Radical enactivism and Māoritanga: Heteronomy flowering

Abstract
Enactivism, a form of cognitive science, has arisen this century which heralds a return to a positive form heteronomy, through a recognition of a relational mind we share with each other. This paper offers an explication of enactivism, drawing on philosophers, popular writers, and a psychoanalyst to make it understandable. It then draws parallels with indigenous cultures and in particular Māoritanga.

Key Words: Radical enactivism, Wittgenstein, Trigant Burrow, Levinas, fast and slow thinking, Māoritanga

Introduction

In Gregory Bateson's book "Steps to an Ecology of Mind" published in 1972, the central idea emphasized the importance of adopting a mode of thinking aligned with nature in order to live in harmony with it. Bateson believed that the recently developed cybernetics, represented the most significant leap in humanity's pursuit of knowledge in the past 2000 years. Since then, advances in the life sciences, greatly influenced by cybernetics, have led to a growing number of voices advocating for a shift in the social sciences towards heteronomy. Previously, the Enlightenment period gave rise to ideas of individual autonomy as proposed by Kant and Rousseau; and these have dominated discussions on political theory, medical ethics, and personal identity. However these ideas of autonomy have been severely criticized by anti-enlightenment environmentalists as they were seen to be responsible for disastrous attempts to enslave nature and colonize people. Thus there has been a gradual erosion of individualism and autonomy throughout the twentieth century, found in the works of Weber (1904), Wittgenstein (1953), Dewey (1934), Mauss (1934), Adorno (1970), and others. Then, over the past 50 years, this erosion has accelerated due to the influence of cybernetics, particularly through the works of Berger and Luckmann (1966), Gergen (1985), and other social constructionists. In the twenty-first century cybernetically inspired developments in cognitive science has brought heteronomy to the forefront, challenging the dominance of autonomy.

This paper will primarily focus on providing an exposition of radical enactivism, the branch of cognitive science that has played a significant role in this shift towards heteronomy. It will draw on the philosophical ideas pertaining to heteronomy of Wittgenstein (1953), Løgstrup (1956), and Levinas (1974), as they relate to enactivism. A number of writers have popularised aspects of enactivism, and they will be referred to as the paper proceeds. Also it will draw on the early psychoanalyst Trigant Burrow (1953) as his work prescinded significant aspects of radical enactivism, and makes it easier to comprehend. The paper concludes by exploring some parallels with indigenous cultures, with a specific focus on Māoritanga.

Radical Enactivism

Towards the end of his life Bateson said his work on cybernetics was being carried on by Maturana and Varela. They were exploring how life has the ability to produce itself, or in a word, autopoietic. That "knowing" is a form of "know how", and refers to this ability of living organisms to self-produce and self-maintain their own organisation and structure. This "know how" is stored in a network of interactions in their bodies, making a form of cognition central to life. In order to achieve this organisms have to be sensitive to the environ they live within. The body and the environment in which it is situated are intertwined; so much so, that enactivists stress that perception and action are tightly integrated and mutually influential. They coined the word "enactive" to capture this perception/action in 1991 (Varela et al, 1991). Instead of seeing cognition as the manipulation of information (or the manipulation of mental representations of the world), cognition is seen as an active, embodied process as organisms attempt to remain in a situated engagement with their environment. A form of know how rather than know that.

This becomes clearer by considering Held and Hein's (1963) demonstration that kittens did not develop depth perception if they were deprived of movement. So too do post-cataract surgery patients have to learn to see by moving around (Hutto, 2011). This is how "know how" skills (as opposed to "know that") are developed. So the brain or nervous system is no longer thought to be doing the heavy-lifting in making sense of sense-data hitting the eye; it is embodied motor skills that facilitate this. "Perception and action, are fundamentally inseparable in lived cognition" (Thompson, 2007, p. 173). For example, when we examine a work of art, it is not a passive process (or all in the head), we move around expanding our perceptual skills, as Dewey (1934) noted. With enactivism there is also a sense of perception being extended or distributed. All creatures with a nervous system have more motor nerves going to the senses then sensory ones coming from them (Noë, 2009). So we are using our senses much like the blind man with his cane. The blind man's attention is moving around a circuit that includes: the sound of tapping, the muscular contractions and extensions of his arms and legs, and the feel of the stick on the street. We used to think that a passive skull encased mind or brain received and processed these perceptions, but enactivism takes a more direct embodied approach. When he sits down for lunch a different circuit comes into play. This also emphasises our sense of "oneness" with our world, which phenomenologists called "readiness-to-hand (Dreyfus, 2007, p. 1138). I feel *my* wheels on the road when driving, until something goes wrong, then enactivists would say I've lost my "readiness-at-hand".

