Position Paper

A part *of* Nature or apart *from* Nature.
A case for bio-philiation

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Abstract. *Diverse inheritances of knowledge and experiences, along with current explorations of holistic sustainability, shows the potential for ecological longevity and how entanglements with natural worlds might be re-thought toward a better sharing of the world. Through an interdisciplinary lens, this article re-considers Edward O Wilson's rendering of biophilia, as a response to present Anthropocene crises. The paper further argues for a stronger re-turn to First Nations ontologies, sustainability practices and dialogue, in the hope of re-discovering how being 'a part of' nature might better endorse a 'love of nature'. Embedded in such inter-disciplinary and critical embodiment praxis are signification systems shown through nature/culture*

confluences, spiritual beliefs and traditions, that form part of a knowledge plexus that calls on humanity to act urgently.

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1. Biophilia, Love and Alienation – on the Spectrum

American environmental educator David Orr prophetically asserts in his essay: 'Love it or Lose it: the coming biophilia revolution' (Orr, 2011, pp. 186-211), that unless we can love nature, we stand to lose it. Statements such as this build on his earlier work and a genealogy of writers and researchers who speak of the love of nature, as well as the increasing alienation from nature that humans appear to have developed. In *Earth in Mind* (2004), Orr credits E.O Wilson and Erich Fromm for creating the neologism – biophilia. He references further definitions of biophilia (in addition to his own development of Wilson and Fromm's work), to draw out the reverential aspect of human relations with nature, broadly understood. This can help humans to work toward a re-evaluation of how meanings and actions change over time, especially in relation to love of those other than ourselves. Love, then, appears as a leitmotif in what I propose here.

This paper argues that untangling such a plexus of cross-cultural and spiritual/religious knowledges is critical to re-imagining how humans can better bio-affiliate and act as caring planetary stewards with an increasing capacity for love. In building a case for *biophiliation* that is a running together of biophilia and affiliation i.e., bio-a-affiliation, I have coined it thus to advance future and inclusive possibilities of love of *all* life, and capacity to 'be with', both estranged and familiar lives and beings, both loved and yet to be known and loved (Hawke and Spannring, 2022). Additionally, I apply the 'slow philosophy' espoused by Michelle Boulous Walker (2017) as an intentional yet spacious mechanism to weave together poetic venerations of nature and cosmogenic creation through creative and cultural practice and scholarship from First Nations ontologies, religion and epistemes.[1]

E.O. Wilson has defined 'biophilia' as 'the urge to affiliate with other life forms' (1984, p. 85). Psychologist, Erich Fromm, also speaks of biophilia within a

[1] This paper does not seek to re-define what nature or religion is or is not, nor to 'persuade' the reader one way or another. It does however, seek to revaluate interconnections and reconciliation between people places, things, and beliefs that offer biophilic possibilities. The author intentionally cites primary examples from Maori and Australian First Nations scholarship rather than drawing only from the predominantly white, male Eurocentric gaze.

context that pre-supposes the proposition of re-wilding human consciousness while simultaneously engaging in slow and conscientious relationship and love between nature and culture:

> Biophilia is the passionate love of life and of all that is alive; it is the wish to further growth, whether in a person, a plant, an idea, or a social group. The biophilous person prefers to construct rather than to retain. He wants to **be** more rather than to **have** more. He [sic] is capable of wondering, […]. (Fromm, 1973, p. 366)

According to Orr (2004, p. 132), 'Both agree, however, that biophilia is innate and a sign of mental and physical health', in which awe and wonder are embedded. Orr follows through with an important question that is sustained throughout the argument of this paper, that is:

> To what extent are our biological prospects and our sanity now dependent on our capacity for biophilia? To that degree it is important that we understand how biophilia comes to be, how it prospers, what competencies and abilities it requires of us, and how these are to be learned (Orr, 2004 p. 132).

