

STORY TELLING TO FOSTER EMOTIONAL INTELLIGENCE, DISTRIBUTIVE LEADERSHIP AND MULTISPECIES RELATIONSHIPS

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Abstract

The short paper addresses a multispecies systemic approach to uniting indigenous knowledge systems with earth jurisprudence and wild law using a systemic approach to storytelling and a range of mixed methods to develop rapport and relationships with participants who are members of an ongoing community of practice. The focus of this paper is on process and the space we have co-created through relationality. Our members pool diverse ways of knowing and being to focus on social, economic and environmental praxis to support multiple species. Ontologically and epistemologically we apply co-learning to our praxis, and axiologically we assume that all transformative interventions should enhance fairness, transparency, and accountability as a basis for our case studies on risk reduction and the enhancement of wellbeing. The problem we are exploring in a forthcoming volume is whether pilot projects that put in place the principles of earth jurisprudence and organic farming (in partnership with members of PGS and the Wild Law institute) can make a difference to social and environmental justice. Our multidisciplinary and cross cultural team draws on indigenous knowledge systems as well as many other ways of learning and knowing through respectful dialogue to address our area of concern. Success is bench marked in terms of establishing a co-operative, the growing number of social enterprises striving to comply with organic farming principles, tree planting, seed collections for an organic seed bank and the perceived social, economic and environmental indicators of wellbeing. Our relational methodology applies participatory action research and storytelling to draw out themes which are mapped to assess progress towards re-generative living. Turning points for the better are indicated by a revised version of the UNSDG with a focus not on growth but on creating a cyclical economy that protects people and their shared multispecies habitat. To date our community of practice has managed to grow the number of participants and partners and our next goal is to set up two seed banks, one at the coast and one inland in South Africa in two case study areas in the Cape and Limpopo. This paper reflects on the process and methodology. The second companion paper details community case studies in South Africa on setting up a circular green economy. It is called: "A gender sensitive approach to uniting indigenous views on natural law with relational governance for protecting the commons". It details responses to climate change aimed at mitigation and adaptation in both South Africa and Indonesia. Longer, discursive versions of this paper and the companion paper will appear in *Affirmative Intervention to Support Multispecies Relationships (forthcoming, Springer)*.

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1. INTRODUCTION

In a forthcoming volume^{viii}, we build on these papers, compare and contrast community responses and potential pathways to wellbeing in Venda and West Java spanning forest communities (rich in natural resources), arid communities (facing famine) and transitional villages in West Java which have the potential to protect or destroy ecological heritage, depending on the decisions taken by regional and village governments^{ix}. Together we advocate for participatory design to protect the commons and we self-organise and create a space to resonate hearts and minds to act together.

Overall we discuss community engagement that adapted President Jokowi's mission to support social enterprises. Our approach supports One Village – Many Enterprises to inspire progress towards a regenerative circular green economy rather than potentially destructive partnerships. The papers, discussions and panel presentations at ISSS are based on the work of a community of practice that reflects on seed and food security, earth jurisprudence and accountability to current and future generations of living systems, we together:

1. *Discuss* the importance of an ecologically aware emotional intelligence that is supported by Indigenous and spiritual leaders.

2. *Analyse* how distributive indigenous leadership can make a difference through empowering participants to be confident, have empathy with one another and concern for others (including other sentient beings) and the living system of which we are a strand.

3. *Examine* a case study through our community of practice applied to translating theory into practice and assessing the impact of our systemic engagement socially, economically and environmentally. The problem – namely an unsustainable food production system linked with the commodification of living systems can be addressed through a regenerative approach based on social and environmental justice that is fair, transparent and accountable. In this way we

4. *Strive* to show how current governance systems could be redressed through praxis that applies and assesses what works why and how and what does not work socially, economically and environmentally.

The forthcoming edited volume is divided into three parts, namely 1. Separation or unravelling, 2. Transition or transformation and then 3. Re-generation as a way to integrate changes in the 'New Normal.'. These are also known as the three stages of ritual or ceremony. Following Victor Turner (1968, 1974) we are interested in studying what happens when people engage together in a *liminal community of practice* to generate 'communitas' – the word Turner coined for the way people generate relationality^x when social structures are set aside. Liminal means at *in between stages of life* during which we are trying to bring about change or when we are going through changes in our life cycle across birth, growing, aging and dying.

Examples of liminal stages include the ceremonies marking our progress through the stages of life, or the stages of sickness and healing, entering a religious setting, entering a retreat or undergoing an initiation ritual. We can experience liminality as a student or struggling together for some goal in a social enterprise aimed at bringing about a better way of life for a community through working in networks such as Dzomo la Mupo (Voice of the Earth) and Earth Rising.

Dzomo la Mupo has been leading the protest against the international company and is cited by De Beer-Proctor in his article on the Musina-Makhado Special Economic Zone^{xi}, legislated by the Department of Trade and Industry: "Our cultural heritage and our spirituality are in the indigenous forests...". Ironically this is in exact opposition to the espoused aims of the special zone^{xii} which purports to support sustainable development through a MOU with UNSDP but at the expense of Indigenous heritage, which is national heritage.

