

ARTICLE

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**WEAVING POTENTIALITIES AND AI:  
PATTERNS ARE NOT INSCRIPTIONS**

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JOE CITIZEN, TONI HERANGI AND HOLLIE TAWHIAO

## **WEAVING POTENTIALITIES AND AI: PATTERNS ARE NOT INSCRIPTIONS**

Ngaa tuku o Maahina is a roopuu (group) whose kaupapa (purpose) relates to the multiple interconnected strands of knowledge of ngaa maramataka (site-specific lunar calendars). We are Hagen Tautari, Horomona Horo, Te Taima Barrett, Hollie Tawhiao, Toni Herangi, Ra Keelan and Joe Citizen. At our inaugural hui (gathering), Toni brought along a taonga (prized treasure) which had been in her family for generations. Dated 1898, this photolithographed collection in te reo Maaori (the Maaori language) and English has copies of He Whakaputanga (Declaration of Independence), Te Tiriti o Waitangi (Maaori version of the Treaty of Waitangi) and other associated papers.

To some, this assemblage might appear to simply be copies of older original documents. In te ao Maaori (the Maaori world), however, this collection has its own mauri (life-essence), mana (spiritual authority and prestige) and haa (breath), and retains links to the tuupuna (ancestors) through their tohu (signs). Maaori knowledge is something that isn't just stored in the mind, but embodied in people, places and things. For three of us—Hollie Tawhiao (Ngaati Tiipa, Ngaati Naho, Ngaati Ruamahue), Toni Herangi (Tainui) and Joe Citizen (Castlefranc-Allen, Rawls), our koorero (discussion/ conversation/ discourse) became centred on its preservation. Simply photographing it and uploading copies of it online would make it vulnerable to AI apps that employ web-scraping and web-crawling practices in order to thief knowledge and assimilate it into a supposedly universalist framework.

This koorero brought to our attention the wider take (subject) of how we should navigate the colonial tendencies of AI—the structural violence that arises from those culturally specific practices that assume a priori truths as universally foundational. By appraising the Eurocentric and human-centric assumptions behind data recognition through the automation of iterative logic loops, we acknowledge the entanglements of historically systemic problems: how cognitivism and positivism underpin supremacist claims of liberatory technological progress; how material realism and representational indexicality have traditionally dismissed and abused Indigenous knowledge frameworks; how military–industrial control culture has normalised surveillance and transnational capitalism; and how reductionist methodologies reify libertarian claims of individual freedoms as commodified transactions between atomistic entities.

Avoiding and navigating these colonialisms requires different patterns of being than Eurocentric framings. In the context of Aotearoa–New Zealand and our kaupapa (cause/ goal/ plan), we assert that everything in existence is related, all things are living and that worlds ‘unseen’ in Western terms can be mediated by humans.<sup>1</sup> Acknowledging the interrelations of everything brings attention to the importance of whakapapa (generated layers of relations), rather than specific entities themselves. To use the metaphor of a net, it’s the spaces in-between that have more importance than the strands that connect the more tangible interstices. When contextuality takes precedence, the calculation of answers becomes secondary—like the way that the emergence of co-created phenomena is not the same as the quantified prediction of events. Perhaps, then, we can start to think of the interconnecting strands not in terms of edges or nodes, but as the boundary conditions to access deeper layers of knowledge.

Our speculations began to pick apart the chain links of digital imperialism; we challenge the proclamations of those supposedly self-evidential truths that have provided the historical pretext for the theft of countless tangible and intangible taonga. Our relational understandings of time contest the claim that homogeneously linear and equidistant measurements are universally applicable, and our relational understandings of potentiality transcend those narrow Eurocentric assertions that potentiality is synonymous with tangible probability. Relational understandings are woven and always open-ended; we are alert to the agencies of non-human people, of those that came before, of that which is hidden and unknown, and to our place within these relations as being within, not under or over, everything else already going on.

To pick a strand and call it a beginning: we begin with mauri (life force), and immediately there is divergence, or growth perhaps—for te ao Maaori does not automatically subscribe to Eurocentric framings of what does or does not have life, agency or influence. We also acknowledge that whakapapa is non-binary—for whilst this koorero is in English, there are no easy essentialist divisions between Maaori and non-Maaori in the way that the prefix ‘non-’ syntactically supposes. Similarly, although we acknowledge that cultures are not essentialist categories, we use the suffix ‘-centric’ to make generalised comments about different cultural trajectories, with all their multiplicities and understandings of normality. These strands are always already connected beyond our cultural knowledge frameworks meeting here. Using kupu, using words, what you are reading or listening to now comes from he kanohi kitea (the seen face), with emphasis on our spoken meeting, where listening is a form of active participation, where our voices contribute to the take.

