiates is a result of the decadence of myth. In the initial stage of the development of western philosophy, at least some Greek philosophers try to make up for the loss that the corruption of myths brings about. Hence, initially there was no radical break between myth and philosophy.

By the time of the first Presocratics, Greek myths, corrupted by the poets, do not provide humans with exemplary models for action. For those who lose their devotional engagement with the world, the original cosmological representation of myth becomes gradually invalid. They may still listen to myths as stories, but for aesthetic or literary reasons. They disprove the existence of the “thou” and become indifferent to Nature, and begin to regard everything merely as an object of either inquiry or exploitation. Consequently, they gradually become self-seeking individuals, whose numerous examples we can find in the Platonic dialogues. Therefore, as its substitute, philosophy needs to replace myth in Ancient Greece. Its function in the early stage of development is still similar to that of myth. By providing a representation of reality, philosophy reveals the meaning of the whole and directs human behavior. It is the type of philosophy that is close to mātauranga Māori.

For the Presocratics, the world is still alive and divine; it is a “thou.” For Thales, water is *arche*, the unity and the origin of the living presence. Water makes things grow. It supports the growth and unceasing process of life. Anaximenes says that “as our soul, being air, holds us together, so do breath and air surround the whole universe” (fr. 2).<sup>5</sup> The original element, *arche*, is for him not water, but air. He does not consider air merely as physical matter. Rather, air is also connected with the maintenance of life. It is an agent of vitality of the universe. Anaximander objects to the idea of a single, determinate constituent of our world being the original element. He declares *arche* to be *apeirion* (something indeterminate, inexhaustible, and indefinite). He reflects upon the very fact of human-being-in-the-world. What he appears to say is that our beginning and end are not known to us. We rise from chaos and go back to chaos. What is between is cosmos, the precious life. Further, Anaximander expresses the idea of a righteous universe when he says that things “pay penalty and retribution to each other for the injustice according to the assessment of time” (fr. 1). Nature for him is not only alive, but like a person, it is moral and subjected to moral laws.

If we define scientists as those who attempt to describe the world “objectively” in terms of abstract principles and explain it by general laws, the Presocratics were certainly not empirical scientists. For them the world is alive and divine, it is “thou.” They inquire into the world as a whole, and desire to know the whole, but such a knowledge requires from us an engagement with the whole and not merely an “objective,” theoretical description. This idea of engagement can be traced to the etymology of the word “philosophy” itself. In the proper sense of this word, “philosophy,” “love of wisdom,” “a quest for complete knowledge of the whole of reality, not of a mere part” (Korab-Karpowicz 2017: 109) presupposes being engaged; it is the attitude of a lover. Hence, the “philosophical attitude” of early Greek philosophers is engagement. But, by contrast to “mythological attitude,” it is not devotional, but rather affective engagement. The stress is no longer put on the supernatural, but rather on the pursuit of the knowledge of the whole and on a holistic understanding. Being engaged with the whole, we feel interconnected with the All (Mika 2022a). The early Greek thought thus bears similarities to philosophical mātauranga Māori, and

this could be of interest to many scholars to explore this similarity further, and to learn what went wrong with western philosophy when it developed further, leading us finally to mere language games.

### 3 Understanding Myth and Philosophy

The fact that there is a continuity between myth and philosophy, which makes early Greek philosophy look more similar to myth than to modern science, does not mean that there are not significant differences between them. First, myth is a wholeness disclosing the world in its completeness. Hence, even if we admit the “inaccessibility of things”—“the tendency of the world to escape our full understanding” (Mika 2022a: 102)—myth signifies wisdom, the knowledge of the whole, as it reveals in a mystical experience. But philosophy, instead of being wisdom, is rather a pursuit of wisdom, the desire to arrive at a holistic worldview, at the knowledge of the whole. Second, mythical attitude presupposes engagement with the world as a whole, of which myth is itself a part. The cosmological representation in myth is founded on devotional engagement. Subjected to a rational inquiry based on the scientific attitude, myth may be seen as an “irrational story,” but thus rationalized it does not lead us to the knowledge of the whole. It does not reveal the levels or layers of meanings which can be discovered in it. By contrast, a system of philosophy is founded on affective or emotional rather than on devotional engagement. Since it is not an object of devotion, it can be subjected to an examination, criticized, and rejected. Hence, early Greek philosophy appears to have almost the same function as myth: it reveals the meaning of the whole and directs human behavior. However, it is already at the beginning essentially different from myth. It does not claim to represent knowledge of the whole of reality, but rather a quest for such knowledge, and does not posit devotional engagement toward itself. The latter is the reason for its decline.

Myth is a wholeness attuned to the world as a whole because those who live in myth and are guided by it are engaged on many different planes with the whole of which the myth is an integral part. By teaching humans and by regulating the way of their living in devotional engagement with the whole and by gradually disclosing many layers of its meaning, myth reveals the knowledge of the whole. But the knowledge of the whole related to myth is not merely theoretical or intellectual. It embraces the whole of life. Myth reveals the knowledge of the whole, which is wisdom, for which philosophy in a proper sense looks. But it does not disclose this holistic knowledge to anyone without his or her appropriate devotional engagement. If myth is “objectively” examined, its cosmological representation may no longer make any sense. If a particular philosophy is subjected to a rational examination, it may perhaps be rejected, but it does not become senseless. Further, myth is completed through the experience of revelation already at the beginning, whereas philosophy seeks to be completed at the end. Mythical societies live in eternity rather than in historical time. The societies in which philosophy or science play an important part depart from the eternal order of myth and constantly seek their completion being in a stage of a constant dissatisfaction with the results of their findings. They live in history and are time-oriented.

The fact that philosophy does not posit devotional engagement toward itself and may be examined and criticized contributes to both its development and decline. On the one hand, it develops into a rich conceptual and intellectual framework as a result of debates between contending world views, different schools and philosophical systems. On the other hand, it declines ultimately because it is challenged as an attempt to attain the knowledge of the whole. It can be noted that by interpreting the Presocratics in terms of his theory of four causes, already Aristotle misrepresents their cosmological representations. Further misinterpretations are obvious if we notice the word *phusis* (Nature) is often translated today as “the real constitution” and the

word *arche* by such terms as “substance” or “principle” (Kirk, Raven, Schofield 1984: 145, 192). It would require a thoughtful and insightful study, partially undertaken by Martin Heidegger and expressed in his concept of the forgetfulness of being (Heidegger 2010), to show the decline of western philosophy. Of a special importance in this process is the scientific paradigm, especially the positivistic one, which transforms philosophical thinking. It reduces philosophy to an exercise in language analysis and deprives the rest of it of the right to exist. Also, it presents human beings as self-interested, self-seeking, and thus rationalized individuals, moved solely by our passions. As a result, it dehumanizes us. Consequently, contemporary philosophy loses its original sense of the love of wisdom and, like science, becomes partial knowledge of a part. However, I shall not immerse myself any further in the issue of the decadence of western philosophical thinking. It was from the beginning doomed to decline because, although it would set before itself high goals, it would not posit devotional engagement toward itself and could be subjected to a critical examination. This ended in its rejection as a holistic world view, reduction to a linguistic analysis, and dissolution to particular sciences.

#### 4 Science and the Scientific Attitude

According to the positivist view of science, science is objective (Chalmers 2013: 1–11). It derives its objectivity from the objectivity of observation. The way in which scientists look at the world is sometimes described as “scientific attitude.” In order to be objective observers, they must be indifferent, disinterested, neutral, and impartial (Neuman 2009: 9). Personal feelings, opinions, or preferences have to be suspended. Further, just as scientific knowledge, derived from observation, presupposes the scientific attitude of being an indifferent and impartial observer, so also its verification and sharing with other members of the scientific community requires the same attitude. Without this attitude, science would neither be objective nor inter-subjective.

Objectivity and the scientific attitude that are considered to be prerequisites of modern science are thus interrelated. However, if this is the case, objective knowledge is not independent of the subjective human mind as it is commonly believed. It depends on the states of mind that constitute scientific attitude. Once we comprehend that objectivity in science presupposes scientific attitude as its foundation, of being indifferent, disinterested, neutral, and impartial, we can no longer accept that objective scientific knowledge is free from subjectivity. Being emotionally neutral and impartial is best expressed in the word “indifference.” But indifference, a lack of feelings and preferences, is a state of mind as well. Therefore, as I prove somewhere else, “there is subjectivity in scientific objectivity, namely, indifference” (Korab-Karpowicz 2002b: 61).

The form of subjectivity that refers to scientific attitude has been described by the word “indifference.” Empirical scientists look at the world “objectively,” indifferently, as if it were an object, but in fact the world is not that. To look at the phenomenal world as an object, as an “It,” is only a way of relating to it from a certain perspective, with which scientists identify themselves. They do not enter into personal relationships with the objects of their inquiry. They suspend their feelings toward them. But by looking at the world in this way, they can learn about it only from a certain viewpoint. This is not the way to know it as a whole. Therefore, scientific knowledge can give us only a partial and not a complete picture of the life-world. Further, if objective, scientific knowledge is a partial one; it cannot claim to reveal what things are like in themselves. It cannot know things as they are themselves, but only as objects. An objective account will omit something. It cannot give us a true account of the world, but only of its objective aspect. By adopting a certain attitude to the life-world, science replaces “thou,” the life presence, with the dead world of abstracted objects. While removing our feelings and escaping the areas that cannot be measured, it only “relates to a small part of human existence” (Mika 2022a: 101). It represents only a partial knowledge of a part, the part being the particular object of its investigation.

To obtain a wholistic vision of the world, science needs to be supplemented with myth and philosophy that can lead us to know the whole. Hence, Mika is right when he claims that “We Do Need More Myth.” But it is not only myth that is today badly needed to supplement the partial scientific knowledge, but also a revived philosophy that seeks complete knowledge of reality. Such a philosophy should not look at things as if they were just objects. It needs to recognize the illusion which the scientific partial knowledge brings about. In the proper sense, philosophy as the love of wisdom presupposes being engaged with the world and not being indifferent.

## 5 Conclusion: Myth and Human Evolution

When we reflect on the present human condition in the west, we find similar circumstances as in ancient Greece. Like once corrupted myth, today’s weakened religion does not effectively provide western people with higher goals in life and does not teach them to live in engagement with the world. Human vices and wicked ideas become prized and lead to constant power struggles and endless wars. For this reason, philosophy originally arises: to reveal the meaning of the whole, to direct human behavior, and ultimately to prevent humans from destruction. But ultimately it fails in this enterprise because it subjects itself to criticism and reduces itself to a partial knowledge.

Facing “imminent extinction along with the natural environment” (Mika 2022a: 104) or total destruction as a result of a nuclear war, we, philosophers, shall once again attempt to move the humanity in the right direction. We can try this by following the way of original philosophy, which is the love of wisdom, a quest for the complete knowledge of the whole reality. But in such a case we have to avoid our old mistake. To place the world before us as an object of indifferent investigation can lead the world to be known only as an abstracted object and not as a whole. Hence, we need to recover the philosophical attitude of affective engagement. Once we engage in something, we are no longer indifferent, but rather develop some feelings. The mythological and philosophical attitudes both presuppose feelings, whether those are feelings of devotion, compassion, or the love of humanity or of alive nature. Such feelings open for us new layers of knowing. They help us to understand that we are evolutionary beings and our human evolution is far from being completed, and it would be a disaster if it was now stopped, and it must be sustained until at last we reach our goal. “The purpose of the evolution of life is its fullness and perfection. Human evolution is a journey to ever greater freedom, and moral and intellectual perfection (Korab-Karpowicz 2017: 160).

