

SOCIAL ENGAGEMENT TO REDRESS THE BANALITY OF EVIL AND THE FRONTIERS OF JUSTICE:

Limitations of the social contract to protect habitat and why an international law to prevent the crime of ecocide matters

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ABSTRACT

‘Existential risk’ continues to escalate and the crime of ‘ecocide’ is not yet recognised as part of international law even though it poses a new form of ‘genocide’. Politically fragmentation and populism have become the new order driven by capitalism, anthropocentrism, speciesism, nationalism and racism. The case is made that liberalism has progressed too far in undermining collective (cosmopolitan) responsibility. The result is a form of state control and governance that is more closely linked with the nation state and the market than with protecting habitat or the needs of all those who fall outside the mantle of the social contract, such as young people, asylum seekers, the disabled and other sentient beings. The frontiers of justice need to be extended to protect living systems. The concept ‘species’ is a central concern in relation to the issue of categorization, membership, displacement and decision-making (in terms of state sovereignty, territory, colonization and its implications for human, animal and plant life). As urbanisation encroaches on the wild spaces and displaces other forms of life, relationships that are Anthropocentric need to be re-framed to enable re-generation and sustainable living that is non-Anthropocentric.

Key considerations are whether new forms of engagement could encourage people to think carefully through their options, rather than making rash decisions:

- Does discursive democracy and more engagement inevitably lead to populist decisions, polarization or narcissism? The need for democracy to re-engage with critical thinking is vital.
- Is it possible for groups to be held responsible in the same way that an individual can be held responsible? Arendt argues that collective responsibility is upheld when each individual engages critically with their everyday decisions.
- Could balancing individual and collective needs be achieved through new processes and structures to help transform values and to address ‘the banality of evil’? Some researchers argue it is indeed possible to engage in large groups that foster collective decision making for the common good.

This paper makes the case that critical engagement could be assisted through enabling people to think through the implications of their everyday choices and that this could help to foster an ‘ecological

mindset' to protect living systems. Balancing individual rights and collective responsibility for this generation of life and the next requires governance to protect the common good. This requires considering the consequences of decisions by considering the multispecies rights of living beings (Kirksey and Helmreich 2010, Raikhel, 2010, Rose, 2015). The minimum requirement is re-balancing society to ensure that rights of the minority do not override the interests of the majority of living systems in this generation and the next. This requires a collective effort to re-create social and economic processes and structures to protect habitat.

The three patterns of engagement that *could* foster the human stewardship of habitat are: 1. Recognition of the interdependency of living systems, 2. Making (ongoing) policy adjustments in context. In policy terms this requires new forms of organizational relationships that redress power imbalances that result in social, economic and environmental injustice and 'existential risk'. 3. Appreciation of cycles for re-generation in designs that sustain living systems are needed. This requires rural-urban balance to protect habitat for domestic, farm and wild life, based on the requisite variety for multiple species and their diverse habitats. The barriers to achieving these three pattern goals include power imbalances within and across species which requires an intersectional understanding of the way in which species membership, gender, race, culture and abilities shape the power dynamics that underpin social and environmental injustice.

A way forward is perhaps to focus on what matters within and across many species, namely a safe, inclusive environment, water to drink, food to eat, being able to keep cool or warm enough to sustain life and a sense of fulfilled purpose. This is upheld by the proposed new law on ecocide that 'protects all inhabitants of a territory'.

Keywords: values, multispecies representation, accountability, re-generation, living systems

INTRODUCTION: AREA OF CONCERN, POLICY BACKGROUND AND AIMS

In this paper I reflect on ways to achieve a better balance between individualism and collectivism through reconceptualizing governance and democracy, in order to address the risks that span national boundaries.

The focus of this paper is on the misdirected socio-economic system(s) that leads to existential risk (Ackoff and Pourdenand, 2001, Bostrom, 2011). Multilevel forms of engagement could provide a means by which to re-generate local bio regions and operationalize some of Elinor Ostrom's (2008, 2010) ideas.

The pilots were funded by the Australian Research Council, several small grants and Local Government. Stokols (2018:302) argues that change can occur if there is transformation in personal values (as Boulding, 1966 suggests), and he also acknowledges change through behavioral modification. He makes the case that when many people change their norms it leads to others following their example. The three patterns (Alexander, 1977) of engagement that *could* foster the human stewardship of habitat are:

- **Recognition** of the interdependency of living systems and the implications for bioethics.

- **Making (ongoing) policy adjustments** in context. In policy terms this requires new forms of organizational relationships that redress **power imbalances** that result in **social, economic and environmental injustice** and ‘**existential risk**’ (Bostrom, 2011).
- **Appreciation of cycles** for re-generation in designs that sustain living systems are needed. This requires rural-urban balance to protect habitat for domestic, farm and wild life based on the *requisite variety* (Ashby, 1956) that spans multiple species. The barriers to achieving these three pattern goals include power imbalances *within and across species* which requires an **intersectional** understanding of the way in which species membership, gender, race, culture and abilities shape the power dynamics that underpin social and environmental injustice. A way forward is perhaps to focus on what matters within and across many species, namely a safe, inclusive environment, water to drink, food to eat, being able to keep cool or warm enough to sustain life and a sense of fulfilled purpose.

The Human Rights Consortium at the University of London has focused on ‘ecocide’ (Gager et al , 2013) as the fifth (as yet, unacknowledged) crime against peace by individuals, organisations or nation states. A few nation states have recognized ecocide since the Vietnam War. Arthur Galston and other scientists from Harvard campaigned in 1970 for a new bioethics and ending the use of the exfoliant agent orange which they said constituted a war related crime (Yale News, 2008). Ecocide National Criminal Codes (2012) have introduced ecocide to include non-war related crimes against the environment and humanity :

“In these countries’ penal codes, the crime of Ecocide stands alongside the other four international Crimes Against Peace; Crimes Against Humanity, Genocide, War Crimes and Crimes of Aggression. These four core crimes are set out as international crimes in the Rome Statute”¹.

Vietnam defines ecocide as follows:

“destroying the natural environment”, whether committed in time of peace or war, constitutes a crime against humanity”

The Russian Federation defines it as :

“massive destruction of the fauna and flora, contamination of the atmosphere or water resources, as well as other acts capable of causing an ecological catastrophe”, constitutes a crime against the peace and security of mankind.”

What is the problem represented to be? (Bacchi, 2009). Given the current international relations between Russian and USA and its allies there has been little support for the proposed law. But the European Institute of Environmental Security (2013) has supported a citizen’s campaign to enable Europe to support the ecocide law, but the number of signatures has not been reached.

The definition of ecocide has been recently reformulated (and extended from its original formulation) as follows by Higgins (2012) as the 5th Crime Against Humanity in her Tedex lecture as follows :

¹
<https://eradicatingecocide.com/wp-content/uploads/2012/06/Ecocide-National-Criminal-Codes1.pdf> The nation states Georgia 1999, Republic of Armenia 2003, Ukraine 2001, Belarus 1999, Kazakhstan 1997, Kyrgyzstan 1997, Republic of Moldova 2002, Criminal Code Russian Federation Criminal Code, Tajikistan 1998, Vietnam 1990”

“ The extensive damage to or loss of ecosystems of a given territory, whether by human agency or other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished.”

Higgins develops the argument (Higgins, 2016) and summarises it at the 2018 Hague Peace Lecture (Higgins, 2019). In Planetary Passport (McIntyre-Mills, 2017) I suggest that a way to achieve rapid transformation is through enabling people to understand the importance of supporting a law that could help them to prevent the disruption of water, food and energy security through the introduction of more sustainable approaches through a) on line engagement and b) better balance between rural and urban areas. Higgins explains that the national or post national federal level could support the law and pursue it through the International Criminal Court. I suggest (McIntyre-Mills, 2017) that the ICC could also support change through scaling up the Aarhus Convention (1998, see McIntyre-Mills, 2014: 21) and that this could remedy the way in which the nationalist social contract is currently framed by developing a planetary passport for ecological citizens who work together at multiple levels to protect their environment .