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Toni: Mauri can be thought of as being natural or constructed. Take a mere (a short weapon, usually carved from stone), which can be thought of as being just an object before going through the process of being given the name of an ancestor, which in turn helps to embed their mauri into that taonga to elevate it. Their mauri and their mana [prestige/ authority/ influence/ supernatural power] and all that came with them as a person when they were alive—this is imbued into the mere. The stone is natural, but the form is constructed, is brought forth, is shaped. The natural stone already had its own mauri, but now the mauri of the mere is different—the carver has helped the form to come forth through their intervention, through rituals and naming. Perhaps we can call it a construction, or perhaps it’s like a birth—it was always there, but now it’s something else. Artificial Intelligence is like the mere: it’s a technology where all its wires and everything come from nature, but it hasn’t given birth to us, we’ve given birth to it.

Joe: Are there distinctions between the natural and the constructed, between humans and everything else? Can human-made objects like AI possess a mauri, considering that they are constructed of natural resources that go through naming and ritual processes? Has human intervention helped to embed mauri into what we now call Artificial Intelligence?

Hollie: Yes. As Toni said, it can be organic or constructed, and as [Horomona] Horo states, AI “has always been first triggered by a human. And so, the essence of the mauri [in AI] still goes back to a human mauri.”<sup>2</sup> Mauri, in a simple way being the essence of something, the life-force of it, whether born or constructed comes from the same place, that same beginning. It has a whakapapa.

Joe: So, can AI have its own personhood? If we say that the Whanganui River has personhood, and we acknowledge non-human agency as a tuupuna, can we acknowledge AI as personhood in the process of becoming?

Hollie: Firstly, are these the same really? Those non-human, but still natural, ‘things’ have agency because of more complex cultural systems that they exist within, as summed up in the Whanganui saying “Ko au te awa, ko te awa ko au” (I am the river and the river is me)<sup>3</sup>—which is considerably different to AI. As Horo put it, with regards to AI having its own mauri, “although it can now continue on without us, it could never have been created without us.”<sup>4</sup> The mauri within ‘things’ is known in te ao Maaori, spoken about, experienced and understood. We have a whakapapa book within the Pei te Hurinui Jones collection here, organised by Princess Te Puea Herangi for the 600<sup>th</sup> anniversary of the Tainui landing. The book shows the whakapapa of everything from Io Matua to the captains of the migratory waka, and then down from those waka to the Kiingitanga.<sup>5</sup> These whakapapa lines are written all across his unpublished manuscripts, focusing on our origin story from te kore to te poo to te ao maarama—in essence, the whakapapa of everything, the essence and origin of all life, matter and our contextual relationship within. I will also point out that these Maaori koeroero are not literal in the way that non-Maaori interpret them—let’s just clear that up right now. Pei has considered the Maaori as “symbolical psychologist[s],” and that to interpret Maaori esoteric lore literally is incorrect. And early missionaries struggled with Maaori ritual, which may have been why they frowned on Maaori religion, and in turn why Maaori withheld esoteric lore.<sup>6</sup> Perhaps this identifies one of the gaps in understanding between Maaori and non-Maaori. But coming back to the question “can this AI have personhood?”—well, based on precedents, it possibly could, it has mauri. But just because it has this potential, that does not mean the potential of it for Maaori is unlimited. It has a different whakapapa and, as an entity, it would be different to, say, a river. Similarly, our rivers are different to, say, Toni’s whaanau book. The potential of such things needs to be considered and reviewed by Maaori in the first instance and, to do that, Maaori first have to understand AI and that knowledge needs to be more accessible to Maaori.<sup>7</sup> What is your understanding of AI?

Joe: Generative AI represents a shift from frequentist statistical approaches towards Bayesian mathematics.<sup>8</sup> Frequentism has a notorious difficulty with the reference class problem: calculating the probability of events happening is always dependent on the number of things in a given set.<sup>9</sup> The problem is that the universe is always bigger than any set of things one chooses to include or not include within that set. Chance, or what has been called chance, sits within a number of known possibilities. The unknown cannot be accounted for because it sits outside of any mathematical set. Flipping an idealised coin will produce either a head or a tail—it’s a set of two possible outcomes, with each supposedly having a 50 percent chance of happening. When people like

Stéphane Mallarmé say “A roll of the dice will never abolish chance,”<sup>10</sup> what they’re really saying is that there are some possibilities that lie beyond the known probabilities. Our idealised coin could land on its edge, it could be lost, or something completely unforeseen could happen.

This brings us to Bayesian mathematics, which is more like a decision tree-making model. It’s not “probability as the relative frequency of occurrence of events” but rather “probability as a degree of belief,”<sup>11</sup> which refers to the likelihood that humans will believe that something holds some measure of truth. Today’s generative AI still relies on Kantian a priori truth, which, simply put, is a Eurocentric insistence that time and space are universally understood to operate in the same ways—ways that are fundamentally measurable.<sup>12</sup> Bayesian probability is less concerned with fundamental measurements, but has shifted to what is known as a posteriori truth—which is the bit that insists that it is the application of logical or mathematical operations on those quantities that will produce new universal truths. The real difference is that Bayesian probability relies upon conditional statements, which in maths are those constructions that say things like “if this, then that” or “this will happen if, and only if, this other thing happens.” In programming these terms are sometimes called gates, because they either allow or don’t allow the next part of a process to occur, depending on whether or not their conditions are met or not.