---

<sup>1</sup> My discussion of myth here is based on my essay Korab-Karpowicz (2002).

<sup>2</sup> Faith as a unique way of salvation that can be found in Judaism, Christianity, and Islam is not the devotional engagement that can be found in mythical societies. See Eliade (1967).

<sup>3</sup> As soon as human beings lose their devotional engagement with the world, the cosmological representation becomes invalid for them. They “objectively” disprove the existence of “thou” and all supernatural phenomena.

<sup>4</sup> In books II and III of the Republic, Plato openly criticizes Hesiod and Homer for giving bad images to gods and heroes. See Plato (2008).

<sup>5</sup> Fragments of Anaximenes and Anaximander come both from Freeman (1983).

## Myths are Kites, Tethered to Fly: Mātauranga Māori, and Holding the Known and the Unknown

O. RIPEKA MERCIER

Victoria University of Wellington, Aotearoa/New Zealand (ocean.mercier@vuw.ac.nz)

It's a pleasure to join this virtual symposium on a topic that I'm right in the middle of, frequently uncertain within, and often in my own "emotional quagmire" about. In Aotearoa New Zealand, Vision Mātauranga (VM) is a New Zealand government policy instituted in 2005 and administered through the Ministry of Business, Innovation and Employment. VM incentivizes scientists to orientate and co-design their work alongside mātauranga Māori (Māori knowledge system) experts and practitioners. Other national and institutional policies encourage mātauranga into education systems. These external compulsions motivate the activity of working between knowledge systems, but leave it to those doing the teaching and research to philosophically negotiate the gap between ways of knowing. We're also left to piece together and defend a knowledge system irrevocably fragmented and eroded by colonization. Resources available to support mātauranga in the context of VM are limited, and compete strongly against the need for mātauranga to regroup, decolonize, and revitalize, independent of science and its scientific adherents.

Ten years of training as a physicist, then a scholar in Māori studies for nearly twenty years, I encounter within my own self the urge to reconcile the different trainings and outlooks—western scientific and Te Ao Māori (a Māori worldview)—as well as feeling the conflicts in attempted reconciliation. Nonetheless I'm committed to the exercise because it affirms my multiple identities and I find synergies and satisfaction in the attempts. Other Māori scientists have also brought these worlds into alignment—though *how* is an unknown to be unpacked.

As a Māori person who works at the interface with non-Māori scientists, I encounter different approaches to negotiating mātauranga knowledge, knowings, and knowers. Motivations range from enthusiastic commitments to collaborate—with outcomes ranging from helpful to hapless—through willingness to work in the same sandpit, through avoidance, through outright hostility towards mātauranga Māori. Approaches range from collaborative to incorporative, through extractive and colonizing, to desecrating. So I greatly appreciate the work that Carl Mika does in his essay, to name and describe the "emotional quagmire" amongst scientists—a fear of the irrational impinging upon the "purity" of science, and a fear of "pseudosciences" sneaking in the door. Mika's writing is also an admonishment to Indigenous knowers to not assert or try to justify their knowledge systems as scientific and rational, giving permission to chart different epistemological territory from western science. However, there are indeed those of us who engage in the empirical evidence that is part of mātauranga Māori. As I will sketch out below, I think we are to achieve this by holding both the known and the unknown, the measurable and the beyond, in a delicate balance.

### 1 The Science-Mātauranga Camp

What follows is strong evidence that I'm in the "science-mātauranga camp,"<sup>1</sup> however I see myself as somewhere in between the positions Mika identifies. Through my scholarship and work as a TV presenter for *Project Mātauranga*<sup>2</sup> I've become the public face of an assertion that science and mātauranga *can* work alongside each other, because science has always been *part* of mātauranga. Each episode of *Project Mātauranga* begins with me proclaiming, "Māori have always been scientists, and we continue to be scientists" (Mercier et al. 2014: 85). I've written about how our archive of mātauranga Māori is generated through science-type processes (Mercier 2018). Either *hundreds of years* of Research & Development occurred, enabling Polynesian settlers with a Pacific

epistemological base to adapt and become *tangata whenua*, people of the land, in islands that were originally named Aotearoa (North Island) and Te Wai Pounamu (South Island), or *decades* of Māori R&D occurred post-European settlement, borrowing from empirical and experimental methods imported by settlers. If the latter, that's a remarkable and perhaps even impossible explosion of insight and knowledge across many fields, including products like rongoā Māori (medicine). Either way, the observation, empirical testing, experimentation, and mental and oral cataloguing involved is distinctive and remarkable. Whether it's called Māori science or mātauranga Māori, it's hard to deny that rigor and relevance underpin its integrity and survival. I venture that Māori held both rationality and irrationality.<sup>3</sup> I agree with scholars who assert common methodological ground between science and Indigenous knowledges (Kawagley, Norris-Tull, and Norris-Tull 1998). I also agree there is nothing philosophically beyond what mātauranga Māori as a knowledge system is capable of, particularly when considering mātauranga as inclusive of traditional and contemporary knowledges. Stewart's "superset" model expresses this all-encompassing-ness (Stewart 2007).

But I'd also classify myself and others in the philosophical mātauranga space. I think we'd all fail the test given in footnote 1 (Mika 2022a: 106). I do react viscerally to the idea that a non-Māori western scientist could claim to do mātauranga Māori. I also would not translate mātauranga as science—instead we have the word pūtaiao as an equivalent for the natural and physical sciences. However, I believe that what Māori scientists—physicists, biologists, chemists, ecologists—do expands what might be considered kaupapa Māori, and adds to contemporary mātauranga Māori. For instance, Melanie Cheung, in her Huntington's disease research, introduced karakia (incantations), water rituals, and other protocols: these acknowledged the tapu (sacredness) of the person while also invoking spiritual protection for her during her experiments with tissue from human brains (Kinita 2013).

I'm more comfortable with a third, middle, interface-type position. This third space is a bit like introducing the string of a kite—it's the tether between a kite-flyer and the kite itself that provides connective reconciliation between whimsy/the unknown and grounding/control.

This middle space is described within mātauranga itself, and is able to hold both the physical and spiritual in balance. Mauri or lifeforce, for example, is "understood as the binding force between the physical and spiritual aspects of entities within the ecosystem" (Morgan 2009: 2). Several concepts in mātauranga Māori assert similarly that there is a balance between the physical and supernatural. One concept is the notion of kauwae runga and kauwae raro. A kauwae is a jaw bone. Traditionally, for Māori, carvings, concepts, and literature that metaphorically reference the tongue and the mouth area are associated with knowledge. The kauwae raro, or lower jaw knowledge, relates to the observable world, and kauwae runga, or upper jaw knowledge, relates to the spiritual world beyond. The tongue, which sits in between the upper and lower jaw, could be seen as another tether or binding force. The tongue brings the natural and supernatural knowledge systems together and communicates these to others. A parallel to this is the duality between te Pū, or the supernatural source, and te Kē, or the manifestation. "Pū encompasses the philosophical, spiritual and psychological connotations behind a word, object or action and Kē is its operational usage, form or the action itself" (Mercier, Stevens, and Toia 2012: 111). This is also reflected in whakapapa (genealogy) where characteristics of atua, unseen spiritual phenomena, explain the physical, observable characteristics of trees, birds, insects, fish, etc. This is a space where the physical and spiritual are connected. Nothing is completely spiritual or completely physical—each has an element of the other. Everything spiritual or beyond comprehension has a grounding or purpose that is of Papatūānuku (Earth), our observable world.

## 2 Myth Is an Old But Fresh Approach

I appreciate Mika's take on myth and how society could reconnect with the unknown through myth. "I take myth to be reaffirming of our philosophically sophisticated understanding of interrelationship [...] a field of thought that works in the opposite direction to science/rationality but is no less advanced for that" (Mika 2022a: 101) This is a compelling exhortation for us who never let go to keep holding on to multiple systems or systems with internal multiplicity. It's also an invitation to those only holding to science to get back in conversation with myth. I agree that our relationship with the natural world needs reconciliation, and herein lies a path.

Ranginui Walker sees myths as figurative, describing the "myth messages" (Walker 1992) or moral codes within as socially agreed upon ways to live rightly with others. Myths, legends, and oral histories also contain literal observations about historical events. For instance, Bruce McFadgen records mystical accounts of taniwha (a large, lizard-like creature) wreaking great destruction, killing, and abducting people, that can be interpreted as describing tsunami or inundation events in poetic fashion (McFadgen 2007). These interpretations are strengthened by their correlation with geological and morphological evidence. Daniel Hikuroa argues that myths are oral histories that capture topographic and geomorphological changes. For instance, the flicking of the tail of a taniwha can be interpreted as the river changing course over time (Hikuroa 2016). His telling of the Ngatoroirangi story charts specific places across the Taupō Volcanic Zone where the god-like "sisters" of Ngatoroiranga created subterranean passages and emerged above the Earth's surface, venting magma and steam above ground (Hikuroa 2009). These geological features persist today.

The legend of Paikea, an ancestor who made his way to Whāngarā, Aotearoa from the Pacific, by riding on the back of a whale, carries parallel and tethered stories: one fantastical and superhuman (Te Pū) and another (Te Kē) that acknowledges the importance of whale migrations in leading the waka across the Pacific to Aotearoa. These traditions are significant at different levels and engage local ways of knowing, and local histories. The stories are part of our identity as Māori. They are not a comfortable fit alongside a type of science which seeks global and generalizable truths. So in a setting where the government encourages mātauranga and science to work alongside each other, frictions arise.

## 3 The Science/Mātauranga Māori Debate

I'm a long-term fan of David Tossman's cryptic crossword, and a faithful subscriber to the *New Zealand Listener* which is home to this puzzle. I read it cover to cover: taking especial delight when Māori columnist, Aroha Awarau, contributes occasional opinion pieces. After the letter from the "Auckland 7" was published in the *Listener*, I was invited to be interviewed for a feature article: the reporter expressed a desire to "shine some light rather than create heat on the issue." I was cited and photographed along with Dan Hikuroa in the article regarding mātauranga and science. Subsequent to that, Richard Dawkins weighed into the debate. He is shouty at the best of times, and his closed-mindedness gets me riled up, so I appreciated Mika's fresh description of the Dawkins contributions.

The *Listener* used to be my fun zone, a happy place. I now open to the Letters page with trepidation, wondering what new insights shared as insults I might have to internally negotiate and debate, before the fresh onslaught of requests for interviews and media comment. As recently as April 2, 2022, letters were still being published on two issues: the philosophical debate around knowledge systems and issues related to freedom of speech.