This embodied view brings into focus the sensorimotor structure; and looking at humans developmentally, the sensorimotor stage is not abandoned or overcome, as Piaget speculated, but instead, refined as language and perspective taking develop (Thelen, 2000). (Again attention is drawn to Dewey, who foresaw this.) Change blindness demonstrations, such as the person in the gorilla suit we fail to see because we are too busy counting the number of times the players pass the ball (Simons & Chabris, 1999), show that we are using our sensorimotor skills to enact a particular world. We are seeing an action-relevant world to us. A beetle, a child, and a forester see a different forest than each other. With regards to

science, Goethe urged us to develop a "delicate empiricism" or an embodied science, which similarly encourages us not to turn away from the world and rack our brains for a fitting hypothesis, but to make ourselves at "one" with the phenomena until we gain a sense of Other as a process-in-context (Seamon & Zajonc, 1998; Drury, 2006). We get a "feel" for the phenomena we are examining, whether it be a client in a therapist's office or a geological feature weathered by the seasons.

Varieties of enactivism

When Varela and colleagues were developing enactivism, it was at the same time as the "third Wittgenstein" school was arising (Moyal-Sharrock, 2002). This was mainly focused on *On Certainty* (Wittgenstein, 1969), whereas the previous schools were focused on the earlier works of the *Tractatus Logico-philosophicus* and the *Philosophical Investigations* respectively. This third school recognised enactivism as similar to what Wittgenstein had written; so much so that Moyal-Sharrock (2016) declared Wittgenstein the first enactivist (p. 2). However the "third Wittgensteinian" school varied slightly from Varela's enactivism.

This third school emphasizes, as does Varela's enactivism, that there are two forms of knowledge; conceptual knowledge ("know that") and performance knowledge ("know how"). (As Ryle (1949) also saw). Because Descartes advocated a method of systematically doubting everything, the Western world has become dominated by conceptual knowledge, and performance knowledge had been relatively marginalised and not well articulated. Wittgenstein recognised the importance of performance knowledge; and argued that we don't go through life with a pair of Cartesian glasses on doubting everything. There are all manner of certainties ("the sun will rise tomorrow", "there were people here for thousands of years", "I have a body", "this is my hand" (holding up a hand), etc.) that are the bounds of sense. Because these can be put into a propositional form Descartes has led us to think they might be falsifiable, a matter for science, but their negation is nonsense, as a moments reflection will show. It turns out they are part of or an expression of our performance knowledge, and the school of the "third Wittgenstein" sets about sorting out performance knowledge from legitimate conceptual knowledge.

So this has given rise to three forms of enactivism. Varela's version has since been called *autopoietic* enactivism, to differentiate it from Noë's (2004) *conservative* or *sensorimotor* enactivism, and Hutto and Myin's (2013) *radical* enactivism. The differences are easiest to see by comparing the different philosophers influencing them. Varela and his colleagues were influenced by the phenomenologists, in particular by Husserl and Merleau-Ponty; and by the Madhyamika dialect of Buddhism (the branch which eventually led to Zen), all of whom were exploring embodiment long before 1991. There is also some Kant in Varela's account, especially his views on autonomy, which go against the sentiment expressed in this paper (and the third Wittgenstein). Alva Noë's background is in Wittgenstein (the second school) and the phenomenologists, but as Hutto (2011, 2021) indicates Kant creeps into Noë's work via the phenomenologists. Dan Hutto was a recognised Wittgenstein scholar long before he discovered enactivism. Although there is a great deal in common to all three schools of enactivism (Ward, Silverman, & Villalobos, 2017), Hutto (2017) emphasizes that the anti-representationalist ethos as one of the core ideas in enactivism is what

differentiates them. Both Noë's sensorimotor enactivism and Varela's autopoietic enactivism accidently smuggle in some of the representational doctrines that they aim to supplant.

Enactivism is mainly describing the "know how" circuits, the performance circuits when we are thinking. The anti-representationalist ethos reflects a rejection of the old idea that cognition comprises of computational processing of representations, or the manipulation of information. (A legacy of Descartes.) Hence the sub-title of Hutto and Myin's (2013) book "basic minds without content". A simple way of understanding this non-representational thinking is to think of it as intuition (Drury & Tudor, 2023). Others (Gladwell, 2005; Haidt, 2006; Kahneman, 2011) have called this "fast" thinking, and it is considered no more than subtle changes in our sensorimotor system. As we literally shift perspectives.