Multiply these processes by billions of instances and we get generative AI; it’s less interested in the frequency of events than it is in using these decision-making logic gates to provide a guesstimate of whatever it is that it’s being asked to provide in the specific moment that such a question is being asked.<sup>13</sup> What’s common to both frequentist and Bayesian approaches is that they both subscribe to an assumption that measurements stand in for reality—that numbers as representations provide the only ‘real’ access to reality.<sup>14</sup> There’s this 400-year-old cultural claim called objectivity that first of all says that measurement is the only real way of knowing ‘the’ truth<sup>15</sup>—but now, generative AI is really just interested in what used to be called subjective truth. And that works really well for hyper-individualised consumer capitalism because it doesn’t have to be right, it just has to be right enough that the system is profitable.<sup>16</sup> Bayesian mathematics in that sense is not really about probability at all. It’s a cultural logic machine. It’s positivism. That’s why I call it a cultural logic.<sup>17</sup> It assumes that the act of measurement is fundamentally a stand-in for the thing that it represents. It comes from the European Enlightenment.

Hollie: See, that is a lot of complex information. And the concept of correctness in a European enlightened way doesn’t necessarily align with Maaori concepts of correctness.

Toni: What are Maaori concepts of correctness?

Hollie: It’s far more fluid. This is what I love about the discussion around tikanga (protocols/ ways of doing things) in relation to what you were just saying: it’s that tikanga can change.<sup>18</sup> An example is black worn at tangihanga (funeral ceremonies)—that’s introduced and adopted. Being able to attend tangi via conference call would never have been allowed pre-Covid. That has also changed; it grows and adapts. But, as I mentioned above, this is for Maaori to decide. With AI, if an existing Maaori position doesn’t exist, it must be discovered.<sup>19</sup> I imagine utilising mathematics as an agreed, confirmed truth would give a sense of certainty, especially if one did not want to bother with the practical application of a process or have to manage many opinions. Less negotiation.

Toni: Predictable.

Hollie: Yes, but people aren't predictable. And then, could AI ever truly embody personhood? It's a bit 'apples and oranges' really. You're saying generative AI is basically processing billions of these calculations and allowing, or not allowing, parts of processes to happen to arrive at a potentially "correct enough" profitable guesstimate. And all this is based on concepts of time and space and how they relate, say, as "this, then that." But what if I suggest Maaori concepts of space and time, relationality and organising our knowledge are different; and that calculations based on linear time may be useful to a degree, but can't fully encapsulate a Maaori way of being? And is how we perceive 'being' the same as 'intelligence'? Are we trying to find a middle ground, for the sake of this conversation, between what we understand as Maaori intelligence and the differences with enlightened European intelligence?

Toni: When we say Maaori intelligence, what is it that you understand or know or think of that?

Joe: I think about differences between what some people call cultural knowledge frameworks. In really broad terms, I would say that there's kind of a European Enlightenment-era kind of thinking that's come through into the modern day and is atomistic.<sup>20</sup> It thinks of objects as being self-contained, discrete. It talks about causal relationships between things. It's 'if this, then that.'

Hollie: Limited to three-dimensionality?

Joe: Yes, it's spatial like that. And time is conceived as being linear in terms of past, present and future. Whereas my understanding of te ao Maaori is that time is not like that.

Toni: Yes.

Joe: Then, to come back to your question about intelligence, I guess you could describe Eurocentric intelligence as an academic understanding that seems to be, in a sense, linear, . that seems to be, in a sense, linear, whereas, from Eurocentric perspectives at least, Maaori intelligence appears non-linear. There are distinct differences between foundational concepts, for example, how does time operate? through to what has agency in the world and what is potentiality? I guess the way I'd describe it is that there are distinct traditions rather than distinctions. Well, you know, in Western thought there is t influence of Newtonian physics. People can acknowledge quantum mechanics, but Newtonian physics is still a dominant discourse regarding cause-and-effect relationships. Western thought acknowledges that in quantum mechanics the agencies of observation have an effect on that which is being observed.<sup>21</sup> That's the case for Niels Bohr, at least. But that doesn't stop us from wanting to use quantum computing as a giant calculator. It seems curiously counterintuitive. I can talk to the things I know. I can't really define what Maaori intelligence is.

Hollie: I want to go back to the concept of Maaori time being nonlinear, because I think I take this for granted, in a way, as a truism; it was always just stated as a fact in my whanau. When Anne Salmond discussed her interpretation of her experience travelling with Eruera Stirling, she described him as "navigating this multi-dimensional set of matrices" regarding how he experienced and related to places and people.<sup>22</sup> She began to understand, by being with him, that the "structure is different" and logic is not the same, such as going from point A to point B. Pei te Hurinui Jones produced visual renderings of this, some of which are in his book *He Tuhi Mārei-kura*.<sup>23</sup> He drew these concepts of time and space as spirals, and Brett Graham points out that while it's linear in a sense, it allows for "seeing" to the past, across the threads.<sup>24</sup> So, with this in mind, another thing is how we share Maaori knowledge, if we do at all—or if we don't, because it has already been

dismissed as invalid because of colonisation. I'm thinking about this in terms of experiences that I've had with people who I feel know more than I do about Maaori culture.