This paper aims to:

- **Address** the complex needs of the most vulnerable² and the interconnections across resilience, food, water and the innovation opportunity for social inclusion, in line with the UN Sustainable Development Goals (2017) and UNDRIP(2007).
- **Make** the case that critical agency is vital to understand, monitor and evaluate everyday social, economic and environmental strategies that enable sentient functioning (Nussbaum, 2011)

Liberalism has progressed too far in undermining collective responsibility. The result is a form of state control and governance that is more closely linked with the market than with civil society. Minzberg (2015) stresses that radical renewal requires rebalancing society. Each voter has the right and the responsibility to think about the consequences of their daily choices for their neighbourhood, province and the wider region to which they are inextricably linked.

I suggest (McIntyre-Mills, 2014, 2017) that the ‘banality of evil’ (Arendt, 1962) is associated with denying the pain and suffering caused by taking decisions that erode the planet and prevent the re-generation of living systems. This has been underlined by the landmark declaration by the president of Vanuatu (2018) who stresses that companies and nation states that rely on carbon intensive approaches should pay for the damage they cause to nation states with a much lower carbon footprint. Critical Systemic intervention by residents living in local regions is needed on a daily basis to achieve ecological citizenship. The Aarhus Convention (1998) provides three policy pillars to enable this everyday engagement to occur. The policy pillars (currently relevant only for the EU, but scalable elsewhere) include:

² The gender dynamic within culturally specific gender relations influences the status of, and opportunities for, women in a given community . Women’s political agency is vital. The policy priorities are also in line with the regional policy agenda (UNRISD, 2017) to map effective regional social policy pathways that span a wide range of sectors. In Indonesia the ‘One village, one product’ (OVAP, Morihiko Hiramatsu – Governor of Oita prefecture, 1979, Yogyakarta, 2014) was applied by President Jokowi in 2008-2009. In Alam Endah, the learning organisation, community approach has been developed as a step towards empowering women in order to reduce their vulnerability to trafficking, but the process needs to be extended, in order to expand women’s role in the decision-making process and to introduce a range of opportunities that support the capabilities of women and the marginalised (McIntyre-Mills et al, 2018).

- The right of all residents in the EU to access information
- The right to be heard and the right to take the areas of concern to the European Parliament and then to the European Court if the issues are not satisfactorily addressed.

As Florini (2003) stresses the policy provides a valuable potential platform for extending democratic rights to residents within and beyond a nation state so that social and environmental justice concerns can be addressed at a post-national regional level.

Statement of the problem, background and policy context

More people are displaced today than during the Second World War and more animals and plants have been displaced than previously.

Populism and de-generation of life chances

The focus is on human security associated with climate change and the exponential risks it poses in terms of human security resulting in mass urbanisation, refugee crises leading to instability at a post national regional level as the temperature rises beyond 1.5 degrees Celsius. Populism flourishes in this context and needs to be addressed through post national and regional engagement along with the creation of innovative new ways to engage, map and model ways to mitigate and adapt to the nonlinear and exponential risks.

The paper addresses the intersection of development, mapping and engagement to support low carbon living and social ecology. It will extend the literature on re-generative community co-operatives based on gender mainstreaming and ecological citizenship (supported by on line engagement) to explicitly empower women and young people through practical training to ‘earn while they learn and to grow a future within the region’. Thus, the research could add to our understanding on the Indigenous production, consumption and re- distribution cycle and the potential to adapt and scale up the ‘one resilient village, one re-generative business’ concept as a regional model popularised in Indonesia by Jakowi in 2014.

The UN 2030 Agenda³ is:

“the new global framework to help eradicate poverty and achieve sustainable development by 2030. It includes an ambitious set of 17 Sustainable Development Goals.... The 2030 Agenda for Sustainable Development sets out the global framework to eradicate poverty and achieve sustainable development by 2030.”

The 17 development goals address social and environmental justice concerns. How can policy practitioners address these goals in the first instance in our post national region spanning Indonesia, Australia and our neighbours? It requires a change in the architectures of democracy and governance to protect the basic conditions for life; water, food and energy. It also has implications for the way in which the food cycle is understood and the way in which choices impact the production and transportation of food.

³ <https://www.un.org/development/desa/disabilities/envision2030.html>

This paper addresses the potential opportunities for regional mapping from below by the public, private and civil society partners who could contribute to addressing the UN Sustainable Development Goals 1 and 5 (no poverty and gender equality), 11 (sustainable communities) and 17 (partnerships to achieve goals 1 and 11) in order to strive to mitigate risks through supporting low carbon living by using a form of 'Place Book'.

Indigenous thinkers such as Chilisa (2012, 2017) stress that our sense of who we are needs to be revised. We are vulnerable and reliant on a shared habitat. The ideas underpinning the UNDRIP stress that Indigenous people need to have the right to express their identity within a sacred space. The challenge will be to scale up this sense of stewardship not only at the local level but also at a post national regional level through understanding that we are stewards of one planet. The earth politics notion of Vandana Shiva is a logical direction for securing living systems

We live in an increasingly commodified and competitive world. The research focuses on balancing individualism and collectivism by exploring the food, water and energy consumption choices (Urry, 2010) people make and how these relate to their perceptions on 'wellbeing stocks'. Wellbeing stocks are defined by Stiglitz et al (2010:15) in 'Mis-measuring our lives' as multidimensional measures spanning :

"1. Material living standards (income, consumption and wealth), 2. Health, 3. Education, 4. Personal activities including work, 5. Political voice and governance, 6. Social connections and relationships, 7. Environment (present and future conditions), 8. Insecurity, of an economy as well as a physical nature."

In '*Planetary Passport* (McIntyre-Mills, 2017) and '*Wall Street to Wellbeing*' (McIntyre-Mills, 2014)⁴ the link between wellbeing stocks and the need to develop everyday decision-making capabilities from:

- the micro household's level to the meso level of organisations at the local government level and

⁴ Droughts, floods, cyclones and storm surges result in higher rates of morbidity and mortality, which impacts on the most vulnerable. The approach to addressing the SDG will require appropriate planning and processes across public, private and volunteer sectors before, after and during disasters. Policy and planning to address preventative measures require mitigating and adapting to climate change to enable lowering of emissions in order to ensure that water, food and energy security is addressed along with meeting basic health and housing needs. This requires addressing social inclusion at all stages of the process. This is central to social and environmental justice. Droughts, floods, cyclones and storm surges result in higher rates of morbidity and mortality, which impacts on the most vulnerable. The approach to addressing the SDG will require appropriate planning and processes across public, private and volunteer sectors before, after and during disasters. Policy and planning to address preventative measures require mitigating and adapting to climate change to enable lowering of emissions in order to ensure that water, food and energy security is addressed along with meeting basic health and housing needs. This requires addressing social inclusion at all stages of the process. This is central to social and environmental justice. How can we address cross boundary regionalist approaches to the big issues of the day, namely poverty and climate change when we continue to work within the boundaries of outdated science? These problems require drawing on the lived experiences (Polanyi, 1966, 1968) and situated knowledges (Haraway 1991, 1992) of many people plus a deep ecological awareness that draws on the consciousness of all living systems of which we are a strand. Representation, accountability and re-generation are the three major challenges of the day. How can we improve the way we live our lives? How can we address cross boundary regionalist approaches to the big issues of the day, namely poverty and climate change when we continue to work within the boundaries of outdated science? These problems require drawing on the lived experiences (Polanyi, 1966, 1968) and situated knowledges (Haraway 1991, 1992) of many people plus a deep ecological awareness that draws on the consciousness of all living systems of which we are a strand. Representation, accountability and re-generation are the three major challenges of the day. How can we improve the way we live our lives?

- the macro level of regional and post regional decision making on food, energy and water consumption was stressed.

Research Approach

It is vital to measure a raft of social, cultural political, economic and environmental indicators that pertain specifically to everyday living. Thus, the multivariate research approach is also participatory, because it is important to find out whether the setting of Sustainable Development Goals through public engagement and recording pledges on an interactive digital site *could make a difference to consumption choices* and whether this *public participation impacts on living ethically and well*. Regional initiatives need to address issues ranging from food security to child trafficking and habitat protection, if they are to have a hope of expanding to regional **“road maps for social development more generally”** (UNRISD, 2017). Regional social policy needs to underpin the UN Sustainable Development goals by using policy engagement processes that not only give voice to the marginalised but are underpinned by viable cross sectorial participatory governance processes to support regional development. Re-generative community co-operatives could support the policy agenda underlined by recent UN policy documents and the Australian Foreign Policy (2017) agenda. Cross-disciplinary and cross border challenges are intertwined across the social, environmental and economic spheres (UNRISD, 2017, Glasser, 2018, IPCC, 2018).