It reminds us of the muddled thinking which underpinned the so-called 'Green Revolution' in India and now Indonesia and South Africa where industrial solutions are suggested as ways forward, but which are inherently unsustainable as they use petrochemical industries and mining as their base. De Beer-Proctor (2022) reports that:

MMSEZ SOC intends to clear between 3600 to 8000 hectares of pristine land, including indigenous vegetation, in the water-scarce Limpopo province in order to make way for a highly polluting mega-industrial project, which would include a coal-fired power station and 14 other heavy metal and polluting industries. The land ...is ...of considerable significance for cultural heritage, biodiversity and for the climate resilience of the area. It is home to a wide variety of indigenous trees, including over 100 000 protected trees, such as Baobabs...” (Chris De Beer-Proctor, 2022)^{xiii}

Carnie (2023) asks what has happened to the Venda bioregional plan:

“Is it because the Vhembe bioregional plan has been squashed – or held up deliberately – to smooth the passage of the controversial Chinese-led plan to develop a massive new steel plant and special economic zone in the heart of Vhembe district?” (Carnie, 2023)

At virtual and face to face meetings in February 2023 Jay Naidoo, Vandana Shiva and Gogo Rutendo Ngara, CEO of Credo Mutwa foundation in Venda discussed the way forward for seed protection in the wake of the increased commercialisation of food. The recording of the meeting resonates with points we raised in the previous chapter on the commodification of the food cycle and the need to protect water and the seed cycle. Dzomo La Mupo and our partner PGS stress the importance of protecting the soil. The so-called Green Revolution and industrial farming supports petrochemical fertilisers which destroy the soil. The Zoom meeting opened with a meditation on the breath, harmonious music and a ritual blessing of the millet by Mphatheleni Makaulule. I listened carefully to the recording of the Earthrise meeting. Gogo Rutendo Ngara explained the significance of the blessing and invocation of Mphatheleni to Mupo (living system) and introduced Vandana Shiva saying that just as the Baobab produces giant seeds, so Vandana Shiva is a great example for Africa because of her work saving seeds.

Vandana Shiva stressed the responsibility we have to save seeds and Jay Naidoo asked how we should move forward to build a mother ship, rather than many small life rafts.

Shiva stressed that scaling up the efforts requires creating harmony and understanding and space for diversity. All bio organisms self-organise and work through symbiosis. When we listen to music we are listening to harmonious sound waves vibrating together.

I was reminded that when we work together in our community of practice we also self-organise and through our symbiotic relationships we achieve some regeneration within our own lives and through working together. Through creating space for each of us to show leadership and creativity we are able to multiply our effects.

Gogo Rutendo contrasted mothering with a systemic approach and the warrior with a linear approach, but Vandana Shiva stressed that women can and must be warriors – but they must also work systemically with others. She continued by saying that in an era of digital surveillance and algorithms we must protect living systems and the soil and realise the quantum nature of living systems. We are not machines and nature is not a commodity. We can and must shape our lives through our praxis.

Much of the discussion focused on the need to move beyond ecological apartheid and to appreciate that we are interbeings.

2. RESEARCH AS CEREMONY, LIMINALITY AND COMMUNITAS

In the book on which this paper draws the three stages of ceremony are discussed and also the importance of developing *communitas* when engaging in participatory action research. Through engagement with one another we create a liminal setting – which in some ways resonates with what Van Gennep and Turner call a ‘liminal process’.

How do we go about establishing *communitas*? It is very similar to joy. Turner (1974 see 2018 edition: 287) cites William Blake, as follows:

“He who binds to himself a joy
Does the winged life destroy

But he who kisses the joy as it flies
Lives in eternity's sunrise." ["Eternity," Everyman's edition]

A mixed method approach was used to undertake an ongoing case study detailed in *Transformative Education for Regeneration and Wellbeing* and in *Affirmative Intervention to Support Multispecies Relationships (forthcoming)* that builds on *From Polarisation to Multispecies*. Our community of practice comprises early career and established academics, practitioners within an organic farmer's support network, indigenous leaders, sages and intergenerational members of the community who share their stories and insights.

Mphatheleni Makaulule has stressed that we need to embrace Mupo or living systems and to understand our sacred relationship with nature. Research is about communication and the rituals involved in fostering a sense of community and ongoing commitment

Patricia Lethole has stressed our solidarity and kinship through totems. Vhonani has stressed the importance of intergenerational learning.

I [Janet] stressed that the stories we tell ourselves and others matter quite literally as we shape our environment through our choices – this is what it means to live in a participatory universe and that participatory research can and should be transformative. We see the world as an ecological relational system in which we are intertwined and on which we depend. My role has also been to help facilitate research, supervise a linked PhD on mapping and modelling, document stories as a contribution to empowering indigenous women and to focus on how indigenous ways of knowing could help us know our place within natural systems. Zanglein (2021) stresses in her chapter “ seeing with both eyes” if we exclude women, we exclude half the world’s population and half of the knowledge and that without documentation, history excludes herstory. The voices of Indigenous women need to be heard s a response to the Uluru Statement of the Heart. The Voice for Indigenous people and women in Australia (in particular) :

“Practically, the Voice is informed by decades of research and the experience of people on the ground, that decisions, policies, laws and most importantly outcomes are improved when Indigenous peoples are empowered and involved in the process. Symbolically, the Voice offers Australia a chance to design a more inclusive narrative ... informed and strengthened by the participation of First Nations people....”

The South Australian Labour government has introduced the right for any locally elected Indigenous people to have a voice which shape services directly to parliament and not to a committee This makes South Australia once again a fore runner of democracy. Just as South Australia gave the right for women to vote as women in South Australia in 1894. Nevertheless women had to wait until 1896 to vote in federal elections, and now the right of Indigenous South Australians have a direct voice to parliament on Sunday 26 March 2023.

2.1 Vignette and focusing thoughts

Walking is often a metaphor for life’s journey and the choices we make. The breath is a metaphor for life and the earth nurtures us before we return to the elements from which we are assembled. I [Janet] spent an afternoon in February a walking meditation with a group in Adelaide. The facilitator explained that the Theravada tradition emphasises walking more than in the Mahayana tradition. It focuses the mind and helps us to think about the breath in relation to the way we are placing our feet on the ground and the footprints we leave. It is a reflection on life, relationships and walking the talk. So much of life is a ceremony – relationality and communication. Who we are, why we think and act the way we do and how we make the world better or worse through our daily interactions and choices. Shawn Wilson describes the research cycle as ceremony because it is about exploring relationships.

Let us begin by summarising the story of how the relational research began. Complex needs are often the result of ‘wicked problems’ involving many interrelated variables with a strong value base, about which

people feel strongly. Poverty, climate change, displacement, pandemics and conflict are just some of the big challenges which we face today.

