

DESIGNING A POLICY RESPONSE TO POPULISM AND THE ‘WICKED’ ISSUES OF EXCLUSION, UNEMPLOYMENT , POVERTY AND CLIMATE CHANGE

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1. INTRODUCTION : THE NEW POPULISM AND A PRACTICAL RESPONSE

The scoping paper addresses unemployment as a complex issue, because it has many, diverse, interrelated variables that are perceived differently by different stakeholders (Flood and Carson, 1993).

It suggests a multiple mixed methods approach Romm, 2017) to inform policy development based on a policy process that re-presents the voices of diverse stakeholders (Hesse Biber, 2010), in order to inform a response that takes diverse views into account and strives to find a way to find overlaps in interests or to recognize spaces for difference.

The wicked nature of problems (Rittel and Webber, 1984, Mertens, 2015) such as climate change, poverty, crime or unemployment is that *a solution* for some stakeholders *causes problems* for others.

Thus the approach is **not** merely to *explore debates* and *either or* dilemmas, but also to explore the feedback loops of policy paradoxes or governance aporias that show the extent to which problems are systemically interconnected.

Often political complications are involved in addressing unemployment in a world where divisions in life chances are associated with *growing inequalities between rich and poor* which are the result of **deliberate structural choices** made by **some at the expense of others**.

The paper builds on the argument developed in ‘Planetary Passport’ (McIntyre-Mills, 2017) and makes a plea for re-connection and re-membling our hybrid relationships with others and the land on which we depend. Developing a greater number of connections enhances consciousness (Greenfield, 2000, 2003, 2008). My research to date tests the extent to which mindfulness (based on enhancing the capability of people to think about our thinking) could help us to create closer bonds with others based on the realisation that we are interdependent and thus that we need to bridge differencesⁱ. The notion of the Mobius Band from the string theory workshop hosted by Louis Kauffmanⁱⁱ (2002, 2016) provided a metaphor for understanding our interconnections and interdependence on living systems (see also McIntyre-Mills, 2008). Pragmatic recognition of this fact could be the basis for working co-co-operatively to draw on diverse practical cultural wisdoms based on experiential knowledge.

In a re-designed economy people, animals and nature would not be treated as objects from which profit can be extracted without compassion or concern for their quality of life. The goal would be transformed from profit to re-generation of a living system of which we are stewards.

The ability to think about the environment of a problem, such as the lack of access to full employment by the younger generation who in turn face increased likelihood of never being home owners is one example of the changes that are occurring in the life chances across the Baby Boomers born after the war, Generation X, Generation Y and Generation Z.

Considering the different experiences of work for the different generations is a good starting point. In a forthcoming publication, ‘getting lost in the city’ (McIntyre-Mills, et al, 2018) these will be detailed in more depth, as this is a scoping paper:

- Baby boomers (aged 36-55 people born between 1946 and 1965) have experienced very different life chances in that they have had full time employment which has enabled them to save and plan for the future.
- Generation X (aged 24-36, 1966–1976) have had a far more difficult set of employment opportunities because of the lack of full time and permanent positions, whilst
- Generation Y (5-24 1977–1997) will face the challenge of learning new skills in order to remain relevant as designers in an increased mechanisation and automation.
- Generation Z (under 6 born after 1997) will face a world where climate change could impact quality of life in ways that are currently unforeseen unless they can ensure that food, energy and water security are addressed in ways that protect habitat for all species.

If we consider the life chances and experiences across these cohorts then we are likely to understand that the social determinants of wellbeing such as home ownership, full time, permanent employment will have an impact on how people understand the nature of work. The threat of unemployment as a result of lack of relevant skills is one that needs to be addressed through enhancing the ability of people to design responses to areas of concern. The rich 1% own almost as much as the rest of the population on the planet according to the latest Oxfam reportⁱⁱⁱ. When local people can protect local knowledge, local fauna and flora and habitat

then unemployment becomes less likely. In the wake of the Panama Papers (Chakraborty, 2016) that showed the extent to which elites hide their wealth in offshore accounts this is important.

After sketching out the background of diverse life chances between haves and have nots in developed and developing contexts, the paper suggests an alternative way to approach participatory democracy and governance that protects a biodiverse habitat to support a new form of economics and more inclusive form of employment that does not extract profit from the majority in this generation, in order to support minority elites. Overall the Human rights issues are being raised as a concern. The paper makes the case that the problem has been misrepresented as a result of a lack of understanding that in nature there is no waste and no unemployment, in a cascade economy no one and nothing is wasted^{iv}. We need to focus on the wicked problem of creating jobs and then link to the so-called blue economy and methodologically we need to address Pauli's visionary ideas to draw on examples of projects using, gender analysis, mainstreaming, participatory action research and engagement. The approach to governance draws on Foucault (1980) and Colebatch (2006) in that it extends beyond the state to include the wide range of groups that are affected by policy making. The idea is that those who are affected by a policy decision should be part of the policy making process. Thus the approach to representation is inclusive and based on testing out ideas. A critical systemic approach to policy design and governance intervention is developed by adapting and extending West Churchman's Design of Inquiring Systems to include the environmental issues associated with politics, age, culture and gender is raised in the paper. Thus the paper:

- **Focuses on a) addressing the issues of exclusion, unemployment, poverty and climate change challenges** and compares and contrasts issues of poverty spanning developed and developing nations such as Australia, Indonesia and South Africa. **b) a human development approach to enhancing capability.** It makes the case that because of the overlaps across categories that policies need to be more systemic and less containerist and categorical, based on the assumption that what we do to others we do to ourselves. 'More equal societies almost always do better' (Wilkinson and Pickett, 2009) and this requires treating others in the way we would like to be treated.
- **Outlines** a transformational architecture for democracy and governance and its relevance for sustainable living through job creation. Participatory democracy has been replaced by disengaged spectators who see global elites benefiting at their expense. Hulme (2009) stresses that governance through non state actors is also very important in shaping outcomes for social and environmental justice. Fear of job loss at a personal level or fear of being left behind economically at a national level are possible explanations for denial of the importance to address transformation in the everyday policy decisions that we make. It explores the implications of urbanization, loss of territory, loss of species and the implications for living systems of which we are a strand.
- **Develops** the argument that national and international law needs to underpin— a) re-generative governance within nation states and b) non-imperialist governance across nation states in order to support— c) local habitat and local wellbeing sticks on which local people depend. Currently, governance is at an impasse as representative democracy does not achieve a support quality of life **for the majority of people**. Governance (and democracy) have been hijacked to support corporate interests as a result of governments being elected with funding and support from capital— at the expense of people and the environment. It argues that trust needs to be restored by enabling monitoring from above and below, in order to balance individual and collective concerns^v. The paper draws on the argument developed in 'Planetary Passport' (McIntyre Mills, 2017) and 'Wall Street to Wellbeing (McIntyre-Mills, et al, 2014)^{vi} suggests that representation, accountability, sustainability and re-generation could be supported through governance architecture that could sustain both individual and collective needs^{vii}. I argue that the global financial crisis and the environmental melt down seem to be seen as two problems – not one. Human beings cannot achieve new growth through increased extraction of profit. Instead, they need to live elegantly and well through redistribution and simpler lifestyles supported by green economies, reciprocal sharing of resources and skills, supported by energy efficient systems^{viii}. The paper distills the arguments detailed to date as follows: The bricolage of governance architectures such as a) the United Nations Local Agenda 21, b) the United Nations Rights of Indigenous Peoples and c) the Aarhus Convention provide the minimal conditions that support both the principle of subsidiarity and Ashby's rule of Requisite Variety that could ensure and enable a more equal society by enabling people to test out ideas and to hold the public and private sectors to account. Creating more job opportunities (although vital) needs to occur alongside a robust willingness to keep re-inventing democracy and governance to keep up with the current challenges. Representative democracy based on voting in a government for a term of office does not achieve representation of the increasingly diverse nation states in Europe, America, Africa, Indonesia or Australia. Mobility has resulted in more and more people living in increasingly diverse city contexts.

Empowerment is a matter of achieving transformation through electoral change shaped by social movements and a process of re-framing based on decisions that are informed by empathy for others as well as rational research informed by a critical and systemic approach. We need to focus on the wicked problem of creating jobs and then link to the so-called blue economy and methodologically we need to address Pauli's visionary ideas to draw on examples of projects using, gender analysis, mainstreaming, participatory action research and engagement processes to enhance representation, accountability and the re-generation of social, economic and environmental resources.

1.1 Statement of the challenge: from building walls to an appreciation of our interdependence: representation, accountability and re-generation

The paper addresses the increasingly populist responses characterized by populist responses in developed and developing countries, such as the UK leaving the European Union because voters in the regional areas were concerned about employment and immigration. Rorty (1998: 38) foresaw the rise of increasingly disenchanted populations who see globalization as a means by which a cosmopolitan elite are able to shape the market in their own interests and who hide their assets with impunity.

The election of Trump and the rise of Fascism in the EU (indicated by the rise in popularity of Le Pen's Party in France needs to be understood systemically as a result of national policy and international foreign policy that is becoming increasingly containerist and less cosmopolitan in its approach.

Urban residents in inner city areas where they are exposed to diversity appear to have voted progressively in London for a Muslim Mayor and to remain within the EU. In London the proportion of people who are employed is higher than in more regional and rural areas where people have less hope of employment.

Similarly, in the USA big cities like New York are more cosmopolitan because of the concentrations of wealth than the rust belts of USA and the rural areas where people are less exposed to other cultures. In these contexts people voted for Trump^{ix}. Both Republicans and Democrats did not listen to the people. But the notion of dismantling caring for the commons, or to use the Australian Indigenous expression: 'Caring for country' has not accompanied his approach. The withdrawal of funding from Environmental Protection and Welfare are two obvious policy moves that have been made. Neither of these policy moves support the commons or the public good.

In contrast the urban poor population of Jakarta has become increasingly conservative. In Indonesia the backlash of populism results from the feeling that government needs to take into account the needs of the so-called 'little people' who have been displaced as a result of the destruction of villages within the city in the name of 'normalisation', slum clearance and protection from flooding. Ahok received support from the middle classes and elites in Jakarta for his modernizing approaches to city planning.