VALUE TRANSFORMATION: RECOGNIZING OUR HYBRIDITY AND INTERCONNECTEDNESS: IMPLICATIONS FOR SOCIAL AND ENVIRONMENTAL JUSTICE

The aim is to extend the research, in order to find out in what contexts:

- On line monitoring in this digital era (Stokols, 2018) could **help to protect habitats** for diverse species
- On line engagement could lead to more individualism and polarization (Rosenberg, 2002, Greenfield, 2015)?

I will draw on ‘Systemic Ethics’ (McIntyre-Mills, 2014: xi) to explain some of the research that underpinned the paper and that I understand that the potential for evolution is based on the interconnectedness of inorganic and organic systems. Webs of relationships are fostered across all forms of inorganic and organic life as recognized in physics. My reading of Turok’s (2012) book was helpful in shaping my understanding of the potential of quantum physics. I go on to explain that:

“ Each particle is in motion and it is the movement and flows of energy that make life possible. The transfer of information through DNA from one living cell to another is repeated in all living systems.....The human animal evolved through thinking about its thinking and being able to relate to others based on shared understanding and reciprocity.”

Importantly, evolution was the result:

“of both co-operation amongst human animals and competition for an ecological space where a tribe could live safely, eat, shelter and reproduce. When the human animal lived as a hunter- gatherer time was spent surviving. Around the camp fire in and near caves was the place for congregating and

communicating stories. But whilst men and women hunted and gathered roots, leaves and berries they communicated stories and maps to aid their success in hunting , gathering and surviving. By pointing out landmarks and telling stories (recalled by pointing to features in the landscape), history was held in the landscape and the land became the dreaming site.”

Donna Haraway (1991, 2011) blurs the dualisms of the human-nature-technological divide and reminds us of our co-evolution as human beings with companion species and how these cultural relationships shaped both human beings and other species. Haraway reminds us that we construct the boundaries by saying ‘we are the boundaries’ and as tool makers we have created a capitocene (2016).

We need to appreciate the systemic risks associated with the denial of our interconnectedness. In policy terms it responds to the ‘concept of existential risk’ by explaining that anthropocentric values need to be questioned as they pose a risk to living systems. Policy makers need to learn from the wrong turns taken by misunderstanding our place and role as stewards within natural systems:

“The focus on anthropocentric humanism and human rights has led to an unethical divide or boundary between the *human and the animal* (Irvine, 2007; Stanescu, 2012). The human being is seen as the controller of nature. But the divided nature of *control and compete* is only one part of the story. The continuum of relationships with nature and with animals needs to be seen as co-evolving. *Cooperation and nurturing* are the other side of the story. ... If animals can understand fairness and unfairness and are capable of empathy, then surely it is time to rethink the social contract, which is far too narrowly defined. The social contract extends rights and expects responsibilities to be fulfilled in return. But what about those who are voiceless, disabled, too young or without citizenship rights?” (McIntyre-Mills, 2014:2)

Nussbaum (2006) stresses that the social contract does not go far enough. She discusses the current limitations of social contract theory to protect those who fall outside the boundaries of the nation state or outside the parameters of state protection as they are non-citizens.

The notion that the mantle of citizenship should only be given to those of voting age and with the right to cast a ballot is problematic. The environment on which we depend is also entirely controlled by the voting citizens of nation states. In ‘Frontiers of Justice’, Nussbaum (2006) develops an argument for extending the social contract to those sentient beings who are not protected. Her starting point is to stress the need for individual capabilities to be protected, in order to be able to live a life worth living. Her argument includes being able to live in an environment that *supports a life in which capabilities can be achieved*.

Current debates hinge on whether cosmopolitan universal rights can be given to sentient beings as a whole or whether rights for human sentients and animal sentients should differ. Donaldson and Kymlicka (2011) link rights to habitat. Thus, the citizenship of domestic animals living in the household may be closer to the citizenship of human sentients.

The rights of farm animals to a life worth living and a compassionate end to life, would require a different approach. The rights of liminal creatures that share our city environments need to be protected and the so-called ‘nuisance factor’ should not always be allowed to override the interests of other species. The lack of tolerance of other species (facing the challenge of urban sprawl) has resulted in displacement, loss of territory and species extinction. We make these decisions at our peril. Without bees and other

pollinators, for example (Mathews, 2010, Woodcock et al , 2016) we face food insecurity. Cascading social, economic and environmental risks are now on a scale that pose a risk to living systems as a whole.

To build on a point made by Cochrane (2012, Cochrane and Cooke, 2016) shared interests go beyond usefulness as the fact that a group of human beings have a shared interest to earn money from animals does not place their anthropocentric desire for profit above the rights of creatures to be treated in a way that enables them to live a life worth living. Donaldson and Kymlicka (2011) develop the argument in *Zoopolis* that animals need to have their rights protected by linking rights to different spaces – the domestic and agricultural, the liminal spaces in cities and towns that we share with other animals and wild spaces. Donaldson and Kymlicka (2011, 253) cite scholars who think that the collapse of habitat and food resources will occur first and then our ethical choices will change. They re-emphasize that by 2025 there will be insufficient water and land to support meat eating.

Existential risks are the result of not recognizing our hybridity and interconnectedness. Dualist thinking pervades our consciousness and is reflected in socially unjust and environmentally unsustainable designs for society. Designs need to be supported by constitutions, based on a priori norms, and consequentialist or a posteriori approaches, based on testing out ideas within context and with future generations in mind. Current forms of democracy, governance and economics need to be re-framed by recognizing that we are interdependent. This is as relevant to nation states and to the wider post national regions of which they are a part.

In an increasingly interdependent world, climate change results in the displacement of people in numbers greater than those displaced during the Second World War, according to António Guterres, the previous UN High Commissioner for Refugees (2017). McLeman (2018:150) stresses that climate change will result in rising sea levels and it:

“...raises the spectre of trapped populations: large numbers of people unable to move away from areas that should be abandoned ...These people will include the rural and urban poor, especially single-parent households, and people who are elderly, infirm, unwell, or lack mobility. ... entire sovereign nations may one day physically cease to be habitable is a situation for which there is no precedent in modern history.”

According to Cochrane and Cooke (2016: 113):

“...cosmopolitans regard ultimate moral value as residing in individuals and their basic rights. By recognising that sentient animals also share this value and also share these basic rights, we are essentially extending the shared moral community to include all sentient creatures. In other words, it is sentient individuals who have ultimate value – not the collective institutions and associations that have been built around them.”

Balancing individual and collective species rights is one of the central challenges for democracy and governance. Learning to read and write requires learning the letters of the alphabet and the shared system of numbers that has enabled the development of the arts, humanities, sciences and mathematics. Learning critical systemic literacy requires many ways of knowing as suggested by Gregory Bateson (1972) in his book the ‘ecology of mind’

Many different intelligences can be employed to make sense of our world. Howard Gardner (2008) stresses the need to draw on diverse forms of human intelligence including: ‘bodily, linguistic, musical, mathematical or logical, naturalistic, spatial, interpersonal and intrapersonal’. But this does not go far enough. The kinds of intelligence of different animal species has been under recognized. Ackerman (2016) gives examples of the way in which species of birds solve problems , use and make tools and teach their young how to find food. This is a form of cultural transmission, based upon communication that goes way beyond mere signaling.

De Waal (1996, 2006: 164) argues that the so-called ‘tower of morality’ needs to be transcended by extending the circle of human⁵ morality and solidarity from “self, family, clan, community, tribe, nation, humanity to all life forms.” Planetary Passport begins where the paper on hybridity and interconnectedness (McIntyre-Mills, 2014:19) ends:

“New architecture for democracy and governance needs to extend solidarity and protection to all forms of life within a region ... rather than limiting protection and thus limiting human security which is dependent on biospheres not national boundaries expressed in policy design and our everyday praxis decisions about how and what we consume. Sociology needs to support intersectional understanding that human beings are part of a living system and that decisions that undermine life chances will result in violence that poses an ‘existential risk’ (Bostrom, 2011).

The concept ‘species’ is a central concern in relation to the issue of categorization, membership, displacement and decision-making (in terms of state sovereignty, territory, colonization and its implications for human, animal and plant life). As urbanisation encroaches on the wild spaces and displaces other forms of life, relationships that are Anthropocentric need to be re-framed to enable re-generation and sustainable living that is non-Anthropocentric.