Also enactivists, especially radical enactivists make an important distinction between intentions (with a "t") and intensions (with an "s"). An intension is the representation of an intention. It is doubtful that animals and small children have intensions, although they clearly have intentions. It is doubtful that the dog that barks at the bottom of the wrong tree in pursuit of the cat has a representation in its mind of its false "belief" (though, strictly speaking, we should not really refer to this as a "belief", as a "belief" is the intension). More obviously, the bacterium swimming towards the concentration of sugar has an intention without an intension. Brooks (1999) realised this difference and revolutionised the artificial intelligence community by making the first insect-like robots that found their way around his lab, performing tasks, without a representational map of the lab. Just sensorimotor-like circuits.

Wittgenstein (2009) refers to this distinction between an intention and an intension when he writes about a person: "My attitude towards him is an attitude towards a soul. I am not of the *opinion* that he has a soul" (p. 179). Moyal-Sharrock (2016) claims that Wittgenstein discovered the animal within us, and this is largely responsible for triggering the anti-representational movement in cognitive science. Hutto's criticism of autopoietic enactivism and sensorimotor enactivism is similar to Searle's "phenomenological illusion", which comes about when we assume that a subjective experience (e.g. pain, colour perception, thinking), can be fully explained by objective descriptions of neural activity. They both criticise phenomenologists for positing that consciousness is transparent to itself and thus can be objectified. Kirchhoff and Hutto (2016) tackle Varela's (1996) phenomenological take on the so-called "hard problem of consciousness" by suggesting that we recognise phenomenal consciousness is more than just the brain. As we proceed we'll see that at times it extends across the social and material world. And for radical enactivism this so-called "hard problem" (of consciousness) is a refrigerator light problem: it is only there when you look! The problem largely dissolves when you accept you are your world.

The Elephant and the Jockey

Jonathan Haidt (2006) coined the term the elephant and the jockey to capture this idea of an animal (the elephant) side of our nature, and the more recently evolved language (representational) system (the jockey). As Dreyfus and Dreyfus (1984) demonstrated (by having a chess grandmaster defeating skilled opponents in a five-seconds-a-move game

whilst simultaneously adding numbers delivered at the rate of one a second), once a skill is mastered the jockey is redundant or can do other things. Many of us allow our "jockey" to daydream or engage in stimulating conversations with passengers when our "elephant" is driving the car. Athletes, in particular, find that if there are too many explicit rules, that presumably were acquired when they learnt the skill, and they are focusing on them, they are at risk of "choking", or over-intellectualizing the task (Hutto & Sánchez-García, 2015).

As we are seeing enactivism (and "third Wittgensteinians") are stressing that "know how" is more important than "know that"; and radical enactivism says we can get by without a lot of "know that". Being taught a skill mainly through analogies and metaphors (and less by rules) is closer to the animal intuitive system; and its better. Mathematics, for example, is viewed primarily as doing something. Abacus users have an edge on non-abacus users (Brooks et al., 2018). Children learn proportionality faster if they enact proportions by moving their hands apart, before being introduced to symbols (Hutto & Abrahamson, 2022). Getting a "feel" for an activity through gesturing and structured activities are now seen as essential for education (Abrahamson et al., 2023). Enactivists turn to East-Asian martial arts to describe the development of skills with analogies or minimal or even no rules (Ilundáin-Agurruza, 2017). "Wax on, wax off" says Mr Miyagi in the *Karate Kid* movie (Cappuccio, et al., 2021). Wittgenstein imagined a person even learning chess without learning or formulating rules (2009, §31).

Intersubjectively

A dominant thought in psychology was the claim that children's understanding of other minds begins around 4 years of age when they are able to succeed at verbally based false belief tasks (Baron-Cohen et al., 1985). However, for some time Wittgensteinian scholars have been taking psychology to task for claiming that people function socially as a result of acquiring a theory of mind (hereafter ToM) (Leudar & Costall, 2009). This is because Wittgenstein had written *" 'We see emotion' – as opposed to what? – we do not see facial contortions and make the inference that he is feeling joy, grief, boredom. We describe the face immediately as sad, radiant, bored, even when we are unable to give any other description of the feature. – Grief, one would like to say, is personified in the face. This is essential to what we call 'emotion' "* (Wittgenstein, 1980, §570). Which rules out both the Theory ToM and the Simulation ToM, as no inferences are made. Its more immediate than that: "*It is there as clearly as in your own breast*" (Wittgenstein, 1967, §220). More recently researchers have been looking at mind reading abilities by using a spontaneous non-verbal response to "violations of expectations" method (e.g., the infant looks longer at Sally if she acts contrary to her false belief). Using this method 10 month old infants have been shown to be sensitive to the false belief of another (Luo, 2011). How early can we trace this to? For example most pre-schoolers demand reciprocal relatedness; they frequently deny they can see a person whose eyes are closed (Moll & Khalulyan, 2017). When does that start?