Toni: Are these people Maaori?

Hollie: Yes. We'll omit the name, but they're an influential person in te ao Maaori. We were being hosted at a university by local indigenous academics; I was recording, and [name omitted] contextualised themselves through their whakapapa. This koorero was to connect them with our audience and show their shared whakapapa. I recorded the session and afterwards they came over to make sure I deleted the whakapapa part. Consider that this was 2015, before our access to AI, on an SLR camera. This could be shared in person only, tailored for that group only, with the express purpose of understanding and connection.

So, with that being their stance on it—a person highly respected for their understanding of Maatauranga Maaori—I would like to discuss why they would not want their koorero recorded. Because that's a really good example of someone not wanting a portion of Maaori knowledge being shared or maintained on technology, with the understanding that it could potentially go elsewhere. When it comes to AI—for example, OpenAI—from the outset what risk does putting our koorero on there look like? They knew in 2015 they didn't want their koorero on technology that could be replicated. Doing that today then, with AI, would be an absolute no.

Joe: So, we can understand this reluctance for Maaori to engage with the technology, but is that AI or is that capitalism?

Hollie: It's probably a combination of both, because the politics that are happening at the moment within AI are not for the advancement or the benefit of people.

Joe: It's not just about progress, it's seeking to be the definitive articulation of a technology, and in a sense that relates to one's market share.

Hollie: It's been this strategic race for people to get things out first, and doing it without thinking through the ethics of it. Even though we are not yet 100 percent sure of where AI leads, it does have a lot of marketable and profitable potential, which is concerning.<sup>25</sup> Whereas with Maaori, the ethics and potential implications are an immediate issue.

Toni: And I think especially because Maaori and a lot of other indigenous cultures always think seven years ahead—it's seven generations. So how will what we do today affect those tomorrow?

Hollie: I think that's what they [name omitted] were thinking. They know it's not just their whakapapa only.

Toni: Yeah.

Hollie: People concerned with profits gawk at that.

Joe: It appears to me that one's whakapapa has been used to validate or invalidate a wide range of claims around ownership of resources, and what is or isn't education or mental health, or what is or isn't the law.

Hollie: We're not being difficult for the sake of being difficult—it's just something that matters a lot to us. It is a tenet of the way our communities function. So yes, watching it being used outside the context of te ao Maaori or forced into European systems in these ways, and in some cases weaponised and/or fragmented, can be concerning. It's dangerous to take things out of context.

Joe: Yeah. And the thing is that the rest of the world actually has to learn from Maaori in this respect, because the European Enlightenment and its heritage—for want of a better way of putting it—is destroying the planet. It's an extractionist attitude and an addiction to a bonanza style of exploitation in order to turn a profit; an exploitation of not just nature, but everything.

Hollie: Capitalism at work. It's doing a great job.

Joe: It's doing a great job of using everything up. And we can talk about humanism, because humanism was a big thing for the European Enlightenment thinker, and today it still is. It wants to have the control; it's kind of an addiction to control. There might be philosophical moves towards post-humanism or whatever, but there is still this thing about materiality—that somehow materiality is separate to spirituality.

Hollie: The idea of materiality and spirituality being separate—and your example earlier of things being self-contained, with causal relationships to other things—is already at odds with Maaori connectivity to all things, through whakapapa or history, et cetera. But also, we are not at the centre of everything; our relationship to other people and things is not a pyramid, with us perched at the top. There's a great example of Princess Te Puea's mum growling at her for being arrogant about her rank, reminding her she is only important because the people allow it.<sup>26</sup> I love this as an example of humility, but also the reality that we are, in fact, not the centre of everything. We realise that pretty quick in the face of disaster.

And I agree it is about control. It's built into every part of our society. That's what scares me about AI: it's the loss of control. Not even that, but our arrogance that we will always have control. And if we lose that control, were the benefits really worth it?

Let's consider some immediate potential benefits, yeah? Of AI as it is now. For example, as urban Maaori I exist in a constant state of negotiation, trying to relearn and reclaim what was lost during urban drift. AI could help with language rejuvenation and whakapapa. It could analyse historical koorero against those of other indigenous cultures and find similarities to close knowledge gaps. Moving beyond that, could it be recalibrated with indigenous knowledge to be less exploitative and more sustainably conscious? Though we know AI perpetuates stereotypes and reinforces injustices, there seems to be an idea that maybe we could use it effectively.<sup>27</sup> And, in fact, a lot more people would benefit in the move away from the dominant biases of the white male programmers, and more towards including indigenous ways of knowing that incorporate kin networks and thus interconnected wellness and accountability.<sup>28</sup> I mean, it can all sound lovely, can't it? But it still concerns me.

There's this entitlement to knowledge and information, I feel. For example, people know my genealogical whakapapa; they'd be aware of Toni's also. And because people have this information, they feel they're entitled to share it however they see fit. I can't stop people having access to these very personal parts of who I am, my own whakapapa—it's published by Pei, Michael King and the like. [Name omitted] could erase the recordings of their whakapapa. I can't. Once it's out there,



it's out there, and it will be used as it will be used. Once we give over this information, even with the best of intentions and with the greatest potential for benefit, how do we uphold its integrity?