The contributions made by Donaldson and Kymlicka (2011) to animal rights through exploring our relationships with other animals need to be given centre stage in redressing current political impasse in animal rights. Frans De Waal (2009) stresses the need to recognise that we evolved not only through our ability to compete but through our ability to cooperate and to show empathy to others and a shared sense of cross species community. Cross species rights are necessary for transformation to a more ethical way of life and for our collective survival. Shanor and Kanwaal (2009) and Sharpe (2005) have also shown that animals are capable of showing compassion within and across species. Unfortunately Huxley, Darwin’s colleague emphasised competition not co-operation when he discussed Darwin’s research. Humans evolved from primates and we share the capacity for empathy, reciprocity and fairness. In fact, we evolved through our ability to cooperate and not only to compete (De Waal 2009).

⁵ De Waal (2009) stressed that primates evolved through both the ability to compete and to co-operate. He stressed the importance of emotion and empathy for evolution in ‘The Age of Empathy’. He explains that the pillars of morality are empathy and reciprocity. Animals such as primates and elephants (and other sentients) are capable of making decisions based on a sense of fairness. Recent research at Stanford University shows how primates who are asked to perform specific tasks react when they perceive that some are expected to perform the same task but are given different better tasting food as a reward. Researchers found that the primates threw the food back at the researchers. Stanford research on non-anthropocentric approaches to fairness and unfairness shows that primates and other animals understand the concept of the fair distribution of resources and that a sense of morality and reciprocity guides the behaviour of primates and other animals (including human animals).

Thus, the emphasis is on developing a new basis for the way in which we live. The emphasis needs to be on what we all share in common, namely the need for food, energy, water, safety and the capabilities to live a good life. The social contract extends rights and expects responsibilities to be fulfilled in return. However, what about those who are voiceless, disabled, too young or without citizenship rights (displaced, asylum seekers or refugees)?

The notion that reciprocal rights should only be given to citizens who are useful has been successfully critiqued by Nussbaum (2006) who stresses that the way it has been used does not follow the intention of Rawlsian philosophy based on the notion justice as a form of fairness based on the ‘veil of ignorance’ which helps us to make decisions by which we would be prepared to abide if they were applied to our own lives. This basic notion of fairness should be applied in all contexts if justice is to be achieved.

PRAXIS APPROACH TO SUPPORT SOCIAL AND ENVIRONMENTAL JUSTICE

Transformative research is both ‘personal and societal’ (Mertens, 2017). The argument set out in this paper is based on a critical heuristics approach (Ulrich and Reynolds, 2010) that strives to make policy decisions based on enhancing critical agency. It upholds the axiom of the rights of sentient beings as a priori and normative. The legacy of Deborah Bird Rose on ways to live ecologically (Gibson, Rose and Fincher, 2015) informs this approach.

Transformative research begins with an assumption that social and environmental justice requires upholding the right to a life worth living and to ensure that sentient beings are not commodified and abused. The Paris Agenda (2015) – whilst hailed as a breakthrough for global security – does not go far enough, according to many of the latest estimates (Ricke et al 2018, IPCC, 2018). Rolling back adherence to this international agenda is worrying and is evident in the way that food, energy and water security are seen as issues that can be addressed through nation states, rather than as post national coalitions working in shared biospheres.

According to the UN the majority of the world’s population will be in Africa and Indonesia. A recent United Nations report projects that by 2050 most of the global urban population is expected to be located in Asia (52 per cent) and Africa (21 per cent) (United Nations, 2014: 11). These selected examples are indicative of the predictions made in this UN report and are directly relevant for the case made in this paper that current forms of democracy and governance are no longer relevant.

According to the previous United Nations High Commissioner for Refugees, Guterres (UNHCR, 2014), for the first time since the Second World War, the global figure for displaced persons has now passed 50 million and, by 2050, this figure could be as high as 150 million (Rusbridger, 2015, 13). The report stressed that currently more people are displaced than during the Second World War.

We face the inconvenient truth that we have normalised every day decisions that can be regarded as evil, because we are consuming resources in excess and we extend the mantle of the social contract to some whilst excluding the rights of non-citizens. Two potential approaches offer hope for the future. These are Structured Dialogue (SD) and pathways to wellbeing software (PW) informed by the same logic employed by SD which inspired the development of PW.

The political potential of scaling up the Aarhus Convention (1998) which requires that all members of the EU have access to information and the right to speak out on issues that have a bearing on the environment be heard, has been discussed (Florini, 2003) and extended in 'Planetary Passport' (2017) as a critical heuristic step toward a new form of governance and democracy based on discussing ways in which already existing policy and small pilots of alternative forms of engagement can be extended and applied.

This paper combines the insights detailed by Florini (2003) with a more widely applied architecture of local governance as detailed by UN Local Agenda 21 which requires that socio-cultural, economic and environmental accounting and accountability (triple bottom line) be applied. This would enable local residents and members of a wider post national region to have a say in matters that impact on social and environmental justice. Food security requires thinking about bio politics and how people can become more responsible and accountable.

Hanna Arendt stresses that critical thought is core to upholding justice. This is not the same as a post humanist approach, because it assumes the individual and collective role of responsible human beings. But what is missing in Arendt's work is an understanding of our ecological interconnectedness. This comes through drawing on the work of Donna Haraway (1984, 1991, 1992, 2010) who understands that 'we are the boundaries' and that all knowledge is situated. To address the ethical risks associated with partial knowledge we need to think about our thinking and we need to take action as ecological citizens (Shiva, 2012). Another critical systemic thinkers who have extended our ways of knowing and included the environmental context is Gregory Bateson (1972) who stressed the importance of level 1, 2 and 3 learning to include those who take on board the need to apply thinking to practice in a responsible manner that addresses both social and environmental justice

Neoliberalism has delivered freedom within democracies for some citizens, namely the elite with power and capital as well as the fully employed who have some job security. For non-citizens, those too young to vote and the 99 % who do not have the freedoms enjoyed by the elites, the notion of rights and responsibilities needs to be unpacked (Stiglitz, 2011).

The right to make decisions that are in the interests of the minority and at the expense of the majority needs to be explored. Voting in a democratically elected government requires ensuring that the right to a life worth living is secured within the state and its region. The notion that decisions about carbon emissions is one that a single nationally elected government can make decisions that impact the life chances of all living systems needs to be addressed. Supporting lower carbon emissions as required for human security necessitates working across conceptual boundaries of theoretical disciplines and spatial boundaries with the support of the public, private and civil society sectors.

To sum up, the axiological assumption for the transformative user-centric research is that change begins with the voiceless, not with policy elites. The constructivist ontology is one of understanding indigenous, local viewpoints and the relational epistemology relies on working with people to shape policy and practice (Cram, 2015, Cram and Mertens, 2015).

NEW APPROACH TO DEMOCRACY AND GOVERNANCE

Upstream and downstream users need to fish in the same river – this principle applies to oceans and to the idea that there are no boundaries when we realize the currents circulate the waste and it enters the food cycle. When we realise that the rubbish dumped in the ocean enters the food chain and plastic and chemicals appear on the dinner plate the notion of interconnectivity is highlighted. Similarly, when people understand that feeding farm animals offal results in high risks such as mad cow’s disease at worst or raised levels of antibiotic tolerance because unhealthy animals are fed a diet of antibiotics this brings the nature of the banality of evil to a new level. Systemic ethics requires that as individuals, we have rights but we also have to take responsibility for the common good. Individualism can be used as an excuse for private greed at the expense of the common good. As Whitehead (2018) stresses in ‘living theory’ we need to learn from experience and all experience is situated. Furthermore, we create our futures through the constructive or destructive decisions that we take on a daily basis. We need so-called hybrid methodologies (Hesse Bibber, 2018: 17) to begin a discussion of what constitutes the nature of the problem (ontological issue) and how to go about researching the issue (epistemological concern).

It is no surprise that Bolivia, an early signatory to the notion of earth politics and the notion that the constitution should protect the environment and the people who depend on Pachamama or ‘Our earth mother’. A coalition led by Bolivia with active support from Asia and Africa has achieved ‘change from below’ by recognizing that peasants and fisherfolk play a vital role in protecting food security:

The United Nations Declaration on the rights of peasants and other people working in rural areas (October 2018) notes that:

“The food crisis 2007-2008 provided a context for the United Nations to recognise the discrimination against the peasants and other people working in rural areas...”