This has resulted in many people being re-settled from areas deemed vulnerable to flooding. They have used populism to shape the debate and to punish the architect of the removals, a mayor who was setting himself up to compete in the running for the next president of Indonesia. He appealed to the middle classes and elites, but not to the largely Muslim majority, many of whom had been affected by the removals in Jakarta. This is a context that helps to shape the election for the next president of Indonesia. Many of the mayors and senior public or private sector elites compete for this role. According to Jong (2016) the destruction of a sense of community and the sense of alienation has resulted in populist movements to oust Ahok by stressing that he is not a Muslim and that he has committed acts of blasphemy. The successful removal of Ahok^x needs to be understood within the context of the competition between haves and have nots, expressed in the cultural idiom of religion:

“The blasphemy allegation against Ahok has divided the nation and emboldened radical Islamist groups who claim to speak on behalf of all Muslims. It was also instrumental in causing Ahok's defeat in the April 19 gubernatorial election”^{xi}.

Trump's notion of addressing unemployment through building a wall to keep out people from Mexico or from Islamic nations expresses the challenge of the day faced internationally, namely the challenge to address social inclusion and social justice for all within increasingly diverse nation states.

Thomas Piketty (2015) has focused on class in his examination of the growing gap between rich and poor and although this is important, it does not go far enough in acknowledging the racial and cultural dimensions of discrimination.

Populist nationalism has expressed the us/them feelings in terms of racial stereotypes as evident in the exit of Britain from the EU, the election of Donald Trump, the increased conservatism in Europe in the wake of terrorist attacks which have escalated in the wake of the wars in Iraq and Syria.

How can a balance between individual and collective rights move beyond the anthropocentric human rights focus on social justice to a more non- anthropocentric approach to social and environmental justice? The aim of my research is to address every day decisions. The hypotheses briefly addressed in this paper are:

- The greater the level of A) local participation the greater the level of B) trust and the greater the control of C) the powerful who have their own monetary interests at heart.
- The greater the level of A) public education on Nussbaum's ten capabilities for a life worth living, the more likely B) people are to participate as active agents to protect their rights.
- The greater the level of A) participation through diverse forms of engagement to protect of local habitat and local living systems as stocks for wellbeing, the greater the B) level of local employment.

To sum up, participation through awareness and consciousness-raising (McIntyre-Mills, 2010) will influence the way in which people think about boundaries. Participation could help them to remake connections with others and the environment through valuing the environment and engaging in healthy relationships (Wynne, 1996). It is based on the notion of neural plasticity in that the brain shapes the environment and, in turn, is shaped by the environment (Bateson, 1972; Beer, 199; Capra, 1996; Greenfield, 2000).

1.2 Three cultural bases for human organisation

Humans evolved from primates and we share the capacity for empathy, reciprocity and fairness. In fact we evolved through our ability to co-operate and not only to compete (De Waal, 2009). Thus the emphasis is on developing a new basis for transforming 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. This is stressed by Nussbaum (2011) who uses the concept of capabilities and wisely avoids too much emphasis on culture per se. Culture is a way to adapt to an environment. It needs to be seen as responsive, rather than as a pre-given. Mary Douglas, a social anthropologist who has inspired systemic thinkers, distinguishes between what is perceived to be culturally 'sacred' and 'profane' and stresses that norms guide social choices and they are re-inforced by authority and religion. She argues from a so-called structural functionalist perspective and according to her, religion has a purpose and is functional for social order. The 'sacred' covers all aspects within the pale (fence) or the boundaries of a culture and these norms are regarded as 'ethical' and supported by civilised society. The 'profane' covers all those aspects that are *beyond the pale* and pertain to the wild, the 'untamed' or the uncivilised. So this argument begins to challenge the independence of religious values. In some contexts values are individualistic and this can support materialism and selfish decisions. In other contexts the group's values prevail because people are communal and this can support collective concerns. But God can be invoked to support both individual and collective concerns.

The San Bushman, for example draw on a sense of connection with the land animals and believe that egalitarian norms should prevail. They draw power from a sense of their interconnectedness with the land, animals and one another. Fiske (1992) extends the work of Mary Douglas and develops an argument that hierarchies and communal sharing characterize the two axes for guiding behaviour. These are in turn linked with different kinds of relationships associated with treating people as equals and distributing resources equally or alternatively giving a price or value based on benefits or entitlements. He sums up the relationships and ways of organising and implications for ethics and morality as: 'Community sharing', 'Authority ranking', 'Equality matching' and 'Market pricing':

"The motivation, planning, production, comprehension, coordination, and evaluation of human social life may be based largely on combinations of 4 psychological models. In communal sharing, people treat all members of a category as equivalent. In authority ranking, people attend to their positions in a linear ordering. In equality matching, people keep track of the imbalances among them. In market pricing, people orient to ratio values. Cultures use different rules to implement the 4 models..."

Both rational and emotional dimensions are important for ethics. When we place too much emphasis on culture and religion as a basis for the sanctity of choices we also have to deal with different viewpoints. This is problematic within Western culture and even more so across cultures. This is why I make a case that we are interdependent. Pragmatic recognition of this fact could be the

basis for working co-operatively to draw on practical cultural knowledges for the survival of living systems. In this paper I sum up 3 bases for human organisation (all of which can occur at multiple levels within and across nation states) as follows:

1.2.1 Implications of three bases for human organization for governance and re-framing economics

Trust	Power	Measurement
Face to face small sub group, organization or community	Large organization , network or society	Abstractions
<i>Egalitarian community</i>	<i>Hierarchy and networks</i>	<i>Conceptualization extends the power based on measurements</i>
relationships based on reciprocity	Managed by social distance or social mobilization	Commodification for extraction of profit ^{xii}
<i>Equality matching based on reciprocity and sharing (Fiske, 1992)</i>	<i>Authority ranking and equality matching (Fiske, 1992)</i>	<i>Market pricing (Fiske, 1992)</i>
Communal sharing	Authority based on a narrative of entitlement to enhance status, equality matching and /or the potential for violence (Fiske, 1992)	Money as a symbols of power ascribes value, based on measurement
Stewardship to sustain a way of live	Extraction of resources based on structural violence entitlement	Extraction of profit based on structural violence and market pricing

A way forward needs to foster more trust to narrow the gap between the powerful and the powerless, summed up as follows:

Three bases for organization to address the growing gap between rich and poor and the worsening social, economic and environmental conditions		
Local engagement to promote a sense of community to hold the powerful to account and to protect natural and social fabric	Constitutional protection to ensure that the powerful are held to account	Transforming the narrative to ensure that we do not ‘mis-measure’ our lives (Stiglitz et al, 2010)
Engagement spans arts, science, politics and forms of economics that protect people and the planet	Engagement includes sanctions to uphold the law	Engagement to include positive and negative sanctions to protect living systems
Monitoring ‘from below’ to protect people and the planet	Monitoring ‘from above’ to protect people and the planet	Changing the narrative to protect people and the planet through monitoring from above and below through public education to enhance representation, accountability and re-generation

1.3 Human development to enhance capability: from sustainability to re-generation

‘Sustainability’ refers to a sustainable local community is determined by a sustainable region in which food, energy and water supplies are considered as major determinants for wellbeing in ‘Wall Street to Wellbeing’ (see McIntyre-Mills, 2014 and McIntyre Mills, De Vries and Binchai, 2014)^{xiii}. But ‘Planetary Passport’ (McIntyre-Mills, 2017) makes a plea for leadership to support **re-generation** based on a recognition of who we are and goes beyond sustainable development (Girarde, 2015)^{xiv}. ‘Re-generation’ in this context refers to decision making that fosters biodiversity and living systems within shared and protected habitats. ‘Indigenous people’ and ‘Indigeneity’ are concepts that can empower and disempower? Who owns the definition? Whose reality counts? (Chambers, 1997)? A perspective that emphasizes Indigeneity puts the ‘last first and the first last’ (Chambers, 1983) from this perspective. Around the world Indigenous groups exist in different circumstances, some have political rights in the form of treaties

or constitutional recognition, some have land rights (often hard won through years of litigation), some have limited cultural rights recognized limited political representation. Some have none of the above, some are not minority groups, but they have survived a history of colonization and prefer to see themselves as Indigenous. This is why the United Nations GA 2007, Resolution 61/295 of 13 September enables self-identification. This is certainly the case in South Africa where the majority African culture describes itself as 'Indigenous' not just the smaller minority groups like the San and Khoi. Gunter Pauli (2010: 230-235) explains that natural systems do not work in linear ways. They are cyclical and abhor any forms of waste.

“Nature does not calculate cash flow. While we are obsessed with monetarization (to our own benefit) natural systems generate multiple revenue flows best measured in protein, drinking water, energy resources and defense systems. Nature produces benefit through the calculation of integrated benefit flow....” (Pauli, 2010:235-6).

Instead of valuing profit we need to think quite differently in terms of so-called wellbeing stocks (Stiglitz et al, 2010). Pauli (2010:236) then goes on to explain that the costs of the linear economic model cost inputs, through puts and outputs and externalize costs to society and nature and it does not disclose the opportunity costs to future generations of life. Sustainable local community is determined by a sustainable region in which food, energy and water supplies are considered as major determinants for wellbeing. No community can be expected to transform from a high carbon life style (or aspiring to this life style) without feeling part of the design process and owning the decisions as to how resources should be used. But if young people can be enabled to tap into 'eco-facturing' in a 'cascade economy' (Pauli, 2010) based on finding sources of abundance in nature and in the misdirected systems (Ackoff, and Pourdehnad, 2001) created by the current economy, then new possibilities can be created. Pauli (2010: 79 citing Peter Drucker stresses that: 'the needs of the poor are opportunities waiting for entrepreneurs.' Furthermore the contributions made by those who live simply and well need to be demonstrated and recognized in their planetary passport (McIntyre-Mills, 2017).