To address that provocation, in particular relation to our 'biosocial prospects', prosperity and sanity, Orr (2004, pp. 131-35) considers that there is a dangerous looming opposite to biophilia, namely biophobia. My stance is to look more in terms of a spectrum. Steffen, Crutzen and McNeil (2007) never-the-less, argue along with others that biophobia arose from the 'Great Acceleration', born from the Industrial Revolution (IR) and more recently the Cold War period. The IR catapulted the planet into the Anthropocene Epoch, through which the excessive burgeoning of human impact through industry and its associated pollution knocked the planet out of balance to a critical 'tipping point' (p. 614). This is not to say that historically nature has always been good and pristine. On the contrary the spectrum is valid here as well as evolution, where keystone species prey on lesser species and so on. The difference is that from the Neolithic Age to the Anthropocene age the bio-phobic evolution of man, in which Steffen et al. (2007) say that the 'sustainability of the Earth's life support system' (618) is now compromised and may not be able 'to provide the services required to maintain viable human civilizations' (p. 614) is dangerously more apparent. During the IR, many western humans, and industrialised countries lost respectful or pre-existent seamless contact with their own natural worlds and those they were conquering. In this historical scenario, market driven governance, territorialised nature-oriented governance and connection (Potter, 2019; Strang, 2012), in which the carbon producing metropolis proliferated.

Mapping the spectrum between biophilia and biophobia, as Orr and others have argued, can help us understand how biophilia can continue to 'come to be', and how it co-evolves; its being and becoming constantly in play. [2]But is that enough and is it relevant to the twenty-first century human world that seems determined to remain alienated, cloistered by its own disaffection? Wilson (1984) suggests, our urge to affiliate 'is to some degree, innate' (p. 85), and rediscovery of that innateness could be enough to facilitate bio-philiation, and draw us closer to sane and equitable futures and a better sharing of the world. 'Water literacy' (Hawke, 2012; Hawke and Spannring, 2022), 'eco-literacy' (Capra, 1997), and environmental literacy all reflect eco-centric methods of engagement and knowing, and through which the biophilic spectrum can flourish–so that we do not kill 'the thing we love, our Eden, progenitrix, and sibyl' (Wilson, 1984, p. 12).

2. Bio-philiation: an original 'part of'

Religious and spiritual traditions throughout the world, talk about creation through song cycles and verse reiterated through a different cadence than that of academic scholarship. The *Psalms*, and *Book of Lamentations*, of the First Testament, and the Song Cycles of Indigenous First Nations Australians, and Maori People are just some examples. Indicated in these creation stories is the idea of love and protection of what is created, from whom it was created, and for whom it was created. As Makere Stewart-Harawira says:

> Maori oral traditions tell us that in the beginning, the world was 'sung into being' … and is documented in traditional songs, chants, … in traditional practices and in language, and is increasingly sought for its contributions to the preservation of biodiversity (Stewart-Harawira, 201, pp. 74-75).

Conversely, modern western philosophy has greatly shifted our understanding of knowledge be it natural, cultural or cosmic knowledge, away from nature. Boulous Walker (2017) argues for the 'love of wisdom, the instituting moment of Western philosophy' (p. 2) that so moved Socrates, as 'the *philo-sopher* – the lover of wisdom' (p. 2). Yet in her treatise, she explains how the very instituting

[2] For example, in the work of Montana-Hoyos and Fiorentino (2016), biophilia and indeed biophiliation are used in the context of urban and post-industrial design – still working with nature respectfully, but not in the context of love and affiliation with all life, in the way that I use it here. Until I came across their work, I thought I had created the neologism. See also Barbiero and Berto (2021) who explain biophilia deftly along the lines of 'both evolutionary adaptation and psychological orientation', referencing E. O Wilson's 'phylogenetic perspective' and E Fromm's 'ontogenetic perspective'.

moment of love and wisdom is gradually replaced: 'The love of wisdom gives way to a particular form of the desire to know and this desire dominates the gradual institutionalization or sedimentation of scholarly philosophical inquiry, as we know it today' (3), and in which any sense of elemental philosophy is largely lost. The argument I present here, in line with Boulous Walker's (2017) notion of 'slow philosophy', is slow and different readings and understandings of how nature 'means' across time, place, religion and cultures.

Before we turn to the current planetary crises of survivability, which recently included COVID-19 [3], let us revisit another old source in which human understandings and instructions for the care of earth are evident and expressed seasonally and elementally, and that have also changed over time. The decree of *Bal tashchit*, loosely translates from the Hebrew as 'do not destroy creation' (Bauckham, 2012), and is evidenced throughout the First Testament and its accompanying eco-theological history, particularly Deuteronomy (20:19-20). The instructions from Isaiah could not be clearer: 'God, who formed the earth … did not create it as a wasteland' (45:18). Nor was it created as a singular entity, but a constellation of co-evolving entities. Such reverential respect and loving appeal or affection for nature is evident in most myths and religious traditions of the world as Charles Darwin, Alexander von Humbolt and others discovered. Yet these readings and knowing's are prophetic and instructive because they emerge from the oldest of times when the human interface with nature was more intimate, set against the backdrop of harsh weather such as the desert conditions of the Middle East North African region (MENA), in this instance.[4] Equally prophetic stories emerge from communities landlocked by ice and snow. Such history and stories conveyed through diverse spiritual and cultural traditions and ages serve to remind us of shared care for: people, creatures, the earth and the living waters *Mayim Chayim* (Bauckham, 2012). But how does that make sense in current times and in different global contexts and can it include a 'slow' devotion, to borrow from Boulous Walker's 'slow philosophy'?