#### 4 Impressions of “Fear,” “Dismay,” and “Panic”

My own emotions are varied—I experience a fight or flight response in relation to all of this. In the fight part of the response is an urge to “defend” the “honor” of mātauranga. I have a responsibility for mātauranga—the mauri and “mana” of mātauranga—and as such an obligation to defend, joining the others who stood up to defend mātauranga. I experience a feeling of hurt when others disparage mātauranga—this is an attack on the work of many, our identities as Māori are intertwined with mātauranga, and an attack on mātauranga feels like as an attack on me.<sup>4</sup>

Nothing is ever truly neutral for Māori within this institution. Even seemingly harmless committee meetings can be unsafe for us because they’re layered in white privilege where Pākehā values are normalized, Māori voices are othered. (Curtis 2022)

I’m one of many who experience the debate as “epistemic racism” (Waitoki 2022: 141), but hang on to mātauranga in spite of that, but I’m also maintaining my grip on science. It is possible to hold to multiple ways of knowing. So I found Mika’s observation about the “fear” underpinning the “Auckland 7” reactions affirming. Another emotion related to fear, that seems to be frequently and openly expressed, is *dismay*. Dismay is defined as “shock, unhappiness, disappointment” by Cambridge; “sudden disappointment” or “sudden loss of courage or resolution from alarm or fear” by Merriam Webster.

In response to *New Zealand Science Review* special issues on Mātauranga and Science in Practice, co-edited by myself and Anne-Marie Jackson, we received a letter to the editor that was published in a subsequent issue. The author wrote about their “dismay” in our work, criticized the positioning of “myth” in proximity to science:

I was dismayed to read some of the articles in the two recent issues of *New Zealand Science Review*. Science cannot be predicated on mythical cosmologies as is proposed in the description. Science is universal. Myths are local. [...] The basis under which science is to be communicated to our diverse communities is not through our individual myths. Science does not need that. It has its own compelling dynamic—its own imperative. Science speaks to everyone through the understanding it creates, through its sheer wonder and through the amazing technologies it dispenses. (Tallon 2020)

Waikaremoana Waitoki of the New Zealand Psychological Society critiqued the “Auckland 7” letter. She found that the arguments about mātauranga Māori not being a science “resorted to rhetorical devices, racist tropes and invitations to moral panic” (Waitoki 2022: 139). Three of the tropes she identifies in the letter can be readily applied to the letter excerpt cited above. Tallon positions himself as a *White Saviour* bringing the “colonial imagination” of universal truths and the *White Man’s burden* of saving the world with science.

While science is in a global debate about truth, this should not be an invitation to panic about mātauranga Māori potentially destabilising their safety zones. Māori do have solutions to global warming, as do many other Indigenous epistemologies. These solutions centre on protecting the planet as an ancestor by using Indigenous science and addressing exploitative capitalism. It is unfair to claim that we should be concerned (and therefore panic) that science won’t be trusted if we teach the truth about the colonisation of peoples, or about racism that occurs in New Zealand society. (Waitoki 2022: 140).

Science aspires to a freedom of the observer—the objective—from the observed—the subject—but in te ao Māori we are linguistically inextricable. We see this in the most basic acknowledgement

of a person to a person. In te reo Māori two individuals might greet each other with “tēnā koe,” which literally means “that you (one person).” The word “tēnā” translates to “that (near or connected with the listener)” (Moorefield 2003–2022), and is a determiner that is connective, spanning any distance. As Mika points out, te ao Māori seeks oneness and unity, and in te reo Māori is embedded an expression of that, like a web between me and you all.

Anne-Marie Jackson and I addressed “objectivity” in our Introduction to *New Zealand Science Review*. We sought to question taken-for-granted assumptions of scientific thought and seek a “passionate, inward subjective approach” as perhaps “abstract rational thought and empirical methods cannot grasp the concrete act of existing which is fragmentary, paradoxical and incomplete” (Marsden 2003b: 22–3). Through this subjectivity, we seek a tethering between the known and the unknown, in order to see and understand much more than we can with just one, or the other.

## 5 Holding Both the Known and the Unknown

In the debate we’ve seen the playing out of “stubborn epistemic hierarchies blocking a symmetrical dialogue of different knowledge systems” (Ilostanova 2019: 139) and interestingly, it’s been individuals playing to scripted roles, not organizations or institutions. So it has not necessarily been structural epistemic inequity we’ve witnessed in this performance, but the vestiges of assumed cultures and norms built up through practice within systems and expressed through the systems’ adherents.

Science is a powerful lens on the universe, but I agree that we also need more myth. I agree that this helps to reconnect our fragmented understanding of our home and the world’s environments. If myth is a supernatural window or passage into unknown pasts and unseen futures, we must hold onto it. This is the advantage of mātauranga, and the opportunity for science. When we take up and anchor our kite, it is like a conscious handling of Mika’s “abstract desiderata” (Mika 2022a: 103). Like the Māori greeting “tēnā koe,” which inextricably tethers the speaker to the spoken to, the abstract are all somehow anchored in the real, observed world. Tethered and flown, the kite evokes wonder and hope, inviting us to take the new and unknown into our hands.

---

<sup>1</sup> Others who I think live in the science mātauranga Māori camp (Mika 2022) are scholars like Daniel Hikuroa, Rangi Matamua, and Melanie Mark-Shadbolt. In her role as Deputy Secretary of the Ministry for the Environment, Mark-Shadbolt established the “Mātauranga Science Insights Panel” in 2021. “Mātauranga science” is an increasingly common term for both the disciplinary bridging between mātauranga and science, and the science within mātauranga as a whole knowledge system.

<sup>2</sup> *Project Mātauranga* is a half-hour television show that ran for two seasons (2012, 2013) of 13 episodes each.

<sup>3</sup> I fall short on grasping the definitions of science and rationality, and so I have deliberately limited my responses to Carl Mika’s references to irrationality to this one

<sup>4</sup> It was painful to even consider re-reading Dawkins’ letter but I did, to double-check that he really used the term “indigenous bollocks,” cited by Mika—and sure enough, that is what he says.

## Cosmological Isolationism Might Be Necessary “Counter-Colonizing”—But What Next and How?

HELEN VERRAN

Charles Darwin University, Australia (helen.verran@cdu.edu.au)

One of the ways Carl Mika’s essay is interesting is that it considers an instance where issues that lie at the heart of the mission statement of the *Journal of World Philosophies* actually play out in institutional life in the world. The roots of the concerns Mika’s paper raises are entangled in two rather distinct sets of institutional matters in the small nation state of New Zealand. Among contemporary British settler-societies (usually listed as the United States of America, Canada, Australia, and New Zealand), New Zealand stands out with around twenty percent of the population identifying as Māori, and nearly a further ten percent identifying as Pasifika. This, and a long tradition of Pākehā (non-Indigenous New Zealanders) keen to participate in language and other cultural expressions of Indigenous cultures, distinguishes many New Zealand institutions with respect to counterpart institutions in, say, Australia, where Indigenous populations account for a mere two percent. The two institutional contexts out of which Mika’s impassioned essay speaks concern epistemics and the sovereign state on the one hand, in the form of the procedures of the august *Te Apārangi Aotearoa*/New Zealand Royal Society, and less exaltedly, the epistemics and pedagogies in New Zealand’s junior high school science curriculum, on the other. In considering how the work of these two institutional settings might be decolonized, he briefly considers two discursive forms of *mātauranga Māori*.

Mika’s paper speaks first to a local New Zealand context performing a partial epistemic politics. Re-locating the paper, placing it instead at the core of a journal symposium, re-presents it in a wider and less parochial institutional setting. In this new setting, the particular tensions over metaphysical commitments that stabilize epistemic practices of diverse origins and alternative cosmologies that Mika articulates brings us face-to-face with what we might think of as “cosmopolitics”—politics of working cosmoses together while keeping them distinct. Beginning vaguely in imagining how such a cosmopolitics might be institutionalized in New Zealand, in constituting a body that can inform and guide that nation’s variously instituted epistemic politics, is the purpose of my response to Mika’s paper.

A brief comparative discussion opens my little essay. I juxtapose narrative myth as means of provision of stabilizing metaphysical commitment in the *mātauranga Māori* knowledge tradition on the one hand, and on the other, of diagrammatic models effecting solidification through metaphysical commitment in the sciences. I recognize the latter (the sciences) as epistemically expressing a Naturalistic cosmos (Descola 2013), and take it as just one among the many that thrive in articulating our planet’s many forms of life. I propose my brief description of these alternative means of affording metaphysical commitment—on the one hand, narrative myth, and on the other, diagrammatic models, as allowing “a world of many worlds” (de la Cadena and Blaser 2018). It is also a working imaginary for cultivating a generative cosmopolitics (Verran 2018).

Having sketched this working imaginary, I turn to Mika’s paper before finally inviting Carl Mika to speculate on how his proposed *te ao Māori*, as a future fully-fledged philosophically discursive *mātauranga Māori*, might begin to engage with the full richness of Naturalism in cultivating, and instituting, a situated cosmopolitics in New Zealand. Reminding Naturalism of its historical capacities to effect shifts in its metaphysical underpinnings (by changing its diagrams and shifting accounts of what is modelled), in engaging with Naturalism Mika could expect to command serious attention from at least some practitioners (philosophically canny scientists?) in a cosmopolitics designed for enacting situated epistemic good-faith on both sides.

In their capacity of offering a rich menu of defined relational categories in the form of narratives, myths often function in founding and solidifying knowledge traditions. A wide variety of myths have functioned this way in multiple pasts, myths continue to do that work in multiple presents, and presumably will keep on doing so in their own ways in generating multiple possible futures. In contrast, the Naturalistic cosmos of modern sciences, which from the Renaissance onwards takes inspiration from western philosophy, *does not* affect its stability and afford certainty in making metaphysical commitments through narrativizing myth. *There* it is a matter of diagrams and models and elaborate prose style.<sup>1</sup>

Mātauranga Māori and the sciences are contrasting knowledge traditions. Mika's essay makes that very clear. In my response, agreeing with him that precision in articulating the differences is required, I prefer to use the term epistemics and the related concept of episteme, rather than the more ordinary term of knowledge tradition. In epistemics, situated knowledge doing and making is effected in collective practices. Using a rather ugly neologism as a verb, we can say knowledge sociomaterializes in the here and now, and when that happens as it should, we knowers experience (enough) certainty to go on together in that situated here and now. Knowledge happens in particular social settings and in the forms of things arranged in a particular way. Importantly, as collectives we have shared stories of how what we know comes to be true—those stories express metaphysical commitments. Of course, they are not usually told. But sometimes it is important to tell them, when knowledge collectives of radically distinct origins—for example, mātauranga Māori and sciences—try to work together to remind young New Zealanders that multiple epistemes exist in our world of many worlds. Institutionally, New Zealanders all need to learn to recognize, respect, and when necessary work in informed good faith with other knowledge traditions.

I propose good-faith epistemic multiplicity as concerning itself with articulating practices (epistemic practices) which have the capacity to simultaneously connect and keep distinct the differing epistemes that arise in enactments of differently focused metaphysical commitments in articulating alternative cosmoses. Myths narrativize categories in articulating metaphysical commitments. This involves storying human and other-than-human social relations in defining and articulating categorical relations. Poetics is the general term used to describe this process. In other epistemic situations, those involving sciences, elaborated models shorn of narrative define and diagramize relations, in achieving the same ends through an objectifying focus. The former is how mātauranga Māori enacts metaphysical commitments, as Carl Te Hira Mika and others have elaborated (Mika 2012; Hikaroa 2017); the latter is the form by which sciences, including social sciences, enact their metaphysical commitments (Godfrey-Smith 2012; Dewey 1929).

