

What i¹ have been reading/learning as of late....
Meandering through the works by (what i call) the ‘new naturalists’...

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¹ Readers will notice that – except at the start of a sentence and in quotes - i resist the capitalisation of the first personal pronoun - the ‘*perpendicular pronoun*’ – in recognition of the rather pretentious and simply wrong cultural assumptions in western writing about the centrality of the speaking, writing or thinking author/subject – or more generally, of the individual person – in the entirety of the living and changing context and the complexity of the interconnections s-he reports on. In modernist research, such assumptions lead to the paradox of *both* denying subjectivity in the researcher, inter-subjectivity in the research relationship and condemning the ‘researched other’ to becoming objects (or forms of ‘enclosed subjectivity’).

What i have been reading/learning as of late....

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Introduction

For a while now (‘as of late’ meaning since 2016 or so), i have been immersed in works by a variety of authors working in the overlapping or ‘in-between’ areas between the natural or ‘life’ sciences (botany, zoology, biology, forestry, ecology), the social sciences (anthropology, sociology, politics and economics – even (social) psychology and archaeology) and their respective research traditions; neuro-science and neurobiology which seem to advance in leaps and bounds (see for example the marvellous Robert Sapolsky’s (2017) *Behave: the biology of humans at our best and our worst*); the – still youngish - tradition of quantum philosophy and other branches of theoretical physics; and the ancient but still growing and diversifying body of Indigenous knowledges and the (too) slowly evolving recognition by ‘us’ westerners that ‘we’ indeed can learn a lot from all of those. As George Nicholas (2018) puts it:

Indigenous peoples don’t need Western science to validate or legitimate their knowledge system. Some do appreciate the verification, and partnerships are developing worldwide with Indigenous knowledge holders and Western scientists working together. This includes Traditional Ecological Knowledge informing government policies on resource management in some instances. But it is nonetheless problematic when their knowledge, which has been dismissed for so long by so many, becomes a valuable data set or used selectively by academics and others. To return to the firehawks example, one way to look at this is that the scientists confirmed what the Indigenous peoples have long known about the birds’ use of fire. Or we can say that the Western scientists finally caught up with Traditional Knowledge after several thousand years. (my emphasis)

So this collection of readings and my take on them can be seen as one humble attempt at ‘catching up’ with the accumulation of wisdom gathered from over 80,000 years of living and surviving and of letting go of the often brutal and destructive impositions ‘our’ errant western ‘enlightenment’ detours have inflicted on it.

As Billy Griffith, historian of the story of Aboriginal archaeology, suggests in his extraordinary *Deep Time Dreaming* (2018:292 ff.), quoting Gaagudju elder Big Bill Neidjie, wondering about *the antiquity of the Dreaming....*:

*When that law started”
I don’t know how many thousand years.
European say 40,000 years,
But I reckon myself probably was more because...
It is sacred.*

In these words, we can appreciate the differences between the two worldviews

involved in my title: the deep time history, which is bound to notions of linear time, and the active, continuous time of the Dreaming, which is a self-referencing and self-affirming system of meaning. Yet despite these differences, historian David Christian observes, both world views are foundational: 'They speak to our deep spiritual, psychic, and social need for a sense of place and a sense of belonging.'... Through the lens of big history, the Australian nation quickly becomes a shallow stratum in a rich layered Indigenous place.... It is only through a long view of Australian history that we can come to understand the Australian landscape, which is as much cultural as it is natural. It helps us grasp the immensity of human experience on this continent and learn lessons about resilience, adaptability and connections to country. It is a scale that allows us to view ourselves as a species – a vital insight in a warming world. A deep time perspective also presents an opportunity for us to recognise cultures and histories that for so long have gone unrecognised.

And slowly (again - too slowly) this awareness has been trickling into 'our' westerners' awareness as well... it did take a while... Australian farmer Charles Massey's *Call of the Reed Warbler - A New Agriculture, A New Earth* (2017:144-157) refers to 'enlightened farmers' and concludes this section of his book:

It's not an exaggeration to say that if we keep on current track, Western and global society (like all civilisations before us that have trashed their soils, environment and landscape functions) are destined for an almighty collapse. So now, of all moments, is when we desperately need these "small voices" of Yeomans, Watkins, Andrews, Savory and similar brave pioneers to be heard by a wider society. Only then will we be able to hear the songs of a multitude of reed warblers throughout the valleys of this nation.

And therefore - and in this spirit - the following meanderings are bits of annotated summaries of what i've been learning over the years. If anything, i feel ever more confirmed in my belief that – indeed – everything is **relational**... that all evolution – human and the enormity and incalculability of time that is the pre-human - can only properly be understood as a **relational story** – rather than the seemingly obligatory 'survival of the fittest' and 'selfish gene' stories we're so often confronted with; and rather than the equally obligatory 'creationist' stories one of which i grew up with and which seem to proliferate as we speak....

I've come to believe that there's so much obvious cooperation and interdependence in all life and living that the conclusion that western philosophies, theories and (research) practices that ignore this ontological/existential fact and that continue to emphasise and practice the 'atomistic' ways of knowing and understanding are actively contributing to our deepening ignorance about the meaning and possibility of life on earth and hence, contribute to the dramatic and brutal states of 'un-liveability' we already are inflicting on – what we call – 'extinct' or 'threatened-to-become-extinct' species... the latter increasingly including ourselves, humans.... And really, it shouldn't have to take the floods and fires and ever more frequent other disasters to shake us into awareness and action....

Starting with the story of French impressionistic painter Paul Gauguin's final almost 4 metre wide masterwork, created at the end of his life in (then) French Polynesia and on which canvas he wrote in the upper left corner: *D'où Venons Nous / Que Sommes Nous / Où Allons Nous* (*From where do we come? / What are we? / Where are we going?*), the late Edward O. Wilson ([https://en.wikipedia.org/wiki/E. O. Wilson](https://en.wikipedia.org/wiki/E._O._Wilson) (died December 2021)) suggests that these are the central questions about the Human Condition as posed by much philosophy and religion. In his last Magnus Opus, *The Social Conquest of Earth*, he suggests that

Humanity today is like a waking dreamer, caught between the fantasies of sleep and the chaos of the real world. The mind seeks but cannot find the precise place and hour. We have created a Star Wars civilisation, with Stone Age emptions, medieval institutions, and god-like technology. We trash about. We are terribly confused by the mere fact of our existence, and a danger to ourselves and to the rest of life.

Ever since our emergence as a species and throughout our evolutionary trajectories, we invented creation stories and myths that 'make us feel loved and protected' and they did as they are 'Darwinian devices for survival'; but the truth of each such myth 'lived in the heart, not in the rational mind.' Wilson makes short shrift of the possibility for philosophy to offer answers to Gauguin's – and all our – riddle; and 'pure' philosophy 'has long ago abandoned the foundational questions about human existence.'

And whilst religion in its various guises still attempts to deal with the riddle, 'most professional philosophers dispersed in an intellectual diaspora... emigrating to more tractable disciplines not yet colonized by science – intellectual history, semantics, foundational mathematics, ethics, theology, and most lucratively, problems of personal life adjustment.' I'm sure that there's quite a bit of Wilson's hubris, tongue-in-cheek and irony in the last part-sentence, but I have come to gradually agree with him as he proposes

That scientific advances, especially those made during the last two decades (nineties and naughties – my insert), are now sufficient for us to address in a coherent manner the questions of where we come from and what we are. To do so, however, we need answers to two even more fundamental questions that query has raised. The first is why advanced social life exists at all, and has occurred so rarely in the history of life. The second is the identity of the driving forces that brought it into existence.

These problems can be solved by bringing together information from multiple disciplines, ranging from molecular genetics, neuroscience, and evolutionary biology to archaeology, ecology, social psychology and history.

To test such theory of complex process, it is useful to bring into the light those other conquerors of Earth, the highly social ants, bees, wasps, and termites... They are needed for perspective in developing the theory of social evolution.

So, below, I share with you my meanderings around such readings – which are ongoing

– and which eventually may find their way into a larger published piece... please accept them as an evolving and – hopefully - reciprocal gift!

early rumblings and disquiets...

In fact, the wondering and wandering started a long while ago when reading the works of people like Wendell and Thomas Berry and Matthew Fox (*Creation Spirituality*) and works associated with Liberation Theology in the seventies and later, somehow reflecting my growing-up into early adulthood in the tradition of the critical Catholicism of John XXIII (the late-50s and early-60s) And eventually, in the active participatory sense, growing past it during the 70-s.... Of course, like for many of my contemporaries, there was the baffling - sometimes uncomfortable - co-existence of the ‘*creationist*’ catholic doctrine with ‘*evolutionary*’ side-currents – for example, Teilhard de Chardin letting us know that ‘*The universe as we know it is a joint product of the observer and the observed*’. He therewith not only questioned the illusionary axiom of positivist science that the ‘separation’ between observer and observed was essential for ‘true’ and objective knowledge, but also the nature of how this ‘product’ came about... which got him into quite some trouble with the catholic powers that where and still are.

Len Puglisi, a Borderlands friend and himself a witness to that time period, shared his eloquent conclusion with us some time ago:

... the direction that should be taken is quite clear – a recognition that in despoiling the Earth, humanity has placed itself at the centre of the planet and is attempting to marshal all natural resources, all the life of the planet, to its own aggrandising ends, and in denial of any religious-ecological dimensions. And all this to such an extent that life itself on Earth is now in serious jeopardy.

As a farewell present, moving on from doctoral studies in the US to coming to work and live in Australia, friend and thesis supervisor Bob Thomas gifted me Marxist biology scholars Levin & Lewontin's *The Dialectical Biologist* (1985); the book then languished for months in the ‘*to-be-read*’ pile as i tried to adapt to the demands and expectations of the academic culture of my new workplace, the University of Melbourne, Social Work Department... and to acclimatising with my family to the land down-under... So it took me a while to figure out why Bob – a sociologist - had given me - a social work and social science academic - something to read about *biology* ... but soon after starting the book a few months later, i did understand why... Just a taste from another piece by these authors’ (1980) *Dialectics and Reductionism*:

*The faith in the atomistic nature of the world ... makes it more difficult to study the nature of interconnectedness.... Both the internal theoretical needs of ecology and the social demands that it inform our planned interactions with nature **require an ecology that makes the understanding of complexity the central problem**: it must cope with interdependence and relative autonomy, with similarity and difference, with the general and the particular, with chance and necessity, with equilibrium and change, with continuity and discontinuity, with contradictory processes. **It***

must become increasingly self-conscious of its own philosophy... (my emphasis)

Much of my own doctoral thesis (*Action-theoretical Reflections on Social and Community Interventions* – 1985; University of Michigan) had been about proposing a similar critical stance, based on similar epistemological foundations, but applied to the social sciences and their professional applications to social work and community development. Part of that endeavour included the serendipitous discovery of Quantum theorist and philosopher *David Bohm*, his *Wholeness and the Implicate Order* (1980 – Routledge & Keegan, London), momentarily starting to cure (liberate?) me of my ‘traditional’ social-science mental reductionisms.

Bohm, Levin and Lewontin generated in me the first inklings that a similar discontent had been spreading across the ‘real’ sciences too ... those sciences had – obviously – not been heeding John Muir’s 1911 ‘warning’ in his *My first Summer in the Sierra*: ‘*When we try to pick out anything by itself, we find it hitched to everything else in the Universe*’ (an early mycorrhizal and mycelial statement i discovered in *Resurgence & Ecologist* No. 308 – 2018:17). And of course, i should not forget my rather enthusiastic – but a bit naïve - reading of Gregory Bateson’s *Steps to an ecology of Mind* (1972:269), also in the early-80s...

We would do well,” he said “to hold back our eagerness to control the world which we so imperfectly understand... rather, our studies could be inspired by a more ancient, but today less honoured, motive: a curiosity about the world of which we are part. The rewards of such work are not power, but beauty.

Well before its confirmation by neuroscientific research (but well after that knowledge had been working practice – praxis – for many Indigenous peoples for tens of thousands of years), Bateson saw the similarities between the *relational networks* of roots and mycelium, between predator and prey, partners and competitors and the neural pathways between the various ‘sections’ of the human brain. Then (and still?) controversially, he saw *landscapes* capable of thinking in forms, colours, tones and scents rather than in ‘abstract’ words or concepts... Arguing against the de-contextualisation of knowledge and the various disciplines, he wrote in *Mind and Nature: A necessary unity* (2002:14)

Without context, words and actions have no meaning at all. This is true not only of human communication in words but also of all communication whatsoever, of all mental process, of all mind, including that which tells the seas anemone how to grow and the amoeba what he should do next.

So, as Andreas Weber (2017:43) suggests, ‘*The relationships within an ecosystem thereby constitute something like the synapses of a landscape’s nervous system (a very specific nervous system, which has the form of a very specific landscape.*’ And we’ll hear more from Weber later...

Finally, i should not omit at least one reference to the person who was clearly at the origin of much of this thinking - even if i had not really yet ‘encountered’ her at that

stage: *Lyn Margulis*. A film about her life and work, *Symbiotic Earth* ('google it' as a certain politician recently suggested in the middle of an election campaign in response to an attempt at a 'gotcha' question by a certain journalist...) explores her ideas as a brilliant and radical scientist, whose unconventional theories challenged the male-dominated scientific community, ideas that are today fundamentally changing how we look at our-selves and ourselves, at evolution and the environment. As a young scientist in the 1960s, she was ridiculed when she first proposed that *symbiosis* was a key driver of evolution, but she persisted. ***Instead of the mechanistic view that life evolved through random genetic mutations and relentless competition, she presented a symbiotic narrative in which bacteria joined with one another to create animals, plants and all other organisms which together form a multi-dimensional living entity that covers the Earth.*** Humans are not the pinnacle of life with the right to exploit nature, but part of a ***complex cognitive system in which each of our actions has repercussions.***

'Creation' as intrinsic and generative part of relational evolving... our western hopeful/desperate pursuit for the linear-final cause of it all re-figured within an evolving relational complexity...

Margulis' collaboration with James Lovelock from the 1970s onwards led to the further development of the *Gaia 'hypothesis,'* in essence positing the overall inter-relatedness of planetary systems and processes. The eighth chapter of Margulis' *The Symbiotic Planet* deals with *Gaia*, describing 'it' as: '*an emergent property of interaction among organisms (or a) series of interacting ecosystems that compose a single huge ecosystem at the Earth's surface.*'

And even if some of her work was then only vaguely known to me, the above 'bold' statement is certainly programmatic for much of the readings i have immersed myself in over the last few years and which i share with you in later sections of this exploration. In fact, Laszlo and Combs (2011) do a nice job integrating their and others' thinking with the 'holism' developed by Lyn Margulis and Thomas Berry, that great farmer-philosopher whose 'dreams' come rather close to the holistic conceptions of David Bohm, of Particle Physics professor Karen Barad and Consciousness philosopher Donna Haraway to whom we will listen later...

David Abram gets me to start...

My 'real' immersing in this literature started with David Abram's *Spell of the Sensuous* around 1997; a few years later in the early noughties, his very lively presentation at Augustine/Borderlands – aided and abetted by listening to and learning from earlier and later presentations by and discussions with Elisabet Sathouris, Satish Kumar (Schumacher College and Resurgence journal), Starhawk, Joanna Macy, Stuart Hill (Western Sydney University, Social Ecology program) and, from a macro-perspective, with Helena Norberg-Hodge (*Economics of Happiness* and *Re-localising* - at

Augustine/Borderlands twice, in a Castlemaine conference (2015) and elsewhere) (all these are easily reachable via Google...).

My encounter with David Abram, whose work sits squarely in the Arne Naess' '*deep ecology*' tradition (https://en.wikipedia.org/wiki/Arne_N%C3%A6ss_Jr.), occurred via the *Participatory Action Research* network (i first read Peter Reason's review of Abram's *Spell of the Sensuous* in 1997; the remaindered hard-back copies of Abram's book were cheaply sold by Canberra's '*Academic Reminders*' bookshop (now unfortunately disappeared...) and i remember buying ten copies as gifts for all my friends from ARIA, the local (mostly Melbourne-based) Action Research network initiated by Yoland Wadsworth... and some copies ended up with several early Borderlands friends and doctoral students i continued to 'supervise'...). Reading the *Spell* was transformative and Abram further exemplified his epistemological and methodological 'approach' in his next work (2011), *Becoming Animal: An Earthly Cosmology*.