And this is an interesting point. Did you know that unpublished and private Maaori whanau manuscripts can come out of copyright? By law, even though they are inherited and donated private manuscripts, passed down through whanau, they will technically be out of copyright and cannot be protected outside of limiting access. I thought that as whanau taonga, these would be safe, but it's not. And that's what I see as a risk of AI. We assume that our interest will be kept, and we're sometimes a bit naive in that sense.

Joe: I see AI as colonialism. It's claiming something which wasn't theirs to claim. During the Enlightenment, the belief emerged that knowledge should be universally accessible; there was a cultural assumption that if western culture was emancipatory, it would be emancipatory for everybody.

Hollie: I can see that reflected maybe in the way that [name omitted] was protecting their whakapapa and in my own experience in my role of kaitiakitanga (steward/ guardian) of knowledge, and especially digitally housed knowledge. I understand the digital space as noa, as unrestricted and accessible, regardless of how 'safe' we want to believe it is. Once digital things can be replicated and shared quickly and further than we've ever been able to before—when our koorero end up in these places—we have given up some level of control. Once it's outside of te ao Maaori, people feel they can take it, use it and claim it.

Toni: They've claimed the world and it's not even been theirs to claim.

Joe: Toni, I'm aware that you didn't give your definition?

Toni: What's my definition of AI? I understand that it is manmade. That it is, in a sense, a machine that can learn from everything that we do. That the more we use it, the more it learns and that one day it will become self-aware. We made it in our image, to a point, I suppose, but it's going to surpass us.

And for me, I don't know. I don't know about anyone else, but for me that fuckin' terrifies me, you know, because we lose control of everything. And because of the history that most indigenous cultures have experienced through colonial processes, which AI is, it's just same shit, different form. How can we preserve the essence of who we are, which is found in our taonga? Because with those taonga is preserved our heritage, our whakapapa, our knowledge systems, our everything. And if you think about it, that's fuckin' freaky. That's terrifying.

Joe: I have a question about awareness. What is awareness? When you talk about machines, will they become aware?

Toni: Maybe it will be able to think and not have to ask for confirmation. What does this mean? What would happen if we do this? It's got enough brain cells or brain or whatever to be able to calculate different outcomes.

Joe: I think it can already do that. I think it doesn't need to ask for confirmation.

Toni: Humans can't even do that. Not really.

Joe: It makes calculations, but these are all mathematical operations. That's not like human thinking. It's more like a highly refined or very, very narrow band of what or how some humans think.

Hollie: Technically, it follows logic, whereas human brains are able to take in a lot of stimuli as well. We can make leaps and bounds of logic, or seemingly impossible connections through what we see, hear, smell, taste, touch, but also through the backlog of experiences we have and our emotional responses to them. Intuitive leaps.

Toni: That's relational intelligence, yeah.

Hollie: There's a lot of different inputs that we have as people in societies and constructed cultures with lived experiences. But, if we're going to talk about awareness in AI, you can feed in cues, but will it ever reach a point of emotional intelligence? Would we ever be able to feed it emotional data? Probably not. But it may be able to perform emotion.

Joe: It's interesting because of that performative thing, by which I'm referring to the idea that the emphasis is on the action, or the action of action, rather than the representation of action. AI, on the other hand, requires representationalism, inasmuch that programming requires the exchange of symbolic tokens, which stand in for the things they purport to represent. Bayesian mathematics is in a sense, more performative in its operations, because it's always being calculated in the event, instant-by-instant, on the fly. What's problematic, is that it uses the mechanism of representationalism in order to work properly, whilst simultaneously discarding an older foundational cultural claim that quantitative methods provide access to objective truth. In any case, I'm very uncertain about claims that AI may be able to perform emotion, because quantitatively tracking behavioural changes is not at all the same thing as the lived experiences of having emotions.

Coming back to intelligence, is that intelligence? Can we agree that it is a practice? This is a way of doing things. It is not innately true universally, in and of itself. We forget that these things are methods, not methodologies—that's what a machine is, it's a method.

Hollie: It's calculated.

Toni: Well, that can also go back to humans. Are we organic machines?

Joe: Some people might think so, but that's a mechanistic way of looking at what humans are. There are parallels between colonialism and AI within this capitalistic model. Purely productive, materialistic. Logical senses of inputs and outputs. AI programming has historically been heavily influenced by ideas that have come from neuroscience and psychiatric models of operant conditioning. Feedback loops, for instance, are in effect positive and negative reinforcements of data inputs.

Hollie: The idea of productivity is reinforced. For example, I come from factory parents; being a hard worker was a good thing and we were always told that if you're struggling you don't work hard enough. And every single problem you have in your life is because you don't work hard enough. But who does that benefit?

Joe: Well, the factory owner, not you. You're simply the means of production—or that would be a classic Marxist analysis of it, anyway.