Some epistemes stabilize themselves through enacting commitments to categories that are relationally defined through narratives articulating particular forms of human-like sociality. Here exegesis and sometimes eisegesis are salient in effecting judgment and critique. An episteme that embeds commitments expressing a Naturalist cosmos of modernity is an exception in that company. In modern Naturalistic epistemics enacted in modern institutions, diagrammatically visualized relational categories articulated as a singular material nature with an infinite capacity for (re)organization (Godfrey-Smith 2020: 11) do the same work. Here analysis precedes any interpretation which offers possibility for judgment and critique. Yet other epistemes, like that of the Achua peoples of Amazonia, model metaphysical commitments through positing multiple natures (Descola 2013: 173; Viveiros de Castro 1998: 478).

In the twenty-first century, many practitioners of those non-modern cosmoses, as members of alternative experiential worlds knowing through metaphysical commitments operationalized in ways other than those enacted in practices of the sciences, are now everywhere moving to establish contemporary organizations, and to intervene in the institutional practices of

modern institutions. Such organizations work outside of but also with modern institutions valued by nation states. In doing so, in their organizational practices, members nurture practices which afford reconceptualizing, thus operationalizing the agendas of their novel, contemporary non-modern groups. These nascent organizations, promoting various forms of Indigeneity, work skillfully in recomposing particular concepts enacting and (re)institutionalizing the epistemes that express and revivify their non-modern epistemics. The point as they see it is to both connect and remain distinct (Wanambi et al. 2014).

This is not the preferred ends for Mika, however, or at least not yet. Mika feels:

a counter-colonial need to develop our platform for thinking before we dive into any equivalences. To develop a method for explaining phenomena in the world—such as how a *taniwha* (supernatural creature) protects the environment, for instance—we need to create a philosophical foundation allowing for the idea that thought, perception, and ultimately knowledge are not human (science would assert they are) but have their origin in the non-human, within *mauri* (life-force), *wairua* (spirit), *kore* (nothingness), and so on. The eyes we use to look at the world are not entirely our own. If this is true, the term “*mātauranga Māori*” may *then* be reintroduced to describe this completely unscientific method, as it would have evolved from an awareness of the origins of science and *te ao Māori* respectively. (Mika 2022a: 106)

## 2

Carl Mika directs his paper “towards both Māori and non-Māori scholars, center[ing] on [...] the incompatibility of science and *mātauranga Māori*; and the emotional quagmire inhabited by those who reject ‘myth’” (Mika 2022a: 102).

In my response to his essay, I write as a non-Māori scholar, a second-generation member of a settler-Australian family, and I focus on the workings of the posited “incompatibility.” One aspect of Mika’s paper troubles me in particular. I recognize that this essay has arisen as response to the turgid workings of Te Apārangi Aotearoa/New Zealand Royal Society, and is addressed to that context. However, if I am to work in good epistemic faith in offering a reading of Mika’s paper in the different context of a symposium in the *Journal of World Philosophies*, I cannot allow this issue to pass unremarked. My concern is the definition of science that seems to have been deployed in the procedures of Te Apārangi Aotearoa/New Zealand Royal Society which Mika has duly mobilized in this essay. That a member organization of the global alliance of high-level national societies that are warranted in using the brand-name “Royal Society” allows this account of science to circulate in its name is shocking. In naming the epistemic working account of science that seems to have been allowed to stand by the procedures of Te Apārangi Aotearoa/New Zealand Royal Society, in perpetrating a form of decolonizing epistemic politics, Mika has done this cluster of modern organizations, which so proudly proclaim their connection with the Royal Society of London, a favor in making it public. Indeed, the work of the Royal Society of London, established under charter of the restored English monarchy in 1660s London, was part and parcel of establishing English imperialism, deeply involved in the English colonizing of Ireland (Syfret 1948). The Royal Societies were established as handmaidens of British imperialism.

Yet Mika has not served himself well in this paper by adopting this epistemically illiterate parody as his working definition of “the other” cosmos. *Rhetorically*, this parodic account of sciences, as they express Naturalism and function in the epistemic life of New Zealand as a nation state, which Mika has adopted here serves him well. For what Mika actually cares about is myth, or to use a more philosophical terminology, he is concerned to articulate the form of metaphysical commitments that affordances epistemic practices in *mātauranga Māori*, and it suits him to ignore

such analogous commitments in the sciences, which a more sophisticated and nuanced account would make obvious.

In one of the two institutional settings Mika is concerned with, this inadequate formulation of science is partially made up for by the sophistication and careful articulation of the NZ science curriculum. Consulting the work of authors whom Mika quotes approvingly as it “advocates ‘the opportunity for good philosophical discussion about categories and definitions’” (Stewart and Tedoldi 2021: 79), I discerned that the curriculum at its best amounts to a form of decolonizing conceptual analysis rather similar to that Kwasi Wiredu has articulated (Wiredu 1996). However, in later distancing himself from the sophisticated pragmatist separating-connecting of epistemes that those developing the science curriculum are calling for (Stewart and Tedoldi 2021), Mika reveals his agenda in this paper. He is proposing a strong, perhaps even absolutist, form of ontological relativity verging on cosmological isolationism. This counter-colonial platform is however only sketchily developed in this paper, which in a small way is a manifesto. These are the main planks in the proposed platform:

Philosophical mātauranga Māori (and its like) [will] reorient currently alienating existence towards an immediate, co-existent relationship with the world. This is probably its strongest attribute. It possesses the language to do this.

Relatedly, philosophical mātauranga Māori [will] reintroduce the idea that the human is only very weakly “knowing.” This humility is a mainstay of Māori worldviews generally. [...] Dealing with and inquiring into objects, the selfhood that philosophical mātauranga Māori advocates is de-emphasized.

Inevitably, leading on from that is the possibility that the human self is in a constant state of vulnerability.

Philosophical mātauranga Māori [will] instigate a renewed, fresh language to describe our reliance on the (apparently) external world.

A full and abiding philosophical mātauranga Māori would likely call for the dismantling of current institutions, as it is inimical to what many of us (Māori and Pākehā alike) have been colonized into believing is normal. (Mika 2022a: 104–5)

### 3

In order to deal with the grand global challenges that face us in what Mika calls “these bizarrely fractured times” (Mika 2022a: 101), something more than cosmological isolationism is required. Recognizing and respecting the roles of different forms of metaphysical commitments that can affordance epistemic practices skillfully attuned to the complex needs of our times and places is feasible. Albeit rooted in the many experiential worlds generated as cosmoses that abut and abrade, we humans can and have in the past invented parliaments where humans and other-than-humans engage in various forms of cosmopolitics (Latour and Weibel 2005).

I am suggesting that Mika is working his way to reinvent a cosmopolitical parliament in twenty-first-century New Zealand. In such parliaments the demands of explicit and informed, widely conceptualized forms of epistemic good faith are paramount. A preliminary agreement to go on together in good epistemic faith, explicitly staying true to one’s own metaphysical commitments, is required in recognizing and respecting, on the one hand, the narrative myth that stabilizes epistemic traditions like mātauranga Māori, and on the other, the diagrammatic models

that stabilize the sciences. That requirement applies on both sides. Whoever we are, we need to reject the idea that parochial epistemic privilege is enough and recognize access to any and every knowledge world as privilege, and that this requires considerable work. This is the “homework” that Gayatri Spivak urges:

To unlearn our privileges means, on the one hand, to do our homework, to work hard at gaining some knowledge of the others who occupy those spaces most closed to our [...] view. On the other hand, it means attempting to speak to those others in such a way that they might take us seriously and, most important of all, be able to answer back. (Landry and Maclean 1996: 4)

I would add to this exhortation. What we need to cultivate is a capacity to answer back *generatively* in helping others both to recognize “us” and our epistemics in all our complexity, and in that recognition of relationship, to recognize ourselves anew and with more insight. This is my way of inviting Mika to speculate on how his proposed *te ao Māori*, as a future fully-fledged philosophically discursive *mātauranga Māori*, might begin to engage with the full richness of Naturalism, recognizing its well-established traditions of effecting shifts in its metaphysical underpinnings, in cultivating and beginning to institute a situated cosmopolitics in New Zealand.

In offering a suggestion on where and how he might begin, I point to a recent article by philosopher of science Peter Godfrey-Smith (2021). In this essay he is considering relations between philosophers and other (non-human) animals, writing as someone who in puzzling about other minds has, for many years, worked at developing relations with some of the cephalopods who inhabit the ocean near where he lives in Sydney, Australia. Godfrey-Smith concludes this article by reminding his readers that across several centuries, both the form and the content of Naturalism’s metaphysical commitments have been shifted, albeit haphazardly and intermittently:

We [naturalists] can choose to seek a greater measure of consistency, as well as benevolence in [our collective relations with non-human animals]. [In Naturalism] we have made these moves in the past—setting out from habits and norms that function in ancient forms of social life, becoming encrusted with theology and coercion in many cases but sometimes breaking free, integrating with our evolving picture of the world and what we are about, and guided, fitfully and fallibly, by parity [between humans]. We can take the process further, if we choose to, and rethink [the metaphysical commitments that ground] our relationships with [non-human] animals. (Godfrey-Smith 2021)

While taking considerable inspiration from the early work of American philosopher John Dewey in recognizing the co-constitution of the knower and the known, but even more inspiration from Nigerian Yoruba schoolchildren who have experience in this matter (Verran 2001: 156–73; Verran 2007), I suggest to Mika that as a beginning in mobilizing his future *te ao Māori* in cosmopolitical diplomacy, and challenging Naturalists to live up to this self-proclaimed capacity for evolving their working imaginary or picture of the world, he might initiate diplomatic cosmopolitical relations with Naturalists concerning possibilities of their recognizing co-constitution of their concepts of knower and knowns as metaphysical commitment. How to institutionalize such discussions is another matter.

---

<sup>1</sup> The concept of Naturalism is highly contested in both philosophy and anthropology, as the following quotations attest. In philosophy: “The contemporary philosophical world is full of self-described naturalists, and there is probably some minimal cluster of theses on which all of us who claim this badge agree” (Kitcher 2018: 66). Indeed, in philosophy “‘Naturalism’ is more prevalent

---

than ever. It is a commonplace that most professional philosophers describe themselves as naturalists, but there is little consensus about what naturalism entails” (Bagger 2018: 1). While both Kitcher and Bagger claim modesty in their naturalism, as do Dewey and Godfrey-Smith to whose work I refer, many philosophers cleave to a full-blown scientific naturalism. Philosophers do not claim their naturalism as a cosmology. Anthropologists also do not propose their naturalism as cosmology, which for them carries old-fashioned anthropological connotations of hermetically sealed whole worlds: “‘Naturalism’ is invoked with increasing frequency by anthropologists as a distinctively Western ontology which posits a shared unitary nature, upon which are overlain multiple ‘cultures,’ ‘perspectives,’ or ‘worldviews.’ But where, if at all, is this ontology to be found?” (Candea and Alcayna-Stevens 2012: 36).