1.3.1 The Paris Agenda and the UN Declaration of the Rights of Indigenous people

The Paris Agenda for development (1992) stipulated that all development initiatives need to enable the participation of local people. This is supported by the UN Declaration of the rights of Indigenous people (1998) that stresses the rights of Indigenous people. It also enables Indigenous people to self-identify as Indigenous, namely people who are First Nations and who feel under threat in increasingly diverse nation states. This has been used a means to protect local habitat. The point of this discussion is that democracy and governance are in need of an overhaul. This reaction needs to be addressed through re-framing current architectures of economics, democracy and governance to enhance representation, accountability and re-generation of the environment through appreciating that: 'We are the boundaries' to cite Donna Haraway (1992).

The potential of enabling people at the local level to have more of a say needs to be explored to address the current impasse summarized below.

Through more monitoring *from below* local people can have more of a say in creating job opportunities. The Aarhus convention which stipulates that local people should have a say locally could be scaled up in combination with United Nations Local Agenda 21 policy and with support of the UN Declaration of the Rights of Indigenous people (1992) and the Helsinki Principles for equitable water management (Shiva, 2002) could make a difference – if they are co-ordinated into a new architecture for governance.

These three pieces of policy legislation could make a considerable difference to social and environmental justice. Each theoretical concept to inform the bricolage approach to transforming policy will be discussed in turn. Subsidiarity is the principle adopted by the European Union that policy decisions need to be made at the lowest level possible. This is supported by Ashby's rule of Requisite Variety (1956) which suggests that complex decisions need to match the complexity of the stakeholders. Or to put it simply, people need to draw on their own lived experience, in order to shape policy. Florini (2003) suggests the potential of the Aarhus convention. I have combined this with the policy potential of the UN Local Agenda 21 and other policies detailed below, such as Paris Development Agenda and the UN Development Goals. Thus the participatory action research aims to:

“[A]ddress the challenge posed by the Earth Charter: “Everyone shares responsibility for the present and future wellbeing of the human family and the larger living world” (cited by Hayden in Wallace and Brown, 2010: 368).

The challenge is to move beyond the rhetoric of cosmopolitan citizenship and to address both justice and sovereignty. The nation state needs to be held to account by an Earth Charter that is supported by overlapping regional institutions (supported by inclusive regional research institutions, policies, the rule of law including parliaments and courts). Co-determination in regions needs to be based on a new architecture for governance, democracy and ethics.¹

The Aarhus Convention (1998)^{xv} ensures that local people have a right to information and a right to speak out. It is a Danish convention that has been applied by other members of the European Union. They also have the right to be heard and if they are not heard then they can go to the EU parliament or court.

Unemployment needs to be addressed in ways that enable people to have a local say in the way that they live and work. But in order to prevent populist decisions, it is important to enable people to understand the consequences of their decisions through more local engagement in scenarios. I argue that this needs to be supported by local governments within post national regional biospheres. This approach could help to address the impasse caused by the limited measures to ensure that the rhetoric to support change towards a more sustainable economy is achieved. Key concepts for praxis

Triple bottom line accountability refers to Elkington's (1992, 1998) notion that social, economic and environmental indicators are required to prevent the pursuit of profit at the expense of people and the environment. Stiglitz et al (2010: 15) extend the notions of triple bottom line accountability to include the multidimensional measure to address the following dimensions of wellbeing stocks:

"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."

'Wellbeing stocks' refer to a raft of measures to protect people and the planet. The United Nations Local Agenda 21 (1992) provides a way to enable local governance to be scaled up to enable local engagement to address social, economic and environmental goals and thus could provide a way to address the UN Sustainable Development Goals.

The aim of the concept of wellbeing stocks is to enable people to re-evaluate economics and to become more aware of the way in which we neglect social and environmental aspects of life. The pursuit of profit at the expense of people and the environment is a central problem for democracy and governance. Similarly the Tuvalu test (Murray, 2007) is based on a deep understanding of interconnectivity of living systems and flows explains that policy decisions that influence every day choices have an impact on our neighbours. These impact on our global footprint which has a flow on effect for our neighbours. Arguments for and against the national, transnational and supra national organisations have been raised by idealists, pragmatists and realists. A way to bridge the divides is through expanding pragmatism to consider the consequences for current and future generations through addressing wellbeing and developing governance systems to ensure that stocks for the future are developed through limiting the way in which production processes and distribution practices benefit the minority at the expense of the majority.

Instead of opting for the liberal market economy it is possible to create a completely different economy based on an alternative approach where for example building materials are grown, collected, distributed and used for the production of sustainable housing, sustainable food, health care drawing on natural remedies and biomimicry in low carbon economies^{xvi}.

Specifically the research responds to the policy context^{xvii}, in order to achieve better forms of distributive governance to address the UN Sustainable Development Goals and adapted from Murray et al (2007) who developed the so-called 'Tuvalu test', Local Agenda 21, Triple bottom line accounting (Elkington, 1992, 1997) and in line with Hayden (2010: 369):

"United Nations Local Agenda 21 and variants that strive to scale up triple bottom line accountability not only at a local-level, but whether networks of local organizations internationally could effectively the approach. 2a Accept that with the right to own manage and use natural resources comes the duty to prevent environmental harm and to protect the rights of people. 9a) Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required. 10a) Promote the equitable distribution of wealth within nations and among nations. the Aarhus convention as a means to implement 13a uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest

He goes on to say that:

"13b supports local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making" (cited by Hayden in Wallace Brown and Held, 2010: 369)

"Common Future and UN Declaration of Human Rights and Earth Charter in particular - 4a Recognize that the freedom and rights of each generation is qualified by the needs of future generations. 6c. Ensure that decision-making addresses the cumulative, long term, indirect, long distance, and global consequences of human activities".

Shiva (2002) in her book 'Water Wars' also stresses that the future of governance rests on managing flows as does her book 'Making Peace with Earth' (2012). Her work on water management can be seen as a synecdoche for transformational governance

to support social and environmental justice. (McIntyre-Mills, 2017). In ‘Planetary Passport’ I discuss the way in which people previously connected with the land, because they relied on it for their survival in a much more direct way that they do today. This process of forgetting has resulted in extreme forms of thinking that externalize our impact on people and the environment. Water flow is a synecdoche for this approach to praxis for social and environmental justice. It explores the implications of urbanisation, loss of territory, loss of species and the implications for living systems of which we are a strand.

New designs need to foster human capabilities (Nussbaum, 2011) through learning that factors in the need to take living systems into account and to re-consider our place within learning systems. Human beings have controlled and determined the landscape of knowledge. The more powerful members of society become the custodians and determine what constitutes knowledge^{xviii}. Questioning the consequences of our choices for human beings and other living systems is a central concern for policy makers. When we reconsider the boundaries of what constitutes knowledge we need to realize that the capability to design responses to areas of concern rests on our ability to ask questions based on considering ‘if then scenarios’. The contribution made by West Churchman (1979) remains relevant.

1.4 Design of Inquiring Systems enables the extension of policy boundaries to address systemic problems

The Design of inquiring system (DIS) is a process that builds on West Churchman’s work (1971, 1979, and 1982) to enhance our capability to work with many different kinds of knowledge. It is a means to enable us to ‘think about our thinking’ and our practice and to enable us to ‘join up the dots’. It applies dialogue to consider ideas with stakeholders through asking questions in order to unfold ideas and values and to sweep in the social, cultural, political, economic and environmental factors. West Churchman’s student Werner Ulrich has design 12 questions which focus on what is the case and what ought to be the case, in order to guide better decisions. The stakeholders and the environment of the problem are considered carefully in the questioning process.

Ulrich (2010) distils the work of West Churchman’s DIS approach into 12 is /ought questions that help to shape boundary judgments when working with stakeholders and different kinds of knowledge (logic, empiric ism, idealism, dialectic and pragmatism) but it does not go far enough.

1.4.1 Ulrich’s 12 questions to enable policy design based on Churchman’s Design of Inquiring systems Boundary judgements

Boundary judgements informing a system of interest (S)			
Sources of influence	<i>Social roles (Stakeholders)</i>	<i>Specific concerns (Stakes)</i>	<i>Key problems (Stakeholder issues)</i>
Sources of motivation	1. <i>Beneficiary</i> Who ought to be/ is the intended beneficiary of the system (S)?	2. <i>Purpose</i> What ought to be/is the purpose of S?	3. <i>Measure of improvement</i> What ought to be/is S’s measure of success
Sources of control	4. <i>Decision maker</i> Who ought to be/is in control of the conditions of success of S?	5. <i>Resources</i> What conditions of success ought to be/are under the control of S?	6. <i>Decision environment</i> What conditions of success ought to be/are outside the control of the decision maker?
Sources of knowledge	7. <i>Expert</i> Who ought to be/is providing relevant	8. <i>Expertise</i> What ought to be/are relevant	9. <i>Guarantor</i> What ought to be/are regarded as assurances of successful implementation?

**The
involved**

	knowledge and skills for S?	and	new knowledge and skills for S?	
Sources of legitimacy	10. <i>Witness</i> Who ought to be/ is representing the interests of those negatively affected by but not involved with S?		11. <i>Emancipation</i> What ought to be/are the opportunities for the interests of those negatively affected to have expression and freedom from the worldview of S?	12. <i>Worldview</i> What space ought to be/ is available for reconciling differing worldviews regarding S among those Involved and affected?
				The Affected

Table 2.1: The boundary critique and questions. Source: Ulrich & Reynolds, 2010, p. 244.

Policy based on idealism is shaped by moral law. It is a priori, because the moral law sets out one's duty, based on *prior* decisions on what constitutes ethical behaviour. The test for the moral law is the being prepared to live with the decisions as if they were to be applied to oneself and one's own children. The policy implication is the need to develop our human capabilities as (Nussbaum, 2006) to think differently about Human capabilities – caring for people and the planet and to be less anthropocentric. Design for Biomimicry Development and de-colonization needs to foster re-generation and Gender mainstreaming.