As a brief aside... 1997 was the year i had decided to quit my university job, unwilling to continue to work in and with the stultifying transformations generated in academia by the imposition of neo-liberalism on the praxis and governance of universities in Australia and worldwide – i have told this story elsewhere. With friends and others seeking a space from where to be able and defend and further develop some of the intellectual, social and educational endeavours we had come to believe in and very much inspired by the movements, transformations and 'recognitions' of the 70s, we started the Borderlands Cooperative which i have mentioned several times before (www.borderlands.org.au and Boulet & Hawkins 2021 for more detail). An 'eco-philosophy' network i had become part of as i was searching the more productively 'channel' my growing discontent with academia, led by friends and colleagues philosopher Freya Mathews and humanities and environmental humanities scholar Kate Rigby, allowed – or rather urged – me to think-say things that would have expelled me from the many other spaces in which i was thinking/saying things... And much of that flowed into the philosophy and praxis of the Borderlands Cooperative to this day... also allowing us to – thanks to Kate Rigby – invite David Abram for a – rather remarkable – presentation early-2000

Like deep-ecologist Arne Naess (https://en.wikipedia.org/wiki/Arne_N%C3%A6ss), Abram attempts to remind us of our species' other ways of knowing, other, that is, than the *cerebral* or '*words-based*' ways in which we as 'modern' humans have removed ourselves progressively further from our intimate '*being-with-all-that-surrounds-us*' and thus alienated our understanding and perception of '*all-that-surrounds-us*' (the literal meaning of '*experience*' as derived from its Latin origins: '*ex*' = 'out of; from'; '*peri*' = 'what surrounds (us)'; '*ence*' = from '*ens*', the present participle (gerund) of the verb '*esse*' = 'to be', hence 'being' (it is also a suffix indicating the gerund (present participle) of all verb forms usually expressed as 'ing' in English); so, experience = '*from what surrounds (our) being*'...). Abram brings '*sensuous*' knowing back into the

spectrum of our knowing, the intelligence of our hearing, our looking, our tasting and touching and smelling, our intuiting, etc.; and he shows how re-learning to communicate with the non-human world is essential if we want to survive the predicaments of the present... and indeed, try to repair the damage. Abram also started to draw my attention to the importance of Indigenous knowledge... which (after thirty years) then still only faintly resonated because of my earlier experience of working in Africa in the late-60s.

And i just stumbled over David Howes' (2005) *Empire of the Senses - The Sensual Culture Reader*, referring to Kessinger's (1991) writing about the Peruvian *Cashinahua*, who hold that

... a wise man, huni unaya, has knowledge throughout his whole body. "Hawen yuda dasibi unaia, his whole body knows," they say. When I asked them where specifically a wise man had knowledge, they listed his skin, his hands, his ears, his genitals, his liver, and his eyes. "Does his brain have knowledge?" I asked. "Hauraki, it doesn't," they responded.

What do the Cashinahua mean when they say that the skin, the hands, the ears, the genitals, the liver, and the eyes have knowledge? Una is that which one's body learns from experience.

A fascinating account detailing all the 'body parts' and how they gather their respective knowledges... and a sad reminder about how western 'culture' seems to have systematically eroded our sensuous capabilities... or should i say – hopefully – only dulled them, as Abram seemingly suggests that we could/would/should be able to regain them...?

Critically following and enlarging Naess' 'deep' ecology, Abram's work contrasts with the tradition of 'social' ecology, which continues to privilege the human presence on this earth even if advocating a more fundamental cooperative and co-existential understanding of the human relationship with the non-human. Murray Bookchin was probably the most explicit representative of this anarchic and rationalist philosophy, even if he modified his anarchism as well as his rationalism regularly – a little too complex to detail this in a few words... Just a taster from a collection of essays, *The Philosophy of Social Ecology* (1994), where he expressed his objectivist objections to – amongst other – the Deep Ecologists, or the 'relativists of our time... (who) would permit the 'imaginative' to loosen from our contact with the objective world' (p.178-9):

At a time when we teeter between Civilization and barbarism, the current apostles of irrationality in all their varied forms are the chthonic demons of a dark world who have come to life not to explicate humanity's problems but to effect a dispiriting denial of the role of rationality in History and human affairs.

The 'relativists' he was objecting to, of course, were located in the spreading 'post-

modernist’ and *‘post-structuralist*’ eruptions of the eighties, seemingly unencumbered sliding into the social (and ecological) nihilism of *neo-liberalism* and *economic rationalism* which have indeed pushed us further into the destruction of our ecology whilst eroding the moral fibre which had held alive the impetus of the *‘end-sixties*’ for several decades (in any case, that's what i believe because i was part of it ... and i stick to it! I think we’d now refer to this type of justification *‘lived experience*’...).

Shades of *'social ecology'* certainly found their locus in Australia, notably in several Graduate Programs across the country; the meanwhile largely disbanded Western Sydney University Social Ecology group, with (amongst others) Stuart Hill (who also presented at Borderlands/Augustine), who co-published the Wright et al. reader (2011) in which most people who have a ‘name’ in social ecology in Australia received a little spot; a good book to whet appetites... And to assist in that whetting, Stuart Hill’s ‘circumscription’ of social ecology in which he also tries to cut a critical path ‘between’ ‘deep’ and ‘social’ ecology, sounds as follows (on p. 5 in the introduction and elaborated in his chapter in the book):

*I was also attracted by its emphasis on **experiential** learning, **participatory action research** and other qualitative methodologies, its recognition of the importance of **context**, and its acknowledgement of **diverse ways of knowing** (including women’s and Aboriginal ways), the importance of **diversity** and of learning to collaborate across difference, of working for equity and social justice, particularly in relation to issues of power, gender and race, and of learning how to work with and design complex mutualistic systems, recognising chaos as an important precondition for creativity, development and co-evolution, and not something to be quickly controlled and simplified.*

As the use (or misuse?) of the prefix *‘eco*’ before an amalgam of other nouns started to proliferate, so did my encounters with the intersections between ecology and disciplines about human ‘stuff’; two edited volumes by Kahn and Hasbach (2012 & 2013, but also including earlier material), dealing more specifically with *eco-psychology* and with the rediscovery of the *‘wild*’, include a diverse (both in content and quality) collection of contributions, some of them very solidly located in the *‘utilitarian*’ tradition, with which i mean that they continue to consider the *‘wild*’ and the *‘ecology*’ as primarily ‘useful’ for humans’ psychological health and survival (rather than representing a *more radical questioning of the nature of our relationship with the non-human* in the tradition enunciated by Naess: that we should re-learn to appreciate the wild and the ecology in its own right and that we should try to *re-learn how the Earth wants us to live with them...*).

And it behoves us to mention George Monbiot here with his 2014 *‘Feral: Rewilding the Land, the Sea, and Human Life*’, written to *‘begin to envision a future world where humans and nature are no longer separate and antagonistic, but are together, proximate, part of a single, healing world*’ (from the back cover ‘blurb’). For my taste, a bit too much focused on the ‘reintroduction’ of certain (endangered or even ‘extinct’) species into the ‘wild,’ but i do like his seeing *‘... rewilding as an enhanced opportunity*

for people to engage with and delight in the natural world' (p.11), something i had started to develop some understanding of through (social) work with people involved in 'wilderness programs' in the mid-eighties... (even if this kept the relationship with the 'wild' also rather 'functional/utilitarian' and beneficial for the re-socialisation or healing of humans with 'problems' - especially 'difficult' young people ... and that will come back in an interesting way much later in this story... and not just for and about 'young' people...).

Notwithstanding my reservations about the two Kahn & Hasbach volumes, one contributor to the *Ecopsychology* book, Canadian psychologist Andy Fisher offered a chapter which is certainly – as its title indicates – more 'radical' and his own book goes well beyond the 'utilitarian' view... Written already in 2002, Fisher was an early promoter of a more '*egalitarian*' relationship between nature and 'us'/'me' in our ways of understanding humans and their 'problems' and in 'our' ways of dealing with those 'problems'...

(Parenthetically, Fisher should be useful reading for recalcitrant psychologists, social workers and counsellors, especially those who continue to think and work in their '*atomistic-individualistic*' reductionist cocoons; they clearly go into the 'sin bin' of Belgian psychiatry professor Paul Verhaeghe's (2014) *What about me?* (a really good and critical piece of work... and not just because he's a fellow Flemish/Belgian ☺) and of Australia's Anne Manne's (2014) *The Life of I*, both severely critical of '*the new culture of narcissism*'. And i will deal in some detail with the work of Gabor Maté in further sections of this reading journey - sorry for this long 'parenthetical'!)

In a related and i think relevant area of discourse and practice, from the mid-70s, initial attempts started were made to *give nature 'standing' in the courts, or to endow nature, the 'wild', with rights which can be claimed in courts. Should Trees Have Standing?* was originally published in 1972 (Stone, 1972; 2010), a rallying point for the growing environmental movement, launching a worldwide debate on the basic nature of legal rights and reaching the U.S. Supreme Court. The argument was accepted in court – albeit as a 'minority' opinion, but it was an important 'first'. Now, 50 years later, several examples can be offered, including from New Zealand (Whanganui river - <https://www.theguardian.com/world/2017/mar/16/new-zealand-river-granted-same-legal-rights-as-human-being> and recently also a mountain area) as well as from Ecuador and Bolivia (the '*Pachamama*' or '*Mother Earth*' reference known to most, i think) and India, where rivers and their direct environment have been given rights enshrined in the constitution (and i received notice of activist groups in Appalachia wanting to bring mining companies to court for the destruction of that ecology and that there's a movement on track to claim legal right for the Lake Erie area between Michigan, US and Ontario, Canada). It would be interesting to see how some of this could be linked with First Nations Peoples' '*native title*' claims to the land and whether and how this could be combined with *nature rights* projects.

Burdon's *Exploring Wild Law* (2011) is an Australian work, produced by a strong network of people – especially a number of lawyers – advocating and defending the 'rights of nature'; this network, the AELA - *Australian Earth Laws Alliance* (www.earthlaws.org.au/), organise regular conferences and run a newsletter/journal with rather interesting material (one of their conferences was titled "*Inspiring Earth Ethics: Linking Values and Action*" in November 2017, at Griffith University in Brisbane and their 2021 conference was co-organised with the *New Economy Network Australia* - <https://www.neweconomy.org.au/>) – all really important connectivity initiatives...

this is where my adventurous reading really starts...

On another but related level, excellent theoretical and philosophical attempts are afoot everywhere to rethink this 'new' relationship between the human and 'that which sustains' us and which we, in reciprocity – 'should be sustaining.' Three favourites of mine are Karen Barad, Donna Haraway and Anna Tsing; they all need a bit of effort to 'get into' but once you do, every page begins to read like sweet honey filling the 'in-between' of the philosophically, scientifically and practically brutally eroded spaces between 'us' and the 'non-human'.

Indeed, their respective books and other work equally show the shifts – and re-learning - in epistemology (philosophy of knowledge) and in methodology social and natural researchers need to engage in so as to more appropriately understand the '*natureculture*' in which we/they dwell and which we/they try to more adequately communicate to their audiences. Ryle's (1949) and Geertz' (1973) '*Thick Description*' approach in the social research tradition certainly fully applies to this methodology (and our reading of these authors would be enriched by the work of the scholars i'm introducing here). The '*radical phenomenology*' David Abram borrows from French philosopher *Merleau-Ponty* (who called it '*carnal knowing*', which we now refer to as '*embodied*' knowing, initially especially supported by feminists) equally applies here as does Abram's appeal to the '*spell of the sensuous*', the broad re-validation of '*other ways of knowing*', 'other', that is, to the merely cerebral way of knowing, explaining and understanding.

But before engaging with the three favourites just mentioned, i want to share *Robyn Wall Kimmerer* with you; she is an enrolled member of the Citizen Potawatomi Nation in the US and Environmental Biology and Botany Professor at SUNI, specialising – of all things - in *mosses*. She offers a stunning passage in her *Gathering Moss* (2003) book, making explicit what '*thick description*' means, combining her Indigenous knowing and experiencing with her 'scientific' knowledge derived from formal 'western' studies and research (and with apologies for the length of the quote - but it is quite illustrative, i think). She had been studying a moss named *Tetraphis* which seemed to have developed two distinct reproductive strategies, one 'sexual' (i.e. needing a male and a female of the species) and another one 'clonal' (i.e. pro-creating asexually through cloning of the existing 'plant'). Having tried all manner of correlations to figure out why certain *Tetraphis* would 'opt' for sexual reproduction and others for 'clonal', she decided that

...there was no rhyme nor reason to Tetraxis' reproductive choice. But if there's anything that I've learned from the woods, it's that there is no pattern without a meaning. To find it, I needed to try and see like a moss and not like a human.

In traditional indigenous communities, learning takes a form very different from that in the American public education system. Children learn by watching, by listening, and by experience. They are expected to learn from all members of the community, human and non. To ask a direct question is often considered rude. Knowledge cannot be taken, it must instead be given. Knowledge is bestowed by a teacher only when the student is ready to receive it. Much learning takes place by patient observation, discerning pattern and its meaning by experience. It is understood that there are many versions of truth, and that each reality may be true for each teller. It's important to understand the perspective of each source of knowledge. The scientific method I was taught in school is like asking a direct question, disrespectfully demanding knowledge rather than waiting for it to be revealed. From Tetraxis, I began to understand how to learn differently, to let the mosses tell their story, rather than wring it from them.

Mosses don't speak our language, they don't experience the world the way we do. So in order to learn from them I chose to adopt a different pace, an experiment that would take years, not months. To me, a good experiment is like a good conversation. Each listener creates an opening for the other's story to be told. So, to learn about how Tetraxis makes reproductive choices, I tried to listen to its story. I had understood Tetraxis colonies from the human perspective, as clumps in various stages of reproduction. And I had learned little by doing so. Rather than looking at the clump as an entity, I had to recognize that the clump was simply an arbitrary unit that was convenient for me, but had little meaning for the moss. Mosses experience the world as individual stems and to understand their lives I needed to make my observations at the same scale.

And after several years, 'Tetraxis started to tell its own story... Tetraxis is a sequential hermaphrodite, changing its gender from female to male as the colony gets crowded...', a fascinating story of learning to understand relationship **in terms of those who are doing the relating**. And with my apologies for lingering with this story - of which i hope that those of us doing community studies and community development would learn a thing or two! - let's return to those i earlier called my three 'favourite' writers in the overlapping space between physics, the natural and the social sciences; just a taste, because i will return to them more extensively later...

Donna Haraway, continuing her habit (a habit many might remember from her '**Cyborg Manifesto**' about 20 years ago and many later writings?) of 'inventing' new words – especially attempting to shift nouns (back) into the 'verb' mode - in a chapter titled '**Tentacular Thinking**' in **Staying with the Trouble** (2016) on pp. 50-1 writes:

'Historically situated relational worldings make a mockery both of the binary division of nature and society and of our enslavement to Progress and its evil twin, Modernization. The Capitalocene was relationally made, and not by a godlike Anthropos, a law of history, the machine itself, or a demon called Modernity. ... A dark bewitched commitment to the lure of Progress (and its polar opposite) lashes us to endless infernal alternatives, as if we had no other

ways to reworld, reimagine, relive, and reconnect with each other, in multispecies well-being.... Pignarre and Stengers affirm on-the-ground collectives capable of inventing new practices of imagination, resistance, revolt, repair, and mourning, and of living and dying well.'

Whilst 'to world' becomes a verb in Haraway's thinking, Karen Barad, professor in Particle Physics and Philosophy at the University of California in Santa Cruz, in the Preface and Acknowledgements of her *Meeting the Universe Halfway* (2007:IX-X), in turn leads us into Quantum 'entanglements':

*This book is about entanglements. To be entangled is not simply to be intertwined with one another, as in the joining of separate entities, **but to lack an independent, self-contained existence.** Existence is not an individual affair. Individuals do not pre-exist their interaction; rather, individuals emerge through and as part of their entangled intra-relating. Which is not to say that emergence happens once and for all, as an event or as a process that takes place according to some external measure of space and of time, but rather that time and space, like matter and meaning, come into existence, are iteratively reconfigured through each intra-action, thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future.... **Which is not to deny my own agency (as it were) but to call into question the nature of agency and its presumed localisation within individuals (whether human or nonhuman).***

And a third tasty morsel of such 'relational' thinking and perceiving comes from Anna Tsing and her *The Mushroom at the End of the World* (2015: p. 20 – 22); she suggests:

*Progress is embedded ... in widely accepted assumptions about what it means to be human. Even when disguised through other terms, such as 'agency', 'consciousness', and 'intention', we learn over and over that humans are different from the rest of the living world because we look forward – while other species, which live day to day, are thus dependent on us. As long as we imagine that humans are **made** through progress, **nonhumans are stuck within this imaginative framework too.***

*Yet the modern human conceit is not the only plan for making worlds: **we are surrounded by many world-making projects, human and non-human. World-making projects emerge from practical activities of making lives; in the process these projects alter our planet.** To see them, in the shadow of the Anthropocene's "anthropo-", **we must reorient our attention.** Many pre-industrial livelihoods, from foraging to stealing, persist today, and new ones (including commercial mushroom picking) emerge, but we neglect them because they are not part of progress. **These livelihoods make worlds too** – and they show us how to look **around** rather than **ahead.** (my emphasis)*

See what i mean...? There's a great convergence of emphases on 'relating' (rather than 'relativity' - cop that, Murray Bookchin and your critique of the relativists or 'relativisers'!) across and between so many disciplines, modes of thinking, places of thinking... and many of these are also actively/theoretically interconnecting... and this small effort at summarising some of them cannot do justice to them at all... but it's

worth trying to give a bit of a taste of them anyway ... (and i am grateful to Anna Tsing for inspiring my formulation of the title of the chapter i wrote and shared with U3A participants: '*Looking back to keep moving... and it may not be 'forward'*' – Boulet & Hawkins, 2021).