First Nations Peoples narrate a similar duty of care almost universally, made culturally specific through localised ontology, protocols and ritual and seasonal performativity. This care was also affected by internal cultural and biological conflict,

[3] As well as intensified climate change and human global failure to reduce CO_2 emissions as reported at the COP26 gathering in Glasgow in November 2021 https://ukcop26.org.

[4] See Jeanette Mathews (2019) "Led through Grief: Old Testament Responses to Crisis" in *Stellenbosch Theological Journal* Vol. 5, No. 3. 621-642, in which she pastorally narrates human response to environmental and geo-socio-political and personal crises. Her reading of the Book of Lamentations is perceptive and warmly invitational to a modern reader experiencing modern crises.

and the effects of extreme weather events. Moreover, however, it was deeply wounded by European colonialism and its attendant philosophy and industrial imperatives. Reparation and reconciliation with land and water, and between peoples is clearly apparent in many areas more latterly.[5] For example, in Aotearoa/New Zealand, *Te Awa Tupua*, a river known as the Whanganui River in Pakeha/English held special cultural significance for the local *Iwi*, and economic significance for settler-descendants. After a decades long process for recognition of its elemental and cultural value, this body of water was eventually accorded 'legal personage', sovereign status on 5 August 2014 because both settler-descended people (white/migrant) and Maori people recognised the river as a living being with power and agency of its own, with strong socio-cultural, economic and spiritual ties. It was later ratified in 2017. This case demonstrates that while water can be sacred, it is also somewhat business like – and acts according to its own volition, in the physical life and sustenance that it provides for both neighbouring ecosystems and people; it has physical and ecological value, cultural and spiritual value, and commercial value (Hawke and Palsson, 2017).

With the river as a meeting place, and through a cross cultural merging of concerns, *Te Awa Tupua* sovereignty was eventually recognised and upheld. By so doing, the humans of the region both Maori and Pakeha as well as visitors, entered into an affiliation with the river, a *bio-philiation,* borrowing from Wilson and Fromm's ideas of affiliation with nature, and in which the confluence between nature and cultures is readable, knowable and embodied. Philia, for the Greeks was one of the three words to denote love: 'Eros, meaning love of beauty or romantic love aiming to possess; agape, or sacrificial love, which asks nothing in return; and philia, or the love between friends' (Orr, 2004, 142). For my purposes biophilia is also representative of a transcendent love between friends of the earth, its airs and waters, as bio-aphiliates, where 'the patience involved in "sitting with" the world and being open to it' (Boulous Walker, 2017, p. 7), matters and yields different knowledge, connection, and 'a kind of non-institutional reading' (p. 17) not dominated by 'the corporate nature of today's institutional demands' (p. 17), of an 'only human' world.

Such possibilities as non-dominant demands, and concepts of entitlement and legal rights in natural environments, are discussed in judicious detail in *Should Trees have Standing* by American Law Professor Christopher D. Stone in the 1970s (and revised in his later 2010 edition). Wilson, who is so optimistic in what we

[5] This is not to say many colonials/visitors did not imbue a love for nature, but that nature and love are variously understood and impacted by colonialism.

might do for nature, also references this work in his *Biophilia*, (1984) asking as Stone does, why don't we extend … 'protection to other species and to the environment as a whole' (Wilson, 1984, p. 131). Stone explains that 'the common law makes natural objects rightless [and] has to do with who is regarded as the beneficiary' (2010, p. 5). In the Western Tradition, the law of economic development and profit have been the primary beneficiaries and eroded much of the broader and more holistic sense of natural, religious, or ancestral cultural law and beneficence in much of the colonised world, as the historical record attests. As Wilson further surmises, 'Humans beings are a contractual species … who easily discriminate against strangers' (1984, p.131). Since the Industrial Revolution, nature has increasingly become the stranger, and 'advances in conservation … have been equally subordinate to whim and short-term social [and industrial] needs' (Wilson, 1984, p. 125). Maori academics James Morris and Jacinta Ruru drew on Stone's work to frame the case for the Aotearoan case of *Te Awa Tupua* (Whanganui River) waterway. It is important to recognise Maori apprehensions of their own circumstance rather than relying exclusively on Pakeha observations. Four years before the legal personage was granted, they proposed that:

> Applying Stone's idea to afford legal personality to New Zealand's rivers would create an exciting link between the Maori legal system and the state legal system. The legal personality concept aligns with the Maori legal concept of a personified natural world. By regarding the river as having its own standing, the mana (authority) and mauri (life force) of the river would be recognised, and importantly, that river would be more likely to be regarded as a holistic being rather than a fragmented entity … (Morris and Ruru, 2010, p. 58)

In the 'Whanganui River Deed of Settlement Initialled' of March 24, 2014, the intentions of the Title were explicated by the Honourable Christopher Finlayson, in which it was stated that

> The *Te Awa Tupua* Framework … Establishes the river as a legal entity, with its own legal standing, reflecting the view of the river as a living whole, and enabling the river to have legal standing and an independent voice.[6]

[6] For the full discussion of the 'Settlement' over *Te Awa Tupua* see Maori Law Review 2014 *The Whanganui River Settlement* https://maorilawreview.co.nz/2014/05/ruruku-whakatupua-te-mana-o-te-awa-tupua-upholding-the-mana-of-the-whanganui-river/ accessed September 09 2014

Once the river received its legal entitlement, spokesperson for the Whanaganui Iwi Gerrard Albert, expressed the celebratory mood of the people, (a sentiment also shared by the Pakeha community of the district): 'Our entire existence as a people is intrinsically linked to the river as reflected in our saying *Ko au tea wa, ko tea wa ko au – I am the river, the river is me*'[7]. (Scoop Independent News n.d. 2014). The results of this ecological and cross-cultural campaign I argue, represent a philial love between friends inter-culturally, and a love of elemental relation. The possibilities to increase in awe and wonder and 'read' how lines of connectivity draw us into a cultural and elemental family tree are infinite, and in which 'Authentic or genuine love welcomes the strangeness of the other' (Boulous Walker, 2017, p. 134), in this case the former 'strangeness' of nature, 'and the generosity that emerges from this encounter' (p. 134). It further points to a 'righteousness' of nature, and the value of the 'natural library', in which water might be read as a 'canonical text' (Hawke, 2012, p. 239).

Prior to colonialism, in which many formerly sovereign nations and their environments and resources suffered, the openings between nature and culture were less defined, and ownership/custodianship differently understood and applied, yet symbolic orders were readable and knowable, if obliquely to the western eye. 'As Indigenous people have been explaining … Aboriginal and Torres Strait Islander cultures inhabit a profoundly different relationship to land and to what a western episteme would term the non-human world. "Country" is genealogic, epistemic and ontological' (Potter, 2019, p.1346); there is no separation except those imposed by others. In post-colonial times, many First Nations and Indigenous Peoples have sought a renewal of tangible and intangible connections for

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See also Jacinta Ruru. 2018. 'Listening to Papatūānuku: A Call to Reform Water Law', *Journal of the Royal Society of New Zealand* 48.2-3: 215-24. DOI: 10.1080/03036758.2018.1442358.https://www.tandfonline.com/author/Ruru%2C+Jacinta
And: "Hundreds Celebrate Signing of Whanganui River Settlement" http://www.scoop.co.nz/stories/PO1408/S00074/hundreds-celebrate-signing-of-whanagnui-river-settlement.htm accessed September 09 2014
Ruruku Whakatupua Te Mana O Te Awa Tupua, http://nz01.terabyte.co.nz/ots/Docu- mentLibrary/140805RurukuWhakatupua-TeManaOTeAwaTupua.pdf (accessed on 14 December, 2015). See also Strang, V. (2020) *The Rights of the River: Water, Culture and Ecological Justice*. In H. Kopnina and H. Washington (eds.), Conservation, Cham: Springer, p. 105-119. https://doi.org/10.1007/978-3-030-13905-6_8 for a western scholarly perspective on *Te Awa Tupua*/ Whanganui River.