In Asia and Africa the rate of displacement of many species is growing along with rapid climate change. People, plants and a variety of animals, birds, insects and reptiles are losing their habitats as the rate of urbanisation and development increases. A new narrative is urgently needed – or better still – indigenous narratives need to be re-membered. Totemic stories remind us of our kinship with nature (see Lethole et al 2022, McIntyre-Mills, 2021, Romm and Lethole, 2021).

The volume aims to provide some pathways to support constructive engagement, hope and praxis by linking indigenous views on natural law with multispecies relational governance for protecting the commons. The transformative research is based on the premise that we live in a participatory universe which we create.

This is also a reflective systemic journey with members of the community of practice enabling ‘unfolding values’ and ‘sweeping in’ (Churchman, 1971, 1979, 1982) the social, cultural, political and economic context which I call *The Great Unravelling*. It is also about facing up to personal frailties and fears. As we think we shape social, economic and environmental policies which shape the lives of those who vote and those without a voice. The anxieties are being expressed in our illnesses and in response to our need to restore our relationships (Haraway, 2016).

‘Fading away^{xiv}’ is a sickness that afflicts some young Australians, it is the title of an Australian Broadcasting documentary produced as part of the Four Corners series. Eating disorders have increased since the pandemic (Miskovic-Wheatley et al, 2022).

‘As above, so below’, ‘As within, so without,’ is the phrasing used by Gogo Rutendo Negara (2022) CEO of the Credo Mutwa Institute which also implies ‘as we think so we embody.’

Each chapter of the forthcoming volume aims to make a difference at the personal, local or regional level through fostering relationships with others and our shared habitat. Each can be read as a stand-alone contribution which makes a case for recognising not only our interdependency on all other strands of a living system but also fostering a recognition of our place within this system, not above it!

The book fosters inner work to support emotional intelligence ways to support engagement with community at a local level and how to scale up engagement. The United States Institute for World Peace (Sept, 2022)^{xv} meeting focused on the themes of belonging, compassion, inner peace, equality and equanimity which are vital for building relationships and maintaining them. Chapters also discuss ways to support systemic intervention.

3. STRUCTURING PATHWAYS TO WELLBEING THROUGH EXPLORING STORIES, THEMES AND PATTERNS BASED ON INDIGENOUS LOCAL WISDOM

The purpose of this paper^{xvi} and the volume is to explore how transformative research can make a difference starting with recognising and re-membering the value of Indigenous knowledge systems. The context of storytelling needs to be carefully considered.

3.1. Steps for transformative engagement

Firstly, it needs to be led by a trusted local leader, in the case of this community of practice we have distributive leadership recognising the community leadership, language skills, emotional intelligence and different ways of knowing which we pool generously with one another.

Secondly, transformative research –needs to begin with some work on the assumptions and values of the co-researchers on how they see the world and how they can engage with one another and other species to make the world a better place through their action research. Together we engage with the community through forming a community of practice which meets regularly to tell stories to address areas of concern. Story telling is a traditional process, but added to this process people are asked to respond to some scenarios

that are shared based on a structure that prompts people to consider what they already have in the community in terms of social, economic and environmental material and non material benefits that support re-generative living to support both mitigation and adaptation to climate change. Participants are asked to consider turning points are for the better and worse and the barriers in terms of social, economic and environmental factors. In the original design each of the steps included prompts which enabled people to consider a number of social, economic and environmental considerations.

3.2. Systemic praxis approach

The community of practice which informs *Affirmative Intervention to support Multispecies Relationships* employs a largely ethnographic and case study approach to address *areas of concern*. The critical systems approach is a *relational approach*. It considers the relationships across parts and wholes and, of course, we need to be mindful that we are part of the system and thus need to appreciate our role and location within the system that we are researching and influencing. We also need to consider the implications of what we include or exclude. This is what Giddens (1990) called the ‘double hermeneutic’.

Thus, we have a responsibility as researchers, because we change the world as we research it. In this sense, I apply a constructivist approach (in the sense used by Romm, 2018). Midgely (2000) reminds us that as the systems approach is indeed about everything, as researchers we need to work out our area of concern. Paradoxically the systems approach is about drawing boundaries Ulrich, 2005) to establish certain levels of understanding within specific contexts.

However, the boundaries need to be seen as a *heuristic device*, based on asking critical questions. If we can understand (as Donna Haraway succinctly summed up) that: ‘We are the boundaries’ and that we need to think carefully about what we include or exclude.

3.3. Rationale for story telling: exploring complexity and webs of relationships

As Alexander Christakis and West Churchman explained when they participated in a Club of Rome Meeting, people need to engage in the mapping the factors which are leading to a way of life that is ‘beyond the limits’ (Meadows and Meadows, 1972, Christakis, 2006).

3.3.1 Engagement enhances understanding of relationality

By engaging in the process people gain greater understanding by considering and understanding the consequences of policy and personal social, economic and environmental choices.

Stories enable people to express feelings, perceptions and emotions which shape thinking and practice. Through a careful consideration of *if then* scenarios, they can see that business as usual is unsustainable and that like lemmings if human beings continue chasing profit we will all fall over the cliff of what William Rees calls ‘Overshoot’. This means consuming resources at the expense of other species and the next generation of living systems.

The rapid U turn (McIntyre-Mills and De Vries, 2009, Scharmer, 2018, 2022) to regenerative living requires changing the way we live our lives. This begins with a transformation of values or re-membering relational systemic knowledge (McIntyre-Mills, 2021a,b) and applying it with confidence.

3.4. Communication and relationality is a multispecies endeavour

Barkin (2022) also reminds us that traditional agriculture, known as Milpa in Mexico is based on biodiversity and a dense rhizomatic network to support the growth of a combination of plants including maize (developed through years of agriculture) beans, other vegetables such as chilli which together provided a nutritious balanced diet. This metaphor of the milpa also inspired their co-operation with one another to enable reciprocity and sharing of produce in ways that sustained one another in a balanced and

harmonious manner. This approach is similar to the approach used by Dzomo la Mupo (Voice of the Earth) to protect Mupo (living system) and the community. As mentioned above, Gogo Rutendo Ngara (2023) of *Earth Rise* stresses ‘As above so below, as within so without’ as important design considerations.