In addition, as i mentioned at the start of this meandering tour, it fully feeds into my central interest in '*relating*' and in the emerging '*assemblages*' (thanks Bruno Latour, Manuel Delanda and Graham Harman, for having made this concept useful) of social or alternative economics and modes of surviving locally... (for which Anna Tsing refers to Gilles Deleuze's (and Felix Guattari's) work and their concept of '*agencement*', which i prefer to translate as '*enactments into assemblages*' (rather than as '*structures*' or even Giddens' '*structuration*') - i can't do more than 'flag' this here as it would lead way too far for this already ever-lengthening story! But it does require a little excursus into the need for a new focus on our language...).

interlude: give us our language back!

In the midst of all that convergence and stimulated by the examples of Haraway and the others mentioned above, i became even more aware of the need to *re-invent our language* and recover some of the vocabulary and associated semantics from our past(s) and to just create new (or re-create old) words to adequately refer to our new (and old) ways of understanding and relating to our world and to re-imagine relational presents and possible more 'sustaining' relational futures. Below i have included ample references to Robert Macfarlane's glorious books about nature and language and their relationship so will not elaborate further here.

An obvious candidate for this necessary linguistic reflection, re-novation and recuperation is anything expressed by or derived from the concept of '*sustainability*'. Indeed, the (mis-)use of that concept has created oxymorons like '*sustainable growth*' and '*sustainable development*' that keep 'polluting' the concept of sustainability with traditional semantic capitalist-economic undercurrents rather than relating it to its foundational semantic space – *our (human) ability to sustain*. The relevant question becomes: is our *ability to sustain* our livelihood and *the ecology which enables us to achieve it* still with us or should we reformulate this question by asking – with Herbert Girardet (2016:20-24) – *how can we create and get involved in 'regenerative' cities and environments...?*

Wondering about our '*ability to sustain*' begs a double question: first, how '*able*' are we to still halt our destructive ways and second, *what is it*, really, that we're meant to *sustain* while our present livelihoods and ways of living are so heavily implicated in the destruction of Earth, its inhabitants and 'holophilic' (wholeness creating) processes...?

Indeed, as we are said to have entered the ‘*Anthropocene*’ – a period in the evolution of earth (after the Holocene), where humans have become the most dominant species accounting for most of the ill effects inflicted on our ecology – ‘*mere sustainability*’ thinking and action will not reach far enough, captured as it is by established and destructive interests and hence, has lost its utility to guide our actions and intentions... If our actions – i.e. the actions we collectively engage in for our collective survival – are doing much of the damage to so many aspects of our global ecological systems and to so many species driving them to extinction, ***then it requires us to much more actively take responsibility for our own and other species’ survival...***

I have included below explicit references to the nature, amount and diversity of our – of humans’ – destructive impact on Earth and therewith on ourselves; Kate Raworth’s ‘*Donut Economics*’ is presented towards the end of this rambling collection of materials.

hence... we need to talk about regeneration and restoration ...

In his *Call of the Reed Warbler: a new agriculture, a new earth* (2017, St Lucia: University of Queensland Press), Australian farmer Charles Massy uses the adjective ‘*regenerative*’ throughout his 500-page book. As a farmer, he juxtaposes ‘*regenerative*’ thinking and action to the ‘*mechanical mind*’, describing farming in the latter mode as a ‘*heavily controlled and modified industrial landscape*’ or – in the former mode as ‘*driven by the sense of wonder, the sheer delight in being alive in a beautiful, mysterious, bountiful world*’ – or what is known as ‘*biophilia*’ (the innate human affinity with living things)’ (p. 65). He continues:

‘In short, I believe one cannot gain true ecological literacy without great empathy with, and understanding of, nature and how it functions. Thus one’s heart also needs to be involved.... [ecological literacy] encompasses the ability to ask, ‘what then?’. But one can only ask such a question with a good knowledge of not just the fundamental basics of ecology but also the history and flow of ideas and historical development of how people and societies relate to each other and natural systems. This also means a familiarity with the processes of evolution, coevolution and self-organisation; with the current predicament Earth is in; and with the dynamics of the modern world, and thus why we as a species have become so destructive. This therefore includes questions that arise if a landscape is diagnosed as ‘unhealthy’. Because ‘What then?’ demands that we act for renewal and restoration, for regeneration and open-ended health.’
(ibid)

The largest part of Massy’s book then details ways of ***regenerating the Five Landscape Functions***, including the Solar-Energy Function, the Water cycle, the Soil-Mineral Cycle, Dynamic Ecosystems and the role of the Human-Social in Landscape Regeneration. Suffice it to finish this small excursion into regenerative thinking and

practice by quoting David Orr (from *The Nature of Design*) to introduce Massy's Chapter 16 (p. 328): '*Ecological design is the careful meshing of human purposes with the larger patterns and flows of the natural world, and the study of these patterns and flows to inform human action*'...

As already mentioned, i have come to express it as follows: '*we need to figure out how the world – earth and its multispecies - want us humans to live with her/them...*' Or, with yet another Belgian, Didier Debaise (2017:2), revisiting 'process philosopher' Whitehead:

The sense of value, of importance, and of purpose - which in our modern experience of nature come under the notion of 'psychic additions,' of projections by humans of something onto nature that it would otherwise lack - are to be found everywhere, from the most elementary forms of life of microorganisms to reflexive consciousness. The speculative question that runs through this book is how to grant due importance to the multiplicity of ways of being within nature?

Just to make it less 'speculative' – thought there's nothing wrong with 'speculative', i think – let's start with looking back ... a glimpse into how we came to think as we do and didn't come to think in other contemporary ways...?

and now more fully to what i promised in the title of this collection...

In High School and later at Uni, i was introduced to the German 18th/19th century poet and dramaturg Johann von Goethe... that was mostly how he was, is and continuous to be celebrated in Germany and beyond... We were told that he was also involved in scientific work, especially developing a theory about colours and about the '*metamorphosis of plants*' but that was really not taken seriously at the time (lest people would get confused about the validity and ongoing indoctrination in the Newtonian 'real' sciences!); '*Faust*' and '*Werther*' were the things he was celebrated and studied for... and it was much later, reading John Shotter's 2005 "*Goethe and the Refiguring of Intellectual Inquiry: From 'Aboutness'-Thinking to 'Withness'-Thinking in Everyday Life*" that awakened me to the 'other' Goethe...

My friend Kate Rigby, whom i mentioned in the section on David Abram as one of the initiators of the Ecophilosophy Network in the mid-1990s, had shared with me bits of her thinking as she was completing her doctoral dissertation. That created several intersecting and consuming conversations on Critical Theory (Adorno and Horkheimer and others whom i had 'dealt with' in my own doctoral work), feminism-Marxism convergences and contradictions, and Kate's ecofeminist reading of German romantic drama and other writings during the time of Goethe and Schiller, the late-1790s and early-1800s. Her early-1990s dissertation *Transgressions of the Feminine: Tragedy, Enlightenment and the Figure of Woman in Classical German Drama* really had intrigued me then... so i sat and read some more...

so i sat and read some more...

Goethe wrote and talked a lot about research, observation, human relationship with nature and our ways of coming to understand ‘it’. It is interesting to muse about why his epistemological and methodological approach did not seem to have a chance against the Newtonian/Baconian natural science approach, the Cartesian ‘*I think therefore I am*’ separation between ‘us’ as the omnipotent ‘knowers’ and the ‘objective’ world – which, of course, was always assumed to be ‘there’ just for ‘us’... with the compliments of an ‘omnipotent god’ (however much we disappointed ‘him’ with our misdemeanours...) and, of course, with us just located at the centre (and on top) of it all... (not just ‘anthropocentrism’ but also closest to the assumed seat of the divine: ‘above’... somewhere...).

As a brief interlude and excursion, compare this with Robin Kimmerer’s (2013:9-10) view:

In the Western tradition there is a recognized hierarchy of beings, with, of course, the human being on top – the pinnacle of evolution, the darling of Creation – and the plants at the bottom. But in Native ways of knowing, human people are often referred to as ‘the younger brothers of Creation.’ We say that humans have the least experience with how to live and thus the most to learn – we must look to our teachers among the other species for guidance. ... They’ve been on the earth far longer than we have, and have had time to figure things out. They live both above and below ground, joining Skyworld to the earth. Plants know how to make food and medicine from light and water, and then they give it away.

After visiting surviving Indigenous groups across the world, Raygorodetzky (2017:255) concludes that across the many differences, ‘*interweaving of animate and inanimate, spiritual and physical, past and future, rights and responsibilities, respect and reverence, traditional knowledge and science*’ is the generally professed foundation towards sustaining healthy relationships with other living beings.

[**Brief reminder...** But like a Russian ‘babushka’ or ‘matrioshka’ set of nested dolls, our western cultural *anthropocentrism* envelops the ‘ego-centric’ concept of ourselves and is itself enveloped in a *cultural (and political and economic)* ‘western’ and still very colonial mode of observing (and dealing!) with the world/Earth and its ‘other’ inhabitants and, finally, is still ensconced in the largest ‘doll’ of them all, our still *pre-Copernican ‘mondocentrism,*’ our belief that we are still safely occupying the very middle of the universe... rather than ‘somewhere’ in a precariously restless cosmos... in spite of NASA, Sputnik and some of the ‘best’ (read ‘richest’) amongst us already trying to figure out where-to next, if life on Earth becomes ever more uncomfortable as we – and especially they - are busily making it... The mind does indeed boggle... and my apologies for summarising and enclosing all of this in a one-sentence paragraph...]

Back to Goethe, though; he was not the only one during the end-18th – early-19th centuries proposing another view than the governing ‘enlightenment’ scientific one ... in a book chapter (Boulet, 2018) i wrote some time ago, i included the following

elaboration... (sorry for the length... just trying to create a sense of history and connections across time...)

“As Carl Linnaeus in Sweden’s Uppsala was meticulously developing taxonomies of *genera*, *species* and *taxa* in the plant and animal world(s), thus adding to the observational and ‘analytical’ approach of the evolving natural sciences since the 16th and 17th centuries, Gilbert White, the sickly Vicar of Selbourne, was meticulously observing animal and plant life, interactions and relationships in the garden of his manse. Carefully, in his *‘Natural History and Antiquities of Selborne’* (1789/1994), he described, for example...

... the Caprimulgus (the goat-sucker), as it is a wonderful and curious creature: but I have always found that though sometimes it may chatter as it flies, as I know it does, yet in general it utters its jarring note sitting on a bough; and I have for many an half-hour watched it as it sat with its under mandible quivering, and particularly this summer. It perches usually on a bar twig, with its head lower than its tail... This bird is most punctual in beginning its song exactly at the close of day; so exactly that I have known it strike up more than once or twice just at the report of the Portsmouth evening gun, which we can hear when the weather is still... (p. 57-8)

Linnaeus, meanwhile, busily *extracted* and *isolated* his genera and species from their living and (mutually) sustaining, changing and interdependent context, observing them carefully in his laboratory, detailing characteristics of each and deciding accordingly, based on ‘objective’ and ‘formal’ but ‘abstract’ criteria and characteristics, ‘where’ they belonged in the *great order of things*... all in the tradition of the ‘enlightened’ and modernist natural sciences, which had emerged barely two centuries earlier. The resulting ‘*disciplining*’ of the *natural sciences*’ mode of investigating and comprehending nature is neatly described for biology by Mae-Wan How:

*Biology has a long tradition of fixing, pinning, clamping, pressing, pulping, homogenizing, extracting and fractionating; all of which has given rise to, and reinforced, a static and atomistic view of the organism. (in Roszak, **The Gendered Atom**; 1999:149)*

Goethe has this to say as a ‘methodical’ scientist:

*In living nature nothing happens that does not stand **in a relationship to the whole**, and if experiences appear to us only in isolation, if we are to look upon experiences solely as isolated facts, that is not to say that they are isolated; the question is, **how are we to find the relationship of these phenomena, of these givens**. (Goethe quoted in Sepper, 1988:69; my emphasis)*

Goethe proposes a process of ‘*proper*’ perception leading to *appropriate* understanding/explanation of *all* phenomena, natural and ‘human’ and thus seems to anticipate the *phenomenological* approach of ‘understanding’ (‘*Verstehen*’ after German late-19th century-early 20th century German philosopher *Husserl* all the way to the French mid-20th-century philosopher Maurice Merleau-Ponty, who coined the term ‘carnal knowing or knowledge’) by including and integrating *sensory perception and comprehension* into cognitive capabilities and operations. Whilst Goethe’s German does not easily translate

into 21st century imperial English, in essence, he suggests that real understanding requires us to *‘fully ‘be’ with the object’* of our perception/con-ception – to identify with it *relationally* and *as part of the ongoing flow of the becoming of reality* – an astounding linguistic convergence between Goethe’s late 18th century language, Bohm’s quantum language in the late-20th century and many of the contemporary ‘new naturalists’ we’ll be listening to in the next section...

[Just another quick *historical excursion in a nutshell*...: the development of this line of thinking follows a long line of ‘alternative’ philosophical thinking going back to the Greek BCE ‘atomistic’ and ‘flow’ thinkers, Democritus and Epicurus; via the Latin/Roman poet/philosopher Lucretius (just before the start of the Common Era) and the rediscovery of the latter’s work *‘On the Nature of the Universe’* during the Renaissance (see the marvellous book *‘The Swerve – how the world became modern’* by Stephen Greenblatt; 2011; NY: Norton & Co); the 17th-18th century Italian Giambattista Vico (“to introduce geometrical method into practical life is *‘like trying to go mad with the rules of reason’*, attempting to proceed by a straight line among the tortuosities of life, as though human affairs were not ruled by capriciousness, temerity, opportunity, and chance”) and the 17th century Portuguese/Dutch/Jewish philosopher Baruch Spinoza (three of his main ideas: the unity of all that exists; the regularity of all that happens; the identity of spirit and nature; these ideas got him being expelled from his Jewish community in ‘liberal and tolerant’ Amsterdam); and then onto the end of the 19th century with the emergence of phenomenology, relativity and quantum theories and philosophies... And another apology for another rather breathless one sentence paragraph...]

As already mentioned, it was a beautiful surprise to stumble over Robin Wall Kimmerer’s (2013) *Braiding Sweetgrass*; as mentioned before, Robin is a Potawatomi First Nations North American academic, educated to become a ‘western’ botanist, Professor at SUNY, and very knowledgeable about ‘Indigenous’ knowledge(s) and understanding(s) of plants, having grown up in close relational connection with all that surrounded her. She brilliantly connects Goethe’s *colour perception* treatise (written end-18th – early-19th century) with the botanical co-existence of plants with ‘*reciprocal colours*’ (pp. 45-7). After obtaining her PhD, she returned to her ancestral lands and a gathering of Native elders to talk about traditional knowledge of plants... and there she found an answer to her botanist question (on p. 40) as to why the *Canada Goldenrod chrysanthemum* - brilliant chrome yellow - would *‘stand side-by side with their perfect counterpart, new England Asters... full-on royal purple that would make a violet shrink...’*? She tells a most fascinating story about ‘*re-cognition*’, connecting for us Indigenous knowing with Goethe and with the modern life sciences...:

... a Navajo woman without a day of university botany training in her life - spoke for hours and I hung on every word. One by one, name by name, she told of the plants in her valley. Where each one lived, when it bloomed, who it liked to live near, what kinds of medicine it offered. She also shared the stories held by those plants, their origin myths, how they got their names, and what they have to tell us. She spoke of beauty. ... I circled right back to where I had begun, to the question of beauty. Back to questions that science does not ask, not because they

aren't important, but because science as a way of knowing is too narrow for the task...