If we recognise that embodied skills develop in much the same way as, say walking develops into sporting abilities later in childhood, then we push back the roots of our implicit (intuitive sensorimotor) system much earlier. Hutto and Myin (2013) are of the view that the bulk of all social interaction is due to the *implicit* system, and the later to evolve secondary

explicit system (that relies on conceptual knowledge) just supports it. (That is to say, a ToM evolves out of the implicit system.) Ciaunica (2017) traces the social aspects of the sensorimotor system back into the womb, by citing Lymer's (2011) observation that, from 22 weeks onwards, "the maternal-foetal relationship begins to manifest *as a relationship or communication*, as reciprocity, when there is maternal engagement with intentional foetal movement" (p. 138). This is supported by Castiello and colleagues (2010) observations that newborns appear to have a propensity to interact socially, or a proto-conversational skill, that appears to be in place before birth. Thus Ciaunica's argument is that our sociality precedes our empathy, and is in fact the source of our empathy. Ciaunica (2020) calls this primary system the "relational self", although I prefer "relational mind".

Autism, from this perspective, is a result of an impairment in the development of this primary implicit system, a biological-based impairment that is evidenced in a paucity of joint play in the first weeks of life. This means it is not an impairment in the slower to develop explicit system, as suggested by ToM advocates (Ciaunica, 2014). Previous researchers have failed to consider that children "fail" false belief tests because they don't understand "belief" until after the age of 6 (Hedger & Fabricius, 2011). We learn as children to explain ourselves and others in terms of reasons that we pick up from the narratives we are told. The implicit system is showing us how people's attitudes (which young children are now learning are called such things as "desires" and "beliefs") are to be navigated non-verbally. It takes some time to incorporate or coordinate these new language games of reason, and for a while we may mistakenly think that Little Red Riding Hood will be afraid of her grandmother. But she will be in good company for as Wittgenstein said "Philosophy is a battle against the bewitchment of our intelligence by means of our language" (2009, §109).

One of these "bewitchments" that Wittgenstein warned us of was substantivization; the tendency to treat certain words as if they referred to substantial and independently existing objects. For example he accused Freud (and his followers) of substantivizing the word "unconscious"; turning an adjective into a noun (that was neither verifiable nor falsifiable). "New regions of the soul have not been discovered" (Wittgenstein, 1979, p. 40). Many abstract words or concepts which suggest by their everyday use can be possessed (or are possessed), such as "knowledge", "truth", "justice", "meaning", "time", "mana", etc., are not "things" at all, but they get their sense or meaning from a way of acting (or a form of life). They are primarily forms of "know how", and although it is convenient to treat them as nouns, we mystify (bewitch) ourselves when we lose sight of this. Wittgenstein approved of St Augustine's famous quote about time: "What then is time? I know well enough what it is, provided that no one asks me; but if I am asked what it is and try to explain, I am baffled" (Wittgenstein, 2009, §89). Philosophers have spent centuries searching for the essences of these things, but we use these words every day with little trouble. When "I", the "relational self", the "relational mind", and ''mana" (which was originally a verb), are substantivized it gives rise to identity politics, as Keesing (1985) saw so many years ago. With regards to the "relational self" or "relational mind" we will see that Hutto & Ilundáin-Agurruza (2018) are more cautious using this term, as they are not wanting to lose sight of the animal we are.

Trigant Burrow & Foucault

Ciaunica's "relational self" (the "relational mind") will be recognised by anyone familiar with early American psychoanalyst Trigant Burrow. Burrow (1968) claimed it made more sense to regard the mother as the "love subject" rather than the "love object" as Freud had proposed. Both were in agreement that the child has "oceanic consciousness", or is at one with the mother at birth. Their difference lay in Freud seeing us as frustrated narcissists objectifying the mother when we can't access the breast; whereas Burrow saw us remaining in radical communion and harmony with not only mother, but eventually with each other, despite frustrations at times. From this sense of unity we gradually objectify ourselves, argued Burrow, especially after language develops. But this ego is something of a false self, which Burrow demonstrated by biofeedback and group therapy we could do without (Burrow, 1938, 1949). We could regain or retain our intuitive unity with others. Similarly Ciaunica (2020) claims we learn to objectify ourselves, but retain the sense of our relational self (or relational mind) through our intuitions. Nowadays there is a growing list of social scientists suggesting that we retain an intuitive sense of our sociality, albeit saying it in different ways (e.g. Siegal, 1999; Reddy, 2008; Porges, 2009; Henrich, 2016).