3.5. Constructivist approach to research: Why small is still beautiful: Growing a future

The production of food locally by local communities has never been more important. Recognising that peasants and local fishers are responsible for feeding the majority of the world’s population with minimal resources is important to prevent the removal of their rights to land by factory farms and big plantations. Barkin stresses that recognising the new communitarian ethos requires standing together (Grain 2022)^{xvii}.

As William Rees (2022)^{xviii} (originator of the carbon footprint) stressed we need to realise that human beings evolved in small groups and that the human brain seems incapable of dealing with large amounts of information. I would argue that the analysis of information is often short circuited by emotions which cloud the ability of people to think through scenarios in terms of if then scenarios as a way to logically consider the consequences of their thinking and actions. There are other approaches to engagement, democracy and governance as stressed in a forthcoming edited volume. As such this volume is a response to the message from William Rees that we need to live more simply and locally. We are on track to 2.4 degrees global warming which will lead to catastrophic changes which are likely to reduce the size of human populations, as we are on track to 8 billion.

But the challenge is that unless we decelerate fast we will make the planet unliveable. He also makes the point that human beings developed to live in small communities and that our capacity to solve wicked problems, in other words problems with many interrelated variables about which people have strong ideas – is very limited. Overall he is not optimistic about our chances as a species. The problem is that he does not consider that some cultures are more complicit in creating the problem of overshoot than others. Although his work focuses on the problems created by industrialisation he does base his assumptions on capitalist complicity based on growth in population and growth in production using a petroleum based economy. His solution is to live simply and in harmony with nature, to grow local food and to look after the soil. He despairs at the destruction of biodiversity and stresses that climate change is just a part of a wider ranging problem.

The forthcoming practical volume focuses on how to bring about changes to support food sovereignty and includes good news stories of how it is indeed possible to do things differently at a local level and how to engage people to think about complexity and tangled wicked problems.

Story telling has always enabled people to think in terms of non-linear, complex scenarios. They also help people to re-imagine the way to live their lives. Story telling brings hope through raising oxytocin levels (Brockington et al: 2022) and through expanding a sense of possibility and perhaps stories can inspire resilience and courage as suggested in the hospital study which found that young people who were told stories had lower levels of cortisol (indicative of stress) and higher levels of oxytocin (released when we are happy). Stories also help to inspire understanding as they provide context and help to make sense of the facts presented to school children in text books (Prins et al, 2017). Throughout history leaders have told stories and parables as a way to convey values and possibilities and to change hearts and minds. Yuval Harari (2015, 2016) makes the point that history is narrative and we base our lives and understanding on the constructs that underpin law, governance and economics. Our ability to think critically and in terms of bigger scenarios is facilitated through story telling. Constructs can be changed through narrative, so that we can *re-imagine* and *bring into being* another way of life, rather than being passive consumers of other people’s stories or (worse) shaped by algorithms to which we have mindlessly contributed through allowing our on line activity to be tracked (Zuboff and Schwandt 2019, Zubhoff, 2019).

Though thinking about our thinking we can:

- a) consider *if then scenarios* in stories based on fact and explained through fiction to reach different audiences.

- b) explore the implications of specific pairs of options, if we think or do this and link it with this option what are the implications. Through the logic of structured dialogue (Christakis and Bausch, 2006, Flanagan and Christakis, 2010, Christakis et al 2023/4 forthcoming) and pathways to wellbeing (McIntyre-Mills, De Vries and Binchai, 2014, McIntyre-Mills 2017, Wirawan and McIntyre-Mills, 2023/4 forthcoming), it is possible to enable the human mind to take on the bigger issues of our time.

Hope galvanises and helps us to transform thinking into practice. This volume explores the potential of metalogues (Gregory Bateson, 1972 and relational ‘warm data’, Nora Bateson, 2021) as well as the potential for stories and archetypes to help with our healing. Stories and art allow for slipperiness and intuition. Dialogue allows us to test out our ideas as the closest we get to truth is not only through dialogue but also through listening to one another and nature.

Hopefully humanity will learn that we need to appreciate other species sooner rather than later. Bryson (2003) used his wit and humour to remind us that:

“ The lung fish, one of the least evolved of all complex animals, has forty times as much DNA as we have. Even the common newt is more genetically splendidous than we are by a factor of five” (Bryson, 2003: 498)

He continues by adding that:

“ Until recently it was thought that humans had at least one hundred thousand genes, possibly a good many more, but that number was drastically reduced....the first results of the Human Genome Project, which suggested a figure more like 35 thousand or 40 thousand genes – about the same number as are found in grass. That came as both a surprise and a disappointment.” (Bryson, 2003:498).

Bryson (2003: 497) also reminds us that we share at least 90% of our genome with mice and Susan Greenfield (2000) stresses that we share *more* than 90% of our genes with rats and our Chimp relatives share 98.4 % of our genes (Bryson 2003: 525) and just so we do not get above ourselves we share 60% of our genes with fruit flies (Bryson, 2003: 497)!

So what, you may comment, well it is clear that all life is woven from the same threads, albeit in slightly different configurations. The complexity of evolution is shaped, however, not only by our genes but by our choices, our thinking and our actions. I use the words *choices* plus *thinking* because plants can make choices (as can we) and collectively our actions shape our environment which in turn shapes us. The Mahayana Buddhists call participatory design dependent arising, or at least that is how I interpret the lessons or dharma on the path to enlightenment.