What if we could become less tied to only limited ways of knowing? Turok (2012) stressed that the 26 letters of the alphabet have shaped our senses, but that new forms of digital media will lead to further changes in the way we relate to others. Greenfield (2003, 2008, 2015) cautions that digital changes may not always be for the better and emphasizes the need to be guided by norms that protect engagement with others in real time and face to face, not only on line. I stress that:

“... New architectures for democracy and governance need to be piloted to support re-generation (rather than merely sustainability) because the current system is so deeply problematic that it requires our *being the change* in our daily lives”. (McIntyre-Mills, 2014 :xxxiii)

A non-anthropocentric approach to democracy and governance that fosters the agency of the currently marginalized is needed to enable monitoring from below and above to ensure that those who are elected are held to account so that they fulfil their role to act as agents of the people and that collective responsibility is indeed taken to protect both people and the planet. One of the issues that needs to be faced is that too much power has been given to those who have been voted into power. Once elected they ‘forget’ that democratically elected leaders ought to be agents of the people and that the environment is of primary concern, not their personal political careers. Two potential approaches offer ways to improve democracy and governance. These are Structured Dialogue and pathways to wellbeing software (PW) is informed by the same logic employed by SD which inspired the development of PW. The pragmatism of considering ‘if then’ scenarios enables thinking through the possible implications of alternative options.

Critical systemic thinking and agency is core to social and environmental justice

Churchman's questioning approach (Design of Inquiring Systems' or DIS) is an approach based on critical heuristics or 'what if questions' that can be extended by means of scenarios to enhance engagement in decision making, in order to test out ideas with those who have lived experience. Openness to the ideas of others is important for democracy as is the need to continuously revise and adjust the way in which we live our lives in relation to one another and the environment.

The axiom to guide transformative research is that we can be free and diverse to the extent that our freedom and diversity does not undermine the rights of others. But we also need to accept that limiting carbon emissions will require a dramatic adaptation to reduce the harmful effects of climate change (Meadows and Randers, 1992, IPCC, 2018). To 'rescue enlightenment from itself' (McIntyre-Mills and Van Gigch, 2006), we need to realize that there are many ways of knowing. Logic, empiricism, idealism, dialectic and pragmatism (as West Churchman suggested) are some of the ways in which we can know the world. But these ways of knowing are situated (in the sense used by Donna Haraway).

Churchman discussed many ways of knowing but these need to be extended if we are to 'rescue the enlightenment from itself' (McIntyre-Mills, 2006). An appreciation of animal knowing, plant knowing, the value of the arts and being able to appreciate 'art in nature' is a starting point for extending the hierarchy of knowledge that Kenneth Boulding alluded to in his 'Skeleton of Knowledge' (1956). Transformation of values from individual human knowing to appreciation of collective knowledge and responsibility and then the leap to appreciation that anthropocentric knowing is far too limited and non-anthropocentrism requires ecological knowing.

Critical systemic thinking needs to extend social and environmental policy to take into account Bateson's (1972) level 1, 2 and 3 learning to addresses both social and environmental justice. Climate change impacts environments leading to displacement of plants, animals and people as cities encroach or droughts, floods, fires render areas unable to provide a liveable environment. This has profound ethical implications for everyday living choices and the impact is worse than previously understood (Ricke et al, 2018).

New architectures to democracy and governance need to be underpinned by systemic ethics, guided by structured dialogue and supported by block chain pathways (Wahlid, 2018). The pragmatism of considering 'if then' scenarios before making decisions is important.

Progress to date on new architectures for democracy and governance

This section makes the case that critical agency is vital to understand, monitor and evaluate everyday social, economic and environmental strategies that enable a life worth living (Nussbaum, 2011). Two architectures for participation and scaling up governance are discussed. These new architectures for democracy and governance use readily available tools and software to link local learning communities with regional and post national regional partners and networks. The policies that could make this approach possible already exist (Florini, 2003, McIntyre-Mills et al, 2014, McIntyre-Mills, 2014, 2017):

Table 1: New architectures to protect living systems and to support the global commons

	Structure	Process	Action
Micro-level individuals	UN local Agenda 21 (1992) and Aarhus convention (1998)	Questions raised and posed to local government by individuals	Local government, NGOS and individuals
Meso States and regions	Aarhus convention linked to global covenant	On line monitory democracy and governance to address state/market/civil society concern	Networking NGOs and INGOS to address representation and accountability
Macro Cosmopolitan governance	Legal structures to support the global covenant, Aarhus convention and Biospheres convention	International Criminal Court United Nations	Global action to pass laws to protect social and environmental justice in overlapping biospheres

Source Adapted from Florini (2003) and Archibugi in Wallace Brown and Held (2010: 322) cited in McIntyre-Mills et al. (2014:92) and McIntyre-Mills (2014: 7) in 'Reconsidering Boundaries', Sociopedia

Source: table 3.1. McIntyre-Mills, 2017: 148, 313 to address nodes (people, organisations) and to connect them to areas of shared post regional concern (Habermas,2001) through an on-line Planetary Passport⁶. The area of concern which a Global Covenant (Held, 2004) and proposed ***Planetary Passport to Protect People and the Planet*** needs to address is poverty, climate change, displacement of people and destruction of habitat. The PP could strive to balance individual and collective needs in line with a Global Covenant. Post national regions could be protected in the form of a nested governance system spanning the ***local personal level*** to the ***household, community, regional and post national regional level***. This could (perhaps) be achieved based on co-creating pathways (McIntyre-Mills and De Vries, 2011, McIntyre-Mills and Wirawan, 2017)⁷ to map and manage local resource systems (Ostrom, 2008) in context 'from below' based on self-reflection (through critical heuristics questions) to prompt decision making (Jackson, 2000).

Stiglitz et al's (2010) wellbeing stocks could be supported by enabling people to 'be the change' on a daily basis through the way they choose to live their lives and making social contracts through the on-line system to protect local resource systems. Their footprint can be monitored locally, and they can generate transformation locally.

The potential success of this approach is detailed (McIntyre-Mills and De Vries, 2011, 2014) and McIntyre-Mills (2019) explores the wider potential for redressing the cascading risks of climate change

⁶ The decisions are prompted by scenario guidelines. The daily living choices can be guided by means of an on-line engagement tool that helps decision making and enables the monitoring of social, economic and environmental choices. Positive and negative sanctions through monitoring could ensure that resources are fed forward to those in need and in the interests of future generations.

⁷ See the demonstration of the pathways to wellbeing software at https://archive.org/download/pathway_DEMO_1 pathways to wellbeing <https://archive.org/details/VN860546> ethics and design

and how the way in which the management of risks was indeed achieved through the Cape Town Provincial Government's use of a transparent water management application that succeeded in getting people to change their water usage in a very short period of time through a combination of shame and the wish to 'do the right thing' and to share resources in order to prevent 'day zero', the day when taps would run dry and the residents of Cape Town would need to stand in queues at approximately 200 proposed water collection points. The problem was caused by the high cost of implementing a desalination plant along with reservations about the appropriateness of such an option (despite the rising rate of immigration to the Cape). A further issue was the associated political friction between levels of government with different party-political affiliations. The use of structured dialogic design across political interest groups has been shown to be both appropriate and successful (Christakis, 2006, Kakoulaki and Christakis, 2017).

The 'monitoring from below' approach achieved re-generation of control by the people of a scarce resource. The potential for further monitoring by means of pathways to wellbeing software to achieve social, economic and environmental outcomes for social and environmental justice can be achieved.

This is a way to achieve re-generation with people in and beyond the usual structures of governance. This approach extends the social contract to ecological citizens who can log on to a new post national form of governance and democracy. It includes those who are currently excluded from citizenship – the young and the displaced.

Could Place Book provide a way forward to protect the marginalised and establish pathways to protect social, economic and environmental wellbeing stocks (in line with Stiglitz et al's policy proposal (2010)?