*Color perception in humans relies on banks of specialized receptor cells, the rods and cones in the retina.... [as] the visible light spectrum is broad... cone cells [are] specialists... one type optimally perceives light of two colors: purple and yellow... In a treatise on color perception, Goethe... wrote that 'the colors diametrically opposed to each other... are those which **reciprocally** evoke each other in the eye.' Purple and yellow are a reciprocal pair.*

*... the visual effect that so delights a human like me may be irrelevant to the flowers. **The real beholder whose eye they hope to catch is a bee bent on pollination....** As it turns out, though, goldenrod and asters appear very similarly to bee eyes and human eyes. We both think they're beautiful. Their striking contrast when they grow together makes them the most attractive target in the whole meadow, a beacon for bees. Growing together, both receive more pollinator visits than if they were growing alone.*

*The question of goldenrod and asters was of course just emblematic of what I really wanted to know. **It was an architecture of relationships, of connections that I yearned to understand. I wanted to see the shimmering threads that hold it all together. And I wanted to know why we love the world, why the most ordinary scrap of meadow can rock us back on our heels in awe.***

For readers who still think that this is totally 'off the planet' and 'overcome' by modern science, it would be instructive – and sobering – to read Yale University's evolutionary ornithologist, Richard Prum's (2014) '**Duck Sex, Aesthetic Evolution and the Origin of Beauty**' (<http://edge.org/conversation/duck-sex-aesthetic-evolution-and-the-origin-of-beauty>):

*Over the last few years I've realized that a large portion of the work that I've been doing on bird colour, on birdsong, on the evolution of display behaviour, is really about one fundamental and important topic, and **that's beauty—the role of beauty in nature and how it evolves.** The question I'm asking myself a lot now is: what is beauty and how does it evolve? What are the consequences of beauty and its existence in nature?*

*... To come up with a complete description of the function of a flower, we need a whole new kind of data. **Not just a description of the physical world, but something else inside, if you will, the mind of this other organism, this cognition.** What I'm coming to conclude is that this is a big watershed in evolutionary biology, and that there's a distinct process that occurs when we have evolution occurring through a cognitive or mental substrate. **That is, when it's about attracting another individual.***

*I would refer to this area as **aesthetic evolution, and the main topic in aesthetic evolution is the origin of beauty.** ... The way nature is—the nature of flowers, the nature of birdsong and bird plumages—implies that **subjective experiences are fundamentally important in biology.** The world looks the way it does and is the way it is because of their vital importance as sources of selection in organic diversity, **and as a result, we need to structure evolutionary biology to recognize the aesthetic, recognize the subjective experience.***

... For example, there are 10,000 or so species of birds in the world, and every single species of bird has a slightly different song and a different courtship display and a different way of attracting a mate and communicating socially. **Those have all evolved as a result of subjective experiences, "Do I like this mate or not?" Making a sensory perception, a cognitive evaluation and then a choice. These elements: sensory perception, evaluation and choice, give rise to this aesthetic evolutionary phenomenon.** (My emphasis)

It's always good to include something from that lovely anarchist anthropologist and transdisciplinary – way too early deceased - David Graeber (2014). Talking with a friend and observing worms engaging in a 'fun' crawling dance, the following reasoning evolves:

"All animals play," June had once said to me. "Even ants." She'd spent many years working as a professional gardener and had plenty of incidents like this to observe and ponder. "Look," she said, with an air of modest triumph. "See what I mean?"

Most of us, hearing this story, would insist on proof. How do we know the worm was playing? Perhaps the invisible circles it traced in the air were really just a search for some unknown sort of prey. Or a mating ritual. Can we prove they weren't? Even if the worm was playing, how do we know this form of play did not serve some ultimately practical purpose: exercise, or self-training for some possible future inchworm emergency?

This would be the reaction of most professional ethologists as well. Generally speaking, an analysis of animal behavior is not considered scientific unless the animal is assumed, at least tacitly, to be operating according to the same means/end calculations that one would apply to economic transactions. Under this assumption, an expenditure of energy must be directed toward some goal, whether it be obtaining food, securing territory, achieving dominance, or maximizing reproductive success—unless one can absolutely prove that it isn't, and absolute proof in such matters is, as one might imagine, very hard to come by.

And Graeber follows this up with a critical reference to (especially) the *Neo-Darwinists*, pointing out that the survival-of-the-fittest story has been challenged all along its historical trajectory:

*An alternative school of Darwinism emerged in Russia emphasizing cooperation, not competition, as the driver of evolutionary change. In 1902 this approach found a voice in a popular book, **Mutual Aid: A Factor of Evolution**, by naturalist and revolutionary anarchist pamphleteer **Peter Kropotkin**. In an explicit riposte to social Darwinists, Kropotkin argued that the entire theoretical basis for Social Darwinism was wrong: those species that cooperate most effectively tend to be the most competitive in the long run. Kropotkin, born a prince (he renounced his title as a young man), spent many years in Siberia as a naturalist and explorer before being imprisoned for revolutionary agitation, escaping, and fleeing to London. **Mutual Aid** grew from a series of essays written in response to Thomas Henry Huxley, a well-known Social Darwinist, and summarized the Russian understanding of the day, which was that while competition was undoubtedly one factor driving both natural and social evolution, **the role of cooperation was ultimately decisive.***

*The Russian challenge was taken quite seriously in twentieth-century biology—particularly among the emerging sub-discipline of evolutionary psychology—even if it was rarely mentioned by name. It came, instead, to be subsumed under the broader “**problem of altruism**”—another phrase borrowed from the economists, and one that spills over into arguments among “**rational choice**” theorists in the social sciences. This was the question that already troubled Darwin: **Why should animals ever sacrifice their individual advantage for others?** Because no one can deny that they sometimes do. Why should a herd animal draw potentially lethal attention to himself by alerting his fellows a predator is coming? Why should worker bees kill themselves to protect their hive? **If to advance a scientific explanation of any behavior means to attribute rational, maximizing motives, then what, precisely, was a kamikaze bee trying to maximize?** (my emphasis)*

Just before his sudden death, David Graeber, anthropologist and anarchist activist (with David Wengrow, archaeologist) had finalised another major work challenging a lot of too often implicit assumptions about evolution and the relational modalities generating it; both the assumed ‘evolution’ of humankind – from hunter-gatherer to hi-tech – and the competitive ‘survival of the fittest’ and its social Darwinist epigones are thoroughly questioned and indeed, left wanting... A very necessary Kropotkin-type gift of a book...

Apologies for my social-scientist Graeber indulgence...

Previously mentioned Berlin-based philosopher, biologist and writer *Andreas Weber* also explores the emotional content of our relationship with nature; he holds degrees in marine biology and cultural studies and has collaborated with Chilean brain researcher and philosopher, *Francisco Varela*, who referred to the ‘*imaginative surplus*’ which exists at the core of all living beings in the context of their relational living reality. Weber’s *The Biology of Wonder* (2016) addresses the disconnection between humans and nature, according to him, perhaps the most fundamental problem faced by our species today; that schism is arguably *the root cause of most of the environmental catastrophes unravelling around us*. He argues that *until we come to terms with the depths of our alienation, we will continue to fail to understand that what happens to nature (therefore) also happens to us*.

He proposes a new approach to the biological sciences that *re-locates the human back in nature; feelings and emotions*, far from being superfluous to the study of organisms, are the very foundation of life and demand a ‘*poetic ecology*,’ intimately connecting our species to everything that surrounds us, *showing that subjectivity and imagination are the prerequisites of biological existence*. The book – and Weber’s other work (2017) - demonstrate that there is no separation between us and the world we inhabit; hence, reconciling science with meaning, expression and emotion (the *imaginative surplus* mentioned before), allows a crucial understanding of our place in the framework of life — a revolution for biology as ground-breaking as the theory of relativity was for physics. Summarising a section of his earlier work, Weber posits (2017:43-4):

*The laws of desire frame the principles according to which life-forms experience all instances of bodily concern as existentially meaningful. A life-form can fail at any time – and therefore **wants** to survive. Because of this existential life wish, the world of organisms is not a neutral stage, but one deeply steeped in values and meaning. Its principles – the **wish for continued existence**. The **visibility of this life wish as an emotional expression**, and the **necessary presence of other beings to enable one's own life** – make up the ground rules of desire according to which living matter pushes towards unfolding. These rules are true equally for processes of material exchange and for mental and emotional experiences.*

Weber's *Matter & Desire: An Erotic Ecology* (2017) certainly amplifies Richard Prum's intimations in *Duck Sex*; he posits that all beings and matter '*long to connect with each other... in order to become ourselves. **Life, the whole cosmos, is formed through relationships, and through the relationship new things are formed.***' 'Love' or 'Eros' is an instrument of knowledge as well as *the practical principle of creative enlivenment, a fundamental aspect of living and being alive...* Anticipating something i will come back to when introducing Gabor Maté's (2022) *The Myth of Normal*, on p. 42 ff. Weber suggests:

*Whenever neurobiologists observe that the brain is constantly learning, this therefore means that for as long as we are alive, we are part of a process of mental and bodily growth wherein we interpret encounters and transform ourselves into the history of these encounters. **The brain is thereby a reflective organ of the world, comprising primarily relationships.** It reflects these relationships by producing relationships **within itself**, by establishing relationships **to the** relationships in the world, and by attaching new relationships **onto these** existing relationships. The brain is an organ that reflects the world simultaneously making itself into a part of this world. (my emphasis)*

Apart from references to writers and thinkers already mentioned in this '*annotated reading list*' - Abram, Goethe, Bateson, Varela, Margulis – Weber's books jolted my memory back to my reading of previously introduced philosophy professor and friend Freya Mathews' work, especially her (2003) *For Love of Matter*. I happened to read this as we were preparing to launch the *OASES Graduate School*, for which she served on the Accreditation Panel in 2006-07; she describes her book as (p. 4):

*A philosophical exploration of a 'reanimated' world, a world that is no longer viewed, in the manner of classical science, as a piece of cosmic hardware, fashioned out of the inherently blind matter of classical physics, but is rather viewed as a subjectival matrix, within the eddies and currents of whose dynamics we and other finite creatures stake out our relative identities. In the last decade or so I have been deeply influenced, in exploring this metaphysical terrain, by certain non-Western perspectives, specifically those of Taoism and of indigenous Australia, but I have continued to seek **a pathway to the reanimation of reality within a Western frame of reference.***

Mathews (p. 160), like Weber, imbues her writing with a practical and necessary tone in that '*...only by relearning to understand our existence as a practice of love will we grasp the overwhelming human dilemmas we face and find the means to deal with them*

differently than we have thus far, including losing our fear for suffering and death, which opens us *‘to engagement with other – to eros.’*

So there... and so far the *‘introduction’* (!) to sharing the readings i’ve been absorbed in in this ‘area’ in addition to Haraway’s 2016 *Staying with the Trouble* and the others already mentioned... We now see more and more research emerge which clearly shows that it’s not just ‘us’ who have the capabilities of communication and – yes! – of *sensory knowing*... research which starts yielding to the *‘Indigenous ways of knowing’* as Gregory Cajete (2000), another native scholar from North America, suggests: *‘we understand only when we understand it with all four aspects of our being: mind, body, emotion, and spirit.’*

Just a few examples...

The first book by those i refer to as the *‘new naturalists’* fell in my hands thanks to a 2015 OASES breakfast presentation by the author of a beautiful story, narrating her walk from the mouth to the source of the Yarra River in Victoria... Maya Ward’s *The Comfort of Water* (2011 – Transit Lounge Publishing) certainly resonated with a book she had brought with her and enthusiastically recommended to me: Stephen Harrod Buhner’s (2014) *Plant Intelligence and the Imaginal Realm* ... So i acquired it later in 2015. The book is full of startling pronouncements which make one think about one’s own way of having walked through the world and not having *‘perceived’* it to any large degree ... Buhner makes a strong argument for the need for us to *‘adjust our consciousness’* by opening the perceptory gates (the *doors of perception* he calls them) we establish in our brains and neuro-system in the course of our socialisation and which *‘regulate’* our capabilities to connect with the ecological surrounds in a truly sensory way. He thus goes over the same territory as David Abram - and several others i already introduced - but with much *‘methodical’* detail; for example, on p. 28-9:

The doors of perception are in fact the sensory portals through which we experience the world. In human beings, as in most animals, informational environmental inputs are processed through the sensory modalities all of us are familiar with: sight, sound, taste, touch, smell, and feeling – which is similar to touch but different from emotion, i.e. how a place feels to you when you encounter it... The function of the sensory-specific neural networks within us is to make sense of, and regulate the inflow of, the extremely large sensory data stream that touches us.

Talking about *plant intelligence* and *‘plant communities’*, he states on p. 128-9:

These extensive social communities of plants, these self-organized ecoranges do not exist in isolation. The vast interlocking series of ecoranges across the Earth themselves communicate with one another, just as plants within a single ecorange communicate with each other. They coevolve. ... The world is made up of a series of nested self-organized systems within other nested self-organized systems within other self-organized systems. They, together, make up the much larger system we know as Earth, the living, self-organized biological organism that James Lovelock

named Gaia. And all of them are intelligent.

Referring to Jason Godesky, Buhner states that *experience of the personhood of other living beings is essential to successful human habitation of Earth, for if we deny personhood to 'the other', we also end up denying the personhood of our fellow human beings...* (p.219), a theme picked up by many others, especially by Timothy Morton, to whom i return later. I can't delve much more into Buhner's work, but am sure that you get the 'gist.' Several of the following works make the point as well (and at almost 600 pages, Buhner's book is probably a bit forbidding for many... but i think well-worth the effort as he writes across so many disciplines and illustrates how this inter- and transdisciplinary work illuminates the value and power of each single discipline as well. In addition, advances in neuroscience regularly give support to many of his assertions, something i will come back to when introducing some very recent work on '*entangled life*' and '*the mind of plants*' and later when musing about what it may all mean for our daily lives in all aspects of living as humans).

Another book in this genre is Haila, Y & C Dyke's (2006) reader, *How Nature Speaks: the dynamic of the human ecological condition*; it illustrates the convergence of complexity theory in the biophysical and the social sciences and the implications of the science of complexity for environmental politics and practice. It's from 2006, so getting on to almost 20 years, but it contains a really good contribution by John Shotter (whom i mentioned earlier as having been amongst those re-introducing me to 'another' Goethe...), titled *Participative Thinking: "Seeing the Face" and "Hearing the Voice" of nature*. In this piece, he also returns to Goethe, showing how he indicated that '*it is not the word but the act, the deed from which our understanding of things began ...*' (p. 106) and that certainly also inspires our understanding of the inner life, the spirit of others, including non-human others...

Probably the best – popularly - known emerging work in this genre is Peter Wohlleben's (2015) *The Hidden Life of Trees*; i do have a special affinity with this book as Wohlleben's 'home forest' is in the Eiffel hills and mountains in the western areas of Germany, recently so very much damaged by excessive rain and unbelievable floods (that is, unbelievable to us in Australia, till they happened in NSW and Queensland early 2022 and in the Kimberleys early 2023; but very believable for people who have lived with floods for almost ever...). Hümmel, where Wohlleben lives, is close to the Belgian border and my home country. I spent many happy hours walking and visiting and can almost re-imagine the place as he describes it in the course of his own walks and observations. The book is very accessible and reads almost like a novel; but importantly, it carries the same messages about the trees' abilities to communicate with one another and how important it is to not unthinkingly interrupt their communication channels, for example by thoughtless felling - especially by clear-felling (hoping that VicForest is reading this as well).

Wohlleben used to work as a state forester, viewing trees as lumber, but soon started to

run survival training courses and log-cabin tours. Since 2006, he has managed the forest on behalf of the community, banning machinery and selling burial plots with trees as living gravestones. Some of his ways of describing his observations and work resonate deeply:

“Beeches and oaks form forests that last for thousands of years because they act like families; trees are tribal; they are genetically as far away from each other as humans and a goldfish and ruthlessly protect their own kind; beeches harass new species such as oak to such an extent that they weaken. Douglas fir and spruce also bond within their species. Willows are loners. The seeds fly far away from other trees, many kilometres. The trees grow fast and don’t live very long. They are like Usain Bolt – always the first, then they can’t breathe any more after 100 years and then they are gone. Poplars aren’t social either and a birch will wipe other trees away so it has more space for its crown. That doesn’t sound very nice but I think birch has no other choice because that’s what it’s grown like because of its genes. City trees are like street kids – isolated and struggling against the odds without strong roots” (i composed these excerpts from several of his public interviews and from the book itself; see also:

<http://www.irishtimes.com/culture/books/the-hidden-life-of-trees-by-peter-wohlleben-review-alive-to-their-roots-1.2930310>).

Wohlleben has brought out a second book, *The Inner Life of Animals: Love, Grief and Compassion - Surprising Observations of a Hidden World* (2017), the same close and long-term observations, describing the encounters he has had during his professional as well as every-day life in nature. Just to give a taste from the introduction (p.3):

Currently there’s a great deal of scientific research on the inner lives of animals although it’s usually so narrowly focused and written in such dry, academic language that it hardly makes for gripping reading and, more importantly, rarely leads to a better understanding of the subject. And that’s why I would like to act as your interpreter... I hope this will help you see the animal world around you, and the species described in this book, not as mindless automatons driven by an inflexible genetic code, but as stalwart souls and lovable rascals.