Together we explore extracts from the volume on the process of affirmative intervention to support multispecies relationships (McIntyre-Mills, 2024 forthcoming):

“The axiological assumption or motivation is an appreciation of the continuity of life and the elements which animate life, as well as the process of cessation. Appreciative intervention is motivated to see potential in all things, *material* and *non material* and to work with others to foster turning points for the better, whilst addressing the barriers in a collegial community of practice. Quantum physics refers to participatory design flowing from a confluence of conditions and decisions. We are what we think and what we do. So each of us is more than a bundle of genetic heritage. Within the limits of our embodied selves we can make some choices, even if it is to choose to think in ways that can make a positive difference...”

4. A SYSTEMIC ACTION LEARNING APPROACH USING A COMMUNITY OF PRACTICE TO SUPPORT THE GREEN CIRCULAR ECONOMY

The joint project involves working with an established community of practice to support setting up a green circular economy. The focus of the community of practice is on *earning, learning and growing a future* to develop a viable social enterprise around local products, sustaining the ecosystem and creating ways to market products on line. In terms of praxis (thinking and practice) the research is shaped by an ongoing collegial community of practice spanning several organisations including PGS^{xix}, an organic farmer's network, several universities, including the university of South Africa, University of Venda, University of Adelaide and Universitas Padjadjaran that connects with local community.

The community of practice is co-facilitated and combines face to face engagement with local facilitators linked with the University of South Africa^{xx}, University of Venda, the University of Adelaide and with Universitas Padjadjaran in Indonesia^{xxi}. The project team draw (in part) draws on Gunther Pauli's approach to developing a production, distribution and consumption cycle that supports regenerative social enterprise and reduces the risks of unemployment whilst fostering re-generative approaches that support wellbeing stocks (Stiglitz et al, 2010).

This learning organisation and learning community approach (Senge, 1990, 2006) supports social inclusion and green, re-generative entrepreneurship. The aim is to learn from Indigenous leaders (see McIntyre-Mills, Makaulule, et al, 2022, Lethole et al, 2022) to raise awareness and capabilities for co-operative social enterprise (Nussbaum, 2011) in line with Indigenous local knowledge systems (Odora Hoppers, 2013 and SA IKS policy, 2004) and to assess whether an online community of practice enables participants to learn more about community co-operatives in terms of potentials and pitfalls, bearing in mind the UN Sustainable Development Goals.

Overall, the intention is to explore the extent to which social enterprise can help to re-generate social, economic and environmental wellbeing and to achieve a sustainable living.

4.1. Scenarios for transformation

To do transformative research we need to engage in context and with others to address the issues of the day.

- The first scenario (business as usual) is that we have little time as we human beings are a failed experiment as we seem to be the tool makers whose designs are bent on destruction.
- The second scenario is taking incremental positive steps based on the idea that human beings have the capacity for transformation and that we can indeed find and create hope.
- The third scenario is that we must do things differently. Our hope lies within ourselves. We need to do things differently.

We also aim to consider with participants via the action learning approach how can we build on the group approach (Ubuntu: "I am because we are) combined with The Indonesian model called "One Village One Product" and the adapted model "One village many enterprises" (Claymore, 2007, McIntyre-Mills et al., 2022, 2023forthcoming) plus the concept of Ecovillages (Shiva, 2020), which are aimed at activating Sustainable Development.

Thus the focus is on: researching whether a community of practice (as per Wenger et al., 2009) can help to support raising awareness after viewing webinars and taking part in further discussion on the need for a green circular social enterprises and whether the webinars plus workshops after the webinars help to support a community of practice which advances capacity building on how to set up a community co-operative in line with social and environmental considerations congruent with regional/international and the UN Sustainable development Agenda (2030).

The project supports the policy agenda underlined by the IKS Policy (2004), the South African Government Voluntary Review (2019) and Odora Hopper's (2013) plea for more Mode 2 engagement to

promote IKS across the sectors, as well as Chilisa's view on Sustainable Development (2018). It also responds to the UN policy to address food, energy and water security and the need to redress high rates of urbanisation and the cascading impact on human security (UN Urbanisation Report, 2014, UN Sendai Risk Platform, 2030, IPPC, 2020).

In terms of innovation we draw on and adapt the principle of the 'One Village, One Product approach', decreed by President Jokowi (2014) in Indonesia, to enable working across sites to facilitate the mapping of opportunities and the cross fertilisation of ideas (that is, learning from practices in Indonesia in which the first author Janet McIntyre-Mills has been involved). It uses a gender mainstreaming lens which means that the focus will be on ensuring that gender diversity is central to wellbeing. Also, the involvement of young people in setting up sustainable social enterprises is important to this project.

4.2. Axiology, ontology and epistemology

The starting point is to be willing to engage in endeavors for the common good with a view to creating shared meanings by considering the consequences of our thinking and practice for ourselves and others in the short, medium and long term. The following citation is from Amy Cohn Varela's contribution to the Mind and Life Institute(2022)^{xxii} which sums up the approach we are striving to develop through community engagement in a community of practice:

"Self-reference is the capacity to be able to look and see how what you are doing is creating things in the world. And so when two sides of a polarization decide that 'A world' is objectively true, and 'B world' is objectively true, there is no conversation, but it's co-creation where the two sides were creating realities against each other. And so the only way you can stop that kind of escalation is by acknowledging your participation in the creation of those realities, and working on yourself."