Emergence is the ability to escape the trap of our own thinking, to cite Vickers in Beer, 1994: 252: 'the trap is a function of the nature of the trapped.' According to his theory of 'recursive consciousness we are able to emerge from our entrapment through making connections and realising that we have the capability to achieve transcendence as we become more conscious. One way out of the trap is to become more creative in our thinking and more open to learning from the environment, even if we do not mimic it! According to the biomimicry website. One way out of the trap is to become more creative in our thinking and more open to learning from the environment, even if we do not mimic it! According to the biomimicry website:

"Biomimicry is an approach to innovation that seeks sustainable solutions to human challenges by emulating nature's time-tested patterns and strategies. The goal is to create products, processes, and policies—new ways of living—that are well-adapted to life on earth over the long haul... Animals, plants, and microbes are the consummate engineers. After billions of years of research and development, failures are fossils, and what surrounds us is the secret to survival"^{xix}.

Bacchi (2000,2010) argues that the way forward is to characterise the discourse of women and marginalized groups as 'action words'. Social planning for women and other marginalized groups calls for practical ways to address 'us them thinking' to enable their life chances through transforming dualistic structures^{xx}.

If we are prepared to recognize opportunity, the potential for resilience and also our mutual vulnerability, it provides a basis for stewardship. We are all reliant on others and need to be able to depend on our connections with others in a cascade economy. What if we could recognize our vulnerability and what if we could foster a sense of caring for others that recognizes our humanity and our mutuality?

The cascade economy is based on emulating nature. Imagine a block of flats design to follow natural flows. Rain falls and is collected on roof top gardens where rain tanks channel water for drinking, grey water can be used to flush toilets and filtered to be re-used for growing food. Gardens could be extended to sides of building, on bridges across buildings and in basements. Natural materials could be used, such as mud, cow dung, thatch, bamboo. Termite mounds could be used as templates for designing air flow and maggots could be used to process waste. Maggots also provide wound care and a natural healing agent! These ideas and more are explained by Gunther Pauli (2010) and William McDonough^{xxi} who developed the Hannover Principles to encourage better design for living in 1992.

Those who live sustainably could be rewarded through measuring their low impact and be afforded points on a resilience score card linked with a passport which indicates transparently what a low footprint they have and the extent to which they are contributing to socially, culturally economically and environmentally. This is an active and practical way to become engaged citizens. It addresses the plea made by Piketty for transparency. It will make it quite clear that the poor are not the problem as far as global warming is concerned.

Instead of building unsustainable businesses, schools and universities a new approach is needed through a curriculum and infrastructure that supports education and training to protect scarce resources, prepare students in terms of literacy and numeracy

and address the current challenges—namely the need to feed and clothe a growing (unsustainable) urban population. A new transformational agenda is needed to meet the needs of young people and to prepare them in ways that protect and re-generate the environment on which they depend.

Kabeer's Social Relations Approach (see March et al 2005) helps to justify the policy-as-discourse argument in framing the interests of the marginalized (Chambers, 1983, 1997) by understanding that the duty of the state to provide a decent quality of life that supports Nussbaum's 10 Central Capabilities.

Her approach to 'institutional analysis' from the household, community, market and state provides the framework in which Nussbaum's Capabilities Approach can be analyzed to ensure gender equity is achieved by institutions (March, et al., date) spanning the state, the market, civil society including the volunteer sector, the community, and the family/kinship.

The state constitutes the Government, legal and security frameworks governing the state and the lower Government bodies and line agencies. The market includes such institutions as private businesses, both local and foreign, operating and/or affecting primarily the state's financial and economic affairs. The community comprises of all organizations directly and indirectly outside the realms of family/kinship. They may be formal and informal groups where families and individuals interact, depend on each other and take leadership roles, when afforded the chance. Lastly, the family/kinship level includes couples/partners, siblings, and extended families related both by consanguinity and affinity.

The institutional analysis enables discourse analysis (Bacchi, 2010) in order to support informed policy planning informed by Churchman's idea of 'sweeping in' as many interrelated issues as possible and unfolding the values of the diverse stakeholders by asking 12 questions that expand the sphere of the decision-making boundary to include the 'involved and affected' (Ulrich, 1994) in planning and design process.

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2. STEPS FOR PUBLIC EDUCATION TO SUPPORT NUSSBAUM'S 10 CAPABILITIES AND TO ADDRESS THE FRONTIERS OF JUSTICE THROUGH ENGAGEMENT AND CRITICAL QUESTIONING

To rescue the enlightenment from itself (McIntyre-Mills, 2006) we need to remember that good questions can only be asked when conceptual systems are open:

'The systems approach begins first when you see the world through the eyes of another', according to West Churchman (1979) and then he stresses we need to realize that that every world view is limited, including the so-called 'Systems Approach'!

Irony is evident in West Churchman's approach which is a good starting point for not taking oneself too seriously, in order to be open to listening to others. This is not to deny the importance of values or being concerned about issues, but it does require being open to hearing the ideas of others. Values and assumptions are the very essence of what it is to be human. Churchman is playing on the notion that our assumptions and values make us human. Our values can also shape what we regard as acceptable and unacceptable. The same holds true for other human beings^{xxiii}.

A more practical and systemic approach is vital. People who are excluded and traumatized as a result of their identity will see themselves in terms of being a woman, a refugee child, an excluded Black student from a rural background. Bryson (2016) stresses the need for sociology to take into account the views of African scholars who have contributed to politics and literature, such as the first African writer Tiyo Soga, the Xhosa Poet who wrote Nkosis sikilele and Pixley Ka Seme the lawyer who founded the

precursor of the ANC. This is important if we are to move towards appreciating the role of culture in shaping the identity of South Africans.^{xxiv}

The ability to work with many ways of seeing requires the ability to think about multiple texts and contexts and to develop a way to respect situated knowledges to the extent that the approaches do not undermine the rights of others or the environment. The notion that a good meal is meat and three vegetables, needs to be revised, even if it just acknowledges that Kangaroos are better adapted to the environment than cattle. The fact that cattle are dying of heatstroke in Australia is not an indicator only of the need to change the way in which we manage life stock, it is also necessary to think about what we eat and why. The high methane output of livestock impacts on emissions, so perhaps the wellbeing of living systems would be enhanced by eating more protein from pulses (Shiva, 1988) and mushrooms (Pauli, 2010).

Transformative education need to address the Areas of Concern, namely: Representation, Accountability and Re-generation through re-considering relationships with others and the land. In education this can be fostered through encouraging 3 Levels of Learning about environments Citizenship, as follows:

Level 1

- Working adequately within one paradigm but without the ability to think about the limitations of thinking in terms of only one framework

Level 2

- Comparing citizenship and other concepts across different contexts such as across time and place

Level 3

- Reframing citizenship and what it means to serve people and the planet based on understanding that we have three options for human behavior, namely: competition, co-operation and a realization of interdependence.

In rural and regional areas the local plant materials for example could be used for developing a range of products spanning pharmaceuticals, cosmetics, cleaning agents, building materials, fabrics, plant dyes, paper, bio degradable plastics, to name but a few examples. In urban developed areas the blue economy could be used to recycle and re-use materials for building sustainable housing powered by sustainable energy and supplied with carefully collected rain water to support indigenous plants wherever possible in the urban environment.

It is proposed that an additional subject is provided based on critical systemic thinking and practice from early childhood to secondary and tertiary level schools supported by the best teachers who foster education, along with apprenticeships from the age of 16, ongoing education until 18 and then full time employment opportunities linked with a series of education and vocational hubs spanning rural, regional and urban areas. Policy refers to who is included and excluded in the decision making on who gets, what, why, how and to what effect. Policy needs to be ‘tried out’/piloted through ongoing learning. Policy makers need to work with stakeholders in ways that explore their assumptions and values based on local, lived experiences of what works, why and how.

2.1 Co-determination in regions needs to be based on a new architecture for governance, democracy and ethics.^{xxv}

This user-centric policy approach starts with the axiological assumption that local knowledge is relevant and that the intention of policy needs to privilege the perceptions of service users to the extent that their diverse ideas do not undermine the rights of others. Policy this needs to be framed and re-framed, in terms of:

- Content, context, structure and process,
- A priori norms and a posteriori measures of performance,
- Many ways of knowing: logic, empiricism, dialectic and pragmatism

The suggested architecture detailed in ‘Planetary Passport’ (2017) is summarized below:

2.1.1 Architecture for governance in overlapping domains to maximize changes towards a more sustainable future

	Structure	Process	Action
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Micro-level Individuals	<p>Capabilities of human and sentient beings protected at the local level through agency and advocacy. Their rights to quality of life and the responsibility to protect decent standards through local structures need to be supported by the principle of subsidiarity and stewardship through an adapted form of the Aarhus Convention (see Florini, 2003; Nussbaum, 2006; 2011). Public education needs to enhance public advocacy and the application of Nussbaum's ten capabilities.</p>	<p>Questions raised and posed to local government by individuals who invoke the UN 2030 Agenda and linking personal troubles as public issues relevant to the whole of community spanning social, economic and environmental concerns (Layard, 2005) to support green democracy (Dryzek, 2010) , the global commons and human rights (Ertuk and Purkayastha, 2012).</p>	<p>Local government, NGOs and individuals (see Florini, 2003) to re-generate local habitat to support living systems</p>
Meso-level States and regions	<p>Aarhus Convention (1998) Linked to Global Covenant</p>	<p>Monitory democracy and governance to address state/market/civil society concerns from below (Keane, 2009) to protect human and animal habitat as part of a dynamic living system.</p>	<p>Networking NGOs and INGOs to address representation and accountability (Carens,1995)</p>
Macro-level Cosmopolitan governance	<p>Legal structures to protect the global commons and social justice (Hayden, 2010) Structures to support the Global Covenant such as a scaled up Aarhus Convention and Biospheres Convention</p>	<p>International Criminal Court and United Nations to support 'world environmental citizenship' (Hayden, 2010)</p>	<p>Global action to pass laws to protect social and environmental justice in overlapping biospheres informed by legal imagination and social engagement (Fourade and Savelsburg, 2006)</p>

Source: Adapted from Archibugi (2010: 322, cited in McIntyre-Mills et al., 2014 p 92 and updated in McIntyre-Mills, 2017 a,b,c)^{xxvi}