The focus of engagement is on protecting 'wellbeing stocks' a concept adapted from Stiglitz et al. (2010: 15) to refer to a multidimensional measure of wellbeing as detailed above. The concept is explained in 'Transformation from Wall Street to Wellbeing' (McIntyre-Mills et al, 2014) and Planetary Passport (McIntyre-Mills, 2017). The twofold aim is to:

a) **Protect diversity** and areas of common ground in the interests of current and future generations by focusing on rights and responsibilities to protect sustainable employment that ensures food, energy and water security.

a) **Explore ways to protect 'wellbeing stocks'** (Stiglitz et al, 2010) for current and future generations. In *Planetary Passport* (McIntyre-Mills, 2017) the case was made that democracy needs to find new ways to engage people to think about their rights and responsibilities to their immediate family, their neighbourhood and the wider region by enabling them to think about different scenarios for the future and making informed decisions by enabling them to think through the implications of choosing one or another scenarios, such as 'business as usual', 'making small adjustments' or 'living sustainably and well'.

Participants are asked to consider :

a) What they perceive they need to **add to** their lives to make a difference to mitigating or adapting to climate change, b) What they perceive they need to **discard** from their lives to make a difference to mitigating or adapting to climate change c) What they perceive are the **turning points** for the better or worse, what the barriers are and what services make a difference.

Telling a story and thinking about what we have and what we need and what we are prepared to add or discard from life is part of stepping into another conceptual space¹. The evaluation of the level of

importance of multiple and a simultaneously important issue is important by reflecting on one's life in terms of different scenarios and the consequences of these choices, for example:

- *I have* the following things in my life – understanding of human rights, respect for biodiversity, fear for the future/ hope for the future, a confidence, or lack of confidence, loss of home due to natural or other disaster, no family/ community support, responsibility to care for others and very high levels of stress.
- *I need* in my life – a home, a sense of safety, affordable food
- *I will add* to my life – more community supports from a range of services and /or more community engagement to lobby for resources, more connection to nature
- *I will discard* from my life – a sense of hopelessness , a sense of entitlement , excessive consumption
- Self-reflection on *the turning points* for the better or worse – hope that consumption can be replaced with greater sense of attachment to others and the environment
- *Consideration of the barriers* that currently exist and consideration of what could be done to transform society and our relationship to the environment

REBALANCING RIGHTS AND RESPONSIBILITIES AT MULTIPLE LEVELS

“The American Constitution instituted an admired system of checks and balances within government, but not beyond. So perhaps it is time to complete the American Revolution, worldwide, by instituting greater checks on private sector activities that have run out of control, in order to balance power across all the sectors ... each of us has to believe in something greater than our persons and our possessions if we are to protect our progeny and our planet.” (Minzberg, 2015: ii)

The notion of extending a sense of ‘ecological citizenship’ (McIntyre-Mills, 2017) could foster awareness of the need for democracy to revitalize the balance between the right to consume the planet to extinction and the responsibility to presence the common good. Rights need to be reframed as do responsibilities so that the economy and the market are seen not as an eternity but as part of the global commons on which this generation and the nest depends.

Nations currently refuse to take responsibility for the impact of their emissions on their neighbours – then we need to think about what that means for current forms of governance. If we can accept that climate, change is the result of collective decisions that constitute a normalization of living beyond our limits what does that mean for democracy and governance?

The big issues of the day, namely poverty and climate change cannot be addressed without collective responsibility. Hence, the argument that new architectures for democracy and governance are needed based on:

A priori norms – that ecological citizenship ought to protect current and future generations of living systems.

A posteriori measures – of the extent to which UN Sustainable Development goals are upheld and the Sendai Risk plat form addressed. Both these UN documents are based on the notion that individuals and organisations need to act in concert to address the goals across national boundaries.

The participatory approach needs to be underpinned by viable cross-sectoral governance to support regional development in line with this regional agenda. The outcome could enable decentralised evidence-based policy across sectors to address the SDGs. The community engagement approach could monitor the sharing of resources ‘from below’. Because block chain is a distributed network that can provide tracking, monitoring surveillance from below it can provide a means to empower the landless and the dispossessed (Nir Kshetri, 2017). It can also provide a means to balance individual and collective needs (McIntyre-Mills, 2017) and monitor the fair distribution of resources such as food, energy and water.

How can the commons be resourced by means of engagement?

Robust version of both forms of software could be shared by means of the cloud and downloaded from what Tom Flanagan (2019, pers comm) coins ‘Place Book’. The pathways to wellbeing prototype software enables data mining and presentation of data in terms of spread sheets that map gender, age specific and cultural aspirations and fears in terms of social, economic and environmental indicators of wellbeing. Thus, it enables responding to the UN Sustainable Development Goals and to address the concerns raised by the Sendai Risk Platform. The engagement processes enable policy makers to mine the data and to enable the policy makers to take decisions that respond to the fine grain details of local neighbourhood places. The geographic focus is most important if political parties wish to respond to diverse needs in cities, rust belts and rural regional areas.

Block chain could enable those who post and share data on specific areas of concern to ensure that the data cannot be changed (Al-Saqaf & Seidler ,2017, Kshetri, 2017). This ensures that people can express their ideas , in order to enhance representation, accountability and re-generation of their community/neighborhood. Thus block chain could provide a way to help with balancing individual and collective needs (Wirawan and McIntyre, 2019).

Instead of cyber security ‘from above’, the software can enable monitoring from below (McIntyre-Mills, 2000, 2006). By opening democracy to enable everyday local placed based commentary, the

aspirations of local communities can be understood by policy makers. Furthermore they can hold those they elect to account in between elections. The distributed ledger enables the cross checking to occur and makes hacking more difficult,

The software could be funded on a cost recovery basis by asking for a donation from each user (suggested amount 10 Australian dollars) for enabling the technology development and testing by working with them. In return they would have access to the pathways to wellbeing software which enables personal and community goals in terms of social, economic and environmental indicators of wellbeing. These can be material and non-material concerns. Cost recovery would be viable if a public, private and NGO organization were to take up the platform and agree to enable the testing, particularly if this is offset by Place Book (potentially linked with Face Book).

The value for organizations is that policy makers will then get a better idea of diverse needs of their electorates and service users. Furthermore , the needs of those who are nonvoters (young people and temporary residents, asylum seekers, new migrants) can also express their views. Given the level of disengagement and potential for populist discontent caused by the disconnect and distrust in governments this could be particularly helpful to address the issues raised in The Foreign Policy White Paper (2017:17) that stresses:

“Australia’s national interests are best advanced by an evolution of the international system that is anchored in international law, support for the rights and freedoms in United Nations declarations, and the principles of good governance, transparency and accountability”.

DEVELOPING POLICY IN PARTNERSHIP

The software development is not merely for personal productivity (although it has this potential), it is to resource the commons. By this we mean that it will be free ware downloadable and by users who can raise issues about social and environmental aspirations. These place book stories are available (as big data) to resource social movements and to inform policy makers of what people think at the local level.

The Cogniscope is based on Structured Dialogue⁸ to enable the in-depth meaning making. The process is suitable for 20- 40 people to find shared root causes of their perceived areas of concern and to shared ideas about how to move forward. The Cogniscope, supported by the network Global Agoras is aimed at finding shared meaning in smaller groups of policy makers who wish to explore areas of concern. They can perhaps take the data mined from place book (as proposed) and think through the root causes.

Both forms of software enable the capacity to think through options collectively to find pathways to a more sustainable future. It also enables statements that bring together many prospective service users concerned about local infrastructure needs, such as water and energy security, employment, education and health services across the age cohorts⁹.

FUTURE DIRECTIONS FOR DEMOCRACY AND GOVERNANCE

The potential study areas for a 'place book' study need to be selected in response to the predictions made in UN reports¹⁰. Increased socio-economic instability in urban areas and intense pressure on food security

⁸ `iframe width="560" height="315" src="https://www.youtube.com/embed/wkcKAw6NoKY?start=66" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe>`

The global agoras website is a repository of a network of academics and practitioners. Global agoras was set up as a resource as a result of a successful grant. The cogniscope software, like the pathways to wellbeing software needs some development expenditure to test it more widely and to iron out some glitches. Training in the use of the cogniscope is required, whereas the pathways to wellbeing software merely requires being able to use drop down menus and basic computing skills.

⁹ Examples of areas of concern that could be explored are ways to balance the budget and to meet the pressing needs for services for the different cohorts such as the elderly and young people who need a range of vocational training options. In Australia and the Pacific Region different cohorts in urban and regional areas need to be catered for. It is estimated that 4 billion people will live in cities and a further 2.5 billion people will become urban dwellers by 2050. Most of the global urban population is expected to be located in two regions – Asia (52 per cent) and Africa (21 per cent) (United Nations, 2014: 11).