Cohn Varela then continues by saying: "Speaking is a way of shutting the other up." This is a welcome reminder that listening is a vital part of conversation and transformative research. Cohn Varela explains that listening is kind of self-monitoring and if you are waiting to speak or thinking of something else then you are not fully engaged with the other and not participating in ways that support co-creation. Sometimes talking over others can be a result of fear, anger or quite simply being unable to hear or understand the other. By listening and observing we need to be able to develop rapport with 'the other' as a first step towards working together. Richard Davidson who helps to facilitate the Mind and Life Institute explains that the more people are able to remain calm and tolerant the better they relate to other people and this "creates a recursive circle which re-inforces a state of wellbeing." (cited in McIntyre-Mills and Corcoran-Nantes 2021) in the chapter titled: From Polarisation to Multispecies Relationships: Re-Membering Narratives', on which I [Janet] draw as follows:

"This constructivist theme is a core theme based on the notion of a constructive (rather than destructive) so-called "participatory universe according to Kafatos and Yang (2015). Thinking matters in a very real sense according to Davies (2006: 281) who explains that human beings are participants in

...shaping physical reality, and not as mere spectators... That is indeed a radical idea, for it gives life and mind a type of creative role in physics, making them an indispensable part of the entire cosmological story. Yet life and mind are the *products* of the universe. So, there is a logical as well as a temporal loop here. Conventional science assumes a linear logical sequence: Cosmos life mind. Wheeler suggested closing this chain into a loop: Cosmos life mind cosmos....' Physics gives rise to observer-participancy; observer-participancy gives rise to information; information gives rise to physics'... Wheeler thereby rejected the notion of the universe as a machine...."

If we believe that not only the participants influence one another in the process of research, but that the environment (and context) influences us it has a profound impact on the way we engage with others.

I explain that:

“This process has much in common with quantum physics and thus *systemic intervention* can be said to occur when we question and re-frame the taken for granted world. Being the change can occur through all stages of a project. The questions we ask matter, the actions we take make a difference and the narratives we foster have the potential to become positive or negative memes.” (McIntyre-Mills, 2022: 196)

The participatory approach to research advocated in this paper draws on many influences and is in line with a notion that we participate in constructing the universe in which we live. When Francisco Varela founded the Mind and Life Institute he stressed the mission to be: “embodying the practices under investigation, creating new frames and stories for our hearts and minds.” (Mind and Life website, 2022)^{xxiii}

The approach used in all the meetings is dialogue on key areas of concern and those who participate sit in a circle. By watching the content and process of these meetings, one is struck by the notion that the end and means are equally important, namely building shared meanings and partnerships. Rosch (2017:xlvi in Varela et al 2017) explains that when we engage with one another in conversations in which we are building rapport we are engaging in “mutual participatory sense making” (see also Candiotta and De Jaegher, 2021). The circularity of mind, body and context is relevant and reminds me that all living systems are ‘alive’ because of a circular regenerative process of taking in nutrients and releasing toxins (see McIntyre -Mills, 2022:8):

“Re-generative narratives draw on spirituality and First Nations. David Abram explains in his foreword to an edited edition (Kaza, 2020) on the work of Joanna Macy (2015),¹⁵ that the notion of ‘interbeing’ can be understood very simply and directly when we comprehend that the air we breathe in, is the air plants breathe out. We could add to this, that we are what we eat and what we consider constitutes food. By understanding the way *in which living systems relate dynamically* is the first step towards understanding mutual causation and the importance of dialogue in what Bohm (2002) describes as a ‘participatory universe’ which he explains in conversation with HH the Bohm and HH Dalai Lama (2018). By participatory universe he means that our thinking shapes the world we live in. If we compartmentalise human beings into body and mind we separate thinking from being. Anger, anxiety and depression impact our physical health. Our emotions have a direct effect on physical molecules in the body as explained by Candace Pert (1999) in her book “The Molecules of Emotion”. In fact *the way we think* can influence *our physical health*. Just as our thinking effects our physical health, it also effects the health of other species and the natural world, because our thinking shapes who and what we value.”

A key goal of ecologists – who are concerned that human consumption is overtaking our ability to sustain not only human, but all living systems – is to find a way to enable people to shift culturally from a rights based approach for the minority to responsibility for our common good and the global commons. All religions focus on fairness and kindness to others, but God or Karma cannot be allowed to deny responsibility or sense of the inevitability of events.

We construct our lives and we live in a participatory universe as Bohm and other quantum physicists stress. What we think matters quite literally. By focusing on others and the environment, paradoxically we care for ourselves and we support our own happiness.

As a community of practice, *ontologically* we are concerned that we face planetary boundaries and that we are fast approaching the cliff, but we believe that cultural choices can be made to turn around from the brink and strive to reverse the damage through regenerative actions such as social enterprises that give hope to the marginalised through creating sources of income based on organic farming that protects biodiversity. David Bohm believed that all life has a form of consciousness^{xxiv} and this thinking resonates with Venda notions of Mupo or living systems. The new quantum physics acknowledges that the states of nature are in a process of being and becoming and that the observer shapes the situation. Bohm stresses that (our thinking matters because we shape our world positively or negatively (see McIntyre-Mills 2021: 571).

Ontology is understood as *continuous flows* (Barad 2003; Ngara 2017; Wilson, 2008) and the recognition that *our perceptions shape the world* are very similar in many respects to the work of David Bohm, Donna Haraway (2018) and Deborah Bird Rose (2015) on *being and becoming*. These insights also

echo aspects of the insights of Deleuze and Guattari (Bogue, 1989) who stress that love and desire (and their opposites) radiate out organically or rhizomatically in many ways to shape our own lives and those with whom we come into contact (McIntyre-Mills, 2021:616).

Epistemologically we are exploring the extent to which social enterprises can foster a green cyclical economy in Limpopo by learning from the experience of organic farmers linked with PGSA, a national and international organization who supports us in Limpopo and with whom the Ocean View Organic Farm is also linked. We have been inspired by their example and the action learning and research in which we are engaged.