[7] Gerrard Albert has represented the Iwi in the media such as in Scoop Independent News, over the 'Settlement'. For more information see the full coverage in Maori Law Review 2014 *The Whanganui River Settlement,* as noted above.

themselves and to re-establish kinship ties broken by the effects of colonialism. Many also see it as a way towards a sustainable and intelligent partnership future for all people, in which the economic, natural and cultural values of the river are recognised more constructively towards a dialogic cross-cultural future, in which spirit is embedded.

Australian Aboriginal elder Auntie Pauline Gordon of the Widjabul People, for example, explains that not only are the lines between values, and nature and culture tangible and intangible, there is also the factor of the co-existence of past present and future: 'There is "the ordinary physical world" and "another connected world from which it is derived", often called the dreaming or Dreamtime' (Bragg, Acret and Gordon, 2007, p. 12). And these worlds do not travel in straight lines, but are rather co-existent in a 'complex adaptive system' (Prigogine and Stengers, 1984: Spannring and Hawke, 2021), interlaced with other complex adaptive systems from the human and more-than-human realm. Such Indigenous renderings and measurements of value, as Muecke (2011) also notes, do not fit neatly into western 'phenomenological orthodoxy' (p. 2) or disciplinary systems and are hence often misunderstood, despite Indigenous scholars who 'consistently re-iterate a Dreaming as existing absolutely and beyond (…) human intervention' (p. 3). Such renderings do however serve to inform saner prospects for future sustainability. The thematic of complexity, adaptivity and inter-connected systems, works well for this prospect, socially, elementally and spiritually.

Whitt, Roberts, Norman and Grieves argue along similar lines: 'The land and living entities which make it up are not apart from, but part of, the people. Nor is the "environment" something surrounding a people. The relation of belonging is ontologically basic' (p.7). The stories they have passed on, the signification system with which they are endowed, is co-constitutive of a 60,000 years old narratology, in which elements and creatures are main protagonists as much as people in 'Country', and the eco-fluency between all actors is acknowledged; historically the community is centred around the spiritual endowments of the natural environment and its creatures – the Dreaming. For Stewart-Harawira:

> This relationship between Indigenous peoples and the environment as the most fundamental aspect of Indigenous identity is widely accepted amongst a large number of scholars involved in the study of Indigenous conservation practices. … there is no sense of the individual as dominant over creation or that creation exists for humankind to exploit, but rather one of the individual as being one with and a part of creation. It is a relationship that carries particular responsibilities of caretaking, of guardianship, of protecting' (2012, p. 83).

And if one part of creation, or indeed a creature or elemental friend or object was hurt, the custodians would respond, as an act of love, care, and cultural responsibility. Stone explicates this ontology of care broadly in the following way: 'On a parity of reasoning we should have a system in which, when a friend of a natural object perceives it to be endangered, he [sic] can apply to a court for the creation of a guardianship' (Stone, 2010, p. 8), which in a summative sense, is what *Te Awa Tupua*/Whanganui River Deed of Settlement began, until the rivers endangerment passed, and its sovereignty was restored. Embedded in that process is the healing of wounds on the nature/culture spectrum in which natural and cross-cultural entanglements are appropriately re-appraised and re-vived. Here I further seek to advance the ontological premise of 'partner-ship' and care through the broader theme of biophiliation, and *being with* nature.

3. Apart from

Nature in itself, or eternal Nature, is just mind born into objectivity,
the essence of God introduced into form,
save only that in Him [sic] this introducing immediately grasps the other unity.
(Schelling, 1803, p. 51)

Schelling, writing at the advent of the Industrial Revolution, perceives nature and the mind that can behold it, as transcendent, unlike (Goldsmith 1794 as cited in Strang, 2004, p.19) who viewed extrinsic value in how such God given nature might be harnessed and commoditised. The latter, constitutes part of how we got to a place in history in which we would need to recover the former reverence for nature and cultural traditions that date back to the beginning of homo sapiens appearance on the planet.

Several geological epochs explain the adaptations of human beings across time and place, our current Anthropocene Epoch, preceded by the Holocene (last 12,000 years), and the Pleistocene prior to that. For the purposes of this discussion, let us travel back to the beginning of the Industrial Revolution and the Great Enlightenment of the Western Tradition that heralds the beginning of the Anthropocene, and follow the journey forward, and ask ourselves how we might now 'be of service' to the 'service of life' (Steffen et al., 2007, p. 618) in a non-possessive act of philial love. Here is Goldsmith (1794) cited in the carefully arranged book by Veronica Strang, *The Meaning of Water* (2004, p. 28):

> God has endowed us with abilities to turn this great extent of water (The Thames) … He has given us faculties, to convert them to our own purpose … Let us boldly affirm, that the earth, and all its wonders, are ours; since we are furnished with powers to force them into our service.