2.2 Transformation in praxis to protect the commons through engagement to protect living systems

The notion that organizational culture in the public, private and third or volunteer sectors either supports or undermines systemic learning is increasingly relevant in positioning sectors to respond to contemporary challenges in ways that reframe neoliberal economics, because it is based on a form of dualism that is not only unethical and unsustainable but inherently flawed. The increasingly rigid approaches to management within organisations do not lend themselves to the creativity needed to address the current challenges^{xxvii}. Ulrich's systemic approach to governance is the most helpful as it sums up Churchman's Design of Inquiry approach to planning and decision making and Bacchi's questioning are the starting point for debunking control from above as a first step towards protection the commons:

According to”(Bollier, D and Helfrich, S, 2012: xvii):

“The commons is a ‘discourse’ which helps get us outside the market economy ‘and helps us represent different more wholesome ways of being. It allows us to more clearly identify the value of inalienability – protection against the marketization of everything. Relationships with nature are not required to be economic, extractive and exploitative, they can be constructive and harmonious. For people of the global South, for whom the commons tends to be more of a lived, everyday reality than a metaphor, the language of the commons is the basis for a new vision of development....notwithstanding the longstanding smear of the commons as ‘tragedy’, the commons, properly understood, is in fact highly generative. It creates enormous stores of

value...the commons tends to express its bounty through living flows of social and ecological activity, not fixed countable stocks of capital and inventory”

Bollier and Helfrich (2012: xii) go on to stress:

“... We are commoners- creative, distinctive individuals inscribed within larger wholes. ... As the corruption of market/state duopoly has intensified, our very language for identifying problems and imagining solutions has been compromised...Such dualisms as ‘public’ and private and state and market and nature and culture, for example, are taken as self-evident. As heirs of Descartes, we are accustomed to differentiating ‘subjective’ from objective’ and individual from collective as polar opposites.Those either/ or categories and the respective worlds we use have performative force. They make the world. In their very moment we stop talking about business models, efficiency and profitability as top priorities we stop seeing ourselves as Homo economicus and as objects to be manipulated by computer spreadsheets. We start seeing ourselves as commoners in relation to others, with a shared history and shared future. We start creating a culture of stewardship and co-responsibility for our common resources while at the same time defending our livelihoods. The commons helps us recognize, elicit and strengthen these propensities. It challenges us to transcend the obsolete dualisms and mechanistic mindsets. It asks us to think about the world in more organic, holistic and long term ways...”

The ontology of the commons is about the nature of reality and how it can be regenerated in the wake of the dualistic ways in which we have thought about ourselves, others and the fabric of life of which we are a part. Instead of emphasizing sustainability as a form of ‘victory’, we need to think of it in term of interdependency and relationship (Weber, 2012, 12 and see Butler and Nussbaum).

‘Anthropocentrism’ refers to a human centred approach that disregards other living systems. The key concepts for a transformative educational approach need to be based on non-anthropocentrism. This means focusing on ways to protect the habitat of all living systems. The approach takes the next important step in the research agenda, to link the notion of relationships across humans, animals and the land as a source of Indigenous and non-Indigenous wellbeing and the broader societal need for environmental protection and effective ecosystem management of domestic, liminal and so-called wild or natural habitat (Donaldson and Kymlicka, 2011).

The Anthropocene is characterised by rapid urbanisation and unsustainable development. According to the United Nations World Urbanization Prospects (2014) in 2014, 54% of the world population was urban and by 2050 66% of the world’s population is projected to be urban if current trends continue. Better urban governance needs to ensure that cities remain liveable and sustainable during and after the development process^{xxviii}.

The historical decision taken in Paris to limit emissions below 2 degrees and to enable all 200 participating nations to agree is perhaps the most heartening decision this year, alongside the role of the German PM’s example of agreeing to take refugees from Syria, even if border controls were later tightened. It was an example of moral leadership^{xxix}. The challenge is to balance both the individual and the collective.^{xxx}

The so-called rational enlightenment agenda has created a sense of entitlement and rights without a sense of responsibility by the elites who have benefited from the system. It also could makes it clear which sectors of the global population are able to contribute socially, culturally, economically and environmentally through measuring their contributions and demonstrating the extent of the responsibility. The following table summarizes the challenges:

2.2.1 Transformation steps forward and backwards: impasse

Steps forward	Steps backwards
<ul style="list-style-type: none"> • Spirituality, non-anthropocentrism and appreciation of living systems • Indigenous notions of citizenship for protection of people and the planet • Protection of local knowledge , local habitat and biodiversity • Liberative potential of Aarhus convention for ongoing engagement – Florini (2003) and Benito Cao(2015) 	<ul style="list-style-type: none"> • Neoliberalism supports corporate citizenship supports property and commodifies living systems • Work continues to be characterised by a lack of permanency and short termism. • The potential breakdown of engagement through populism dulling the mind of the voter (Rorty 1999) • The cynical use of constitutions as rhetoric in Ecuador and Bolivia • Governmentality moves within the UN to use labelling and self-monitoring

<ul style="list-style-type: none"> • Liberative potential of constitutions that protect both people and the planet - Benito Cao (2015) and Michael Hardt (2009) • Training in democracy and political engagement beyond so-called representative democracy which is very limited – need engagement to ensure that people understand the implications of choices. This will make the populism of Trump^{xxxi} and Le Pen more transparent - Michael Hardt(2010) and McIntyre-Mills (2017) <ul style="list-style-type: none"> • Valuing human rights and capabilities for all sentient beings (Nussbaum, 2011) • By valuing living systems as the basic fabric of life (Vandana Shiva, 2012) • Universal Declaration of Human Rights • Earth constitution for Ecuador and Bolivia • Triple bottom line and wellbeing stocks need to be monitored from below and from above to ensure that they do not lead to ‘greenwashing’. • Legal architecture is needed to implement change. Water flow is a synecdoche for this approach to praxis for social and environmental justice. 	<ul style="list-style-type: none"> • Measurements of nature lead to commodification and greenwashing the notion of sustainable development goals • UN moving towards labelling and self-monitoring in the UN Global compact (2000) with less emphasis on corporate liability in International Criminal Court. Individuals and corporations can decide to change. • Lack of support for re-generation • Donald Trump road on the wave of concern about mechanization by stressing a nationalist response. In some ways his dismantling of the TPP s not a bad outcome as critics on the left have stressed that it was developed without respect for commoners.
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Source: Extended table based on McIntyre-Mills, 2017 in press ‘Recognising our hybridity and interconnectedness: Implications for Social and Environmental Justice’ *Reconsidering Contemporary Sociology*.

Spirituality refers to the sense of the sacredness of living systems and that human beings are part of a continuum of life. In pre-literate hunter gatherer society and agricultural society people relied on the seasons and the landscape for their survival and made sense of the world through myth, magic and religion. They reminded themselves of their links to the land through ritual and oral history sung and handed down from one generation to another.

This is the first step towards a sense of humility and compassion, rather than hubris and ruthless exploitation demonstrated by current exploitative economics, described by Kenneth Boulding (1966) as so-called ‘cowboy’ economics as opposed to economics to protect space ship earth. Despite the lack of gender sensitivity many of Boulding’s ideas are worth re-stating, in his words (Boulding, 1966: 6):

“The essential measure of the success of the economy is not production and consumption at all, but the nature, extent, quality, and complexity of the total capital stock, including in this the state of the human bodies and minds included in the system. In the spaceman economy, what we are primarily concerned with is stock maintenance, and any technological change which results in the maintenance of a given total stock with a lessened throughput (that is, less production and consumption) is clearly a gain. This idea that both production and consumption are bad things rather than good things is very strange to economists, who have been obsessed with the income-flow concepts to the exclusion, almost, of capital-stock”

The shift in governance needs to be towards new approaches to protect collective interests and the global commons within post national regional biospheres as detailed in Planetary Passport (McIntyre-Mills, 2017) as follows:

2.2.2 Evolution of democracy and governance to support trust and stewardship



	Ancient Public Administration	Traditional Public Administration	New Public Management	New Public Governance	New architectures for people and the planet
Accountable to	Subjects	Voters	Customers	Citizens	Living systems
Policy tool	Minimal	Direct	Contracting out	Co-production	Co-determination
Role of government	Rule	Row	Steer	Facilitate	Steward ecofacturing
Style	Royal	Post Autocratic Bureaucratic	Post Bureaucratic Competitive	Collaborative	Post national Cascade economies
Accountability	Leader	Hierarchy	Market	Network	People and the planet
Goal	Loyalty	Law	Results /performance	Relationships	Protection of wellbeing stocks

Source: Column 6 is added as new architectures to extend governance approaches outlined by Zeger Van der Wal, Flinders Symposium, April, 2016

Protection of so-called *stocks for wellbeing* (Stiglitz et al, 2010) ought to be the focus of economics. Human beings are a strand in the ‘web of life’ (Capra, 1996). In urban, secular society we forget our place in the universe and we need to remind ourselves of our dependency and interdependency. In modern industrial and postindustrial society people make sense of the world in terms of science and believe that they can design solutions to suit anthropocentric needs. We need to rediscover the wisdom of earlier human beings who understood their dependency on plants and animals.

The Sydney Peace Prize winner Vandana Shiva (2002) sums up the challenge for this century as one of preventing the commodification of life and stresses the need to learn from nature and across disciplinary specialisations. Transformative praxis needs to be based on critical heuristics and pragmatic action learning to address practical areas of concern based on questioning and an ‘ecological mindset’ Bateson (1972). This means working to achieve transformation from Level 1 learning based on thinking in terms of a specific paradigm to level 2 learning based on making comparisons to Level 3 learning that fosters thinking creatively and making changes to protect and re-generate the environment. The process for education of this type is based on listening and thinking in terms of the short medium and long term. World views need to be transformed though the will to identify with others and the environment. Habitat’ refers to the living spaces for human beings and other living systems which we share and on which we are mutually dependent in overlapping biospheres^{xxxii}.

The argument is that the election of nationalistic leaders and a return to tribalism is a result of an emotional^{xxxiii} ‘zero sum’^{xxxiv} responses to global markets that have protected the few at the expense of the many as demonstrated by Brexit and the election of Trump in two neo-liberal democracies that set an agenda for other electorates.