Capitalizing the term as “Naturalism” is my way of signalling that I am explicitly proposing a cosmology that in philosophical terms offers possibilities for articulating the metaphysical commitments that afford scientific naturalism. Here I am following my Indigenous academic colleagues who claim themselves to be “Caring for Cosmologies” in the academy (Wanambi et al. 2022). My formulation of Naturalism is more minimalist than even the most “modest” philosophical formulation, and appears radically underdetermined when compared to even Descola’s fairly minimalist anthropological definition (see Verran 2001: 33–6, where I use the term “working imaginary” rather than cosmology).

## Reply: Criteria Beyond the Pale: Mātauranga Māori and Science

CARL MIKA

University of Canterbury, Aotearoa/New Zealand (carl.mika@canterbury.ac.nz)

I am extremely thankful to the four symposiasts for their responses, each providing fascinating outlooks on a complex topic. The reviews have been generously given, they have an openness about them, and they often cause me to reconsider or at least firm up my position. Such in-depth contributions must surely take their toll somewhere in this time of excessive busyness,<sup>1</sup> and so I am indebted to the four symposiasts for their excellent work.

I feel privileged to now respond to them, with my focus landing on the following broad themes: the need for Māori to establish our own standards by which we assess claims of equivalence between Māori and western phenomena; those criteria and their battle with language; and the Māori scientist's dilemma.

### 1 Māori Ontological Commitments

Starting with the first theme: as so often happens, something outside of ourselves can demand our attention to the point of being noisy.<sup>2</sup> The problem that repeats itself for me, which I raised in my initial article and asks for my response in this debate and others, is simply the following: what are our *Māori* ontological commitments that a western phenomenon must meet for it to be equivalent to a Māori one? Questions would then launch from those same commitments, assessing whether science meets the criteria behind the questions. I could have bypassed this step, but to me it is vital to the overall debate because it centers what is important for a Māori worldview instead of assuming that such a worldview is already situated within the questions normally asked (which I do not believe is the case). The importance of these Māori criteria cannot be overstated, and the categories they establish would drive in a completely different direction from those we are familiar with (Mika 2021). Vitality, these criteria cannot be determined by science because they preexist science, in the sense that whatever criteria we articulate from our shared ontology we create become our means of assessing a situation, including (for instance) whether science resonates or equates with philosophical *mātauranga Māori/Te Ao Māori*.<sup>3</sup>

Here, I acknowledge Jones' argument that "The researchers [...] may well be acting on their impulses, but I would suggest, that bears no relation to *mātauranga Māori*. *Mātauranga Māori* is grounded in experience and principle and reason. It incorporates knowledge and knowledge systems, built up and developed over generations. It is no more or less impulsive than western science" (Jones 2022: 108). Jones' assertion may hold true for *mātauranga Māori* if it is a direct translation of science, by which science and scientific *mātauranga Māori* are one and the same. I suggest that the principle and reason within philosophical *mātauranga Māori/Te Ao Māori* he advocates for, however, are different to that of science. Philosophical *mātauranga Māori/Te Ao Māori* "principle," to begin with, is different to that of western science. At the most fundamental level, western science—in fact, western rationality generally—relies on a separation between things in the world, whereas *Te Ao Māori* emphasizes the opposite. That deep difference cannot be ignored, even into subsequent dealings with objects in the world. Moreover, the "reason" of classical Greek philosophers, in particular of Plato and Aristotle, is vastly different to that of Māori who, on the basis of the interconnection I have alluded to throughout this response and the initial article, ordered things in the world in a different way to make sense of their interconnectedness, not their separateness.

Does science meet our Māori criteria that our own version of "principle" and "reason," for instance, dictate? First, we would have to look at those ontological commitments I mentioned

earlier. They lie in the swirling ether of our cosmologies as forms of logic that may not need to be systematized but do await our attention in some form. They could reside in Kore (Nothingness), Te Po (the Dark), or several similar phenomena. These logics should have wider application than simply a ceremonial, spiritual use; they should apply to the everyday, because the “everyday” seems to be the neglected aspect of Māori philosophy.

Moreover, these established commitments should be deliberately skeptical of the ones we currently and often unconsciously default to. They give rise to those simple questions we are already familiar with in the mātauranga Māori/science debate, such as: is there observation at work, and does knowledge evolve from a systematic process? While appearing straightforward, these questions are inadequate for a Māori worldview because they draw on sets of ontological commitments that dominant western thought deems acceptable. These questions assume, for instance, that a spiritual commitment to one’s ancestors in the form of the question “Is there an ancestral presence in my relationship with this object?” is at best irrelevant and fanciful, and possibly a hindrance to the distance between an object and the observer that science calls for.

I have been grappling with the overarching nature of those western-derived ontological commitments/criteria underpinning those questions mentioned earlier in the above paragraph, and I suspect their unifying feature is that they rely too heavily on the surface features of a thing—those characteristics presented to us through colonization as being apparent, possessing empirical qualities that, if we pay attention to *just* them, will tidily answer our questions.<sup>4</sup> Thus, whether observation takes place, or whether there is deductive logic at work, does not fully shore up the issue of whether mātauranga Māori is science, at least not from a Māori philosophical/Te Ao Māori perspective.

Those sorts of questions we default to when we posit an equivalence between mātauranga Māori and science are “surface questions.”<sup>5</sup> I am interested in Korab-Karpowicz’s ideas here, especially when he identifies that “societies in which philosophy or science plays an important part depart from the eternal order of myth and constantly seek their completion being in a stage of a constant dissatisfaction with the results of their findings” (Korab-Karpowicz 2022: 116). For him, myth “reveals the knowledge of the whole, which is wisdom, for which philosophy in a proper sense looks. But it [myth] does not disclose this holistic knowledge to anyone without his or her appropriate devotional engagement” (Korab-Karpowicz 2022: 116). Science also blocks that being-within-the-world in its insistence on objectivity; along with philosophy in its rationalistic mode, it precludes any sense of “world-withinness,” whereby the self is already deemed part of the All before their inquiry into a particular phenomenon.<sup>6</sup>

## 2 Potential Questions

The criteria that the Mātauranga Māori-science equivalence proponents seem to attach appear to center on how the scientist or mātauranga Māori exponent works with science or mātauranga Māori—whether they observe, inquire, and so on. These questions assume that know-how or method within science or mātauranga Māori are key, and they therefore also assume that science and mātauranga Māori *in themselves* are somehow already established. A Māori scientist existentialism does indeed need to be carefully formulated, and I suspect this is Mercier’s key concern when she says, “I agree with scholars who assert common methodological ground between science and Indigenous knowledges” (Mercier 2022: 120). However, to focus simply on how one deals with science assumes that the essences of science and mātauranga Māori respectively are already determined and, as a result, their respective natures are not critiqued. With science and mātauranga Māori already neatly established, the key Māori question of how science and mātauranga Māori respectively *establish themselves* among things in the world is not addressed.

A Māori set of questions could be the following: does something (e.g., science) proclaim something about the world (and does its statement about things in the world match with a Māori worldview)? How does something (such as science) take its place among other things—what is its disposition towards the idea that the world is radically interconnected and that the human self is not supreme in the world? These criteria reflect our current problem by insisting that any questions relate to whether science acknowledges that the world is radically interconnected, that the observing self is indivisible from what is being observed, that the observer is not simply dealing with one phenomenon but the universe in its entirety (this is how we see “whakapapa”), and that, more abstractly, science works along the same lines as Māori thought in terms of time and space.

Only if science were able to agree that all things, invisible and visible, are indeed one could it correspond with the principles of philosophical mātauranga Māori/Te Ao Māori. Only if science were a particular kind of phenomenon that acknowledged the observer and observed were one would it correspond with some key Māori ontologies of interconnection (Mika 2021). Science cannot accommodate those two characteristics of philosophical mātauranga Māori/Te Ao Māori, and it cannot deal with the Māori idea that things in the world do *not* occupy their own, individual space within linear time, either. One can see that science needs to prove itself to mātauranga Māori in terms of how it tends to manifest, not simply its implementation.

Given the positivist nature of dominant western thought, it makes sense that it privileges what is tangible and visible and thus advocates that we all seek out those features that are tangible and visible. In the colonization of our perception of objects, we have been subtly taught to settle for the surface characteristics as if they really meet our own standards. Often, those colonization-imposed units of assessment find their voice in language.

### 3 Language and Māori Criteria

I detect Jones’ unease with the role of language in this debate, and I share it with him. Language remains a tricky issue for Māori philosophers and for other scholars as well. Often, I have heard Māori complain that a translation from Māori into English does not sufficiently cover the scope of the Māori term, yet nearly always the problem is thought to be linguistic, not philosophical. I suggest that this problem can only be solved by looking at the colonized assumptions of language itself. Linguistics in its conventional form—a discipline itself based at least partly on the sciences—cannot solve this problem. A solely philosophical debate around what language in itself *is* awaits Māori forums.<sup>7</sup>

Jones addresses the problem in the translation of “law” as “tikanga.” I want to quote him at length here:

Do those differences mean that the effective recognition of tikanga Māori is incompatible with the common law? Perhaps. But it does not mean that tikanga Māori is incompatible with the concept of *law*. Some people would argue that it is unnecessary and perhaps unhelpful to describe tikanga Māori as law or to identify the legal dimensions of tikanga Māori. The argument is that tikanga Māori is best described as tikanga Māori. It does not need to be slotted into the terminology of law. And seeking to identify the legal dimensions of tikanga Māori so that it can be addressed as law is to engage in the type of separating out that is inimical to te ao Māori. As I understand it, this reasoning bears some similarities to the argument advanced by Mika. That is, by applying western modes of thinking to a system which has its philosophical foundations in te ao Māori, the elements of that system that are most consistent with those western modes of thinking come to define the Māori system (of knowledge or of law, as the case may be) in ways that are inconsistent with te ao Māori. (Jones 2022: 110)

I see the issue Jones raises as belonging to both the difficulty in deploying concepts across cultures and what language is *in itself*. I italicize that phrase because it is important for assessing whether language reveals anything—from a Māori perspective—outside of its intended denotative meaning.<sup>8</sup> This approach means returning to the ontological commitment I mentioned earlier and abandoning our current views on what language is, handed to us through colonization. I suggest that language, for Māori, does not simply bring with it conceptual meaning but, more importantly, reveals how a phenomenon relates to the All.<sup>9</sup> Thus, language provides both a concrete and abstract means of assessment (in these debates the *taonga*<sup>10</sup> nature of language may lie in its ability to reveal where colonization puts objects in relation to the All).

I suspect abandoning our current views of language, which separate things in the world from each other, calls for courage, because it means preferring a highly subjective view of language, perhaps based even on what we have come to term “the spiritual,” leading to accusations of being fanciful or irrational. This turn in language would be marked by a Māori notion of Being within language. A Māori view of language in these sorts of debates, I suggest, would not default to whether terms *mean* the same thing, according to the one-word definitions that we have attached to them, but to whether a term such as “law”—and even the current “tikanga”—generally reflect the view that things in the world are one.

Questions that arise about this view of language are the following: should we reject the English translation of an (apparently) Māori phenomenon because of a problem in its (the translation’s) original sense? That is, can we speculate that it began in a way that does not fully agree with a Māori worldview?<sup>11</sup> Or has it taken on assumptions or characteristics through its use that do not correspond with that Māori worldview?<sup>12</sup> This latter, broadly discursive view of language might also lead to the following subset of questions: what relationship does a term (such as law, science, philosophy, or even knowledge) impose upon the self, where the self is meant to be related to all things in the world? And what can we do with the term when we have to use it (this question might also be asked in light of Mercier’s stance in respect of both science and *mātauranga Māori*)?