Goldsmith's proclamation was not solitary, as Strang further narrates through a history of exponential depletion, pollution and disassociation of humans, from sources of water over the next few hundred years. She further notes an elemental 'hydrolatry', that echoes the 'idolatry and impiety' of social and religious issues that so concerned Athanasius (*On the Incarnation*): 'And everything was completely full of impiety and lawlessness, and neither God, nor his Word, was recognised, even though he had not hidden himself invisibly from human beings' (*Inc.* 11, in Behr 2014, p. 61). For First Nations Australian Peoples, God might be understood as the Dreaming (tangible, intangible, past, present, future, elemental and abiotic) embedded also in other creation narratives, understood as pantheistic and timeless (enduring).

Physicists Prigogine and Stengers (1984), who came up with the theory of 'Complex Adaptive Systems', also note attitudes to the Great Acceleration although before the Epoch had been named as the Anthropocene. They refer to both the perils and promise of industrialisation and technology and turn in part to philosophy to try and understand the evolving human 'apartness' from the natural world. For example, they adduce that: 'Heidegger is not concerned about the fact that pollution for example, has destroyed all animal life in the Rhine. What does concern him is that the river has been put to man's exclusive *service*" (p. 33). Such a mis-use of power is easily seen in hindsight. But in all fairness how could we know that the development of the engine, for example, would alter the global quality of the air we breathe for ever. Now that we do know, of course we are called to action to reverse or at least slow the continued accelerated growth of human industry and recklessness that speaks in the name of profit and economic development and denies the idea of nature as both sentient and rational. This involves taking a fairly thorough inventory of past practices, that no longer serve life, or a biophiliation of the future. Capra (1997) coined the term 'ecoliteracy' – that may help us serve to dissolve apartness and concrete lines of separation.

4. A Bridge Between or a Bridge too Far

> *Landscapes are continually co-produced by a plethora of authors, no one of which, as an individual, is definitively responsible for what results from the writing. (Mangiameli, 2013, p. 148)*

Jan Morgan (2013) refers to the great apartness as 'creation de-natured' (p. 104) and our collective dominant 'culture as ontologically crippled' (p. 125). The beginning of the license to bend nature to human will and make it 'other' starts with the Great Acceleration of the Anthropocene Epoch as Steffen et al*.,* (2007) describe by stating, 'the Earth System has left its natural geological epoch'(p. 614).

During this 'departure' and coupled with our apparent denial of 'the fact of living, life itself, life as such, or bare life … an anthropology of life' (Palsson 2013, p. 27), that recognises a broader milieu of life may serve the planet more equitably. However, the current state of play suggests that the 'service of life' (Steffen et al., 2007, p. 614) hangs in a precarious balance, however it is read. 'An ethical engagement with the other [in this case nature] … opens us and changes us – transforming us over time' (Boulous Walker, 2017, p. 179), yet the pace of our transformation continues to lag. The 2019 United Nations Environment Program (UNEP) "Emissions Gap Report" clearly states:

> We need to reduce emissions by 7.6 per cent every year from 2020-2030. If we do nothing beyond our current, inadequate commitments to halt climate change, temperatures can be expected to rise 3.2 degrees Celsius above pre-industrial levels, with devastating effect.[8]

The new call, after at least 250 years of full industrialisation or ecocide the world over, is to recognize that humans are not the only storytellers in the progressive narratives of creation. As Mangiameli's work also suggests: 'it would be helpful to focus attention not only on the process of reading, but also on that of the writing … the world writes itself' (2013, pp. 146-48). How well are we co-authoring the world for the next generation of readers? Failing our "Emissions Gap Report" by falling so short with carbon emission reductions, may not have propelled us sufficiently as recent history continues to show. However, the outbreak of COVID-19 in late 2019 certainly provided clear evidence that while humans tragically struggled to breathe, the biosphere was breathing anew, suddenly unhindered by human industry – discreetly proposing a new kind of 'acceleration', more reverent of all Creation, and the circulatory system of the planet, as well as delivering a new lexicon, to describe our transformations and their enactment. It remains to be seen how history will write its retrospective on the COVID-19 pandemic.