The central argument developed in this paper is that local people have always survived by living on local environments which they control. They are likely to protect these environments because they bear the negative consequences.

They are less likely to extract resources in ways that affect people and the planet in negative ways. This is evident if we consider examples of multinational corporations who pollute the environment, extract resources and damage the social fabric in the bid to extract profit in the short term. The organizational response to a problem may be to respond to the effects, rather than the causes of the problem. Churchman (1979, 1982) stresses the need to consider the environment of the problem.

So when considering institutionalized bullying and violence within workplaces, schools and aged care facilities, it is necessary to consider the wider structural context of violence and the way it plays out at a personal, interpersonal and interspecies level.

3. METHODOLOGY TO SUPPORT POLICY AND EVERY DAY DECISION MAKING THAT SUSTAINS A VIABLE ECONOMY THROUGH LAW AND GOVERNANCE

The terms intra, inter and cross disciplinary will be explored, this is one suggestion to consider (McIntyre-Mills, 2017):

3.1.1 Defining intra, inter and cross disciplinary approaches

Intra disciplinary	Inter disciplinary	Cross disciplinary
Working with the assumptions and values within a bounded system	Working across the assumptions and values across open porous conceptual boundaries	Working across the assumptions and value of bounded systems
Creativity is limited to a single paradigm	Creativity is fertilised through comparing , contrasting and creating syntheses and new integrations	Creativity is informed by respecting differences and spaces where diversity is fostered

In this paper the case is made that all three of these approaches has a role to play and that they can be seen to be supported by a Multiple Mixed Methods approach (Romm, 2017). The case is made that all three of these approaches has a role to play and that they can be seen to be supported by a Multiple Mixed Methods Approach (Romm, 2017). The concept of MMR helps to locate the approach of Expanded Pragmatism for ethical thinking and practice. Planetary Passport discusses research aimed at piloting and testing out new architectures for democracy and better governance through:

- **Addressing** the issue of a priori norms and a posteriori measures for transformation towards re-generative living.
- **Finding ways** to match social, cultural, economic and environmental decisions to perceived needs with a focus on food, energy and water security.
- **Narrowing the gap** between perceived needs and the way resources are distributed and the way it impacts on service outcomes.

Previously oral histories connected people to their place and the wisdom of the elders was handed down to the next generation through re-membling the vital social, economic and environmental information needed to survive. Cultural memory was aided by association with myths and landmarks. Ritual, song and artefacts reminded people of knowledge they needed to survive (Kelly, 2016). In pre-literate society knowledge was coded in many forms and could be recalled in more integrated ways albeit at varying levels of detail for those who were initiated.

3.2 Designing Policy responses to address exclusion, unemployment and poverty by enhancing representation, accountability and re-generation

We need to foster the ability to think about what, why and who is included or excluded. Matching the right design response to an area of concern is the challenge! This goes beyond merely thinking in terms of inputs, through puts and outputs and thinking about the values of different stakeholders who view the same area of concern through different lenses. When the area of concern spans many interrelated variables that are perceived differently by stakeholders with strong emotional responses, it becomes increasingly challenging to find answers unless one adopts a situated approach to address the contextual needs of those who are going to be affected by a policy decision.

This is why a great deal of my research to date has been undertaken to address decision making in terms of the principle of subsidiarity where decisions are taken by those with lived experience and (most importantly) by those who will be affected by the decisions in the short, medium and long term.

Transformative approaches' (Mertens et al, 2013, Mertens, 2016) refer to assumptions about power, the value of Indigenous knowledge the need to make life chances and the lack of life chances visible and the need to develop trusting relationships that are responsive to complex needs. The following table sums up my approach which draws on Romm (2017) who in turn draws on my research to conceptualise Multiple Mixed Methods Research that can be characterised simply as follows:

- Post Positivist approaches that try to combine methods to test hypotheses and find the truth
- Constructivist approaches that re-present narratives (See Hesse Biber,2010) to enable people to have a say and to define their own realities through their narratives
- Transformative approaches that strive for justice for people informed by
- Expanded pragmatism (McIntyre-Mills et al, 2014a, b, c). The approach to multiple mixed methods to address social exclusion is as follows:

3.2.1 Multiple mixed methods for transformation

Foundationalism positivist approach	Non Foundationalist constructivist approach	Expanded Pragmatist (EP) approach^{xxxv}	Indigenous paradigm	Transformative^{xxxvi} Paradigm
Ontology and Axiology				
Mirrors reality as closely as possible	Re-presents truth	Closest we can get to truth is through dialogue and testing out ideas with people ^{xxxvii}	Nature is vitally important and human beings are part of the natural world and return to it. History is written into the landscape as a result of choices made	Ontology is based on the notion that research has a purpose and thus social and environmental justice shape the way that research is designed.
Assumes truth exists	Narratives portray diverse life experiences	Expanded testing out of ideas	Nature is law. We are part of nature and we need to listen and learn as interdependent parts of a living system	Assumes that through participation based on strategic decisions change can be brought about through actions
Epistemology				
Scientific hypothesis testing and design based on experimentation	Ethnography ,auto-ethnography, psychodrama, art forms for expression participant observation and narrative, action learning, participatory action research	Participatory action research drawing on multiple mixed methods. Working across disciplines and respecting space for difference	Narrative and oral history, Science based on and informed by a respect for sacred ness of country.	Purposeful research that informed by the participation diverse stakeholders.

		Echoes the Popperian notion of testing but assumes that experts do not know best and that truth is mediated within contextual experiences and shaped by nature	Being, doing, having and interacting are everyday decisions that matter. Thinking is translated into practice in the everyday choices we make	Requires careful reading of the social, cultural, political and economic context.
Influences from literature and experience				
		Influenced by critical thinkers such as Spinoza, Deleuze and Guattari ^{xxxviii} , Foucault, Marxism ^{xxxix} , Habermas, Donna Haraway, West Churchman, Max Neef	Influenced by the Indigenous mentors,	Influenced by Paulo Freire, Donna Haraway, Yolar Wadsworth, for example
Implications of the approach for social and environmental justice				
Neutral – an approach that is difficult to justify if one accepts that all research takes place in a political environment But nevertheless plays a vital role in terms of providing a foundation for understanding a view about the world that has helped to extend many disciplines in the sciences	Priority is to give a voice to the silenced, in order to understand their reality and to appreciate and respect their views as a first step for policy and practice	Strives for better as in socially and environmentally just policy for people and the planet. Does not abandon ideals or the search for better decisions to address the limitations of an existing situation and existing circumstances. It accepts that we work with objective, subjective and intersubjective forms of knowledge.	Non -Anthropocentric Nature decides and stewards speak for country and advocate for its protection and re-generation. This goes beyond the sustainability approach because we are already living ‘beyond the limits’.	We are the boundaries and we can make a difference if we decide to find a way. These approaches can vary from reframing research to developing small pilots that demonstrate alternative ways of being, doing, having and interacting

Multiple mixed methods can be conducted across the full spectrum of approaches with varying emphasis depending on one’s assumptions, values and area of concern. Neo Marxists such as Michael Hardt make the case for the adaptability of human nature and culture.

4. SOCIAL EXCLUSION, UNEMPLOYMENT, POVERTY AND CLIMATE CHANGE IN A RANGE OF DEVELOPED AND DEVELOPING CONTEXTS: SKETCHING OUT SYSTEMIC ISSUES

This section focuses on addressing challenges through comparing and contrasting issues spanning developed and developing nations such as USA, Australia, Indonesia and South Africa associated with closing the gap between haves and have nots.

The ability to work with many ways of seeing requires the ability to think about multiple texts and contexts and to develop a way to respect situated knowledges to the extent that the approaches do not undermine the rights of others or the environment. What is the problem represented to be?’ (Bacchi, 2009).

‘What if’ we were to apply the policy ideas of Wangari Maathai, Donna Mertens, Vandana Shiva, Donna Haraway, Andrea Nightingale, Sharlene Hesse Biber or Deborah Bird Rose, Thomas Piketty and Gunther Pauli, who for example show leadership through re-framing policy that takes into account discourses, power and the importance of acknowledging the way in which people make sense of their world?

The sketches focus on addressing challenges by comparing and contrasting issues associated with closing the gap between rich and poor across a range of developed and developing contexts.

Similarly the sense of betrayal by the majority has resulted in increased populist responses in the UK, USA, Europe, South Africa, Indonesia where the challenges of making ends meet in an increasingly divided society have resulted in popular responses that are indicative of distrust in the elites.

Policy approaches need to address the complex context of cities, rural and regional areas and requires thinking about democratic engagement in developed and developing contexts.

This morning, for example I was teaching a student via SKYPE who is currently based in Kenya, Nairobi where he is currently undertaking research on the impact of urbanization strategies on habitat in partnership with UN Habitat, Flinders University and the University of South Africa. We have been inspired by the legacy of Nobel Peace Prize winner, Wangari Maathai and the implications for greening cities and protecting ground cover from the systemic ravages of deforestation detailed in 'The Greenbelt Movement' (2004) and 'Unbowed' (2007) in which she tells the details of her struggle to introduce the Greenbelt Movement to Kenya, despite opposition. Her legacy impacts the quality of life of current and future generations who are dependent on the land for their survival. Without ground cover erosion impacts agri industries and has a long term impact on the climate (Pauli, 2010).

I shared the story of my attending Open State, a meeting in South Australia for people who wished to share policy and business ideas or who had been invited on the basis of winning an award for research. The tent provided space for engagement and the experience was fulfilling for those who were invited to discuss innovation and ways to strive for a carbon neutral state. As I left the event I saw a group of Aboriginal Australians sitting in the shade of a tree on North Terrace. They were being questioned by uniformed police as they appeared to be 'lost in Adelaide', homeless and despairing alcoholics without a sense of purpose, despite being First Australians and members of a Kuarna nation whose 'country' is metropolitan Adelaide.