Hutto and Ilundáin-Agurruza (2018) describe what is called here, following Ciaunica, the "relational self" (or "relational mind") as "if we are anything at all, we are a sea of selfless activity and experience" (p. 516); and an explicit sense of self is "a quite sophisticated conceptual achievement ...that only comes late in development" (p. 515). Burrow claimed that as a result of demands placed on us as children to be "a good boy (or girl)", as language is developing, our attention becomes divided as we begin monitoring ourselves. He called such divided attention, the "without in" way, or constantly looking in the rear view mirror to see how we are doing, "ditention"; and claimed it has become habitual or chronic in Western culture. This is what gives us a sense of having an ego. "Cotention" is the "within out" way of paying attention and is the way of animals, children, and some indigenous people. The anthropologist, Geertz (1983) has commented that "the Western conception of the person as a bounded, unique, and..distinctive whole is... a rather peculiar idea within the context of the world's cultures" (p. 59). Similarly Taylor (1989) writes that the idea of a "self", which exists at the centre of our being, and is the source of meaning, is a peculiar Western idea. Henrich (2020) makes the case that Westerners are considered weird by the rest of the world because of our disposition towards the self. Burrow found there was a considerable drop in respiratory rates when people weren't consistently monitoring themselves. He formed a group that was focused on maintaining this cotentive state that existed for twenty years, until his death; and then carried on for many decades subsequently (Drury & Tudor, 2022).

One of the things Foucault (1978) is famous for is introducing the world to panopticism. This was a prison designed in such a way that the guards could see the prisoners, but the prisoners couldn't see when they were being watched. After a while the prisoners adopt an attitude that they are being constantly watched, and police (discipline) themselves. This is Burrow's divided attention state (or "ditention" or the "without-in" way of looking). Bentham, the English politician and architect who designed it, thought that this was a model for how to discipline all society. Foucault describes such self-disciplinary processes as "diabolical" (1980, p. 156), or "a cruel, ingenious cage" (1978, p.205); as he (and his subsequent followers – Rose, 1999; Campbell, 2004; Dean, 2007; Read, 2009) documents

how our surveillance society has us all monitoring ourselves by looking in a panopticon mirror. This has accelerated under neoliberalism; and, as there is some choice in the "style" of your fabrication in today's world, and thus an appearance of choice, todays society is called "post-disciplinary" (Rose, 1999). However as Foucault says (and we are largely unconscious of), as we increase surveillance, "supervision tends increasingly to individualize the author of the act" (2000, p. 71). Thus modern society is a cruel, ingenious cage that diabolically increases our alienation from each other and our own nature by leading us to think we are freely choosing our own unique style of individuality. This fosters identity politics (Dean, 1999).

Levinas and Relational Responsibility

Emmanuel Levinas was a 20th century Lithuanian born philosopher whose writings are known as an "ethics first" philosophy. Levinas (1969; 1974) saw, that because of what I have been calling the "relational mind", that an ethical obligation is upon us from the outset. He preferred to call his philosophy the "wisdom of love" rather than the "love of wisdom". I found the simplest way to introduce this thinking in my clinical practice as a psychologist was to ask a child of 6 or 7, in front of her family, what she would do if, on the way home from school one day, she encountered a 3 year old who had fallen off her tricycle, and was lying in the middle of the road bleeding. I have yet to encounter a child who doesn't recognise the rudiments of our ethical obligations to others. Our ethical obligation for one other is infinite claims Levinas, and is only limited by competing ethical obligations to others. Thought is born when two or more ethical obligations are upon us, and we have to choose how we will (ethically) limit our infinite obligation to each.

As our "relational mind" is experienced as an embodied, intuitive sense ("a sea of selfless activity and experience" (Hutto & Ilundáin-Agurruza, 2018, p. 516)) these demands or competing obligations are experienced as a "pull" upon us. Kant's "I" or Freud's ego fails to recognise that this ego or "I" is what we call this internal conflict or inner tensions as we sort out these various "pulls" upon us. Recognising that the "I" or ego is not just a subjective centre of consciousness (or self-enclosed) but rather an open intersubjective or relational system, that achieves its eventual, but perhaps mythical, freedom by meeting its obligations, leads to an understanding of ourselves as relational beings. With Kant and other proponents of autonomy, we start with the sense of freedom; but with Levinas the opposite is true. We start from a position of heteronomy and endeavour to get free. But as our obligation is infinite ...(Meade, 2017). (Perhaps at seventy, Confucius managed to achieved freedom (Confucius, 1998, chpt. 2.4)?) Thus Levinas is consistent with the newly emerging definition of heteronomy that is arising with enactivism (Steiner & Stewart, 2009).