[8] See The UNEP Emissions Gap Report online: https://www.unenvironment.org/resources/emissions-gap-report-2019 that goes into considerable detail about what the the gap is as a measurment tool and what needs to be achieved to reduce it.

5. Moral Capacity Building

To possess intrinsic value is to be worthy of moral consideration.
(Freya Mathews, 2016, p. 143)

Under the current environmental, economic and socio-cultural rock bottom planet earth is facing, serious amendments to the human-centric habits and practices do now require transformation into bio-centric principles and practice and in which an appreciation of the 'intrinsic value' of all creatures and entities is recognised. 'To possess intrinsic value is to be valuable in one's own right, and inherently worthy of moral consideration' argues Freya Mathews (2016, p. 143), who further notes that "Biocentrism … attributes intrinsic value, and hence moral considerability, to non-human entities in their own right' (p. 143), adding weight to the case for the combined agency of nature a sentient, rational and of diverse value. Where a sense of spirit sits in all of this, remains to be seen, but serving the naked truth of the vulnerable and attending to the fragile, seems logical and conscientious. Yet, as Indigenous elders, environmental justice activists, and scientists around the world have said so many times, we have defined the problem, we have the knowledge to fix the problems on all levels, so why not act with more affirmation, inclusion, intelligence, and reverence for life? Continuing to argue the case for biophilia and re-engagement with spiritual traditions and stewardship, is thereby essential to create space for more intimate connection to nature that is a critical part of the way forward. Reverence, respect and relationship underpin moral behaviour, but can an evolved sense of global moral responsibility, affected by turning towards nature and its human allies for the answers, suffice? Popular culture mediums such as film and music, also produce naked-truths. Creative culture has a freedom of expression that politics, and scholarly engagement ultimately lacks, and perhaps this is where a rewilding of human consciousness might first flourish.

For example, in the film *Tommorrowland: A World Beyond* (Bird 2011) there are several key messages about doing life differently. Aimed at youth, and directed by Brad Bird, the dystopian film of the end of the world, sagaciously presents the epiphany for the teenage main protagonist Casey, who realises humans are broadcasting the self-fulfilling prophecy of doom, environmental degradation and negativity willingly, as if a micro-chip has been installed into our collective head. Not only are humans spiritless, their complicity in global devastation is both acute and chronic. This human neurosis is eloquently narrated in the soliloquy from

the main antagonist Governor Nyx who speaks of the terminal viral paradox of human self-obsession and complacency:

> Let's imagine if you glimpsed the future … politicians, captains of industry … how would you convince them? Data, facts. Good luck! The only facts they won't challenge are the ones that keep the wheels greased, and dollars rolling in. But what if there was a way of skipping the middle man, and putting the critical news directly into everyone's head …what reasonable human being wouldn't be galvanised by the potential destruction of everything they've ever known or loved. … How do you think people responded to the prospect of imminent doom? …They didn't fear their demise, they re- packaged it. …The entire world wholeheartedly embraced the apocalypse, and sprinted towards it with gleeful abandon. Meanwhile your earth was crumbling all around you. … Bees and butterflies start to disappear, the glaciers melt, algae blooms, all around you the coal mine canaries are dropping dead – and you won't take the hint! …So, yes, you saw the iceberg, warned the Titanic, and all steered for it [the iceberg] anyway[...] (Bird, 2011).

Are we really so galvanised towards our own destruction? Is it true that 'What we love only from self-interest, we will sooner or later destroy' (Orr, 2004, p. 142)? Or can we skid to a halt and re activate imagination, appropriate innovation and better ways of sharing the world, a *metanoia* that involves a complete transformation of being and knowing and that 'alters the character of our entire civilization' (Orr 2004, p. 145) and relationships between nature, culture and the cosmos/God. We will need many Carpathians to rescue in titanic proportions: this ship, this mission, this creation, to seek out those with a capacity to embody the earth and what it gives and shares and develop some insight into its concomitant daily crucifixions at the hands of human enterprise. As Freya Mathews says of the current age, 'It will take our best poets along with our best scientists and natural historians to compose, generation by generation, the great Song Cycle that could unite, at the level of moral obligation, multiple cultures and societies' (2011, p. 275).

While culturally different, the story of Genesis, and the stories of the Dreamtime and First Nations Spirituality all narrate a Creation story and the concurrent moral human responsibility to protect that which has been created, as the elected stewards of creation, as kin. Political ecologist, Ariel Salleh, does warn however that the equity of that care and stewardship is variously realised (and enacted) by 'species, gendered and postcolonial others' (2017, p. 25).