Such questions will inevitably expose the shortfalls of English terms *en masse* and the worldview they reveal in one way or another, especially when the translations are economical one-worders. From a philosophical perspective, I have argued elsewhere that language for Māori is mostly revelatory in terms of the fact of the All, and any conceptual meaning manifests accordingly (Mika 2017; Mika 2016). Thus, “law” seems to indicate a clear overlay upon objects—not itself part of the objects but like a blanketing structural organizer. It puts things in their place. It is highly conceptual and so it is abstract even though it does deal with concrete objects (humans, property, and so on). Its tendency fits with its etymology that it evolves from—“that which is fixed or set” (online etymology dictionary, n.d.).<sup>13</sup> Its disposition (Korab-Karpowicz calls this tendency “attitude”) is such that things in the world become highly separable and static. This is not to say that there were no ground rules or commitments in traditional Māori society but—and to repurpose Heidegger’s words somewhat—the term law “appropriates” a world that is immediately what it is—fixing, fragmenting, and divisive.<sup>14</sup> What it cannot help but *be* is static. Its most basic disposition is that it welds things into place,<sup>15</sup> and any excess beyond the limits it sets would therefore be unacceptable. The characteristic of fixity is hence necessary for the survival of that Being innate to the term “law.”

Interestingly, the term “science” also betrays the reduced scope of things in the world. This reductionism is inimical to a Māori worldview as much as “law” is. Science also singles things in the world out and fixes them, evident in its origins as “scientia.” *Scientia* is sourced in Aristotelian logic, where its corresponding knowledge must evolve from universally true propositions (Demeter, Schmal, and Lang 2015).<sup>16</sup> From a Māori worldview perspective, it is significant that *scientia* as derived from Aristotle has as its disposition a focus on singular, separate elements at a time. This singularity is more rigid and radical than what I suspect traditional Māori

would have engaged with, being enforced from the outset with the idea that things are most certainly *not* immediately one. The fact that it tacitly but deeply opposes unity between all things—including between the inquiring self and those things—makes it immediately at odds with Te Ao Māori. In Te Ao Māori, though, I speculate that if we did traditionally focus on one entity in our formulation of knowledge (and I am not convinced we did, but am admittedly unsure—I wasn't there!), the All would have formed an inescapable backdrop to that inquiry. If we did single things out for knowledge's sake, we would not have obliterated that backdrop, as it constituted (among other things) the lens through which we inquired. And even if the All were not evident or were even dropped in the process of inquiry, it would have been implicitly understood as incorporated within the entire process, and there would likely have been a way of making that fact of the All visible *at all points*.

My points here lead me to consider whether we can moderate scientia and its separability through either including a qualifier, such as “*indigenous* science,” or by allowing for mātauranga Māori to be “scientific.” Mercier and Jones hint at both possibilities. However, because scientia already illuminates its innate tendency, the die is cast, so to speak. Yes, for Māori there may traditionally have been a type of empirical observation, maybe there were necessarily true propositions at work, but scientia wants us to reduce our relationship with things down to their singularity and their knowability and thus pretend that observation and universal propositions are ultimately concerned with forming certainty about things in the world through knowledge. Therefore, any qualifiers cannot lessen certainty through “scientia” and its descendant “science.”<sup>17</sup> To return to Verran's critique: I posit that we are already drawing on that essential Being of the term (science) that must come with it, regardless of the type of science we use.

This interpretation of language I endorse does admittedly imply that we have little control over language. From a Māori perspective, we certainly can change a term's meaning, but not its innate mechanism. It is the necessary tendency of both “science” and “law” that may be causing us to run up against the problems we see with translation, not any meaning we attach to the term.

#### 4 The Māori Scientist's Position

As I have mainly been speculating on how science and philosophical mātauranga Māori/te ao Māori manifest themselves—as if they have their own phenomenal agency, derived from some articulated, given first principles—I must admit I am much less clear about the space(s) the individual Māori scientist occupies, in much the same way as I am unsure about the space(s) I occupy as a Māori philosopher. The fact that I have neglected these questions clearly does not make them invalid: I am simply admitting I have not been especially reflective on how *we* construct human identities (although I have worked on a sort of Māori existentialism of humanity generally in light of our interconnection with the All). Both Mercier and Verran draw my attention to this very important issue.

Mercier does a much better job of addressing Verran's concerns than I do. Verran encourages me to think beyond what she calls “cosmological isolationism.” Where, ultimately, I see incommensurability and thus no cross-fertilization, Mercier sees more dynamic potential, due in part to her own experience. She advocates for a third space, where “[w]hen we take up and anchor our kite, it is like a conscious handling of Mika's ‘abstract desiderata.’ Like the Māori greeting ‘tēnā koe,’ which inextricably tethers the speaker to the spoken to, the abstract are all somehow anchored in the real, observed world. Tethered and flown, the kite evokes wonder and hope, inviting us to take the new and unknown into our hands” (Mercier 2022: 123). Muru-Lanning has also spoken recently on the possibility of science and mātauranga Māori working alongside each other. While they can work together, overall I think Mercier sees more hope of reconciliation than I do.

But I see the point that Verran and Mercier want me to consider, and the best I can do is revisit some of my earlier points. If it were *really* Te Ao Māori being enacted, science simply would not figure as an issue. It would cease to exist, because the conditions necessary for its survival—separability of things in the world, the unspiritual properties of objects—are no longer there, due to the introduction of Te Ao Māori. From the perspective of first principles, science and Te Ao Māori are at odds and they cannot co-exist in a third space, as both need to remain true to their respective ontological commitments to take their forms *as* what they are—science and Te Ao Māori. As soon as they are combined to make up a third space, they lose their essential nature and cease to be what we call them. Thus, science would no longer be science if it had to engage with an object that is spiritually imbued and take that fact seriously, or if it had to proceed as if the observer and observed were indivisibly one. And te ao Māori simply would not be te ao Māori if I, as a scientist, a lawyer, or a philosopher, had to engage with an object as lacking spiritual essence or if I had to see myself as separate from the object.

Again, this feature of the argument suggests to me that we cannot talk about mātauranga Māori methods or the positionality of the Māori scientist until we have determined what that deep commitment of Te Ao Māori to its first principles looks like. Once we have wananga'd (broadly, “debated”) this issue, we can then turn to what form Te Ao Māori methods and personal identities may take—but not until that point is addressed. Currently, however, I suspect the boundaries we attribute to Te Ao Māori are too porous. Unlike the Richard Dawkinses of this world who fiercely defend the boundaries of science (whether we agree with the specifics of his argument or not), we have not given attention to what is *not*<sup>18</sup> Te Ao Māori according to its philosophical origins, and so we may be more accommodating of potentially antithetic paradigms than we should be.

Mercier draws on an interesting phrase in Māori to explain her ideas. She notes that:

Science aspires to a freedom of the observer—the objective—from the observed—the subject—but in te ao Māori we are linguistically inextricable. We see this in the most basic acknowledgement of a person to a person. In te reo Māori two individuals might greet each other with ‘tēnā koe’ which literally means ‘that you (one person).’ The word ‘tēnā’ translates to ‘that (near or connected with the listener)’ (Moorefield 2003–2022), and is a determiner that is connective, spanning any distance. As Mika points out, te ao Māori seeks oneness and unity, and in te reo Māori is embedded an expression of that, like a web between me and you all. (Mercier 2022: 123)

I wholeheartedly agree with Mercier’s explanation and want to visit it in light of the science phenomenon. While “tēnā koe” might be translated as “that you,” it glides too neatly over the complexity of the “you.” There is certainly a “you,” but one that is complicated by the web Mercier refers to. The distance spanned is connective, as Mercier notes, and furthermore, all entities within that distance spanned are incorporated into the notion of the “you.” The you is immediately the All. As Mercier suggests, though, science dispenses with that entanglement and keeps trying to separate the you from it. To achieve this, it seeks clarity on the you and the other, through identifying the individual characteristics of the phenomenon (often the person when we use tena koe, although sometimes the mountain, the meeting house, etc.) as a separate entity.

What seems to be important here is that the cultural way of talking about things in their most fundamental form—how we word their irruption within the world—is key in our decision about whether science or te ao Māori is valid. There may therefore certainly be a third space, but it is one we inhabit to witness two vastly opposed ontologies. In my rendering of the third space, I suspect I emphasize that sheer difference more than Mercier does. This space is one we can occupy to feel awe at the sheer incommensurability of two such vastly opposed ontologies. It allows us to marvel at the fact they haven’t ever gotten together, nor will they ever. This does not

mean there is not some productivity created from their opposition, but perhaps this space is simply one that we can inhabit to experience the witnessable.

I suggest that the Māori scientist would have to accept, and even welcome, that total incommensurability, not try and get science and Te Ao Māori to speak to each other. Thus, I agree with Verran's lament that my position could lead to "cosmological isolationism." I agree that to stop at simply saying "they are different" is insufficient. But we cannot default to "cosmological togetherism" either. I see the same possibility emerging in Māori philosophy, incidentally. As a Māori philosopher, my concern is less with trying to get dominant western philosophy and Te Ao Māori to talk with each other and more with highlighting their (again) complete incompatibility. As a philosopher, I deal nearly exclusively in the world of ideas, not so much with external objects like scientists do. However, as a Māori philosopher, what an "idea" is, in a Māori sense, is as concrete as what the west calls the empirical world.<sup>19</sup> Those different propositions around "idea" are stunningly different from each other. In my work in philosophy, I therefore wouldn't say that I occupy a third space so much as I am a witness to their brilliant, respectively different essences that might give rise to incredible things in their absolute otherness.<sup>20</sup>

## 5 Conclusion

Speculative philosophy is so interesting because it does not simply assume that a thing is bounded by concept. Also, the speculative philosopher is aware that they are caught up in a stance or attitude of their own. However, the speculative philosopher is not alone in being an interested actor; so is the scientist, and so is the analytic philosopher, both of whom, through their "indifference," as Korab-Karpowicz puts it, cannot help but take a position. Mercier is especially open about her vulnerability in this whole debate when she states that "I experience a fight or flight response in relation to all of this. In the fight part of the response is an urge to 'defend' the 'honor' of mātauranga. I have a responsibility for mātauranga—the mauri and 'mana' of mātauranga—and as such an obligation to defend, joining the others who stood up to defend mātauranga" (Mercier 2022: 122).

If it is any consolation to Mercier, proponents of both science/scientific mātauranga Māori and Te Ao Māori adopt mythicity in the form of interest and emotion. She can be assured that those who oppose mythicity are experiencing the same "fight or flight response." Thus, while I agree with Jones that the defensiveness I alluded to in the initial chapter "only closes off possibilities for different ways of knowing," I stand by my assertion that they share in the same origins. At least the defensive actors are showing some emotion. Perhaps it is time we smiled instead of getting outraged, happy with the feeling that their opposition to mythicity or indigenous thought is at least honest. They are heading (back) towards accepting mythicity—it's just going to take them a bit of time to get there.