¹⁰ United Nations Human Development Index. (2003). *A compact among nations to end poverty*. New York: UNDP, Oxford University Press.

United Nations Sustainable Development Goals, (2017).
<https://www.un.org/development/desa/publications/sdg-report-2017.html>

United Nations, (2014). *World Urbanization Prospects*:
<https://esa.un.org/unpd/wup/publications/files/wup2014-highlights.Pdf>

United Nations Declaration of the rights of Indigenous peoples, (2007).
<https://www.humanrights.gov.au/publications/un-declaration-rights-indigenous-peoples-1>

United Nations Office for Disaster Risk Reduction, (2017) http://www.preventionweb.net/files/55465_globalplatform2017_edings.pdf

United Nations Office for Disaster Risk Reduction, (2015-2030). Sendai Framework
<http://www.preventionweb.net/drr-framework/sendai-framework/>

are risk factors highlighted in the Australian Government's (2017) Foreign Policy White Paper 'Opportunity, Security, Strength. In line with the agenda stressed in this report this proposal focuses on the importance of promoting opportunities for women and young people within the Indo Pacific and wider region.

Budgeting requires responding to diverse needs and place based civic engagement could achieve civic renewal by providing snapshots of meaning provided by searchable software that provides SPSS spreadsheets. The matching of responses to individual contextual needs is vital and the group agreed that engagement with local people is vital. Elinor Ostrom stressed in her update (2014) to her Nobel Peace Prize lecture (2009) that contextual, polycentric, multiscale responses are best. One size, one flavor does not suit everyone. Matching design responses requires that people have a sense of purpose and they are involved in the process. This proposal is in line with the New Zealand approach that has recently stressed the need for a wellbeing budget to address multiple dimensions (Field, 2019).

To sum up the value of the proposal is that it will narrow the gap between service users and providers and enable greater congruence between governments and the people and places they serve. But even more importantly the local wisdom of groups of people who try out new ways of being the change can be shared more widely. One such example is perhaps developing an alternative currency backed by the water standard and litres of water 11 rather than being backed by a gold standard. This point has been stressed in South Africa where water insecurity is a very real threat to the way of life in both rural regional areas and in cities of varying sizes.

Dryzek et al (2019 citing Erkan et al, 2019) stress that:

“A major improvement to the deliberative system would involve enhancing moments and sites of listening and reflection and integrating these into political processes that are currently overwhelmed by a surfeit of expression.”

The notion of 'communicative plenty' in face to face dialogue held as public fora and on line dialogues can provide spaces for expression of ideas, listening, deliberation and collective decision making in terms of policy options or scenarios. These can provide the basis for balancing individual and collective needs. Pilots of both the above means of engagement¹² have been undertaken to address the concern raised by Dryzek et al 2019, Bächtiger et al, 2018 and

United Nations Paris Climate Change 2015 Conference of the Parties Twenty-first session Paris, 30 November to 11 December 2015 <https://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf>

United Nations, (2014). *World Urbanisation Prospects: The 2014 Revision* <https://esa.un.org/unpd/wup/publications/files/wup2014-highlights.Pdf>

¹¹ <http://thegreentimes.co.za/category/articles/green-living-articles/>

¹² Christakis, A. and Bausch, K. 2006. How People Harness their Collective Wisdom and Power to Construct the Future in Co-laboratories of democracy, Information Age. Greenwich. Christakis, A. and Flanagan, T. 2010. The talking point: A collaboration project of 21st Century Agoras. Information Age Publishing. Flanagan T. (2013). Blueprint for a Digital Observatory. Worlds Futures Forum, Montreal, Canada, Flanagan, T. & Christakis A. (2010). The Talking Point: Creating an Environment for Exploring Complex Meaning. Charlotte: Information Age Publishing, Flanagan, T. and Bausch, K., (2010). A Democratic Approach to Sustainable Futures. Emergence Press; Flanagan, T. McIntyre-Mills, J, Made, T. Mackenzie, K. Morse, C. Underwood, G. and Bausch, K. 2012. A Systems Approach for Engaging Groups in Global Complexity: Capacity Building Through an Online Course', Systemic Practice and Action Research. 25(2):171-193.

A case has been made for finding ways to respond to the diverse needs of residents who face cascading social, economic and environmental risks within so-called ‘resource specific settings’ (Ostrom, 2008). Deliberative democracy needs to be buttressed by legislation to protect crimes against people and the planet.

This paper makes the case to support local engagement to manage water, food and energy security in the interests of local place-based communities. In this way the principle of the Aarhus Convention (1998) which underlines the need for transparency, engagement and freedom of information if we are to protect the environment on which all living systems depend.

To sum up, citizenship (as it is currently applied) does not protect the rights of all sentient beings unless they are of voting age and they are recognised by the state as citizens. The responsibility as human species to act as stewards is overdue. Tragically the mechanistic view of the world with some human beings at the apex of the pyramid was used to justify the exploitation of powerless human beings and animals. The treatment of animals merely as food sources or ‘beasts of burden’ needs to be challenged, just as the voiceless sentient human beings need to be protected (McIntyre-Mills, 2014b).

Ackerman (2016) suggests that one of the many intelligences of fish and birds is in the ability to respond to the actions of those swimming or flying nearby and to make small adjustments to enable the whole to move forward. This is a sound analogy for balancing individual and collective thinking and practice, drawn from the obvious intelligence of other species. By making small adjustments in our thinking and practice, perhaps human beings can move towards a greater level of appreciation of one another, just as the fish and birds swim in schools or fly in flocks.

The idea that human beings have completely different brains from primates and other animals, birds, lizards or dinosaurs is increasingly contested by the evidence (Ackerman, 2016, De Waal, 2009, Donaldson and Kymlicka, 2011, Goodall, 1986, Kehoe, 2016). Research has debunked the notion of ‘bird brains’ lacking intelligence and (given their sentience) they too have rights that need to be taken into account when planning to address the habitat for wild creatures, liminal creatures who live on the margins and try to share habitat with us, farmed animals and domestic pets as stressed by Donovan and Kymlicka in Zoopolis (2011).

The wider implication is the need to make a difference by re-framing the way we live our lives. A further point to make is that the collective and common concern for water and food is a good starting point to enable the practical application of balancing individual and collective concerns. A forthcoming book ‘Mixed Methods and Cross Disciplinary Research: Towards cultivating Eco-systemic Living’ (McIntyre-Mills and Romm, 2019) addresses one of the Australian Government’s research priorities: “Environmental change”, which requires the integration of research outcomes from a range of stakeholders and disciplines to support the commons. Bollier and Helfrich (2012: xii) stress that as commoners we:

McIntyre-Mills, J. (2008). *User-centric design to meet complex needs*, New York: Nova Science, McIntyre-Mills, J. De Vries and Binchai, N. (2014). *Transformation from Wall Street to Wellbeing*. Springer, New York.

“need to “start seeing ourselves as commoners in relation to others, with a shared history and shared future” to create “a culture of stewardship and co-responsibility for our common resources while at the same time defending our livelihoods”. ... It asks us to think about the world in more organic, holistic and long-term ways...”

The IPCC formula (2013) stresses that the excessive consumption of energy resources affects the size of our carbon footprint. The energy footprint in turn creates cascading social, economic and environmental risks. The cascading social, economic and environmental risks associated with unsustainable consumption poses an existential risk. Our food choices are central to reducing the size of our carbon footprints. The footprint is defined in terms of: $E \text{ (Emissions)} = \text{Population} \times \text{Consumption per person} \times \text{Energy Efficiency} \times \text{Energy Emissions}$. It suggests that the privileged lives of some people living lavish urban lifestyles consume a range of resources that pose an ‘existential risk’ to all forms of life on the planet (Bostrom, 2011). Consumption based on living simply and ethically and well versus consumerism to express status are based on very different values and they have very different consequences for others and for the environment.

At a practical level the impact of climate change on water and food has been underlined by the most recent IPCC reports and the link with our current energy reliance on coal and petrol has implications for the size of our carbon footprint.

By concentrating on water (which makes up the majority of human life) , food (in which we are all interconnected in the web of life) and energy on which we depend for transport , heating, cooking and cooling.

Some human beings today are consuming resources at the expense of the majority in this generation and the next. Just as democracy evolved from the ancient Greek version that exclude women and slaves, democracy needs to evolve to include the rights of those who are currently excluded by the social contract.