And this is certainly how the book reads... full of interesting stories of how ‘...animals are out there, loving each other, feeling each other’s pain and enjoying each other’s company.’ Wohlleben also has followed his first book on trees up with several others, including some adopted for young readers and for use in schools; as far as i know, the last one is ‘*The Secret Network of Nature: The delicate balance of all living things*’ (2019).

Wohlleben’s book about animals’ ‘inner’ life certainly is not the only one in this area of research and writing; Rupert Sheldrake’s (1999) ‘*Dogs that know when their owners are coming home and other unexplained powers of animals*’ is one of the more remarkable books, combining science – including quantum ‘mechanics,’ the previously mentioned David Bohm involved with Sheldrake in experiments about the possibility of ‘*morphic fields*’ - offering interesting ideas about human-animal relationality... The book is replete with fascinating stories about human-animal relationships and Sheldrake concludes (p. 237):

... there is no doubt that we have much to learn from our dogs, cats, horses... and other domesticated animals. They have much to teach us about social bonds and animal perceptiveness, and much to teach us about ourselves.

The evidence I have been discussing in this book suggests that our own intentions, desires and fears are not just confined to our heads, or communicated only through words and behaviour. We can influence animals and other people at a distance. We remain interconnected with animals and people we are 'close' to, even when we are far away. We can affect people and animals by the way we look at them, even if they do not know we are there. We can retain a connection with our homes, however distant we are in a geographical sense. And we can be influenced by things that are about to happen in ways that defy our normal notions of causality.

We are at the threshold of a new understanding of the nature of minds.

That certainly will be confirmed by my further reading – especially relevant for the way we understand and address human experience and include it in our thinking and praxis – particularly our relational praxis in professional contexts. As a matter of fact, the powers that be – economic and political – may already be ahead of the pack... advertising companies are now recruiting specialists in ‘neuro-marketing’ ... Again, some further references to this – however limited – in following sections of this collection...

But back to the plant world...

Writing in the same vein as Wohlleben – albeit with more academic gravitas – is Canadian Suzanne Simard, professor in the Department of Forest and Conservation Sciences at the University of British Columbia. Viewed by millions, her ‘Ted Talk’ ***How Trees talk to each other*** shows how trees interact and communicate, using below-ground fungal and mycelium networks – or ‘mycorrhizal relationships’ - (https://suzannesimard.com/research/?doing_wp_cron=1649764419.5564279556274414062500), leading to the recognition that forests evolve hubs or ***Mother Trees***, large, highly connected trees playing an important role in the flow of relevant bio-information and resources in a forest. The complex relationships contribute to forest resiliency, adaptability and recovery and have far-reaching implications for how to manage and heal forests from human impacts, including, of course, climate change. Simard’s 2021 book ***Finding the Mother Tree*** is a fascinating detective story, whereby the detectives – Simard and her many colleagues and students – offer a case study about how to employ ***sensory imagination and socio-ecological-relational insight*** (remember Goethe’s concepts?) when trying to understand living other-than-human complexities.

I have already talked about Robin Kimmerer’s two books – but especially ***Gathering Moss*** – that eloquently confirm Wohlleben’s and Anna Tsing’s earlier mentioned book, ***The Mushroom at the End of the World***, the interconnected ‘*assemblages*’ of the story of ***Matsutake***, a sought-after mushroom, read as follows (2015:3-5):

Matsutake are wild mushrooms that live in human-disturbed forests. Like rats, raccoons and cockroaches, they are willing to put up with some of the environmental messes humans have made. Yet, they are not pests; they are valuable gourmet treats – at least in Japan, where high prices sometimes make matsutake the most valuable mushroom on earth. Through their ability to nurture trees, matsutake helps forests grow in daunting places. To follow matsutake guides us to possibilities of coexistence within environmental disturbance. This is not an excuse for further damage. Still, matsutake show one kind of collaborative survival.

Matsutake also illuminate the cracks in the global political economy. For the past thirty years, matsutake have become a global commodity, foraged in forests across the northern hemisphere and shipped fresh to Japan. Many matsutake foragers are displaced and disenfranchised minorities. In the US Pacific Northwest, for example, most commercial matsutake foragers are refugees from Laos and Cambodia. Because of high prices, matsutake make a substantial contribution to livelihood wherever they are picked, and even cultural revitalizations.

*How would capitalism look without assuming progress? It might look patchy: **the concentration of wealth is possible because value produced in unplanned patches is appropriated for capital.***

Whilst Tsing thus connects detailed every-day stories of often disenfranchised migrant fungi harvesters with the global sphere of the political economy of capitalist (re)production and exploitation, Elisabeth Tova Bailey's *The Sound of a Wild Snail Eating* restricts itself to the very local life of the bedroom of its chronically ill author; it is indeed a beauty. (Creating a link with my own personal and family life, i bought a copy of the book for my daughter-in-law, artist Clare James, whose recent creations included hand-created snails made of a clay-like substance; she had observed snails during a month-long spending the night in a tent in her garden to gain inspiration for her artistic depictions of the hidden lives of the critters in her garden (<https://clarejamesartist.bigcartel.com/0>; her exhibition – in 2014 – was titled *She Hides in the Ginkgo & Weaves Through the Night*, referring to the spider whose web became another piece of art in that exhibition. In return, Clare gifted me with me Sy Montgomery's (2015) *The Soul of an Octopus*, another small book very well worth having for regular 'dips' in above or under water...)

Anyway, i share the review of Bailey's book that has appeared in *Orion*, written by Kathleen Yale in the December 17, 2010 issue. It's really well and insightfully written, i think...

“Survival,” Elisabeth Tova Bailey writes, “often depends on a specific focus: a relationship, a belief, or a hope balanced on the edge of possibility. Or something more ephemeral: the way the sun passes through the hard, seemingly impenetrable glass of a window and warms the blanket.” In her case, the key to survival lay in the sound of a tiny mouth munching.

When a mysterious virus and long-undiagnosed illness keeps her debilitated and bedridden, a friend brings Bailey a cheerful pot of wild violets and with it an

unassuming woodland snail. She immediately feels a sense of kinship with the snail — both of them were transplanted from their natural environments, both of them were now confined — and she soon loses (or perhaps the more appropriate word is finds) herself in the creature's tentative forays first around her nightstand and eventually around its terrarium home.

*With a naturalist's curiosity, Bailey dives into a wealth of gastropod literature. She fills her chapters with fascinating snail biology (They have thousands of teeth! They can mate with themselves!), ultimately dedicating equal if not greater space to the inner workings of her slimy friend than to the details of her own life. This mix of old-fashioned observation and personal reflection offers a refreshing balance to what might have been another self-indulgent illness memoir. **The depth of this restorative companionship becomes so great that when the snail goes temporarily missing, a panicked Bailey realizes that she has become "almost more attached to the snail than to [her] own tenuous life." Where fellow humans fail, it's the snail who "[keeps] the isolation at bay . . . [her] spirit from evaporating." In truth, it saves her life.***

*This isn't a book about answering big questions, or solving hard problems. It's a book **about the healing powers of connection.** It's about a journey, a journey back from the brink. I read the story while on my own journey, hiking through the mountains of Montana, walking many miles in a day, watching the glacier-cut country change shape over each new pass. At first I worried it might be hard to relate to a world defined by the circumference of a small, white room. The landscape I roamed seemed limitless. My sore muscles and fatigue were the result of too much movement rather than too little. I felt more like a wolverine than a snail. But nature is humbling on both the largest and smallest of scales. You don't have to be in the wilderness any more than you have to stay in bed to be awed, to be jolted or slowly prodded back into the world of the living, to feel connected. Look big enough or small enough, and all things start to take on a familiar geometry. Nebulas swirling in space, the tight twist of the double helix, the "marvellous spiral" of a snail's perfectly curled shell. Size and distance become variable, unimportant. Bailey acknowledges that "Snails may seem like tiny, even insignificant things compared to the wars going on around the world," but through her eyes we are reminded that **nothing, no matter how small, is without significance.***

A lovely little book which i devoured in an evening's session...

Tova Bailey also has praise for another book written in this area, a book i had bought just a few weeks earlier; Daniel Chamovitz' ***What a Plant Knows*** (revised edition in 2017) is '... walking the *Homo Sapiens* reader right into the shoes – or I should say roots – of the plant world'. A fascinating exploration of how plants experience our shared Earth; the chapters sequentially deal with 'what a Plant Sees... Smells ... Tastes... Feels... Hears' and then 'How a Plant Knows Where it is... and What a Plant Remembers.' The Epilogue has the significant title: ***The Aware Plant***, with Chamovitz hesitating to call that 'awareness' *knowledge*... Interesting and inviting discussion; here are his final words (p. 163) – which make me wonder what Robin Wall Kimmerer would have to say about the end of his first paragraph below and what E. O. Wilson would have thought about the entire approach of Chamovitz:

A shared genetic past does not negate eons of separate evolution. While plants and humans maintain parallel abilities to sense and be aware of the physical world, the independent paths of evolution have led to a uniquely human capacity, beyond intelligence, that plants don't have: the ability to care.

So the next time you find yourself on a stroll through a park, take a second to ask yourself: What does the dandelion in the lawn see? What does the grass smell? Touch the leaves of an oak, knowing that the tree will remember it was touched. But it won't remember you. You, on the other hand, can remember this particular tree and carry the memory of it with you forever.

There is no such hesitation for the editors of and contributors to the very recent (2022) ***The Mind of Plants: Narratives of Vegetal Intelligence***; the editors, two Australians, John Ryan and Monica Gagliano and a Portuguese, Patricia Vieira, have invited Dennis McKenna, a Canadian, to introduce the collection of 40 chapters and 14 poems as follows:

*Plants surround us and nurture us along with the entire community of species on the planet, whether we are paying attention or not (and we are often not).... In the course of evolution, plants have mastered a rather miraculous biochemical trick: **photosynthesis**... the process whereby plants capture the energy of the sun using light-harvesting pigments (chlorophylls) and use that energy to reduce an inorganic compound, carbon dioxide (CO₂), to simple sugars. In this process, molecular oxygen (O₂) is produced as a byproduct of the reaction. **Photosynthesis sustains life on earth.** It is the process by which cosmic energy (solar energy) is brought into the atmosphere. This is most convenient for us and everything else that **breathes** because oxygen is essential to support the metabolism of (almost) all organisms (including plants, which have respiration as well as photosynthesis, carbon fixing capabilities). The simple sugars produced in the initial stages of photosynthesis are further spun into a maze of biosynthetic reaction pathways to generate a vast diversity of organic compounds. **These compounds are literally the 'stuff of life'**. Because they have mastered photosynthesis, producing the molecules on which the rest of life depends and of which it is composed, **every other living thing in the biosphere that is not photosynthetic is effectively a parasite on plants.** But plants do not seem to mind; in fact, they benefit from their relationships with less biochemically agile species in other ways. For example, they benefit from insects that pollinate them and enable them to complete their reproductive cycles. They benefit from birds and animals who consume their fruits and seeds and spread the seeds throughout the ecosystem. They benefit from humans as well, who sometimes 'adopt' the plants by cultivating them, thus facilitating what must be one of the primary objectives for a plant: to grow, to spread, to reproduce. **These plant relationships with insects, animals, humans, and other organisms such as fungi and bacteria, are all examples of symbiosis – close relationships between organisms that are often mutually beneficial.***

And the editors hope 'that the texts in the *Mind of Plants* travel far and wide. Delivered to the world, the essays, poems and artworks... will disseminate and undertake their own journeys into your libraries and your minds. With no fixed destination, the anthology will contribute to our understanding of what goes on in a plant's mind and to our human mindedness of all the vegetal beings with whom we share our existence.' ... a dissemination i am hereby happily contributing to...

The essays, poems and evocative drawings of the plants being brought to life by the writers detailing their lived relationship with their individual plant-companions cover almost 500 pages; there's no way that i could even attempt to summarise the work(s) – indeed, that would rob and betray the empirical detail of the individual accounts of the writers' relational experience with *'their'* specific plant. It's especially the stories of writers' relating with mind-altering – 'psychedelic' – plants that fascinated me because of the deep and diverse experiences they offer those who carefully (i.e. 'full of care') relate with them and even find healing from and with.

Just one example: the *Peyote*, growing and playing an important role for the health of local communities in Chihuahua province in Northern Mexico (and in many other regions), is narrated by Maria Luisa Chacarito (who lives there) and Sabina Aguilera, an ethnologist (pp. 289 – 294).

*... Maria Luisa told me that 'the word 'nature' in Ralamuli language does not exist.' It is not needed because there is simply no separation between nature and culture... this continuum is also present in Ralamuli's very way of being, in their care, awareness, and knowledge of the Earth. **They practice a palpable relational experience with 'Mother Earth' that translates into a vital and reciprocal engagement based on the notion that everything (e.g. the Earth itself, animals, plants, rocks, rivers, etc.) is animated and plays a crucial role in the well-being, balance, and preservation of life.... All flora and fauna is 'rijimala', a word used to refer to family members that goes beyond the human realm. It is a living heritage that gives meaning to the experienced world.***

... plants are beings that have existed long before mankind emerged in the world, and they are wise. Each plant has its own mind and some of them are known to have specific powers and qualities. ... a variety of mighty sacred plant beings that – because of their agency and power – one should be extremely cautious of... they give good advice, strength, protection, vision, and healing power. Hence people will make sure to demonstrate profound respect and gratitude by making costly offerings, usually a cow or a few goats that will be sacrificed in a specific ceremony, but also fermented corn beer and incense...

A truly sensational book, very much in the double meaning of that word: a feast for the senses and extraordinary in its diversity and the ubiquity of the relational and agential reciprocity/reciprocities between human(s) and plant(s) ...

While i originally intended the *peyote* to be the only example from this book, in early January 2023, i had an another encounter with a plant related with here, the *Ayahuasca*, another sacred Amazonian vine (pp. 9 – 16); the author of that chapter, Luis Eduardo Luna, introduces it by wondering:

*... I will focus on the paradoxical theme of this book, *The Mind of Plants*. Can one talk about the mind of these plants independently of one's own mind or the mind of others? How do plants communicate with us when our minds are apparently so very different? Is it only through ingestion that the plants are able*

to communicate with us, or are there other vehicles, perhaps in our dreams?

Obviously, i didn't really 'get' the complex implications of Luis Eduardo's questions till something else stopped me in my tracks – in the middle of my breakfast muesli; reading chapter 31 (pp. 447 – 462) of Gabor and Daniel Maté's (2022) ***The Myth of Normal: Trauma, Illness & Healing in a Toxic Culture***. The chapter's title *Jesus in the Tipi: Psychedelics and Healing* recounts the 2019 Peruvian experience of Gabor Maté, physician and world-wide known 'expert' on addiction, child development, stress and trauma; i let him do the talking:

I have been facilitating retreats that use the bitter drink brewed from the mystic ayahuasca plant for over a decade. These events combine the Amazonian tradition of vegetalismo, an ancient and highly sophisticated system of plant healing, with my Compassionate Inquiry therapeutic approach. The plant sessions are conducted by shamans at night; usually I attend, ingesting la medicina along with the participants. My work begins earlier in the day, helping people formulate their intentions for the ceremony.

I'll provisionally leave Gabor Maté at this point, returning to his work – and to *ayahuasca* – in the penultimate section of this 'meandering botanical and intersectional excursion;' but before i move on, i let Luis Eduardo have the last words here, resonating as they do with Maté's (please, dear reader, hang on to them, especially if you're sceptical of all this spiritual, 'personal,' 'touchy feely' stuff and if you're more – 'hard-headedly'? – focussed on 'real hard data research and science' or rather into criticising the social 'structures' that oppress us and need to be criticised and, especially, changed... and indeed they do need to be changed – but that doesn't necessarily negate the importance of plants and their relationships with 'us', does it?).

... these scared plants give us a sense that reality, whatever it is, is much more complex and fascinating than what we have learned in our schools. They put us in touch with deeper aspects of the mystery.... I believe ayahuasca has made me more sensitive to the environment – which means care, compassion, gratitude, and appreciation of the natural world and our situation. Perhaps I am even more curious about the nature of reality. What a privilege to be alive on this beautiful planet! But also, what an enormous responsibility this entails, especially now when we are perfectly aware that our human history has taken such a course that propels us toward our own destruction and that of countless other non-human persons with whom we share this planet.

So please, dear reader, stay tuned as i move on with the 'naturalists'...