Hollie: Because everything is productivity here. Everything. We rip our land to shreds because it's productive. We like the concept of AI because it can do things faster and more efficiently. We can be more productive, like light speed—productivity without any clarity as to what the ends are. But why? When is enough, enough?

Joe: I think some of that relies upon those ideas that, again, come out of the European Enlightenment, like the concept of the commons. The Enlightenment identified nature as being common—that there is common access to nature and that any surplus after survival can be turned into profit. The trouble is that this was seen as revolutionary within these culturally specific instances of older imperial colonial relationships. That may have been revolutionary for America to escape Britain, but we cannot assume it would be equally revolutionary for the rest of us. To assume that it is revolutionary in a universal sense is cultural arrogance.

Coming back to what we are talking about—this idea that essentially our behavioural data is there for the taking—again, it's a claim on what we would otherwise call natural resources. For profit. I mean, Linda Tuhiwai Smith talks about the difference between colonialism and imperialism, where colonialism is the fort and port of imperialism.<sup>29</sup> In that sense, that's what AI is. It's the means of acquisition and removing data from its original context. Production is not for the benefit of the people from whom it came. Ditto with the resources to make it go, and with everything else.

Hollie: So, the other question, then, is why? Say, talking in terms of Maaori data, why is it important that Maaori maintain hold of their data and what is the risk if it goes into AI? As I said, once it's out, it's out—can the integrity be protected?

Joe: Well, I think, first of all, you have to grapple with the concept of control and who has access. You talked about access to whakapapa and who has the right to recite which whakapapa and to who. And it comes down to the type of time that AI uses, which is an a linear sense of how time operates. Digitality typically requires a clock in order to make these processual calculations.<sup>30</sup> Clock time, as understood within a system of GPS and GMT, inscribes a very specific set of relations. It assumes a cause and effect, processual relationship between inputs and outputs. In a sense, this is a Newtonian understanding of how time operates, as if the universe was a giant clock. It may be true that the original idea of computers was that they computed. But when we move to a Bayesian model, we keep this culturally specific understanding of time but jettison the original search for certainty. It can't be assumed that this model of time is universally true, whether it's from indigenous perspectives or quantum mechanics. The Newtonian model cannot be taken for granted. So, we have to decide what is right for us. It's important for everybody to decide what they need to hold onto and to decide what belongs to them. It's about who has control about how we live our lives and what is 'normal.'

Toni: Maybe not control. Maybe the ability to navigate your own path.

Joe: I mean the ability to have self-determination.

Toni: Yeah.

Joe: That you are the ones that get to decide how you are, and are engaged with, in the world. I mean, is that control or simply self-determination?

Hollie: I'm asking if there's a point. But I'm asking because it is also interesting. If we are to consider precedents as one step to dealing with deciding such things,<sup>31</sup> then, historically, entering Maaori knowledge into Paakehaa systems has already not served us. WAI 262 [Waitangi Tribunal claim 262] touches on some cases of misuse, like koru on toilet paper, the misuse of Te Rauparaha's ngeri—better known as “Ka Mate Ka Mate,” the ‘haka’ of the All Blacks—and even copyright as ‘protection’ in regards to ngaa mooteatea (laments) or the writings of Elsdon Best.<sup>32</sup> Best himself is a great example of being given knowledge and space only to disseminate it in the most bigoted and offensive way.<sup>33</sup> Obviously, from a European perspective, it was reinforced as accurate and cited over and over again, giving it further credibility in the Western world. Non-Maaori became Maaori ‘experts’ because Maaori were dying out. Assimilate or die—so we did, we lived the Paakehaa way and we are good at it. Because there was absolutely no interest from Paakehaa in living a Maaori way, which was, I feel, our assumption of what could happen in the first place. A mutual growing. It turned out not to be the case, and here we are. Ferociously protecting what we have left.

Joe: Ngaa mihi o te mamae (acknowledgements of the wounds). It provokes a number of other questions. Generative AI is not just about pattern recognition, it's also about making tweens between things. There's an assumption that nothing means anything anymore because there's this supposed departure from the real. But I think conversations with indigeneity reveal that one cannot assume any such departures, because what is or isn't real can't be taken for granted. The exchangeability of meaning can't be assumed to operate in the same way that a hyper-capitalist world might align with postmodern understandings of meaning, where the commodification of meaning means that meaning itself is understood to be infinitely exchangeable. Conversations with indigenous cultural knowledge frameworks quickly reveal that this type of cultural trajectory can't be assumed to be universally applicable. So, when it is assumed to be universal, the question has to be asked as to who benefits from these claims?

Toni: Quite interconnected, the scope.

Joe: I just want to come back to a point that you talked about: Maaori becoming really proficient in Paakehaa ways of being and knowing. In the book *Pūrakau: Modern Maaori Myths Told by Modern Maaori Writers*, Nic Low writes about AI being made in the image of atua (ancestors/ deities/ personifications) for different iwi.<sup>34</sup> It's kind of written like a gangland war, and what's interesting about it is the question it asks—which is, what's to stop iwi (confederated tribes) or haapuu (sub-tribes) from having their own intranet-style AI that is not connected to the rest of the planet, in the same way that the internet was originally conceived of with DARPA?<sup>35</sup> All it really requires is consistent protocols for communication and the servers to be located here in Aotearoa. There's nothing to stop Maaori from doing it for themselves, to be used by themselves, and the way in which they want to use it for themselves.