The ethical responsibility we have for the 3 year old lying on the road is broadened as the family conversation continues. Can you "read" your mate Billy's body language from the way he is walking, from a long way off, how he is feeling? Does your dad (or mum) allow you to look after them a bit when they have had a bad day? When you were very little mum (or dad) got you doing chores around the house, but when are you going to be at an age to notice jobs that need doing and without any prompting do them? What does that say about you with regards to maturity? Mum and dad, how transparent is the household budget? Do

the kids have an awareness of how the budget is distributed, and although you are the government, do they have a say as to their share? This is a snapshot or sample of some of the questions that can be asked to cultivate relational responsibility. As social constructionists see it identity politics is in need of some relational responsibility to counter it's excesses (Gergen, 2021).

Indigenous sense of "we-ness"

In order to live in harmony with nature we must leant to think as nature does (Bateson, 1972). This begs the question as to which cultures come close, and can we learn from them? He thought an error made by his father (William Bateson, the father of genetics) and his generation, that could be tracked back to Darwin, was a symptom of the lack of harmony in the Occident, and partially responsible for the ensuing ecological mess. That error was in identifying the unit of evolution as the organism, whereas what evolves is both the organism and its environment. The horse evolved with the evolution of the grassy plains; it is the context or ecology which evolves and not the organism on its own. Co-evolution is the order of the day. The ecological mess, partially fuelled by this error, led Occidentals to consider the environment as mindless and unworthy of ethical or moral consideration; just a resource for exploitation. In the nineteenth century an "unnatural" market economy developed, that was partially built on this error, that transformed the more natural economy, which was ecologically and socially sensitive, to just being focused on money (Polanyi, 1944). This form of economics brought industrial might to the aggressive rape of the environment. Of course this attitude was brewing for many centuries previously. For instance, Goethe saw that both Bacon and Newton were proposing a philosophy of science that was, in effect, subjecting nature to torture in order to make her reveal her secrets. As we have seen Goethe proposed a far gentler science, a delicate empiricism, which entailed the fostering an aesthetic intuition of the phenomena to be studied (Seamon & Zajonc, 1998). Bateson put forward the idea that the Western attitude stemmed from the Abrahamic religions placing God outside the universe, and considered themselves to be created in His image; thus seeing themselves as naturally separated and opposed to the world around them. In time they adopted God's imaginary position and tried to gain some leverage of the world to their advantage. He wasn't alone in blaming, at least Christianity, for the ecological crisis. Lynn White jnr (1967) claimed it was with the destruction of pagan animism in the middle ages that made it possible to develop an indifference to nature, and led to the manipulation of nature. With animism you are required to appease the god of the forest before dropping a tree. These scholars are united in viewing Occidental culture as having an engineering attitude to life, attempting to gain some leverage over life. Bateson claimed that with this attitude our "likelihood of survival will be that of a snowball in hell" (1972, p. 468). Jung claimed the majority of us are wilfully blind to our shadow side, despite our individuation ecologically overheating us all.

Recently Oxford University published a book on the history of the self (Kitcher, 2021); looking at the concept of "I" or a "self" as it has developed at different times in the West. They contrast this with an "interconnected self" found widely in sub-Saharan Africa. In Zulu this is commonly known as *ubuntu*, and is often translated as "I am because we are". Thus the relational mind is widely recognised in sub-Saharan Africa; however with identity politics

the word is being substantivized and its universal meaning is giving way to claims that it is unique to Africa (Gade, 2013; Biney, 2014). Gade found that it was in the 1970s that *ubuntu* was increasingly defined as African humanism. The contention of this paper is that although some African cultures may have cultivated greater relational responsibility, due in part to them having a word for the relational mind, it would be wrong to claim they are unique in possessing a relational mind. The remarks of Geetrz, Taylor, and Henrich, cited above attest to this. However evidence that some African cultures may have cultivated greater relational responsibility due to them having either a word for the relational mind, or an experience of communion with others, may lie in a remark expressed by the Dalai Lama's translator Thupten Jinpa. "He wondered if the relative lack of success of the truth and reconciliation process that addressed the generational trauma of Canada's First Nations might be attributed to the neglect of embodied experience in the process" (Gobodo-Madikizela, 2019).