Australian Monica Gagliano, evolutionary ecologist and one of the editors of the book i just introduced you to, dear reader, is the author of ***Thus Spoke the Plant – A Remarkable Journey of Groundbreaking Scientific Discoveries and Personal Encounters with Plants*** (2018). Introducing the work, Suzanne Simard, who we encountered earlier talking about trees' mutual relationships and about the 'Mother Tree', suggests that Gagliano 'provides you with a completely different way of understanding and knowing the world. ... She asks that you tear off your lifetime of

cultural blinders and open all of your senses to let in the world of plants.’ And Robin Kimmerer, whom we also already listened to, finds this a ‘revelatory new book, (in which) we are brought into the presence of gifted storytellers in three different forms: a scientist, traditional plant practitioners, and the plants themselves. Gagliano’s discoveries uproot assumptions about the plant world as insensate, revealing their capacities to listen, learn, and remember. This is a compelling story of discovery at many levels, simultaneously personal, scientific, and spiritual. It will change the way you see the world.’

I agree... and like with *The Mind of Plants*, it’s hard to summarise as we would lose the all-important detail and context... So over to you, dear reader, do go and purchase or borrow it... It’s well-worth the – challenging but really mind-changing - effort! Just these few sentences from the prelude (p. 5) in which Gagliano briefly tells us how she came to travel to Peru and to other places to study plants – or rather, allow plants to take the lead and do their teaching...

... I had developed a profound internal conflict sparked by the realization that, for me, there was no scientific question significant enough that could justify the killing of another living being. This was immediately followed by the horrifying problem of how to continue doing my scientific research without the slaughter (in her research in the coral reef in North Australia). I tried to, and it was not good enough – in the temple of modern science, a blood sacrifice to the old gods of the Enlightenment is still, for the most part, the required ceremonial procedure. So without realizing that I was to be the sacrificial offering this time around, I fumbled in futile attempts to desperately hold together what had simply run its course. At the time, I was still unaware of the fact that my research career as an animal scientist has just ended and a new one as the plant scientist was about to start. I was also unaware of the fact that an invitation from the vegetal world had already been extended.... Indeed, my professional and personal life were about to take an incredible and wild turn as I staggered along an unfamiliar territory and, like Alice, found myself tumbling down a rather strange rabbit hole.

This book is about what I found down that rabbit hole. It is about the up-close-and-personal encounters with plants themselves – as well as with plants shamans, indigenous elders, and mystics from around the world – and about how these experiences were integrated with an incredible research journey and the groundbreaking scientific discoveries that emerged from it, so as to relate this new advanced knowledge to modern culture...

And her first trip was to Peru, to the same place earlier and later stories in this collection i talked and will talk more about; the stories of Luis Eduardo Luna and Gabor Maté and of the power of the plant ayahuasca and other plants... coincidences and convergences as my meandering reading and discovering trajectory will continue to illustrate...

A few words about the work of Emanuele Coccia, philosophy professor in Paris and his *The Life of Plants – A Metaphysics of Mixture* (2019); elaborating a theme we have heard from several – mostly Indigenous – voices, that ‘*Our world is a world of plants before it is a world of animals*’...

The life of plants is a cosmogony of action, the constant genesis of our cosmos. Botany, in this sense, has to rediscover a Hesiodic register (Hesiod, the first Greek poet – 750-650 BCE who wrote a ‘Theogony’, explaining all the gods and where they ‘came from’ – my insert) and describe all the forms of life capable of photosynthesis as inhuman and material divinities, domestic titans that do not need violence to found new worlds.

*From this point of view, plants challenge one of the pillars of the biological and natural sciences of the past few centuries: the priority of the environment over the living, of the world over life, of space over the subject. **Plants, in their history and evolution, demonstrate that living beings produce the space in which they live rather than being forced to adapt to it.** They have modified the metaphysical structure of the world for good. ... In making possible the world of which they are both part and content, **plants destroy the topological hierarchy that seems to reign over our cosmos**.... Plants have transformed the world into the reality of breath, and it is starting from this topological structure, which life has given to the cosmos, that I will attempt to describe, in this book, the notion of ‘world’.*

And so Coccia goes on... as Bruno Latour comments on the back of his book: ‘*Back to the animals! Back to the mushrooms! And now back to the plants! It is with plants that this marvellous, witty, and immensely literate book wants us, the human readers, to get acquainted again. And, of course, with plants it is actually toward the sun that we are reoriented, Philosophy is on the move again, **not exactly forward but downward**, giving a completely different meaning to what counts as a foundation to thought.*’

So there... as i tried to suggest with the title of the final chapter in the book (‘*Practical and Political Approaches to Recontextualising Social Work*’) i edited with Linette Hawkins (2021): *Looking Back to Keep Moving... **and It May not be Forward**...* Part of that ‘recontextualisation’ – for the benefit of the profession and all those Social Work and Community Development ‘deal with’ – needs to include the natural world we so thoughtlessly continue to destroy... And i do wonder what the late Edward O Wilson with whom i introduced this perambulation would have said about all this plant ‘stuff’ and its fundamental and existential importance for the insects and hominids he credits with ‘*the social conquest of earth*’...?

A really good overview of a variety of ‘new’ or recent ‘discoveries’ in the vein of this reading story of mine comes from Kristin Ohlson’s (2022) *Sweet in Tooth and Claw*, its subtitle, a very suggestive ‘*nature is more cooperative than we think,*’ accurately pointing at our ‘*thinking*’ that may be the cause of this and many other our misperceptions... as a careful reader of my report of my reading discoveries will already have concluded as well... Ohlson’s book is a lovely and very readable contribution (she’s a journalist so she knows how to ‘translate’ difficult stuff into digestive material...); it’s a really good introduction for people starting on this journey, mixing philosophy, science, everyday experience into exciting prose...

Let's move again to more 'empirical' work; David Haskell's two books followed one another rather quickly when one considers the time it has taken for his observational work and the other research he engaged in as converged in his several books; in 2012 came his *The Forest Unseen* and *The Songs of Trees* followed in 2017... Can you imagine someone visiting 'a one-square-meter patch of old-growth Tennessee forest almost daily for one year'? (from the back cover of the book). That's precisely what Haskell did and then described the changes and transformations he observed in almost 250 pages of sometimes lyrical prose. The detail of description is magnificent and that – again - makes it rather hard to share excerpts! One example from his introduction as he contemplates snowflakes:

'I examine again the glassy stars on my fingertips. Thanks to Kepler and those who followed him, I see not just snowflakes but sculptures of atoms. Nowhere else in the mandala is the relationship between the infinitesimally small atomic world and the larger realm of my senses so simple. Other surfaces here – rocks, bark, my skin and clothes – are made from complicated tangles of many molecules, so my view of them tells me nothing straightforward about their minute structure. But the form of the six-sided crystals gives a direct view of what should be invisible, the geometry of atoms. I let them fall from my hand, and they return to the oblivion of massed white.'

Amazing... and the *Songs of Trees* is possibly even better... He visits a dozen trees around the world, exploring each tree's connections with webs of fungi, bacterial communities, cooperative and destructive animals and other plants and demonstrating how trees and humans are intimately entwined. The Brazilian *Ceibo*, the Canadian *Balsam Fir* and their surrounds offer insights in *how the climate of the Earth has emerged from interactions amongst trees, soil communities and the atmosphere and also warning us that the human transformation and disturbance of these networks have made us enter into a precariousness we most likely have no answer for...*

Even more important for me in my search for better 'methodologies' for entering into 'researching as a relating journey' – both with human and non-human persons and species – he has this remarkable passage in his second book (p. 18); talking about the relationship the Ecuadorian Waorani have with their ecology –

'...what Western science calls a forested ecosystem composed of objects is instead a place where spirits, dreams, and 'waking' reality merge. The forest, including its human inhabitants, is thus unified.... In thinking about these spirits, our English words and ideas fail us, coming as they do from another place. ...

[Mayer Rodriguez] said that not only would we not believe his stories of spirits but we could not understand. We can hear, but the sounds will not penetrate. The resonance of understanding is not possible without lived, embodied relationship within the forest community. The relationships necessary for understanding extend back in time through genealogy and outward through space in webs of biological connection. Rodriguez's words give us a better outer understanding while conveying that comprehension from the inside will elude us. Knowledge is relationship; belonging is spiritual knowledge.' (my emphases)

And in 2022 Haskell has now added onto these two earlier books “*Sounds Wild & Broken: Sonic Marvels, Evolution’s Creativity and the Crisis of Sensory Extinction*”; it’s a rather tragic book which carefully detects and unfolds the capabilities humans have been losing over time because of technology, urbanisations, extractive and devastating industries and agriculture.... Beautiful and devastating to read... his final words in *Sounds Wild and Broken* to us readers:

Thank you, reader, for spending time with the sounds, living beings, ideas, and places imperfectly evoked by these words. I offer the book as an invitation to both wonder and action, guided by your own listening.

I can only say a few things about Eduardo Kohn’s *How Forests Think*; it’s too rich and needs to be read as a ‘flow’ rather than being ‘taken apart’ for excerpts; there’s a good review at <http://somatosphere.net/2013/09/eduardo-kohns-how-forests-think.html>. Kohn profoundly challenges his anthropologist’s discipline and its ‘anthropocentric’ assumptions as well as our central assumptions of what it means to be human, especially the ‘exceptionalist’ characteristics thereof. Marilyn Strathern calls the work ‘*thought-leaping*’ and Donna Haraway (2016) refers to it by warning us that ‘*a thinking forest is not a metaphor... it teaches the reader how other-than-human encounters open possibilities for emergent realisation of worlds and not just worldviews.*’ It therefore beautifully complements her own work in which she powerfully suggests that the survival of our world will only be possible if and when we enter into a *sympoesis mode of relating*, which she so forcefully describes: (p. 125)

“Finally, and not a moment too soon, sympoesis enlarges and displaces autopoiesis and all other self-forming and self-sustaining system fantasies. Sympoesis is a carrier bag for ongoingness, a yoke for becoming-with, for staying with the trouble of inheriting the damages and achievements of colonial and postcolonial naturalcultural histories in telling the tale of still possible recuperations.”

And Kohn – working and living in Ecuador – gives us a really beautiful taste of what this could entail – hence also pointing at possibilities for a more-than-human survival of Earth...

Translated in 20 languages, nominated for numerous prizes, praised by about everyone who has a name in this area and only published a few years ago, Merlin Sheldrake’s (2020) *Entangled Life: How Fungi make our worlds, change our minds and shape our futures* is indeed ‘*dazzling, vibrant and mind-changing*’ as Robert Macfarlane – a dazzling writer himself, as we will see in a few moments... - enthuses on the front cover and on the back cover: ‘*I ended it wonderstruck at the fungal world and the earth-shaking... implications of Sheldrake’s arguments*’. And Sheldrake’s own dedication in the front pages...? ‘*With gratitude to the fungi from which I have learned*’ ... Timely gratitude indeed... and may many of us readers join him in saying thanks to those – as Robin Kimmerer pointed out – who have been here much longer than us...!

Sheldrake's book *IS* sensational... and very hard to summarise, yet again. Merlin is also a very good writer and storyteller (he is also a musician and the son of Rupert Sheldrake whose work i shared earlier...) in addition to being a thorough scientist (the book contains almost fifty pages of extensive notes and references and a bibliography of forty pages).

Starting from the introductory question 'What is it like to be a Fungus?' he leads us deeply into a *relational* conception of the task of researching 'with' the physical world:

The study of relationships can be confusing. Almost all are ambiguous. Have leafcutter ants domesticated the fungus they depend on, or has the fungus domesticated the ants? Do plants farm the mycorrhizal fungi they live with, or do fungi farm the plants? Which way does the arrow point? This uncertainty is healthy.... The clean line I had imagined dividing 'nature' and 'culture' started to blur.... I continue to wonder how, in our total dependence on fungi – as regenerators, recyclers, and networkers that stitch worlds together – we might dance to their tune more often than we realise.

Imagination forms part of the everyday business of enquiring. Science isn't an exercise in cold-blooded rationality. Scientists are – and have always been – emotional, creative, intuitive, whole human beings. Asking questions about a world that was never made to be catalogued and systematised. Whenever I asked what these fungi were doing and designed studies to try and understand their behaviours, I necessarily imagined them.

Sheldrake then leads readers across the chapters of the book, starting with truffles and the dogs who are trained to find them (Lagottos – one exemplar of whom has been part of our family for 12 years...) and the mycelium '*living labyrinths*' that together with the root systems of the plants connect into the mycorrhizal networks through which the communications of plants 'run' and which we have encountered several times in the stories of Simard, Wohlleben, and many of those i have invited into this story... (or was it they and their plants who invited me into their – 'our' - story...? See how questioning the direction of the arrow makes one wonder...!). Sheldrake then spends time with the '*wood wide web*' idea that ranges from local, regional and 'Gaia' sized connections, interactions and 'systems,' ending up with activists operating in the context of '*radical mycology*,' trying to solve – or at least help solve – the many problems the Anthropocene – *we!* – generate(s); as the author formulates it: '*the first tender steps towards the possibility of mutually assured survival, symbiosis in its earliest infancy*'.

It's worth contemplating the final sentences of Merlin Sheldrake's Epilogue:

Fungi make worlds; they also unmake them. There are lots of ways to catch them in the act: when you cook mushroom soup, or just eat it; when you go out gathering mushrooms or buy them; when you ferment alcohol, plant a plant, or just bury your hands in the soil. And whether you let a fungus into your mind, or marvel at the way that it might enter the mind of another; whether you're cured by a fungus, or watch it cure someone else; whether you build your home from fungi, or start

growing mushrooms in your home, fungi will catch you in the act. If you're alive, they already have.

Yet again: go buy or borrow the book... it really reads like an adventure story... and let your certainties be undermined and your uncertainties be celebrated together with Merlin Sheldrake and, of course, the fungi and mycelia...

and now steadily trying to live with it all – and not drowning

Finally now, on to ways of coping and actively living with it all... and trying to make sure that botany finds its active place in our understanding of the world and its inhabitants ... and all the while learning... and incorporating it in our feeble attempt at changing and healing ourselves and our world...

First to Robert Macfarlane ... he is a miracle writer whose many books defy any summary but they captivate from the first page, not the least because of the beauty of his writing and – importantly – ***his linguistic capabilities***; he pursues landscapes in ***Landmarks*** (2017) and - with J Morris – words and vocabularies in ***The Lost Words*** (2019) of which the proper description increasingly escapes us as we lose the landscape-related language our ancestors evolved to relate to the places they inhabited and of which they themselves were intrinsic part (and i can now refer back to earlier passages in this collection, the book by Charles Massy and his ‘landscapes’ of regenerative farming!).

Macfarlane visits remote places – the Shetlands, the Hebrides, Devon’s moorlands... - and writes their landscapes, recovering the original words locals used to talk about them and to connect – ‘be’ - with them... The book has a series of glossaries of (almost) lost words and it is worth including some of his guide to these glossaries at the end of the book:

... [the glossaries] are not intended as scholarly to the point of definitive; rather as imaginative resources, as testimony to the vivid particularities of language and landscape, as adventures in the word-hoard – and as prompts to vision. ‘Visit’ comes from visum writes John Stilgoe in his elegant essay-book on marsh language, Shallow Water Dictionary (2004):

It and vision stand related. To visit means to see, but not to talk, but to take notice, to take note, to actively engage the eye... Landscape – or seascape – that lacks the vocabulary cannot be seen, cannot be accurately, usefully visited. It is not even theoretically, if theory means what the Greek word Theoria means, a spectacle, a viewing.

Reading Robert Macfarlane’s ***The Old Ways*** (2013 – London: Penguin) connects with my understanding of (social) research ‘***method***’ – from the Greek ***meta hodos*** or, literally, ‘***(being) on the road/path***’ and about which i have written (Boulet 2018) and taught as i tried to give the usually rather dry research teaching subjects and sessions

some of the ‘juices’ of *traversing landscapes* as a metaphor for applying research methods in the research context or site... (just stumbling over the word ‘*site*’ and newly becoming aware that ‘*situation*’ really points at the ‘becoming’ of the site as we perceive it/them... back to Goethe, phenomenology and connecting with Peter Westoby’s latest (2022) book on ‘*Three Rivers Flowing - Understanding Phenomenological Reflective Practice in the Social and Ecological Fields*, to which we will return...). On pp. 26-7 Macfarlane elaborates on ‘*paths*’, referring back to Edward Thomas, late-19th century Welsh-parents born poet who died during the first WW and who was both a walker and a writer... writing 142 poems in just two years... Here’s Macfarlane...:

To Thomas, paths connected real places but they also led outwards to metaphysics, backwards to history and inwards to the self. These traverses – between the conceptual, the spectral and the personal – occur often without signage in his writing, and are among its most characteristic events. He imagined himself in topographical terms. Corners, junctions, stiles, fingerposts, forks, crossroads, trivia, beckoning over-the-hill paths, tracks that led to danger, death or bliss: he internalized the features of path-filled landscapes such that they gave form to his melancholy and his hopes. Walking was a means of personal myth-making, but it also shaped his everyday longings: he not only thought on paths and of them, but also with them.