6. Ecological Longevity

The once-neon reef
bubble wrapped and bleached
asks to be seen. (Author)

Ecological longevity is predicated on getting things very right in the next decade, and indeed the nearer future, as the planet is faced with re-assembling itself after the prolonged fall out from COVID-19 virus, that has seen other species flourish and breathe with greater ease, while the lives of vulnerable humans have expired. Continued mitigation strategies for guardianship of vulnerable, people, places, species and elements will be crucial. We must ask to see and be seen in *all* our vulnerability, if we are ever to accept the precariousness of *our* standing on the earth, and the standing of other creatures and things, as a part of the ongoing story of life – of love. As Braun and Cavagnaro said in their perceptive book *Living Water,* in relation to natures articulation of the body of the world, 'nature may consider him [man] an experiment as yet unproved' (Braun and Cavagnaro, 1971, p. 24). Writing at a similar time, and at the advent of the deep ecology movement Gregory Bateson (2000 [1972]) aptly said: 'The unit of survival is organism plus environment. We are learning by bitter experience that the organism which destroys its environment, destroys itself' (p. 491). This sentiment is presupposed by Rachel Carson (1962) in *Silent Spring,* in which she says 'Water, along with other resources, has become the victim of man's indifference' (Carson, 1962, p. 50). She provides a tragic plethora of examples of environmental damage caused by pollutants used in agriculture (and by extension aquascapes and the respiratory system of the planet) to turn the earth and its crops into hyper production – the bigger the better – denying for decades the 'earth's green mantle' (p. 69) an opportunity to 'rest' and revive. She warns, 'Future historians may well be amazed by our distorted sense of proportion' (p. 26). The 1970s, while the peak of the Cold War politically, also represented the new peak of the 'Great Acceleration' and the bedrock of environmental pollution that the era propagated, where exchange value of nature was all it stood for, and the pace at which we have consumed it, and paradoxically disembodied it, irrelevant.

What now are the actual strategies, and ways of knowing and reading that are in place, to both empower people in the re-assemblages of everyday life, and support of industry and economics in appropriate scale. Icelandic philosophers Thórgeirssdóttir and Jóhannesdóttir

speak of how we *be* and *become* and discover (or mis-cover) nature through our entangled being in the world: 'There are parts to nature (as both our inner and external environment) that are still concealed. We are continuously in the process

of discovering nature, either with the help of science, or our own lived experience' (Thorgeirsdottir and Jóhannesdóttir 2016, p. 41). Such a re-posturing they suggest, involves '*sensing and experiencing* like embodied beings' (p. 41), the embodied beings we actually are, not as appendages to a perception of nature that exists somewhere 'out there' as the exotic 'other' known only as strangeness.

How well we listen in to our inner and external environments, and as students to older cultures who demonstrate affiliation – bio-affiliation – with the earth, its waters and airs, and to other more and differently knowledgeable others, can steer us through the latest in a serious of bio-phobic crises and help us make meaning of what we encounter (Hawke and Spannring, 2022).

Re-purposing human thinking and agency then, seems to be a valid alternative cognisant of potent interactions such as bio-philiation, and feedback, and in which the vast assemblage of life and co-creation adapt for a future we cannot yet see or read. How well we read the signs that nature is showing us now, about *its selves*, and *ourselves*, is worthy of deep consideration. Where might convention and re-viewed symbolic systems lead and can they adapt to otherwise knowledges and naturalisms?

Human cultures have indeed inherited a rich body of knowledge, both from inter-disciplinary and cross-cultural fields, spiritual and religious traditions and the murmuration and articulations of nature itself. But as this paper has proffered, our challenge rests in the human capacity to re-institute some of what we have lost, by 'heading towards a new naturalism' (Prigogine and Stengers 1984, p. 56) that, includes *bio-a-philiation* at the core. Incorporated in such a new naturalism or whatever twenty-first century lexicon and praxis we invent, must be a reverence for life, 'as the only possible basis for a philosophy [broadly imagined] on which civilization might be restored from the decay ... of the modern world' (Orr 2004, p. 138) that has become estranged from its source and in so doing de-ranged our physical, mental and spiritual selves. If, as Ariel Salleh (2017) suggests 'ecology reframes history', how will a re-constituted composite ecology of the future look, and can it include all life in intelligent measure, by discovering some unifying and dedicated thread – possibly love?

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