4.1.1 Sitting on common land outside a public gathering



What are the policy silences in the structure of 'open state events'? How could the situation be addressed? The country on which we were meeting had been their place long before Australian settlement. Acknowledgement of country is an obligatory courtesy that is nearly always acknowledged at State Sponsored events but the issue of constitutional recognition^{xi} remains unaddressed. Race remains a basis for discrimination within the constitution and recognition of First nationhood within this document could perhaps be translated into everyday interactions. The latest 9th 'Closing the Gap Report' stresses that whilst there has been improvement most of the health and employment benchmarks have not been met. But the numbers of Year 12 students who have passed matric has been met. Systemically this could have a flow on effect.

Significantly only 3 % of Australians are Aboriginal and Torres Strait islanders and it will take a few more decades for the numbers to return to pre colonization.

The following ABS projection did not mention that at invasion the numbers were in the region of 700 000 or more. Only in recent years living conditions have improved and more people are identifying as being Indigenous: "Aboriginal and Torres Strait Islander population may exceed 900,000 by 2026 (Media Release)"^{xii}

4.2 Developed contexts such as Australia, USA and France and less developed contexts such as South Africa and Indonesia

In Australia we have an aging population where increased dependency on welfare will place a burden on future generations once the Baby Boomer Generation draws down its resources.

Current data Megalopolis (2016) shows that welfare dependency has increased in Australia and that currently workers are facing increased levels of casualization of the workforce. 30 % of Australians do not have permanent employment. This casual workforce is employed in multiple jobs – all of which can be of a short term nature. The result is that people are unable to save for the deposit on a home or for their retirement. It is assumed by generation Z that the social wage and the pension are what they can look forward to. An added concern is that without home ownership this safety net provides slim security, particularly if unexpected

costs arise, such as the need to fix a vehicle or costs associated with illness. The availability of affordable social housing becomes another challenge for those without access to a vehicle, because much of the low cost rental housing is located at a distance from places of employment in metropolitan centres.

Students will also face the need to pay more for university education as subsidies to universities decrease as a result of funding decisions made in the 2017 Budget aimed at reducing Australia's debt.

Thus the challenges pose a deepening challenge in Australia that will have systemic implications for addressing wellbeing and risk if populist responses are to be prevented. According to the Budget for 2017 costs for Medicare will rise albeit it is proposed that the maximum charges will not be borne by those on lower incomes. Older Australians who have had casual employment are also at risk as they are reliant on the pension. Without home ownership at retirement they face the same challenges as the younger generation with the increased challenge of needing to pay more for accessing Medicare, the public health systems provided by the Australian government. The issues are summed up by Hillier (2017:3), entitled 'A federal Budget for business as usual':

"Over the last five years, house prices nationally are up more than 40 percent. Younger people in particular are being priced out, as evidenced by the decline in home ownership rate: a more than 30% drop for those aged between 25 and 34 and almost 20 percent for those aged 35-44"

Hillier (2017) goes on to quote the Australian Housing and Urban Research Unit figures on Melbourne alone which show that only 2% of the 5 billion expenditures are allocated to public housing.

Although the populism in Australia is minimal^{xlii} at this stage it is growing in terms of the way in which attitudes to outsiders is expressed in the media. The turn back the boats rhetoric remains along with a silencing of all those who work in the outsourced, off shore processing centres. The Australian Labour Party's approach in the past (and today) tends to put Australia worker's rights first, which has resulted in some recent moves to stress the need to protect Australian jobs for Australians and the rhetoric has become more strident in the wake of the election of Trump on a jobs for Americans and increased levels of Xenophobia for undocumented immigrants to America from Mexico and those travelling to USA from many Islamic countries.

Similarly in South Africa, xenophobic violence towards outsiders who fled as refugees from other parts of Africa, such as Zimbabwe and the DRC or Sudan, for example need to be held in mind when considering human security. In South Africa a rising number of people are without housing, without jobs and they have a sense of despair which is often expressed as anger and xenophobia. The welfare needs across the cohorts need to be taken into account through new approaches enhancing wellbeing and lowering risks so that people have hope for the future through better pathways to opportunities. So where to from here? How can jobs be provided for people in ways that protect both people and the planet? This is a discursive paper that explores other options

Bourdieu (1999:2-3) for example undertakes team ethnography of the experiences of diverse women and men living in close proximity and explores the ways in which they perceive their experiences in city environments. Instead of dismissing some of their views as 'deplorable' the team try to understand the context of their views. This approach is as important for politicians, social policy planners across the public, private and volunteer sectors if representation and accountability are to be achieved in ways that re-generate urban living where poverty is becoming more extensive and where people live not only in relative poverty which Bourdieu discusses, but are living increasingly in absolute poverty that is made all the more galling, because the life chances of the elite are increasingly visible through the digital media which results in increased levels of anger at their relative disadvantage:

"To understand what happens in places like 'projects' or 'housing developments' as well as in certain kinds of schools, places which bring together people who have nothing in common and force them to live together, either in mutual ignorance and incomprehension or else in latent or open conflict- with all the suffering this entails – it is not enough to explain each point of view separately. All of them must be brought together as they are in reality, not to relativize them in an infinite number of cross cutting images, but quite to the contrary, through simple juxtaposition, to bring out everything that results when different or antagonistic visions of the world confront each other – that is, in certain cases, the tragic consequences of making incompatible points of view confront each other, where no concession or compromise is possible because each of them is equally founded in social reason.... And we would not be faithfully representing a world that, like the world at large, has the distinction of producing innumerable representations of itself, if we did not make a place within the space of points of view for social categories that are particularly exposed to this ordinary suffering...from the particular character of their own point of view".

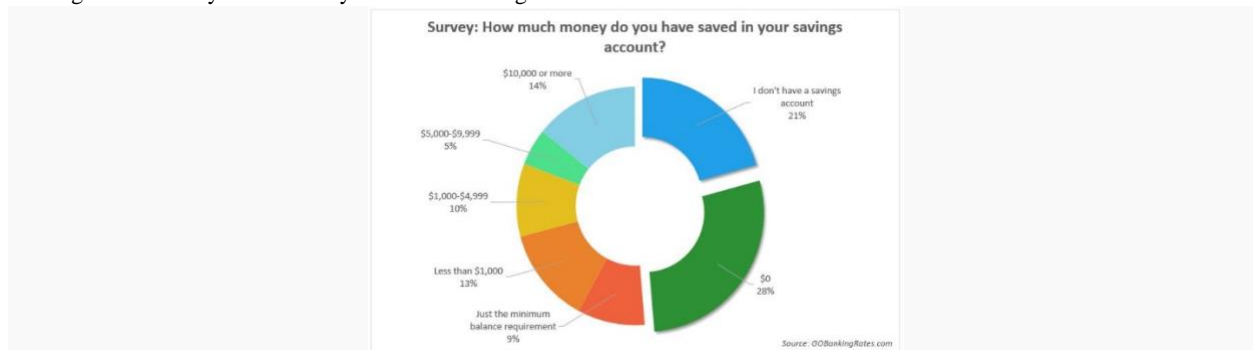
Mishra (2017) stresses that in the USA the anger of the excluded has resulted in the election of one of the most racist presidents:

"Never in human history have so many diverse peoples lived together as in our time. Nor has the appeal of democracy ever been so widespread. The promise of equal rights and citizenship held out by modern society has been universally embraced, especially keenly by people long deprived of them. But, as Donald Trump, the favoured candidate of white supremacists, becomes president of the United States, the quintessential multicultural democracy, the long arc of the moral universe, as Martin Luther King called it, does not seem to be bending to justice... His election victory was engineered by [Steve Bannon](#), the executive chairman of Breitbart News, an online site notorious for its antisemitism, racism, misogyny and xenophobia."

It is no co-incidence that Trump's election follows the Obama presidency (see Mishra, 2016).^{xliii} Despite his popularity expressed in the attendance of his outgoing speech, the people who voted for Trump feel that they need 'to make America great

again' and that elites have not served them well, hence the slogan: 'drain the swamp', gained traction for the 62% of Americans with under 1000 in savings.^{xliv}

Figure 1: Poverty illustrated by the lack of savings



Source: Kirkham, E. 2015. <https://www.gobankingrates.com/savings-account/62-percent-americans-under-1000-savings-survey-finds/>

Needless to say Kirkham (2015) stresses the need for greater savings, but in many instances people need debt, merely to make ends meet in urban and rural environments where earnings do not keep up with rising costs. Furthermore, poverty includes lack of access to a range of social wellbeing determinants that need to be factored into policies to address social and environmental justice.

South Africa is also not immune to the threat of resentments. Drawing on the World Wealth and Income site the Business Tech report^{xlv} cites data shared by Piketty and Emmanuel Saez. The report stresses that: 'the top 1% in South Africa had a fiscal income share of 19.2% of the economy in 2012'.

The Business Tech Report that cites their data and stresses that the rich are getting richer since the early 1990s. The same report cites the Oxfam SA report, entitled 'An economy for the 99%'. Business Tech cites Oxfam's report as follows:

"... the world's richest eight men own the same wealth as the poorest half of the world. Using data from the Credit Suisse Global Wealth Report 2016, Oxfam said that this inequality is more pronounced in South Africa as the richest 1% of the country's population have 42%, or \$272bn (R3.7tr), of the total wealth of \$650bn. The wealth of the richest 10% also accounted for 31% of total wealth, or \$202bn (R2.8tr), according to Oxfam. The remaining 90% of the population only account for \$175.5bn (R2.4tr) of the country's wealth. "Such inequality is the sign of a broken economy, from global to local, and lack of will from government to change the status quo," said SA Executive Director Siphon Mthathi, who is director of Oxfam.

In the same report Maathai added that:

"The recent State of the Capture Report revealed how private rich individuals influenced public policy and the allocation of public resources"

In the wake of Marikane, the people who remain without safe water, sanitation, electricity^{xlvi}, housing, education or employment feel that the ANC needs to do more to meet their needs.

Ramaphosa has been linked with the Marikane massacre of mine workers who protested about the garnishing of their wages by employers on behalf of debt collectors. The administration of the debt collectors was seldom questioned and the debts were paid out of wages that were needed to support workers in the urban areas and their extended families in rural areas. Zilla (2016)^{xlvii} stresses that class based political responses to the problems in South Africa are inadequate. A more practical and systemic approach is vital. People who are excluded and traumatized as a result of their identity will see themselves in terms of being a woman, a refugee child, an excluded Black student from a rural background.