For paths run through people as surely as they run through places.

And he continues:

*... We think in metaphors drawn from place and sometimes those metaphors do not only adorn our thought, but actively produce it. Landscape, to borrow George Eliot’s phrase, can ‘enlarge the imagined range for self to move in.’” and “...We are adept, if occasionally embarrassed, at saying what we make of places – but we are far less good at saying what places make of us. For some time now it has seemed to me that the two questions we should ask of any strong landscape are these: **firstly, what do I know when I am in this place that I can know nowhere else? And then, vainly, what does this place know of me that I cannot know of myself?** (my emphasis)*

Astounding and marvellous... i so wish that this language - and the associated linguistic capabilities! - would re-enter our social science and social research vocabulary... yes, even starting in our primary schools... and in our households (can you imagine dinner table conversations between dad Rupert and son Merlin Sheldrake...? Merlin does have a few references to these...). I would only add here that – because of *empathy* – (no pun intended!) paths also go beyond – or is that *before*? - the personal and into the social and relational... they relate ‘us’ to the landscape and to the multispecies we together inhabit the landscape with and who relate us to one another ... he would probably agree with ‘*the pathos of paths...*’ i think.... Indeed, Macfarlane concludes this section by ‘*looking back*’: ‘... *The proposition that cognition is both motion-sensitive and site-specific pre-dates Romanticism, though it was Rousseau who made it famous....*’

Macfarlane's 35-page introduction to a reprint of Nan Shepherd's *The Living Mountain*

(1977/2011) is an amazing example of deeply felt understanding of another naturalist's understanding of the natural world, in Shepherd's case, of the Scottish Cairngorms. This should be obligatory High School reading in my opinion... to then stay forever alongside people's beds for regular bedside re-reading... together with a pile of other books including Walt Whitman (https://en.wikipedia.org/wiki/Walt_Whitman) and Mary Oliver (https://en.wikipedia.org/wiki/Mary_Oliver) or Deborah Bird Rose (https://en.wikipedia.org/wiki/Deborah_Bird_Rose) ... and many more... (if my partner would let me...)

As i have earlier referred to the importance of language and our need to redevelop our capacity to more adequately refer to and relate with nature, 'Commons' writer David Bollier (<http://www.bollier.org/blog/robert-macfarlane-how-language-reconnects-us-place>) equally picks up on this issue, commenting on the vocabularies Macfarlane inserted at the end of most chapters in *Landmarks*:

Such vocabularies bring to life our relationship with the outside world. They point to its buzzing aliveness. There is a reason that government bureaucracies that "manage" land as "resources" don't use these types of words. Their priority is an institutional mastery of nature, not a human conversation or connection with it.

*Macfarlane writes that the rationality of our technological era has eclipsed our once-bountiful engagements with nature – and along with it, our once-vivid lexicon for knowing nature. Our sense of nature has been reduced to a mechanical, instrumental relationship. Macfarlane writes: "As we have enhanced our power to determine nature, so we have rendered it less able to converse with us. We find it hard to imagine nature outside a use-value framework. We have become experts in analyzing what nature can do **for** us, but lack a language to evoke what it can do **to** us."*

*This is a huge loss to humanity reflected in our language. According to botanist Oliver Rackham, there are four ways that a landscape can be lost – **through the loss of beauty, the loss of freedom, the loss of wildlife and vegetation, and the loss of meaning.** The way that we talk about nature these days reflects our diminished relationship to it, our ignorance of our local landscapes, and our impoverished understanding of who we are in the cosmos.*

*By re-introducing us to lost words and near-forgotten nature writers, Macfarlane's book is an attempt to "**re-wild our contemporary language for landscape.**"*

It's instructive to see that the word 'vocabulary' derives from the Latin 'vocare' (from 'vox' or voice), thus meaning 'to call, to name, to voice' and therewith illustrates the *active reciprocity* inherent in the verb 'call', which, being used as a transitive verb renders both the caller and the being-called active participants in the creation of the word(s)... words as voicings... Which brings me back to yet another old favourite of mine, Raymond Williams, who wrote in his *Keywords: A Vocabulary of Culture and Society* (1983:15) that there is:

*A problem of **vocabulary**, in two senses: the availability and developing meanings of known words, which needed to be set down; and the explicit but as often implicit connections which people were making, in what seemed to me, again and again, particular formations of meaning – not only of discussing but at another level of seeing many of our central experiences.*

...and why not extend this to the ‘often implicit connections plants and other ‘things’ were making with people...,’ something the growing group of ‘new materialism’ thinkers and writers would heartily agree with, several of whom are included in this account of my readings... Something also reverberating out of Peter Westoby’s ‘*story and portrayal of practice in the ecological field – the bioregion of Maleny...*’ (2022: 158 – 171);

*In this practice of observation and then meaning-making – for all observation requires this dual process – I bring ideas, concepts, metaphors. Every description of the dialogues above draws on ideas, concepts and metaphors **that don’t just depict what I see/sense**. They shape a world. Each idea, concept and metaphor reveals the world in a particular way and seeing the world then brings other ideas, concepts and new metaphors. There’s a relational circle of enlargement, expansion – literally a dialogue with the world that makes the world. This is a phenomenological approach to change. It’s beautiful and bewitching, rigorous and reflective. It’s not only a dialogue, but also a creative dance! We are literally dialogued and danced into consciousness by the world, and a practice that helps us in both the dialogue and consciousness is a precious contribution. (p. 170)*

It also leads me to a recent publication applying the notion of ‘rewilding’ to the urban and cityscape and quite differently from Monbiot whom i briefly talked about before; Claire Dunn has become known as the woman who wrote ‘*My year without matches*’ (2014 – Melbourne: Black Inc.) and lived without ‘civilisation props’ in the wilderness for a year; she followed this up with a year of ‘*searching for the wild in the city*’, the subtitle of her book *Rewilding the Urban Soul* (2021 – Scribe), the ‘city’ being Melbourne and the book sharing her experience of living for a year by foraging for ‘undomesticated’ food in its suburbs. I interviewed Claire on Borderlands’ *Think Again* radio program on 3CR Community Radio in June 2021 (<https://www.3cr.org.au/thinkagain/episode-202106111000/rewilding-urban-soul-conversation-author-claire-dunn>); it is a well-written book and will delight all of us locals as we recognise the places and environments Claire frequented to ‘scavenge’ food and sustenance, therewith making it so much more ‘tangible’ for us ‘normally consuming’ city dwellers. Just one quote from the very end of her work:

*Relating to the monetary economy is straightforward – a linear transaction. This non-monetary economy is far more involved and nuanced. It requires paying attention, the acquisition of knowledge and skill, the slow ripening of community, The number of relationships inherent within this bowl (of food) makes for a more beautiful life, and as such, a more beautiful possibility for culture. If the larger crisis at hand is, as Charles Eisenstein posits, a crisis of belonging, the word ‘culture’ deriving from the Latin **cultura**, meaning to cultivate the soil. Eating food is the most intimate way a human can interact with the land – soil and flesh*

becoming flesh. It defines how we interact with the land and each other. This tending to my most basic of needs belongs me. It's food born of all my relations – everything from the soil microbes and the bees, to the hands that planted the seed and picked the fruit. It's a sacrament to life itself.

Which leads straight into the ‘thing’ i must have repeated ‘ad nauseam’ in many of my presentations, conversations and writings and in this collection of thoughts and ideas gathered from many others ... it is essential to relocate ‘social’ and ‘community’ work as well as *mediation, conflict resolution* and *restorative practice* in the *relational traditions* out of which they emerged... Indeed, before social work and other ‘supporting’ professions were high-jacked by the various ‘atomistic’ ‘self’-centred forms of psychology and therapy (and the research which helps promulgate the paradigm), they firmly sat in the tradition of *social-contextual thinking and practice* (and activism!) as Jane Addams and Bertha Reynolds and many others so clearly showed (and indeed suffered for!). So i included Gergen, Hyde and Spretnak in the below references list to see the world not always from ‘our/my’ assumed centre but from the in-between spaces of our relating on the levels of *every-day living*, of *institutional-contextual* process and on the *political-economic* level from the local to the global... And after all the previous meandering, such relationality obviously also applies to the rest of our multispecies living and world-making...

Andrew Boyd (2002) makes the point much better than i could ever hope to emulate:

‘Compassion hurts. When you feel connected to everything, you also feel responsible for everything. And you cannot turn away. Your destiny is bound with the destinies of others. You must either learn to carry the universe or be crushed by it. You must grow strong enough to love the world, yet empty enough to sit down at the same table with its worst horrors.’

It is probably useful to return in these concluding sections of this long meandering (and ongoing!) botanical exploration to the ‘social’ sciences and the ‘macro’ or global area in which all of the ‘micro’ processes we have together examined play their constitutive roles and enact their relational ‘practices’. We have a lot of work to do, dear reader... As Patel and Moore (2017) eloquently express it in the title of their last book, ‘Nature’ is one of the seven ‘cheap things’ our economic/capitalist ‘system’ takes for granted; talking about the recent spike in storms worldwide, they conclude:

‘This is what it is like to live in the Capitalocene, Certainly, previous human civilisations altered their environments. But none were guided and governed by the strategy of cheap nature which has allowed the transformation of the planet into Nature and Society through the subjugation of human and extrahuman life, Those who have opposed this transformation... have faced death, Indigenous people continue to resist, and continue to face slaughter - though the language of the Capitalocene tells us that such people aren't being annihilated. They're being developed.’

And in his massive and already mentioned *Behave* (2017), Sapolsky is ‘trying to understand the virtuosity with which we humans harm or care for one another (and our world), and how deeply intertwined the biology of the two can be’; he offers an appropriately virtuosic ensemble of neuroscience, psychology, biology, social science including sociology and social psychology, to help us understand the linkages between human behaviour and all that surrounds us - in the process recognising that the notion of ‘surrounding’ may give us again the false understanding that we’re in the middle and at the centre of - and of course – ‘above’ everything ‘else’...

Understanding the damage our righteousness about our ‘human rights’ and our self-centredness continue to inflict on our relationships with other humans and other species and on our relational capabilities, puts the bar very high if we, as humans and as (post)humanists, want to move towards multispecies solidarity as Timothy Morton (2017:14) entices us to do...

*Something like a permeable boundary between things and their phenomena is highly necessary for thinking solidarity. If solidarity is the noise made by the uneasy, ambiguous relationship between 1 + n beings (for instance, the always ambiguous host-parasite relationship), then **solidarity** is the noise made by the symbiotic real as such. **So, solidarity is very cheap because it is the default to the biosphere and very widely available.** Humans can achieve solidarity among themselves and other beings because solidarity is the default affective environment of the top layers of Earth's crust. **If non-life can have a world, then at the very least we can allow lifeforms to have solidarity....***

Difficulties of solidarity between humans are therefore also artifacts of repressing and suppressing possibilities of solidarity with nonhumans.

Given that ‘care’ sits at the centre of ‘social’ work and so many other efforts we engage in in our homes, friendships, work, learning places, everywhere, really, Maria Puig de la Bellacasa’s (2017:217) suggestion in the conclusion to her book ‘*Matters of Care: Speculative Ethics in a More Than Human World*’ certainly deserves consideration here:

*Across this book I have come back, as a reassuring refrain, to Joan Tronto’s generic definition of care. I have also placed it within discussions that engage with more than human worlds and agencies. Tronto stated that **care includes “everything that we do to maintain, continue, and repair “our world”” – our bodies, our selves, and our environment – so that we can live in it as well as possible in a complex, life sustaining web.” I have tried to gently decentre the “we” and the “our” that put human agency as the starting point of care, prolonging relational ontologies’ ongoing problematisation of any claims to a centre....***

Thinking with care** attracts attention to ethical interrogations meant to seem untimely and worthless from the perspective of predominant uni-linear futurities, but we cannot let productivist stories, or even the earnest economies of service, define how nonhuman worlds will be appreciated. **There must be other ways to get involved in fostering the ethopoietical liveliness of the more than human agencies that support, currently mostly coercively, that we get the care we need.

May “we” find other ways to be obliged, as well as possible.

And how absolutely necessary that also is between and amongst ‘us’ humans becomes sharply clear in Sarah Krasnostein’s recent (2022) Quarterly Essay: *Not Waving, Drowning: Mental Illness and Vulnerability in Australia*; talking about the necessary ‘systems change’ that will need to take place in Australia and societies like it when we want to address meaningfully the ‘*complex, interwoven root causes of social problems*’ – including the rampant growth of mental illness across the population, especially also after years of pandemic - she forcefully posits that ‘*Change cannot only be structural; it must also be relational.... ‘transforming a system is really about transforming the relationships between people who make up the system’*’... So Krasnostein concludes with the question:

What would happen if we became curious about the sources of our strangely ambivalent relationship to change? If we acknowledged the fact that our vulnerability is our greatest strength because it is the source of true connection? If it all no longer seemed contemptible to us, and we chose to make that the telos of the pandemic – the direction in which the pain of our many crises sent us, soaring? What life would open up to all of us on the other side?

And it seems to me that this would also be the right acknowledgement to make about our ambivalent relationship with plants, nature and the Earth ... entering into a caring modality of relating with the non-human that is *healing* – which is just another word for ‘*making whole again*’ ...

Which is a good point – we could call it a necessary ‘crossroads’ – to return to Gabor Maté, the Hungarian-Canadian physician and trauma specialist i introduced in a previous section. I also have introduced *ayahuasca* earlier as ‘it’ has been experienced by Luis Eduardo Luna and by Monica Gagliano and then promised to return to a description of ‘its’ encounter with Gabor Maté. The last of five sections of his massive and very important last book, *The Myth of Normal* (2022), is titled *Pathways to Wholeness* and includes details of his learnings derived from 50 years of practice and almost 80 years of living. Titled *Jesus in the Tipi – Psychedelics and Healing*, Chapter thirty-one describes Maté’s discovery of *ayahuasca*, of its healing properties as used in traditional Amazonian healing ceremonies and how he integrated these ceremonies with his own ‘western’ approach of *Compassionate Inquiry*, an approach he evolved over all his years of therapeutic practice.

Compassionate Inquiry gives additional affective and relational meaning to the *Participatory (Action) Research* approach i have been practicing for half a lifetime (Boulet 1985; 2018), adding healing or therapeutic purposes to the professional or ‘helping’ involvement. ‘*Compassion*’ – like ‘*empathy*’ – derives from the Greek word for ‘*suffering*’ and hence indicates the capability and soul-practice of ‘*suffering with*’ (an)other(s). Remember Boyd’s earlier statement: *Compassion hurts*... It thus requires

the personal openness and vulnerability on the part of the ‘healer’ (or researcher or whatever the professional ‘walking-along-sider’ may be known or ‘functioning’ as) to really be able and become a ‘medium’ for the (an)other(s) to become able (again) to connect or reconnect (apologies for this extreme abbreviation of what Maté uses 500 pages for in *The Myth of the Normal* to approximate the depth of the meaning of pathways towards healing and wholeness...).

So, for ten years, Gabor Maté had been facilitating retreats in a healing centre in Peru; he worked in concert with local shamans who led the *ayahuasca* ceremony and stayed with the ‘patients’ guiding them through their processes of reconnecting with their traumas or other conditions. Maté worked with the patients during the day, assisting them in integrating the psychedelic experiences into their daily relational and living experiences by helping them formulate their intentions for the ceremonies. In 2019 the group of participants consisted of therapists, psychologists and other health care providers mostly from Anglo Saxon countries; and this time things turn out differently... as told in his own words...:

Over the years, I have become adept at this work of facilitation, helping people overcome depressions and addictions and to heal from physical conditions... I am inspired and moved by the transformations to which I regularly bear witness, transformations that gratifyingly ripple outward into people’s lives, far beyond a weeklong retreat...

When it comes to my own transformation, it’s a different matter. All my life, no matter what breakthroughs I’ve beheld or helped potentiate, a glum certainty has dominated my outlook on my own healing prospects. I have participated in many dozens of ayahuasca ceremonies without believing that much could happen for me, and usually find my pessimism rewarded: nary a vision or visitation, no ancestors or spirit animals, not even one deep thought, just some mild nausea and the wish that more would happen.

Maté than described how the six shamans administer the medicine and chant their songs for each participant; he usually participates in the ceremonies as well which he describes as follows:

*Each time a shaman sits in front of my mat, I steel myself, silently daring them to do their worst. Go ahead, I think, try to break through the barricades of **this** psyche. Knowing full well this is an unhelpful attitude doesn’t deter that inner voice from speaking first and loudest. Predictably, nothing does happen except the usual frustration and disappointment....*

The shamans meet with him on the second day and refuse to have him in the ceremonies, even forbidding him to work with the group in his usual role; they tell him: ‘You have a dense, dark energy our healing chants (*icaros*) cannot penetrate. That energy pervades the room, so it impairs our work with the others. We cannot have you here.’ Telling him to not work with the group during the daytime, they suggest:

'Even during the day, your energy would have a disturbing effect on the others, and more importantly, you would be absorbing their griefs and traumas. As a medico (doctor), you have obviously done that for so long, working with troubled people, and you have nothing done to clear that out of yourself. And long before that, we all sense that you must have suffered a big, big scar very early in your life; you haven't gotten over it yet. That is why your energy is so dense.'