---

<sup>1</sup> Busyness impacts us all, and I wish I had the time to respond to all the points the reviewers raised, as they are all valid. However, I have had to opt for some overarching themes that spring from specific points they make.

<sup>2</sup> In fact, if we were expansive enough in our reading of mātauranga Māori, it would highlight the pre-rationality that, I argue, should play a significant part in Māori thought.

<sup>3</sup> In other words, science cannot establish the criteria that we use to assess science. Without limiting the problem to science, I have argued elsewhere that Māori need to develop these understandings and set the parameters of these discussions, whether in relation to science, law, or language, etc. (see, e.g., Mika 2017). Stewart (2020) makes a similar claim with specific reference to science: "[t]o equate mātauranga with science means attributing to mātauranga the epistemological commitments of science, thereby limiting the ability to explore and develop contemporary

understandings of mātauranga in its own right” (n.p.). The epistemological commitments are actually ontological ones, in my view. Stewart also advocates viewing mātauranga Māori as a philosophy. Significantly, that philosophy would call for a highly speculative approach, perhaps similar to what I employ later in this piece.

4 Here, I acknowledge conversations with, and ideas from, Garrick Cooper, Beverley Collison, and Margaret Stuart, who all in their own way urge the practice of looking beneath the surface. Cooper, a colleague of mine, is currently theorizing that Te Po (the Night) is the lens through which we should be approaching phenomena.

5 This is a sort of working title. In Māori we might simply call them Ao marama patai—questions which embrace visibility. They could also be called “the empirical question” or, in a colonized era, “the obvious question.”

6 To that extent, I do not see any fundamental difference between science and rationalistic philosophy, even though they may have different forms of inquiry. Both essentially encourage the self’s skepticism of things in the world, which Māori thought would not have endorsed.

7 This debate may not necessarily be based on traditional knowledge but instead an awareness of colonized views of language and then theories in response to them. Traditional knowledge about language may play a part here but wouldn’t eclipse the discussion.

8 My propositions on a Māori philosophy of language are highly speculative. I am unsure of how Māori traditionally thought of language in itself. I am convinced, though, that they thought of it differently to how we currently perceive it.

9 “The All” is admittedly a dreadful phrase, but it’s one we have to make do with.

10 Translated as “treasured.”

11 This could relate to whakapapa (genealogy) as it relates to origins. Tracing the origins of a term through its etymology is not a new practice, but any cultural group will approach it in their own way.

12 This could relate to a more accrual-type notion of whakapapa.

13 And here I see Jones’ point about law and tikanga being incommensurate because of the degree of fixity that law strives for. However, I assert that tikanga is fast becoming just as fixed and so will soon meet the fixity-expectations of law. We might then have to replicate the categories in the science/mātauranga Māori debate with the following: *legal* tikanga and *philosophical* tikanga/Te Ao Māori.

14 My views around language here share similarities with Heidegger’s. However, Heidegger would have trouble with a Māori view that the human self is, in all respects, also “that thing there.”

15 Even if it modifies something about itself, for example through common law, it merely replaces one area of fixity for another. It is in its DNA to fix.

16 On this point, I take on board Verran’s observation that my version of science could be more thorough. There may certainly be other versions of science that do not reflect those strict renditions of it and appear not to be so tightly wound up in that conventional version of science. I respond by stating that the aim of my paper is simply to address Dawkins’ and certain Māori responses in light of their default to this particular description of science. Additionally, though, Dawkins’ (and similar others’) description of science is not actually wrong, and furthermore it is a very common description. Verran may be correct when she states that I am unwittingly doing them and any relevant societies a favor by adopting their description of science; however, if their version of science is indeed incomplete, as she suggests, perhaps I am highlighting that very fact by running with what they propose is science.

17 Though I believe it would be a mistake to assume that simply getting rid of a term will solve the problem. We already see that a term can be replaced by another which simply replicates the problem. More frequently, we see this happen in policy and law, where English terms are being

substituted by Māori ones that are being reduced in scope (and the mātauranga Māori/tikanga debate is an instance of this).

- 
- 18 Developing Te Ao Māori modes of inquiry might there be a negative process.
- 19 Indeed, while the debate around mātauranga Māori and science ensues, we haven't even begun to address what a Māori version of abstraction is, which would involve us taking to task how we view an idea. In my view, that latter issue has more profound implications than the mātauranga Māori/science one does, as it impacts on all Māori, not just scientists and mātauranga Māori proponents. In academia, it would be an especially profound debate in philosophy.
- 20 These “things” may not be measurable or capable of being used.

## References

- Anderson, Kim, Flores Ruíz, Elena, Stewart, Georgina. Tuari, and Tlostanova, Madina, “What Can Indigenous Feminist Knowledge and Practices Bring to ‘Indigenizing’ the Academy?,” *Journal of World Philosophies* 4 (2019): 121–55. doi: 10.2979/jourworlphil.4.1.07
- Bagger, Matthew, “Introduction,” in *Pragmatism and Naturalism: Scientific and Social Inquiry After Representationalism*, ed. Matthew Bagger (New York: Columbia University Press, 2018), 1–18.
- Barnes, Jonathan, *The Presocratic Philosophers*, Vol. 1 (London, Routledge, 1979).
- Candea, Matei and Alcayna-Stevens, Lys, “Internal Others: Ethnographies of Naturalism,” *The Cambridge Journal of Anthropology* 30, no. 2 (2012): 36–47.
- Chalmers, A. F. *What is This Thing Called Science?*, 4th edition (Indianapolis, IN: Hackett Publishing Company, 2013).
- Curtis, Elana, “A Day in the Life of a Māori Academic,” (2022). Available from [https://e-tangata.co.nz/reflections/a-day-in-the-life-of-a-maori-academic/?fbclid=IwAR14E49uosrDmn8uGv\\_G7ge70ejozgUIzd3q7VrwtE2xwOGzIXkrKIo0NhQ](https://e-tangata.co.nz/reflections/a-day-in-the-life-of-a-maori-academic/?fbclid=IwAR14E49uosrDmn8uGv_G7ge70ejozgUIzd3q7VrwtE2xwOGzIXkrKIo0NhQ) (last accessed on July 1, 2022).
- Dawkins, Richard, “Myths Do Not Belong in Science Classes: Letter to the Royal Society of New Zealand,” Richard Dawkins Society for Reason and Science: A Division of the Center for Inquiry (2021), <https://richarddawkins.net/2021/12/myths-do-not-belong-in-science-classes-letter-to-the-royal-society-of-new-zealand/> (last accessed on June 28, 2022).
- Demeter Tamas, Láng Benedek, Schmal Dániel, “Scientia,” in *Encyclopedia of Renaissance Philosophy*, ed. Marco Sgarbi, (Cham: Springer, 2015), [https://doi.org/10.1007/978-3-319-02848-4\\_266-1](https://doi.org/10.1007/978-3-319-02848-4_266-1) (last accessed on July 5, 2022).
- Descola, Phillipe, *Beyond Nature and Culture*, trans. Janet Lloyd (Chicago: University of Chicago Press, 2013).
- Dewey John, *Experience and Nature* (Chicago: Open Court, 1925/1929).
- Eliade, Mircea, *Patterns in Comparative Religion*, trans. R. Sheed (Cleveland: Meridian Books, 1963).
- Eliade, Mircea, *Myths, Dreams and Mysteries*, trans. P. Mairet (New York: Harper & Row, 1975).
- Frankfort, H. and H. A., *The Intellectual Advantage of Ancient Man* (Chicago: Chicago University Press, 1967).
- Freeman, Kathleen, *Ancilia to the Pre-Socratic Philosophers* (Cambridge: Harvard University Press, 1983).
- Godfrey-Smith, Peter, “Metaphysics and the Philosophical Imagination,” *Philosophical Studies* 160, no 1 (2012): 97–113.
- Godfrey-Smith, Peter, *Metazoa. Animal Minds and the Birth of Consciousness* (London: Williams Collins, 2020).
- Godfrey-Smith, Peter, “Philosophers and Other Animals,” *Aeon* (2021), <https://aeon.co/essays/why-korsgaards-kantian-argument-about-animals-doesnt-work> (last accessed on July 3, 2022).
- Griffin, Peter, “Richard Dawkins’ Foray into the NZ Science Curriculum isn’t Helpful,” *Stuff* (2021), <https://www.stuff.co.nz/science/300475046/richard-dawkins-foray-into-the-nz-science-curriculum-isnt-helpful> (last accessed on June 28, 2022).

Heidegger, Martin, *Being and Time*, trans. J. Stambaugh (Albany: State University of New York Press, 2010).

Hikuroa, Dan, *Integrating Indigenous Knowledge With Science*, paper presented at the 2009 Seminars, New Zealand, 2009, <http://mediacentre.maramatanga.ac.nz/content/integrating-indigenous-knowledge-science> (last accessed on July 1, 2022).

Hikuroa, Dan, “Mātauranga Māori—the ūkaipō of Knowledge in New Zealand,” *Journal of the Royal Society of New Zealand* (2016): 1–6. doi:10.1080/03036758.2016.1252407 (last accessed on July 1, 2022).

Husserl Edmund, *The Crisis of European Sciences and Transcendental Philosophy*, trans. D. Carr, (Evanston, IL: Northwestern University Press, 1970).

Kawagley, A. O., Norris-Tull, D., & Norris-Tull, R. A., “The Indigenous Worldview of Yupiaq Culture: Its Scientific Nature and Relevance to the Practice and Teaching of Science,” *Journal of Research in Science Teaching* 35, no. 2 (1998): 133–44.

Jones, Carwyn, “A Māori Constitutional Tradition,” *New Zealand Journal of Public and International Law* (2014): 187–203.

Jones, Carwyn, “Response to Carl Mika ‘No—We Do Need More Myth: A Response to the Science/Mātauranga Māori Fear,’” *Journal of World Philosophies* 7 (2022): 108–12.

Kidman, Joanna, “This is Going to Hurt,” *E-Tangata* (2021), <https://e-tangata.co.nz/history/this-is-going-to-hurt/> (last accessed on June 28, 2022).

Kitcher, Philip, “Deweyan Naturalism,” in *Pragmatism and Naturalism: Scientific and Social Inquiry After Representationalism*, ed. Matthew Bagger (Columbia University Press, 2018), 66–88.

Kinita, Dana, “Science Finds Fit with Tradition,” *New Zealand Herald*, <https://www.nzherald.co.nz/rotorua-daily-post/news/science-finds-fit-with-tradition/NUFSQKDZ5RRHQWDVPYFTXA4HMA/> (2013, last accessed on July 2, 2022).

Kirk, G. S., *The Nature of Greek Myths* (London: Penguin Books, 1974).

Kirk, G. S., J. E. Raven, Malcolm Schofield, *The Presocratic Philosophers: A Critical History with a Selection of Texts*, 2nd edition (Cambridge: Cambridge University Press, 1984).

Korab-Karpowicz, W. Julian, “Rethinking Philosophy: A Reflection on Myth, Philosophy and Science,” *Philosophy Today* 46, no. 2 (2002a): 209–17.

Korab-Karpowicz, W. Julian, “Knowing Beyond Science: What Can We Know and How Can We Know?,” *Humanitas* 15, no. 2 (2002b): 60–73.

Korab-Karpowicz, W. Julian, *Tractatus Politico-Philosophicus: New Directions for the Future Development of Humankind* (Oxford: Routledge, 2017).