Hollie: Money and an infrastructure that supports Maaori into these spaces. Maaori could do this, this is 100 percent true, except for the digital literacy gap, the digital divide with Maaori. Access to internet is expensive, quality devices are expensive and quickly obsolete, education is expensive, servers are expensive, land is expensive, and hosting a server for a large language learning model requires money.

There's a claim at the moment, the WAI 3311 claim,<sup>36</sup> arguing these points and highlighting where there are inequities specifically for Maaori in the tech sector. Inequities such as systemic discrimination against Maaori in the tech sector and lack of support for Maaori to enter into the sector, both through funding and meaningful legislation.<sup>37</sup>

Maaori can 100 percent do it, but—and I know people like to say that this isn't true, but it really, really is—we are often at a disadvantage. Maaori have been streamed out of the tech sector and instead channelled into unskilled labour.<sup>38</sup> The digital divide became very clear during Covid, when they realised that a lot of Maaori only had one computer in their household, if they had one at all.

Joe: You're right. I experienced that in my own classes.

Hollie: So, with that in mind, what do we do?

Joe: You know, you hear all the time the conversation about taonga tuku iho (cultural treasures handed down through the generations), and I can see how the need to think about the future in relation to the past, is not always seen as being immediately financially viable, but surely the need for digital sovereignty is as important now as it is for our shared futures? When you're handing down to next generations, you know, there's a lot of koorero about what sort of ancestor you are. And, surely, you're an ancestor—I mean, all of us are ancestors who want a better world and a sense of having our different knowledges protected. Now, maybe I'm informed by my own liberal Paakehaa traditions when I say that word 'better,' but what I'm getting at is that, as a Paakehaa walking into te ao Maaori, I often feel that I can't say the things I want to say, because it's not my place to say them.

Toni and Hollie: That's correct. Not in a disrespectful way.

Joe: Yeah, I don't take it in a disrespectful way because I recognise that I've come from a different culture. But if, we're talking about digital sovereignty, then it's beneficial not just for Maaori, but for everybody in Aotearoa, that our data is kept in this country. And was it you, Hollie, who was saying that the Ministry of Justice keeps all its servers overseas?

Hollie: I don't think I said that, but even our libraries—including the University of Waikato library—have moved all of their data overseas, with the exception of some pockets of data which we've managed to secure local servers for, specifically our kaimahi in the library; we've actually nailed down servers for Maaori and sensitive data. But outside of those, it's all cloud and international servers.

Joe: Yeah, it's really common for educational institutions and other ministries to do that, because it's cheaper to go with the cloud. And the thing is, that data is insecure because those overseas servers are not subject to our country's jurisdiction, so they're also susceptible to AI web crawling and web-bots to basically take it at will.

Hollie: It benefits people who are tech savvy, an area which Maaori have been proven to have been streamed out of.

Joe: It makes sense to me that we have control over our own data, simply because it comes down to our own self-determination. And are we really in a position to be able to decide the right side or the wrong side of that for today, when we're talking about those who come after?

Toni: To be honest, I don't think that I'm really that tech savvy in terms of AI and the computer kind of stuff, but I do know my te ao Maaori. You know, trying to find ways to preserve our taonga is my angle on this article. All the things that you guys are saying, I'm listening and I'm learning. So, keep talking.

Hollie: No, no, no, because this is the thing, you shouldn't have to know. You shouldn't have to understand the tech. You're already a master in te ao Maaori. Maaori already have to walk two worlds. Why, then, should you have to learn tech inside and out to use it safely, because there's this expectation that you have to do this in order to maintain your own interests? You know, this is what I'm talking about—we get tired. You—we—should be able to know our stuff and have support from people who know their stuff, like AI. Say, Toni, if I come to you to get you on board with AI and I'm, like, "We've got a language learning model and it's closed. The servers are held in New Zealand and what that means is that none of your information is going to go overseas, and what we can do is we can use it to record your koorero and it'll hold it. We're not going into the ether, this is where we will hold it. And this is the law it will come under, which will be New Zealand law." But you're sceptical, so I persist with "it's super-fast and efficient at analysing and organising your data."

Toni: What's wrong with the way that we organise our data? I can do it in my mind.

Hollie: What about big amounts of hugely valuable data, such as a Maaori academic's manuscripts or the Maaori Land Court minutes? It could organise that and make it easily accessible super quickly, whakapapa, koorero, the lot.

Toni: I disagree with that. I don't think that's a good idea.

Hollie: Awesome. Can you please tell us why?

Toni: Well, because, you know, for centuries, generations prior to the arrival of colonial people to Aotearoa, our tuupuna (ancestors) had their own kind of knowledge base that we were able to preserve. Generations and generations and generations of whakapapa that sometimes will take a month to recite nonstop—that is held in our brains, in our minds. So, we have the capability and the kind of mental capacity to be able to retain huge amounts of knowledge. Which is just exactly what that AI thing is, so it's obsolete. But I do know that not everyone has that capacity. Not everyone has a good memory. And I suppose AI could make it more accessible for others. Do they deserve that knowledge? What are they going to do with it, once they get that type of thing? So that's why that's not a good idea.