The challenge we face is to achieve a balance between the individual and collective needs of living systems of which we are a strand (McIntyre-Mills, 2017a) and to find a practical way to ‘operationalise the capabilities’ approach through taking local indigenous wisdom and experience into account (Yap and Yu, 2016). Unless habitat is protected through global ethics buttressed through law, multiple species extinctions will become increasingly inevitable.

- To what extent current structures of democracy and governance are adequate for protecting the rights of sentient beings and appropriate habitats to support lives that are worth living?
- To what extent can current structures be considered to support the ‘banality of evil?’ (Arendt,1963) associated with every day decisions that undermine living systems and cause pain and suffering?

Valuing other species is a starting point for addressing the critical systemic risks that we currently face. The new policy document provided by the Department of Home Affairs 2019 ‘Profiling Australia’s Vulnerability: the interconnected causes and cascading effects of systemic disaster risk’ that frames the need for a ‘conversation about vulnerability’.

The participatory action research described in ‘Transformation from Wall Street to Wellbeing’ (McIntyre-Mills et al. 2014) grasps the nettle to: ‘address the challenge posed by the Earth Charter.

Designs need to be supported by constitutions, based on a priori norms, and consequentialist or a posteriori approaches, based on testing out ideas within context and with future generations in mind.

The circle of democracy requires respect for the balance between the individual and the collective which in turn requires ongoing adjustments through thinking about who gets what when why, how and to what effect and monitoring the decisions. This requires scaling up practical pilots of the prototypes discussed in this paper.

Key considerations

Key considerations are whether on line engagement could encourage people to think carefully through their options, rather than making rash decisions (Kahneman, 2011). Could it lead to polarization and narcissism (Greenfield, 2003, 2008, 2015, Kahneman, 2011, Rosenberg, 2002)?

The need for democracy to re-engage with critical thinking is vital. Is it possible for groups to be held responsible in the same way that an individual can be held responsible? Arendt's (1963) notion that collective responsibility is upheld when each individual engages critically with their everyday decisions. Could balancing individual and collective needs be achieved? Some researchers argue it is indeed possible to engage in large groups that foster collective decision making for the common good (or instance Flanagan and Christakis, 2010, Flanagan and Bausch, 2010, Dryzek et al, 2019, McIntyre-Mills et al 2014).

Critical engagement could be assisted through enabling people to think through the implications of their everyday choices. An early prototype (McIntyre-Mills, De Vries and Binchai, 2014) to enable this process has been developed and piloted.

The research could be extended, in order to find out in what contexts:

- On line monitoring in this digital era (Stokols, 2018) could **help to protect habitats** for diverse species
- On line engagement could lead to more individualism and polarization (Rosenberg, 2002, Greenfield, 2015)?

In Planetary Passport (McIntyre-Mills, 2014: 21) I stress that:

“The limited nationalist social contract is reframed through suggesting what if we could develop a planetary passport to protect the environment of which we are a strand? What if we could become less tied to only limited ways of knowing?...”

Greenfield (2003, 2008, 2015) cautions that digital changes may not always be for the better and emphasizes the need to be guided by norms that protect engagement with others in real time and face to face, not only on line

The research pilots were funded by the Australian Research Council and Local Government¹³. A demonstration of the prototype can be found at:

¹³ The software needs development into a robust version that could be scaled up and tested through participating organisations such as vocational education and training hubs in Indonesian villages that follow the ‘one village, many enterprises policy’. It currently has the facility to display spread sheets in EXCEL that could enable daily snap shots on social, economic and environmental indicators of wellbeing. My interest is in exploring engagement for the stewardship of diverse species habitats and finding a way to foster ecological citizenship through using a combination of critical heuristics and factual data to inform people of the implications of their choices for themselves, their family and grandchildren and to offer options so that people can make a living through ‘ecofactoring’ as suggested by Gunter Pauli (2010). This is why I have linked with an industry partner who heads Wirasoft and has a leadership role within the Indonesian diaspora. Could engagement in careful decision making about how people live their lives leads to decisions that encourage others to make social, economic and environmental decisions that are supportive of environmental concerns that go beyond the rhetoric of the UN 2030 Sustainable Development Agenda and the Sendai Risk Platform (2015-2030)? Perhaps it could be called ‘My Place Book’ as Tom Flanagan (pers com, 2019) suggested and if it was set up it could be used as resource to foster a multispecies stewardship agenda. In terms of innovation we draw on and adapt the principle of the ‘One Village, One Enterprise approach’, decreed by President Jakowi (2014) to enable working across sites to facilitate the mapping of opportunities and the cross fertilisation of ideas. Research needs to

https://archive.org/details/pathway_DEMO_1

The prototype software is explained at this website hosted by Wirasoft:

http://wirasoftfoundation.org/en_GB/web/sm-artenergy/wirasoft

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- make a practical a difference through a community development and community learning approach in line with the UN Sustainable Development Goals and extend the frontiers of justice (Nussbaum, 2006) to protect sentient beings and their habitat.
 - support gender mainstreaming which explicitly empowers women and young people through practical training to ‘earn while they learn and to grow a future’. Community Vocational Education and Training could be supported by local participating schools, colleges and universities using entry level practical training with partner organisations.
 - add to the literature on the production, consumption and re-distribution cycle and the potential to adapt and scale up the ‘one resilient village, one re-generative businesses.’ The link between expanding women’s agency and resilience will be explicitly addressed.

CONCLUSION: RESCUING THE ENLIGHTENMENT FROM ITSELF THROUGH RECOGNITION OF OUR INTERCONNECTEDNESS AND HUMAN AGENCY

A plea for a relational approach to protecting living systems is developed in Planetary Passport (McIntyre-Mills, 2017) and ‘Balancing Individualism and Collectivism’ (McIntyre, Romm and Corcoran-Nantes, 2017). The critical heuristics approach is vital to address the ‘banality of evil’ which now passes as commonplace governance. Today the markets are open but conceptual and spatial (geographical) borders are closed. This is the paradox that is not addressed in the name of ‘border protection’. The case is made (drawing on Shiva, 1989, 2002, 2012a, b) that sharing resources in common does not lead inevitably to the tragedy of the commons (Hardin, 1968) if the right design conditions prevail (Ostrom, 2008) and reciprocity, trust and ongoing monitoring by engaged local people occurs from below in line with post national conventions to protect people and the planet (Held, 2004)

Human capabilities can be extended through indigenous *ways of knowing* and *being*. These ways respect the interdependency of living systems, by expressing this relationship as family, spiritual connection and a sense of awe (Harris and Wasilewski (2004, Romm, 2018). ‘Rescuing the enlightenment from itself’ (McIntyre-Mills, 2006), discussed the potential for critical thinking to enable people to think through their rights and responsibilities. Critical reflection is the only thing that will enable people to avoid stepping back from their responsibilities to engage actively as citizens (not only of nation states, but as citizens of the world) who care about what is going on across the border. To rescue enlightenment from itself, we need to realize that there are many ways of knowing, but to protect food security ethical decision making is essential. Nussbaum’s capability approach is core to human agency for food security along with respect and stewardship of voiceless sentient beings. Her work dovetails quite well with Kymlicka and Donaldson (2011) in Zoopolis. Protecting habitat for human animals and other living systems is the logical next step to prevent existential risks to all. Safe passage across habitats in post national regions flows from this argument on new forms of architecture for governance. Ways of knowing as listed by Churchman such as ‘logic, empiricism, idealism, dialectic and pragmatism’ need to be extended to include other ways of knowing by drawing on nature. Wadsworth (2010: xxvii) poses the question as to: “what would a more life-enhancing system of research and evaluation look like?”

She then goes on to say:

“Although still dimly perceived by many, some of it ironically reflects some very ancient wisdom, now converging with some breath-taking new knowledge from physics, biology, mathematics, engineering, psychology and sociology in a transdisciplinary picture that may promise to give not just hitherto elites but all of us a whole new way of thinking about ‘how we can be with each other’ and our worlds.... (xxvii)

As such systemic ethics needs to be applied to all living systems based on the *a priori* right to a life worth living and the *a posteriori* responsibility to consider the consequences of their actions for other living systems as stewards. This is linked with human rights and has been stressed by deep ecologists, eco systemic thinkers such as Haraway (1992), Shiva (2012a, b) and Wadsworth (2011) and critical thinkers such as West Churchman (1972).

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