Axiologically we believe that research ought to be transformational and supportive of fairness, transparency and accountability to support social and environmental justice. ‘We’ refers to a group of engaged academics, practitioners and members of the community who work together in a collegial manner pooling our diverse but complementary skills and ways of knowing, to sum up we strive to be transformational in our approach by moving away from individualism, competition, rights, mere objectivity towards a more collective, collegial approach rooted in the recognition of multi-species co-determination:

4.2.1. Table: Balancing through a circular dynamic approach to axiology, ontology, epistemology, methodology	
Individualism	Collectivism
Competitive governance	Co-operative approach
Objective, de-identified	Warm intersubjective data in context
Rights	Responsibilities
Species specific	Recognition of multispecies-codetermination
Linear	Spiral, interdependent networks

As explained in the companion paper (McIntyre-Mills et al 2023) titled ‘*A gender sensitive approach to uniting indigenous views on natural law with relational governance for protecting the commons*’, our approach is as follows:

4.2.2. Table: Summary of our praxis approach	
Axiology	Human beings are one of many species on which we depend. In a priori terms we consider that our rights and responsibilities should be to respect and protect living systems.
Ontology	A non dualistic relational view of the world in which human beings are co-dependent on multiple other species. We recognize that consciousness is a continuum
Epistemology	Many ways of knowing need to be appreciated along with a recognition that human beings, other animals and nature have consciousness. Our approach is to create inter-generational partnerships with all age groups to support multispecies habitats and relationships is core to our praxis to extend the UN SDG 17 to create partnerships. We pool many ways of knowing in the way we interact with our students at undergraduate and postgraduate level and most importantly instead of polarizing the ecocentric and post national continuum – drawing on Studley (2022:12) – we extend a relational understanding that acknowledges the work of Thomas Berry and the Indigenous, spiritual roots of animism. Instead of a merely “enlightened anthropocentrism.”

Methodology	Case study, focus groups, field visits and participant observation by members of the team who act as local facilitators. We are using a specific way of doing action learning - where people come together to learn from one another through stories, dialogues to explore many ways of knowing and experimenting with collaborative options in action.
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5. TRANSFORMATIVE RESEARCH IS PARTICIPATORY

Constructivism in this project strives to bring into being the principles of earth jurisprudence (Lampkin, 2021) and wild law (Cullinan, 2003, 2014, Burdon, 2010, 2011, 2015) through scaling up local projects in Limpopo by linking with a local project in the Cape and co-learning with a wider community of practice in Indonesia (see Widianingsih, McIntyre-Mills et al., 2022). We pool our knowledge and experiences collaboratively and strive to learn from one another. Importantly, the one village, one or many social enterprises was combined with the organic circular economy approach which we learned about from PGS. We have also been mindful of the point made by Rees (2022) that greenwashing is not the answer, we need to reduce our consumption and opt for living in ways that lower our global footprint. This means that personally and politically we need to adopt voluntary simplicity in our lives. In line with this thinking our focus is on pre-figuring ways to protect biodiversity through protecting a multispecies habitat: forests, water sources and the soil through learning with PGSA to protect all stages of food production from the seed, to soil fertility using natural organic fertilisers, companion planting and protecting biodiversity by avoiding chemical pesticides.

Stef Swanepoel in a recently submitted grant together with Dzomo la Mupo writes:

“The impacts of climate change are already being experienced in South Africa with an increase in the frequency and intensity of extreme events (floods, droughts) and it is predicted that the temperature is likely to increase by up to 1°C along the coast and up to 3°C in the interior. This will negatively affect farmers’ ability to maintain or grow food or maintain agrobiodiversity, particularly in rainfed production areas. We need a robust and resilient agricultural sector to contribute to ongoing food and nutritional security in the face of a changing climate. ...Research shows that traditional crops (millet, cowpeas and groundnuts) play an important role in community food security. And that the informal seed system can play a key role in maintaining agrobiodiversity providing a buffer against failure and drought through the rapid diffusion of seed. It is also a more affordable option for farmers as breeding and diffusion are integrated functions carried out simultaneously.”

The design is participatory as it needs to be re-generative and able to sustain itself like all other living systems. Part of this re-generative cycle is sustaining one another through our relationships. In our community of practice we build on some long standing friendships and newer relationships and we have navigated some challenging value issues by focusing on common needs for life, namely air, water, healthy soil, food and sustainable energy. We have done this simply by focusing on how to support local food security and to reduce food miles. At a practical level this contribution focuses on organic farming as a means to protect biodiversity and mitigate climate change.

A non anthropocentric, living systems approach (Mupo approach, to cite the Venda concept) is needed so that a balance is found between people and nature. A wild life institute that supports the ecocide law (Higgins 2012) underlines the new approach to biodiversity. This is also supported by tree planting, seed saving and organic farming with In Limpopo the – Dzomo la Mupo network of villages include Mabvete, Tshidzi, Ha Gumbu, Malambwana, Vhutanda, Mudzidzidzi, Vhuthalu, Vuvha and Tshidzivhe and their co-op.

The group comprises these villages that have joined Dzomo la Mupo and who work with PGS in order to learn more about organic farming. Both Dzomo la Mupo and PGS are part of a community of practice located across University of South Africa and supported by academics and graduate students who have won

or who support the research environment. We pool resources including funds from, for example National Research Foundation Grants and in kind assistance from a range of universities and NGOs to support the research environment spanning University of Adelaide and University of Venda, Uni of Stellenbosch, Universitas Padjadjaran. Government departments support the project, such as the Department of Forestry, Fisheries and the Environment, for example.

In October 2022, eco tourism was discussed with a community bordering the Kruger Park at Medupi. At a focus group discussion in Tshidzivhe one of the facilitators shared that in her (nameless) community during the Marula season the villagers lure the elephants so that they can be hunted. One of the issues is poverty, a sense of entitlement to the area and a sense that the communities are not receiving a fair share of ecotourism opportunities or that elephants threaten their small farms. One of the facilitators shares the elephant totem and was shocked by the story, another helped to found the Wild Law institute and others present with a vegetarian view of life listened with a view to finding a better way to maintain multispecies relationships.

One of the key concerns of Dzomo La Mupo (highlighted last October) creating an ecotourism experience in which local tourists can experience a new green economy approach to eco-tourism.

Park management needs to be expanded into something much wider, we need earth jurisprudence and an understanding of our place in nature. I have spent time researching co-management and have read the thesis by Maluleke (2018) which highlights the uneasy partnership expressed as co-management between a local community and the KNP.