He was in a discussion about how *ubuntu* was embodied (or a form of "'know how" as we saw earlier). Henrich (2016) has claimed that when we have lost touch with this common know-how (e.g., through epidemics killing off large proportions of the population leaving insufficient transmitters of this knowledge, or through colonization, etc.,), humans have not fared so well. His thesis is the relational mind (or collective mind) accounts for human success in spreading into nearly every corner of the globe. (Burrow called this our "social instinct".) In other words he is saying that our relational mind (or collective mind) has an intelligence that is superior to individual intelligence. Henrich cites experiments in which chimpanzees outperform humans on some cognitive tests; but claims we humans have an edge with our social learning. Chimpanzees may rely on mimicry, but as we've seen Wittgenstein pointed out it is much more immediate in humans, "...*as clearly as in your own breast"*. Henrich has shown the importance of maintaining contact with our collective mind. The anthropologist Roy Rappaport (1999) says that most cultures acknowledge this contact through communitarian rituals. Most people in most collectivist cultures achieve what has been called a numinous state, in which the distinction between self and other is blurred. An experience of "we-ness", which is a kind of religious experience (and makes collectivist cultures "vulnerable" to missionaries). Although Canada's First Nations people (and the Inuit) may have experienced this relational mind, or sense of "we-ness" in the original performance of their communitarian rituals, they have come to adopt (or had forced upon them) the European term "Aboriginal", which marks them as unique instead of valuing an experience of their common humanity. If so identity politics is inviting a loss of our common humanity. Globally there have been many Truth and Reconciliation (or Truth and Justice) meetings with numerous indigenous groups, and their relative success may well be due to this remark identified by Thupten Jinpa. This awaits empirical research.

The Sámi (of northern Scandinavia and the Kola Peninsula) have a concept called *maadtoe* which seems to be the relational mind; defined as a "network of mutual rights and responsibilities that an individual possesses through biological and social relations with both living and dead" (Nilsson, 2020, p. 296). Again identity politics appears to be in play. Nilsson argues that Sámi are being "invited" to shift from a relational understanding of themselves, in which *maadtoe* is our common humanity at root, to a rights-based view which emphasises their uniqueness as a cultural group. By way of contrast Korean culture have

developed *shim-cheong* as their form of the relational mind, but it has not been divorced from its humanitarian roots and made exclusive to Korea (Choi et al, 2007). By way of definition, in a culture of relational responsibility you come to expect caring from others; and *shimcheong* is the emotional state aroused when it is not shown by the other, or the amount shown far exceeds expectation. So it can be positive or negative. But as they have not had to deal with colonization to the extent these other cultures have, identity politics is not overshadowing relational mindedness, and *shimcheong* has thrived in Korea. Some sub-Saharan Africans have claimed because of *ubuntu* their hospitality is warmer than others, but cross cultural studies show that relationships with others is of high importance to East Asians also (Ho, 1998).

Māoritanga

For us in Aotearoa New Zealand the word *whakawhanaungatanga*; which is derived from *whanaunga*, meaning kin or relation, and with the suffix *tanga* added becomes "kinship and the rights, responsibilities, and expected modes of behaviour that accompany the relationship" (Benton et al., 2013, p. 524). And with the prefix *whaka*, meaning to action added, it gives the overall dictionary meaning as the "process of establishing relationships, relating well to others" (Māori Dictionary, 2023). Although, like some sub-Saharan Africans, some may claim this as unique to Aotearoa New Zealand, I would claim it is an Aotearoa New Zealand expression of the recognition of humanity's relational mind. Although identity politics might have been necessary in Aotearoa New Zealand in order to prevent the complete annihilation (or assimilation) of *Māoritanga*, this may "soften" with reverse-cultural colonization (Moore, 2001). This is where the colonized perceive the colonizers as culturally inferior. And as Bateson urged us to attune ourselves to a way of thinking that is closer to the way nature thinks, many may recognise Māori are closer to this.

The poet James K Baxter once wrote: "'Ko te *Māori te tuakana. Ko to Pākehā te teina…' The Māori is indeed the elder brother and the Pākehā the younger brother. But the teina has refused to learn from the tuakana. He has sat sullenly among his machines and studied his account books, and wondered why his soul was full of bitter dust…*(Baxter, 1969). It was a theme he expressed frequently in his poetry (Dennison, 2005); and it was his invitation to see a reverse-cultural colonization. The ecologist Thomas Berry has similarly argued If we are to become more attuned to the world "an indispensable resource in the fulfilment of this task is the guidance of the indigenous people" (Berry, 1999, p.x).