Korab-Karpowicz, W. Julian, “Philosophy as Engagement with the World. Why Do We Need to Understand Myth for our Philosophical Revival? A Response to Carl Mika,” *Journal of World Philosophies* 7 (2022): 113–9.

Landry, Donna and Maclean, Gerald, “Introduction: Reading Spivak,” *The Spivak Reader. Selected Works of Gayatri Chakravorty Spivak* (New York and London: Routledge, 1996).

ed. Latour, Bruno and Weibel, Peter, *Making Things Public: Atmospheres of Democracy* (Cambridge, MA: MIT Press, 2005).

Marsden, Maori, *The Woven Universe: Selected Writings of Rev. Māori Marsden* (Ōtaki, New Zealand: Te Wānanga o Raukawa, 2003a).

- Marsden, Maori, “God, Man and Universe: A Māori View,” in ed. T. A. C. Royal, *The Woven Universe: Selected Writings of Rev. Māori Marsden* (Otaki: Estate of Rev. Maori Marsden, 2003b), 2–23.
- McFadgen, Bruce, *Hostile Shores: Catastrophic Events in Prehistoric New Zealand and Their Impact on Maori Coastal Communities* (Auckland: Auckland University Press, 2007).
- Mead, Hirini Moko, *Tikanga Māori: Living by Māori Values* (Wellington, New Zealand: Huia, 2003).
- Mercier, Ocean Ripeka, “Mātauranga and Science,” *New Zealand Science Review* 74, no. 4 (2018): 83–90.
- Mercier, Ocean Ripeka, Douglas, M., Rickard, D., Orlando, S., Morrison, S., & Apiata, D., “Project Mātauranga—Our Science On-Screen,” in *Enhancing Mātauranga Māori and Global Indigenous Knowledge*, ed. Tairahia Black (Wellington: NZQA, 2014), 69–86.
- Mercier, Ocean Ripeka, Stevens, Nathan, and Toia, Anaru, “Matauranga Maori and the DIKW Hierarchy: A Conversation on Interfacing Knowledge Systems,” *MAI Journal: A New Zealand Journal of Indigenous Scholarship* 1, no. 2 (2012): 103–16.
- Mercier, Ocean Ripeka, “Myths are Kites, Tethered to Fly: Mātauranga Māori, and Holding the Known and the Unknown,” *Journal of World Philosophies* 7 (2022): 120–4.
- Mika, Carl, “Overcoming Being in Favour of Knowledge: The Fixing Effect of Mātauranga,” *Educational Philosophy and Theory* 44, no. 10 (2012): 1080–92.
- Mika, Carl, “Worlded Object and its Presentation: A Māori Philosophy of Language,” *AlterNative: An International Journal of Indigenous Peoples* 12, no. 2 (2016): 165–76.
- Mika, Carl, *Indigenous Education and the Metaphysics of Presence: A Worlded Philosophy* (Oxon, England: Routledge, 2017).
- Mika, Carl and Southey, Kim, “Exploring Whakaaro: A Way of Responsive Thinking in Maori Research,” *Educational Philosophy and Theory* 50, no. 8 (2018): 795–803. doi.org/10.1080/00131857.2016.1204905 (last accessed on June 28, 2022).
- Mika, Carl, “Where Do We Stand When We Know? Reflections on Mātauranga Māori and Its Translation as ‘Science,’” *The Philosopher* (2021): 48–53.
- Mika, Carl, “No—We Do Need More Myth: A Response to the Science/Mātauranga Māori Fear,” *Journal of World Philosophies* 7 (2022a): 101–7.
- Mika, Carl, “Reply: Criteria Beyond the Pale: Mātauranga Māori and Science,” *Journal of World Philosophies* 7 (2022b): 131–9.
- Moorefield, John, “Te Aka Māori Dictionary,” available from <https://maoridictionary.co.nz>, (2003–2022).
- Morgan, Kepa, “Takarangi, Yin and Yang, Mauri and Qi,” *MAI Review* 3 (Peer Commentary 5), (2009).
- Muru-Lanning, Charlotte, “The Place for Mātauranga Māori is Alongside Science” (2022), <https://thespinoff.co.nz/atea/01-06-2022/the-place-for-matauranga-Māori-is-alongside-science> (last accessed on July 5, 2022).
- Neuman, Lawrence, *Social Research Methods: Qualitative and Quantitative Approaches*, 7th edition (New York: Pearson, 2009).
- Online Etymology Dictionary*, “Law” (2022), <https://www.etymonline.com/word/law> (last accessed on July 1, 2022).
- Plato, *Republic*, trans. Robin Waterfield (Oxford: Oxford University Press, 2008).

- Royal, Te Ahukaramū Charles, “Politics and Knowledge: Kaupapa Māori and Mātauranga Māori,” *New Zealand Journal of Educational Studies* (2012): 30–7.
- Short, T. L., “Peirce on Science and Philosophy,” *Philosophical Topics* 36, no. 1 (Pragmatism, 2008): 259–77.
- Stewart, Georgina, “Kaupapa Maori Science,” PhD Thesis (University of Waikato, Hamilton, 2007).
- Stewart, Georgina, “Mātauranga Māori: A Philosophy from Aotearoa,” *Journal of the Royal Society of New Zealand* 52, no. 1 (2020): 18–24. <https://doi.org/10.1080/03036758.2020.1779757> (last accessed on July 5, 2022).
- Stewart, Georgina Tuari and Tedoldi, Angelo, “Bringing Māori Concepts into School Science: NCEA,” *Contemporary Issues in Education* 41, no. 1 (2021): 77–81. <https://pesaagora.com/access-vol-41/bringing-maori-concepts-into-school-science-ncea/> (last accessed on June 28, 2022).
- Syfret R. H. “The Origins of the Royal Society,” *Notes and Records of the Royal Society* 5, no. 2 (1948): 75–137.
- Tallon, Jeff, “Letter to Editor,” *New Zealand Science Review* 76, no. 3 (2020): 81–2.
- Verran, Helen, *Science and an African Logic* (Chicago: University of Chicago Press, 2001).
- Verran, Helen, “Metaphysics and Learning,” *Journal of Learning Inquiry* 1 (2007): 31–9.
- Verran, Helen, “Politics of Working Cosmologies Together While Keeping Them Separate,” *A World of Many Worlds*, ed. Marisol de la Cadena and Mario Blaser (Durham: Duke University Press, 2018).
- Verran, Helen, “Cosmological Isolationism Might be Necessary ‘Counter-Colonizing’—But What Next and How?,” *Journal of World Philosophies* 7 (2022): 125–30.
- Viveiros de Castro, “Cosmological Deixis and Amerindian Perspectivism,” *Journal of the Royal Anthropological Institute* 4, no. 3 (1998): 469–88.
- Wanambi Gawura, Wanambi Yangipuy, Muwara, Davis Wunungumura Watha, Wunumurra, Mickey Murkiltja Guyula Peter, Wunumurra Burrumbirr, Wunumura Dhukaniny, Lewis Margie, Wunumurra, Harry Marrkula, William GanambarrWarngarrkja, “The Story of the Gon-Däl Aboriginal Corporation,” (2014). [https://bushready.nt.gov.au/\\_\\_data/assets/pdf\\_file/0003/358941/The-story-of-GonDal-Aboriginal-Corporation.pdf](https://bushready.nt.gov.au/__data/assets/pdf_file/0003/358941/The-story-of-GonDal-Aboriginal-Corporation.pdf) (last accessed on June 28, 2022).
- Wanambi, Gawura, and others: <https://researchers.cdu.edu.au/en/projects/in220100007-caring-for-cosmologies-making-living-maps-for-west-mi> (last accessed on June 28, 2022).
- Waitoki, Waikaremoana, “In Defence of Mātauranga: A Response to the ‘Seven Academics,’” *New Zealand Medical Journal* 135, no. 1552 (2022): 139–42.
- Walker, Ranginui, “The Relevance of Māori Myth and Tradition,” in *Te Ao Hurihuri: Aspects of Maoritanga*, ed. Michael King (Auckland: Reed, 1992), 171–84.
- Winiata, Whatarangi and Luke, Daphne, *The Survival of Māori as a People* (Wellington, New Zealand: Huia, 2021).
- Wiredu, Kwasi, *Cultural Universals and Particulars* (Indianapolis: Indiana University Press, 1996).
- Yates, Amanda Monehu, Whakaaro Papa: Anthropos, Design and Decolonising Metaphysics (PhD, Auckland University of Technology (2018). <https://openrepository.aut.ac.nz/handle/10292/11995> (last accessed on June 28, 2022).

**Dr. Carwyn Jones** (Ngāti Kahungunu) is Pūkenga Matua (Lead Academic) in the Ahunga Tikanga (Māori Laws and Philosophy) programme at Te Wānanga o Raukawa and an Honorary Adjunct Professor in Te Kawa a Māui (School of Māori Studies) at Te Herenga Waka—Victoria University of Wellington. He is the author of *New Treaty, New Tradition: Reconciling New Zealand and Māori Law* (UBC Press, 2016) and co-editor of the *Māori Law Review* and *AlterNative: An International Journal of Indigenous Peoples*.

**W. Julian Korab-Karpowicz** received his doctorate from the University of Oxford and has taught at many universities across the world. He is the author of several books including *Tractatus Politico-Philosophicus: New Directions for the Future Development of Humankind* (2017). Korab-Karpowicz's articles have been published by *The Review of Metaphysics*, *The Monist*, *Philosophy Today*, *Ethical Theory and Moral Practice*, *Modern Age*, and other journals. Currently he is a professor at the University of Opole and Lady Davis visiting professor at The Hebrew University of Jerusalem. He is the recipient of the Personality of the Year Poland 2020 Award in Science.

**Ocean Ripeka Mercier** (Ngāti Porou) is an Associate Professor in Te Kawa a Māui, the School of Māori Studies, at Te Herenga Waka—Victoria University of Wellington. She teaches into the school's Resource Management Program and her research applies mātauranga alongside sciences in the context of mapping groundwater, protecting iwi/tribal interests in marine and coastal environments, and pest control to protect native species.

**Carl Mika** is Māori of the Tuhourangi iwi, and is a professor in Aotahi: School of Māori and Indigenous Studies, University of Canterbury. He has written several articles and chapters as well as books relating to Māori and Indigenous holistic philosophies, with a particular focus on their revitalization within a colonized reality.

Carl has experience teaching and researching in education and mātauranga Māori (Māori knowledge), the law, and global studies. He has held an adjunct professorship at RMIT and is involved in international projects that engage with Indigenous philosophy, including Sámi mánná jurddavázzin—Sámi Children as Thought Herders (Swedish Research Council); and Understanding Indigenous ethics and wholism within academic and Aboriginal community research settings (SSHRC, Canada).

**Helen Verran** is University Professorial Fellow at the Northern Institute, Charles Darwin University, Australia. Previously she taught History and Philosophy of Science at University of Melbourne. She began puzzling about how to connect in good faith with those who, metaphysically speaking, are committed to knowing otherwise when she began teaching at Obafemi Awolowo University in Ilè Ifé Nigeria. Later this work was pursued with Yolngu Aboriginal Australians who own lands in Australia's northeast Arnhem Land.