This could be a way forward as clearly the history of dispossession has tainted or soured the relationship and although the land rights have been restored there is a sense that the share of the gate takings, some rights to benefit from hunting do not restore the old way of life. This argument is developed in the forthcoming volume, *Affirmative Intervention to Support Multispecies Relationships*.

The areas spanning the Limpopo and surrounding regions spanning Zimbabwe, Botswana, South Africa and Mozambique need to be seen as an area that ought to be preserved as a way to protect biodiversity of which human beings a strand. The shift to earth jurisprudence and wild rights is overdue (McIntyre-Mills et al 2023). Totemic relationships are explained as a way to remind African peoples that all species are co-dependent as detailed in Chapter 10: 'From polarisation to multispecies relationships: re-membering narratives' (McIntyre-Mills, 2021).

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^{viii} The forthcoming volume is called '*Affirmative intervention to support multispecies relationships*' which builds on previous Springer volumes, namely *From Polarisation to Multispecies Relationships (2021)* and *Transformative education for Regeneration and wellbeing (2022)*.

^{ix} In Tarumajaya, West Java. The focus is on supporting farming, fishing and forestry. Our approach is based on the resident's stories, classified into Business as Usual Small Changes and Regenerative Living. By analysing the stories indicators of wellbeing are drawn from their stories to take into account a wide range of factors that contribute to overall wellbeing, such as health and education, economic stability, social cohesion, and environmental quality. It can also be used to measure progress towards the United Nations Sustainable Development Goals (UN SDGs).

^x Relationality is explored in depth in the forthcoming volume, here is a definition: Mphatheleni: ... many of these terms are just different ones to the one's we use. Mupo to us is a living system and we are custodians. Janet: Yes, the following terms seem to resonate across cultures and different knowledge systems and our paper explores:

- *Awareness of interbeing/ inclusionality /Mupo*
- *Relationality* through sensing communicating and demonstrating ubuntu and respect for organic and inorganic life by responding to *indicators*
- *Not objectifying life*, because it is dynamic and because human beings are a strand in a conscious universe
- *Thinking matters quite literally* – we create the landscape of our lives through our thoughts and actions.

^{xi} <https://miningindaba.com/Exhibitor-list/musina---makhado-sez-soc>

^{xii} <https://www.undp.org/south-africa/press-releases/undp-and-mmsez-sign-memorandum-understanding-achieving-sustainable-development>

^{xiii} <https://cer.org.za/news/multiple-court-challenges-brought-against-fossil-fuel-based-musina-makhado-industrial-project>

^{xiv} <https://www.abc.net.au/news/2023-02-27/fading-away:-australias-secret-battle-with-eating/102029500>

<https://www.sydney.edu.au/news-opinion/news/2022/01/21/escalation-of-eating-disorders-during-covid-19-research-finds.html>

“Overall, the online survey data showed an increase in all eating disorder symptoms during COVID lockdowns, with increased body image concerns, food restriction and binge eating, reported by the majority of participants. There was also a significant experience of depression, anxiety, stress and loneliness.”

Miskovic-Wheatley, J., Koreshe, E., Kim, M. *et al.* The impact of the COVID-19 pandemic and associated public health response on people with eating disorder symptomatology: an Australian study. *J Eat Disord* **10**, 9 (2022). <https://doi.org/10.1186/s40337-021-00527-0>

^{xv} <https://www.usip.org/events/2022-generation-change-exchange-his-holiness-dalai-lama>

^{xvi} This is one of several other papers to appear as revised versions in a Springer volume titled ‘Affirmative Intervention to support Multispecies Relationships’. Unlike the others it is not written in the form of a metalogue, but it does form part of an ongoing program of research with a community of practice (COP). It reflects on the process and how it came about. The COP comprises colleagues who contribute jointly to a series of publications through ongoing iterative engagement comprising Zoom, WhatsApp and face-to-face engagement as well as iterative emailed metalogues on topics of shared concern that unfold as we engage with one another. The participants include those who have contributed to edited Springer volumes, co-authors of papers and chapters based on our co-learning. This is an opportunity to reflect on the process and to invite commentary on our approach, as such it serves as a way to monitor and evaluate the extent to which engagement per se enables us to co-create new meanings.

^{xvii} The UN Food and Agriculture Organisation (FAO) has bumbled into a controversy over whether peasants or agribusiness feed most of the world. Eight organisations with long experience working on food and farming issues have written to the Director General of the FAO sharply criticizing the UN agency for a 2021 report.

^{xviii} Plenary speaker for International Systems Sciences (2022) – “*Why things will likely get worse: a systems perspective*”. <https://stream.syscoi.com/2022/07/01/international-society-for-the-systems-sciences-66th-annual-conference-online-conference-7-11-july-2022/> and see Our human-caused Existential Dilemma. Prof. William Rees.: Competitively displaced other species https://www.youtube.com/watch?v=3Hy_soodK3U

^{xix} According to the PGSA website the organisation was: “Established in 2011 as a non-profit voluntary association, Participatory Guarantee Systems South Africa (PGS SA) is the body representing PGS in South Africa. It is dedicated to supporting the establishment of PGS’s in the region to help facilitate local market access for organic and agroecological farmers. PGS SA helps smallholder farmer groups to harness the economic, environmental and social potential of organic farming. The end result of this process is the development of a sustainable market access system, based on transparent, producer-focused systems where consumers are assured of the integrity of organic products. PGS drives food sovereignty through localised, farmer-driven food systems based around a community of practice.”

^{xx} The purposive process in our research is directed at areas of concern, namely the need to foster and support a regenerative way of life. We followed appropriate ethics approval processes which preceded all engagement.

^{xxi} Facilitated by the University of Adelaide and UnPad along ethically approved lines.

^{xxii} This is a podcast transcript.

^{xxiii} <https://www.mindandlife.org/event/2022-mind-life-conversation/2022> Conversation on Interdependence, Ethics, and Social Networks

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^{xxiv} David Bohm speaks about Wholeness and Fragmentation, <https://www.youtube.com/watch?v=mDKB7GcHNac>.