**Hollie Tawhiao** (Ngāti Tiipa, Waikato, Pākehā) (ORCID ID: <https://orcid.org/0009-0001-8191-9021>) is Kaitiaki Mātangireia in Te Iho o Te Manawataki, University of Waikato Library. Graduating her undergraduate in Fine Arts at ELAM, she went on to complete her PGDip in Museum Studies from Massey and her Masters in Contemporary Arts with Te Pūkenga | WINTEC. Her masters explored the potential of visual culture as a portal to influence cultural evolution. Focussing on Māori visual culture as existing on a spectrum free from colonial parameters such as “traditional” and “contemporary”, her research reflected on the methods of knowledge transfer and the impact of human influence on shifts in cultural beliefs over time and how these impact identity and self-perception. Her research interests include Māori material culture, identity and self-determination.

**Joe Citizen:** I gained my PhD (Design) from AUT in 2019, and currently work for Wintec | Te Pūkenga in Kirikiriroa/ Hamilton. I am a collaborative practice-led creative-arts researcher mainly interested in speculative metaphysics located at the intercultural hyphen space (Fine, 1994), particularly in relation to te ao Māori and te ao Pākehā ways of knowing and being. My work has relevance to the fields of Māori-Pākehā relations, post-humanist and new materialist critique, aesthetics, and contemporary digital theory.

**Toni Herangi:** My creative practice is Toi Māori/Māori Art Practices based, meaning my creative explorations and processes are guided and nurtured primarily by bodies of knowledge and ways of knowing which stem from Toi Māori, te ao Māori practices and traditions. The narrative focus of both my creative practice and mahi rangahau processes are informed by Whakapapa; concepts focused on understanding the nature of relationships and connections from an indigenous perspective, and processes of doing or practical applications. My contribution to this field endeavours to illustrate the nature of the connections and relationships that weave the fibres of te ao Māori together, to articulate the significance of Whakapapa in its many forms, to pay homage to the knowing that is fostered through such explorations, and to highlight the value that matauranga Māori has to offer.

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## CALL FOR PAPERS: JUDGEMENT

*Junctures: The Journal for Thematic Dialogue* invites submissions on the theme of “judgement.”

In the contemporary moment we regularly see both forthright judgements and a recoiling from the violence of such judgements. On the one hand, there has been a widespread (re)turn to the political right, bringing with it a gleeful dismantling not only of the gains made for marginalised identities and communities in the post-1960s period but an undisguised reimplementing of forms of discrimination and oppression. Meanwhile on the left there is a staunch refusal to allow space for anything that carries the whiff of, or bears some resemblance to, discredited attitudes, particularly with regard to cultural or gender identity. On the other hand, there is a growing view that critique, criticism, critical theory and critical thinking, rather than furthering progressive thought and countering unreasonable and entrenched beliefs, can be damaging. Judgement can perpetuate combative, competitive modes of being—affirming a state of opposition between competing ideologies. Judgement can tend to represent and reaffirm existing paradigms and conventions—that which already exists—rather than being conducive to generating unexpected and imaginative insights, spaces and relationships—that which might happen. Judgement can appear arbitrary and groundless in contexts (contemporary art, for example) where the criteria for value are unclear or unstable. Judgement, no matter how rigorously supported, can be stultifying, imposing the illusion of resolution, closure or an end-point rather than opening up more discussion. And judgement can be culturally blind, based on ignorance or disregard for world views different to one’s own, or harmful to mental health or wellbeing, a repercussion more conspicuous than ever in today’s culture of candour and diagnosis. Yet the refusal to judge could be regarded as allowing reprehensible or unsupportable views to go unchallenged, or as a pusillanimous acceptance of the prevailing state of affairs. To refrain from explicit judgement might be a failure to recognise that, as Barbara Herrnstein Smith has written, “We evaluate all the time. It’s not a matter of should or shouldn’t. We can’t stop ... We continuously orient ourselves different toward things that seem better or worse, more or less desirable.” Smith’s position, simultaneously challenging entrenched values and socio-political power relationships while acknowledging the inevitability of judgement, constitutes a sophisticated form of post-modern relativism. Recent critical theory that advocates for less judgemental forms of discourse is more aligned with the ontological turn, as with Rita Felski’s 2015 book *The Limits of Critique*, a critique (for want of a better word) of what she calls (using Paul Ricoeur’s words) “the hermeneutics of suspicion.” The editors welcome proposals for articles in any field or discipline and from diverse perspectives on the current status of critical judgement.

Please submit a title and abstract of between 500 and 750 words for a finished paper of between 4,000 and 6,000 words accompanied by a short biography including your institutional affiliation by 31 March 2025. We will let you know if your abstract has been accepted by 14 April 2025. Final draft of submissions due by 2 June, 2025 with envisioned publication October 2025.

Please enquire about submission guidelines for other formats from editors:

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