The shamans had never heard from Maté's experiences before, but they quite accurately sensed the early trauma he had gone through as a member of a Jewish family in his native Hungary during and after the war... But they promised him that they could help... and for ten days he does not interact with the others but receives the medicine and is being chanted to for hours by shamans... i let Maté continue the story...:

...Each day I feel myself lighter, my mind less preoccupied. Still, for the first four of those ceremony nights, no visions come, no deep experiences, only a growing sense of ease and gratitude.

The fifth and final ceremony over – so I think – with the anticipated non-results, I nevertheless feel cleansed and thankful. Via the interpreter Publio, I converse jovially with the maestro (the shaman). Abruptly, mid-sentence, I throw myself on the mat – or rather, I should say, I am thrown facedown with sudden, involuntary force. At long last, the medicine is driving the bus and I am its helpless passenger. I am finally, indisputably, blessedly not in control.

Later they tell me I remained prone for nearly two hours. To me it might have been two days; in the vision's vortex, there was no sense of time. All the while, cross-legged, still, and silent, Publio and the shaman sat vigil next to me. I need not, indeed cannot, describe what I experienced, but I remember the transcendent joy of it.

What I can articulate is what I saw at the very end. On a sky-screen of deep blue, outlined in giant cloudlike wisps of letters, was spelled BOLDOG, the Hungarian word for 'happy'. The vision and the inner peace evoked with it came from beyond thought – even, I'd venture, beyond my subconscious mind.

Finally, reacting to the experience of working with the group of 'western' healers, the shamans responded – and this seems to me a really important aspect of the learning from such experiences for those of us in the so-called 'helping professions' ...:

... they had never worked with such a 'heavy bunch' (they said). "As healers ourselves, we must face all the pains and traumas people bring to us, but we take care of ourselves: we regularly clear these energies out of our bodies and souls, so they do not accumulate and burden us. We expected you medicos to have done the same for yourselves. But no, we found, you came here weighed down by the griefs and heavy energies you have all been absorbing for years and years.

So, it feels appropriate to conclude this meanwhile rather elaborate perambulation by inserting the conclusion of chapter i wrote for a book on 'Social Work Radicals', which gathered reminiscences of 20 Australian social workers and social work educators about our experiences of the seventies and all the exciting and promising things we were then

up to with and about social work and social work education. With thanks to Karen Barad for the title of her 2013 book, i titled my chapter *When we tried to ‘meet the universe half way...’ an all-too-brief revolution in Social Work education, research and practice...* Its conclusion, which brings me back to a theme with which i started this rambling collection, reads as follows:

*Indeed, i have had the privilege of moving into a deeper/broader understanding of my/our human entanglement in a much larger story than the one i grew up with... a story which has re-emplaced me in the responsibility of helping to maintain a larger-than-human commons and for which my ability-to-respond is feeble and full of hesitations... I have come to know that i/we need to move from the ancient Greeks’ ‘gnothi seauton’ (know thyself) which i learned in High School as the Western ideal of humanness, to Haraway’s **sympoiesis** mode of relating, which she so forcefully describes [and whilst i have already included it before in this perambulation, it is worth repeating, i think...]:*

*“Finally, and not a moment too soon, sympoiesis enlarges and displaces autopoiesis and all other self-forming and self-sustaining system fantasies. **Sympoiesis** is a carrier bag for ongoingness, a yoke for becoming-with, for staying with the trouble of inheriting the damages and achievements of colonial and postcolonial naturalcultural histories in telling the tale of still possible recuperations.”*

And it seems to me that this should be programmatic for ‘work’ and anything that continues to refer to itself as ‘social’...

Concluding...

And this is where i need to stop – however provisionally that will want to be; so before i do, a few words about the importance and necessity to remain aware of the power and control the ‘system’ continues to exercise (and increasingly seems to be able to exercise!), rendering personal and local or everyday resistance or transformative action if not rather useless, certainly less ‘effective’ for fundamental social and ecological change as necessary. As we in social work traditionally say, the ‘*macro reality*’ of the political-economic system and its meanwhile global processes seem to indicate - at least to me – that they are being systematically, systemically and even ‘visibly’ eroded, undermined, hollowed-out and that they are nearing collapse.

Gabor Maté (2022) says it poignantly in the conclusion to the chapter referred to several times in previous sections; after all the positive experiences he recounted and shared beforehand – especially also about the plant ayahuasca and what we can learn from her ...:

... I am no psychedelic evangelist. Contrary to the fond imaginings of some enthusiasts, neither plant-based nor manufactured psychedelic medicines will, on their own, transform health care or human consciousness at large. That will have to await vast-scale social change, not least the broadening of the mainstream medical ideology. For all they can offer, at present psychedelic treatments are

esoteric, expensive, and time-intensive. They are bound to remain beyond most people's reach for both practical and cultural reasons. But we would be negligent to exclude them, to ignore their healing potential for many endemic conditions in the face of which Western medicine finds itself largely helpless.

Lest i leave any doubt, structural awareness and work towards so-called macro-change will remain absolutely central to professional ...

The massive work (2014, 2020) of Thomas Piketty, the French economist, with together almost 2,000 pages, gives us a 'bit' of an idea.... Just some few additional references make the above point about the need for structural change abundantly clear; in ***How will Capitalism End?*** (2014) Wolfgang Streeck convincingly makes the point that the proper question to ask about the 'state of capitalism' nowadays is not anymore ***whether*** or ***when*** it will (should?) collapse, but ***how?*** As Maté repeatedly did in his 500 pages, Streeck depicts the inevitability of the ongoing self-destructive processes and, looking for the human and Earth consequences of that collapse, suggests that – as per usual – it will be those who *already* suffer who will suffer more, poor people in so-called 'developing countries', the marginalised and excluded and, of course, other species and the Earth. Paul Mason's (2015) ***Post-Capitalism: A guide to our Future*** is another good publication arguing in this vein, as is the work of Timothy Morton.

Wendy Brown, for her part, in ***Undoing the Demos: Neoliberalism's Stealth Revolution*** (2015), details how democracy has been entirely undermined and 'usurped' by the needs of those forces who profit from the imposition of economic rationalism or neo-liberalism, effectively doing away with the (few and hesitant) gains of the re-distributional paradigm coming into force after WWII having adapted the Keynesian approach to the political-economy of social-democratic capitalism.

And i really want to finish with a final strong encouragement to get hold of anything Kate Raworth says or writes ... her book about '***Doughnut Economics***' (2017) is ***sensational...*** It should be obligatory reading for all, i think. A small excerpt will have to do (<https://www.kateraworth.com/doughnut/?subscribe=success#536>)

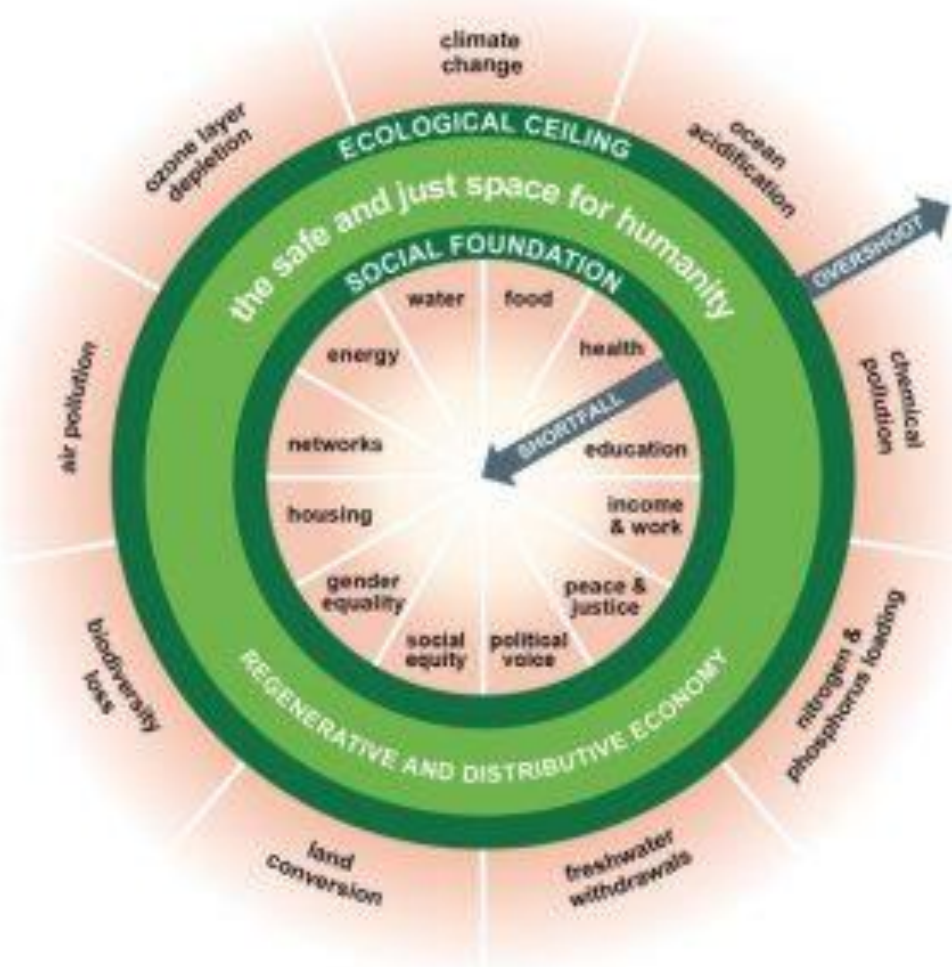
What on Earth is the Doughnut?

Humanity's 21st century challenge is to meet the needs of all within the means of the planet. In other words, to ensure that no one falls short on life's essentials (from food and housing to healthcare and political voice), while ensuring that collectively we do not overshoot our pressure on Earth's life-supporting systems, on which we fundamentally depend – such as a stable climate, fertile soils, and a protective ozone layer. The Doughnut of social and planetary boundaries is a playfully serious approach to framing that challenge, and it acts as a compass for human progress this century.

The environmental ceiling consists of nine planetary boundaries, as set out by Rockstrom et al beyond which lie unacceptable environmental degradation and potential tipping points in Earth systems.

(<http://www.nature.com/news/specials/planetaryboundaries/index.html>). The twelve dimensions of the social foundation are derived from internationally agreed minimum social standards, as identified by the world's governments in the Sustainable Development Goals in 2015. Between social and planetary boundaries lies an environmentally safe and socially just space in which humanity can thrive. Here's a one-minute introduction to the Doughnut, by the brilliant animator Jonny Lawrence (<https://www.youtube.com/watch?v=Mkg2XMTWV4g>).

And here's a commentary published in The Lancet Planetary Health, May 2017 (<https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196%2817%2930028-1.pdf>). Since the first iteration of the Doughnut was published as a discussion paper by Oxfam in 2012, it has had traction in very diverse places – from the UN General Assembly and the Global Green Growth Forum, to Occupy London. Why such interest? I think it is because the doughnut is based on the powerful framework of planetary boundaries but adds to it the demands of social justice – and so brings social and environmental concerns together in one single image and approach. It also sets a vision for an equitable and sustainable future, but is silent on the possible pathways for getting there, and so the doughnut acts as a convening space for debating alternative pathways forward.



I want to say goodbye with a few paragraphs from David Bollier, one of the best ‘*thought and action integrators*’ i know... he deals with the necessary *philosophical* shifts we need to undertake, the *relational reawakening and broadening* we need to engage in in our thinking and life practices and the reintroduction of the ‘*commons*’ as a metaphor and a practical/operational frame to gradually and carefully – ‘*full of care*’ for the Other - overcome our destructive individualism and self-centredness, our self-defeating anthropocentrism and finally become ‘*able to sustain*’ ourselves and that/those that sustain us... (https://www.kosmosjournal.org/kj_article/animism-and-commoning/)

*As I have learned about the social life of trees and the intimate bonds that indigenous peoples have with various lifeforms and rivers – and as I pore through recent ecophilosophy that explains aliveness to the western mind — I’ve concluded: **We really ought to be talking more about animism and commoning.***

Scientific rationalism and economic thinking may be the dominant forces of our time, but they aren’t so good at creating social purpose and meaning. Which may help explain why evidence of a new animism keeps popping up as a way to re-enchant the world, often finding its voice through commoning. This should not be too surprising, suggests ecophilosopher Andreas Weber, because the biology of life points to an understanding of reality itself as a commons (<https://patternsofcommoning.org/reality-as-commons-a-poetics-of-participation-for-the-anthropocene/>).

Commons are realms of life defined by organic wholeness and relationality. They stand in stark contrast to a modern world whose hallmark is separation — the separation of humans from “nature”; of individuals from each other; and a separation between our minds and our bodies.

To be sure, animism has a problematic history. Early anthropologists generally projected their own worldviews onto tribal peoples, denigrating them as backward. As staunch Cartesians and moderns, they saw body and mind as utterly separate. So anyone who ascribed a living presence to animals, mountains and natural forces could only be seen as “primitive” and “superstitious.”

But today’s animism (as seen through western eyes) is different. It sees the experience of life as a dynamic conversation among the creatures and natural systems of the Earth. It is about surrendering an anthropocentric vision and seeing the world as “full of persons, only some of whom are human,” in which “life is always lived in relationship with others,” as religious studies scholar Graham Harvey has put it. Animism is “concerned with learning how to be a good person in respectful relationships with other persons.” It resembles the “I-thou” relationship of respectful presence proposed by theologian Martin Buber.

Happy reading... and for those of you who have become socialised into short attention spans and bite-sized bits of degustation - my apologies for my relentless loading of this piece with so much ‘stuff’.... Please accept it as a reciprocal gift... or probably more accurately, understand it as my gifting role in a living context of reciprocal being...

Whilst not intending to end your reading of this meandering cascade of titbits on an unhappy note, i do want to share something that just now (12/02/2023) tumbled into my inbox, intercepted and sent on by a friend – Daryl, who is very much, as they now say, on the same page i try to be on when sharing the foregoing excerpts ... It's Sasha Norris' lament for a dead raven ... Sasha is from the UK, a zoologist at Herefordshire Wildlife Rescue and she's talking to/about a dead raven brought into their rescue place... Her poem touched me deeply, adding to my 'ability to respond'... my responsibility for all loving beings...

To a dead raven.

If they had known
That afterwards,
Your wife
With great rasping sobs
Would call through the trees
In the last place she saw you
Her whole being becoming those primal calls
Which ricochet from the empty forest
If they had known that your garb
Normally so brushed and dandy
Would sit on your corpse like
Wet leaves, and your face would
Snug into the corner of this cardboard box
An ancient knowing
dying with you inside the dome of that skull
A knowledge which could find a nook for this brave body
To survive any brutal or blistering weather,
Could find sustenance in the tilled soil and
In the leaf litter,
In the heart of an oak.
Would they?
If they maybe knew the numbers
That we outweigh your kind
A thousand-fold,
That you have culture and lineage and homeland
And family and extended family
And that the love you bear lasts,
Once united with a partner,
A whole lifetime and that
Behind that flickering eye light
There are more dawns than we humans
Have even dreamed of seeing
And there's a euphony of music we can't hear
So lambasted are we by our own nullifying sounds
Black cap, linnet, heron, the whooper swan
On its way to the tundra.
If they knew that dying on the forest floor,
you would be scooped into the arms of a
walker, and warmed by the fire,
wrapped in a yellow fleece
Blanket and transported

20 miles in a car to a rescue centre where
You would breathe your last breaths
Under the gaze of someone who
Deeply cares, Would they? Would they?
If he knew, is there a chance
Is there any tiny fleeting chance,
he would lower the stupefying barrel and returning
to his centrally heated home,
Turn the key for the last time on the gun
in its metal cupboard, go and make something
beautiful out of his day?
While out there, somewhere,
you continued your innocent dance with
Yolk and brimstone and the helical curl of snail shells
If they knew, how she calls and she mourns still,
Would they?
I don't know, but I promise, I promise
I will try make them listen, I promise, I will tell.

So, the last word should be left with an Australian First Nations voice; Tyson Yunkaporta's (2019:275) final urging to all of us at the conclusion of his remarkable book *Sand Talk*:

Respect, Connect, Reflect, Direct – in that order. Everything in creation is sentient and carries knowledge, therefore everything is deserving of our respect. Even narcissists.

Much love to all and thanks for your forbearance...

Jacques

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