A number of scholars have indicated that if due care is taken *mātauranga Māori* might be enriched or even evolved through consideration of non-Māori perspectives, and not necessarily further colonised or exploited (e.g., Marsden, 2003; Sadler, 2007; Roberts, 2013). All cultures might benefit (Gillett, 2009). Indeed Tau (2001) has warned there is some risk of some Māori writers imposing closed systems of beliefs (perhaps due to "information overload", or theft of *taonga* fears), preventing further development of *mātauranga Māori.* We have covered the relational mind (or collective mind), and established it is far more clearly recognised in a number of indigenous cultures.

As we have seen radical enactivism is offering a new understanding of human nature; that mostly we still engage the faster animal intuitive side of our mind compared with the later to evolve linguistic system. Know how supersedes know that. The highest forms of learning are

computations done without representations (i.e. without the linguistic system). A parable for staying sharp in this manner was offered by Chuang Tzu in the 4th century B.C. A cook has not needed to sharpen his knife in nineteen years, because he lets the knife find its way through the gaps in the meat; and when it comes to a piece of gristle or bone, he lets it find its way through the gaps there too (Watson, 1996). Similarly Royal (2007) explains *mōhiotanga* as embedded knowledge, which is tacit and embodies in activity, and doesn't require an exchange of verbal knowledge. He exemplifies this by citing numerous instincts, and thus it appears consistent with 'performance knowledge' (or 'know how') as expressed here. In the educational philosophy of *te whatu pōkeka* (Walker, 2008), it is what we start with or bring to a learning situation. But it is also what we end with, for as Marsden (2003) notes, 'knowing' (*mohio*) belongs to the heart and not the head (p.79). (It's a form of know how rather than know that). As we've seen this is the Dreyfus brothers exposition on learning skills. This indicates that Māori had a comprehension of learning that is consistent with enactivism.

Te whatu pōkeka uses the word *mātauranga* to describe the *process* of negotiation or educating (when we look to explicit exchangeable concepts or rules for guidance); and amongst the many uses of the word *mātauranga* it is also used to refer to the conceptual knowledge itself (Royal, 2007). *Māramatanga* is the word for when we 'get it' (understanding, enlightenment, clarity), or in the words of Wittgenstein (2009), when we say "now I can go on" (§154). Skill mastery, then, takes us through a stage of awkwardness as we monitor ourselves, or use training wheels, but eventually returns us to our primary intersubjectivity, albeit in a more artful form. However you will also recall Wittgenstein's example of learning chess without rules, or with as little awkwardness as possible.

We also see this comparison of embodied knowledge (*mōhiotanga*) with 'aboutness knowledge' (*mātauranga*) in Salmond's (2005) account of eighteenth century Polynesian and European navigators. Although some of the European sailors had also acquired an embodied knowledge of the seas and the stars etc., they seldom had bloodshot eyes from staying awake for long periods to maintain unity with the world. The Europeans could turn to their technical instruments, charts, and drilled routines. But at the cost of some atrophy in their 'know how' skills, and intimate relationship with the world.

Sadler (2007) describes a philosophy of science which is similar to Goethe's delicate empiricism. By making oneself identical with the phenomenon studied, the *whanaungatanga* or network of relationships is sensed. *Nohopuku*, a form of meditation is useful in achieving this (Royal, 1996; Salmond, 2013). Thus the natural unity of the world is attuned to, and then a variety of genealogies (*whakapapa*) may show themselves (Roberts, 2013). Now whereas Cartesian-based science aims at a 'grand theory of everything' (or as the Duhem-Quine thesis has it, at a minimum a hypothesis that's coherent with other theories), Polynesian science has a different aim. It seeks a 'grand experience of everything' (*Te Ao Mārama*). As we've seen the Cartesian science is a more engineering approach to nature in wanting to acquire 'aboutness knowledge' (conceptual knowledge) to leverage the world; whereas the Polynesian is developing *tikanga* (practices, customs) that enhance our 'know how' to live in harmony more economically. Or what Shotter (2011) calls "withness knowledge". In this respect Polynesian science finds resonance with

Wittgenstein's philosophy, which seeks perspicuity or clarity as an end in itself, rather than about something (Drury, 2011). Again a return to our primary intersubjectivity, albeit in a more sophisticated form.

Conclusion

A new cognitive science is appearing which is more ecologically harmonious, called enactivism. The purest form of this is radical enactivism. It is closer to some indigenous ways of thinking, including Māoritanga. This embraces heteronomy, and my sense of being autonomous stems from the internal tensions arising from competing obligations. As we embrace our shared relational mind we may also find social harmony. This is a further step towards an ecology of mind.

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