Mishra (2016) in his essay on the 'Age of Anger' stresses that in South Africa people have 'lost faith in the state' because the elites in the public and private sectors are not accountable. The price of inequality –national and global –has escalated. For example in South Africa where access to education has driven the '#Fees must fall' and '#Fees will fall campaign' and the need to decolonize the curriculum is an expression of the anger felt by those who consider that Apartheid has made little difference in their lives.

The current state of the nation can be summed up by the following statistics. A quarter of the population is unemployed if the discouraged job seekers are included. Thus the South African Institute for Race Relations figure of 34.9% underestimates the full extent of unemployment. And According to Van Wyk, 2017:

"The unemployment figures put South Africa on a par with countries such as Greece, Senegal, DRC and Lesotho. And unemployment is four or five times greater than in Brics partners Brazil (7.6%), China (4.1%), Russia (5.2%), and India (4.9%)."

Van Wyk adds furthermore that ‘half of the unemployed in South Africa are aged 15-24 ‘and ‘85.8% of the unemployed are black’. ‘More than half of the population’ are ‘without piped, clean water’ and ‘more than a third don’t have access to flush or chemical toilets’ (Van Wyk , 2017 cites SAIRR report) and goes on to stress that ‘20% do not live in a formal home’. Formal and informal housing need more clarification as the rural housing using sustainable materials such as clay and thatch are more appropriate in many ways and could be upgraded with appropriate technology that supports the environment. As detailed below the blue economy and biomimicry agenda could be explored to take into account the employment and training needs of the population.

Representation, accountability and re-generation remain the greatest challenges for democracy and governance. Rorty stressed that the Left needs to focus not merely on identity politics (which remain important) but that they also need to create jobs. Current social and economic agendas need to focus on ways to support the current and future generations through focusing on living systems and ways to re-generate life in rural, regional and urban areas.

Increased urbanization and education based on the ‘misdirected system’ (Ackoff and Pourdenand, 2001) of neoliberal economies simply focuses on doing the wrong thing right, to cite. It is estimated that 65% of the South African population live in cities ^{xlviii} and this poses a threat for food security (Battersby and Crush, 2014, Crush and Fayne, 2010, Frayne et al 2014).

The future for South Africa lies in developing learning organisations and learning communities where people feel that they have a right to a voice and where they do not only participate in vertical democracy through elections that vote in elites who then lose connections with the people they are supposed to represent. So the future lies in participatory democracy and more direct interventions for re-generation^{xlix}.

The problem in South Africa is that debt is being used to bolster education. The 2008 financial crisis has been blamed by Mogajane based in the SA Treasury. The spending cannot be maintained as current levels of SA debt are at 48% of the GDP (Mogajane, cited by Van Wyk, 2017). But the issue is exacerbated by national debt and the need to draw money from other public spending needed at the provincial level for housing and infrastructure. It is also exacerbated by the debt which each student who has a loan from the National Financial Aid Scheme will have to repay. The likelihood of defaulting students is high and this will lead to the end of the current system of education.

Tertiary education is a focus of attention, but primary and secondary schools are also in crisis as a result of the number of students who cannot be accommodated by existing schools.

Internationally higher education needs to be expanded beyond university education to address the Vocational and Educational training needs of people. Instead of channeling all students into universities more training and apprenticeships need to be created spanning rural, regional and urban areas. Learning on the job would enable students to earn a living. Instead of trying to make a failing economy work, nation states need to:

- Draw on the inspiration of the ‘Blue Economy’ approach of Gunter Pauli (2010) ¹ and find ways to find sources of natural abundance in the natural and urban environment.
- Re-affirm their interconnectedness within overlapping regions.

In South Africa the resurgence of race-based politics featured in the ANC discussions on nominations for future leadership of the ANC. The ANC youth^{li} league stresses the need for radical transformation in the areas of education, employment creation and access to land. The decolonization of the education curriculum has become the cornerstone for transformation in South Africa based on a renewed understanding of the importance of Biko’s black consciousness political agenda and an increasing usage of the discourse of race, rather than the discourse of class which was favoured previously by Mandela. This is explained by a sociology Professor Mangcu at the University of Cape Town as a recognition of the contribution that can and must be made by black scholars. He cites Biko’s notion if a ‘joint culture’ for South Africa (see Mangcu 2016, p57 who cites Biko, 2004) and stresses:

“ The shared ‘text of Blackness’ could be the basis of a conversation between Black and White academics about what a new sociology might look like. His article is about decolonizing the subject of sociology but his discussion extends to the content of curricula, the nature of democracy and the governance of educational institutions: “Participation is the cardinal principle of democracy—not only because of its intrinsic value, but also because it increases the political efficacy of citizens by giving them direct training in the policies and tools of governance. Almost 200 years ago, John Stuart Mill suggested that this kind of democratic training is best obtainable at the local level, where citizens can make decisions about issues they can immediately relate to, and then generalize that knowledge to the broader, national political system.” (Mangcu, 2014: 31).

According to Crenshaw (1991:299):

“Recognizing that identity politics takes place at the site where categories intersect thus seems more fruitful than challenging the possibility of talking about categories at all. Through an awareness of intersectionality, we can better acknowledge and ground the differences among us and negotiate the means by which these differences will find expression in constructing group politics”.

Thus the concerns raised by Mangcu in South Africa about the focus on class in post-Apartheid South Africa could be addressed through more intersectional discourses that take into account the many different life chances experienced by people as a result of socio-demographics (race, culture including religion and language, gender, age, level of ability), economic aspects (class) and contextual political aspects (citizenship). If the roll of the dice determines that one is born in a context that favours or discriminates on the basis of one or many of these variables, then the life chances of individuals will be very different from the life chances of one who is politically privileged in this context. This is why national and international law to protect the capabilities of all are needed to uphold human rights.

What is needed in South Africa is a greater emphasis on core principles and engagement with the people in discursive democracy, as suggested by Mangcu (op. cit) but it is also a realization that unemployment has not been redressed in South Africa by means of a class based analysis that denies the relevance of other factors that also play a role. Gender, level of ability, language, class and culture as well as race played a role in terms of job eligibility in South Africa like elsewhere.

This engagement process needs to enable participation on a number of issues pertaining to identity and opportunity. Clearly being unemployed is a vital aspect of people's lives, but material living conditions are not the only determination. Arguably culture is relevant for women and it plays out differently for women who are white and middle class or black and working class (hooks, 1989). The ability to engage in a respectful dialogue can help to develop reconciliation based on telling one's story, listening deeply and acknowledging the experiences of the other and the consequences of our own thoughts and actions on other people's lives. This process was guided by Bishop Desmond Tutu in South Africa within a framework of trying to build a new South Africa. But laws that require respect, such as Racial Discrimination Acts also have a place and need to be maintained even when so-called 'political correctness' is called into question. It is evident that when people perceive that there is license to act out their xenophobia then acts of violence escalate from verbal abuse, subtle to legalized exclusion and discrimination, control of mobility, disfiguring and confiscation of property, physical violence and 'ethic cleansing'.

In South Africa the outcry against Apartheid control of labour movement resulted in sanctions and eventual transformation. In USA currently religious affiliation and national identity can be used to determine mobility into the USA. The mobility of people has always been less possible in global economies than the movement of wealth as evidenced by the reports of Panama Papers through Wiki Leaks (Chakraborty, 2016)ⁱⁱⁱ.

The invitation to Thomas Piketty to give the 13th Nelson Mandela Address in 2015 was appropriate as Piketty has stressed the need to narrow the gap between the rich minority and poor majority through greater levels of transparency and less opportunity for corruption. Piketty has studied the increasing gap in America and drew on his analysis and the lack of transparency in his lecture. As Piketty stressed in the Mandela lecture (2015) the data on money trails and wealth could be managed to ensure fairness and reciprocity. In some instances this would require some transfers to restore the balance. But although transparency is vital for public trust a further step is required, namely the need to protect the environment through everyday decisions. This was stressed previously by Wangaari Maathai in the 3rd Nelson Mandela Lecture.

All public education on global citizenship ought to support understanding the notion of stewardship for current and future generations of life. A systemic approach is needed to address the IPCC formula that underpins the increased consumption in an increasingly urban way of life:

$$E \text{ (Emissions)} = \text{Population} \times \text{Consumption per person} \times \text{Energy Efficiency} \times \text{Energy Emissions.}$$

This suggests that the privileged lives of some could lead to 'existential risk' for all forms of life on the planet (Bostrom, 2011). This is evident in the different ways in which human services are provided and the way in which for example water and energy is consumed in Cape Town.

- What are the links between use of scarce resources, sustainability and inequality?
- Can living more simply promote sustainability and minimize inequality?
- What are the views on consumption-related ethical decision making in South Africa?

The New World Governance Report (2017:30) for example stresses that in South Africa there is resistance by some elites to moving towards renewable energy as it is perceived to impact their business interests in coal, for example. Focusing on the consumption of food energy and water, it seeks to understand how participatory democracy and governance may shape personal practice in regard to sustainable living. This participatory action research provides interdisciplinary theory and models on consumption across the public, private and business sectors on 'caring for country'.

The Western Cape is suffering one of the worst droughts in the past decade and has moved to level 3 water restrictions as the winter rains were particularly low. The dams are at 47 % at this stage and no rains are expected until June/July 2017. This is the peak tourism season which adds to the water usageⁱⁱⁱ. The drought has been accompanied by fires. An average of 99 fires per day raged in the Western Cape during the first half of January according to a Cape Argus reporter (Latief, 2016)^{iv}. In a context of increasing anger concerning the lack of equity in social services some have suggested arson, others suggest they could be the result of a combination of factors such as strong, dry winds that ignite unattended paraffin stoves in informal settlements.

4.3 Transformation through multiple perspectives in multiple spaces spanning rural, regional and urban areas

In South Africa, for example instead of focusing on the rising school fees in traditional schools (ranging from over 200 thousand rand a year for boarding)^{lv} and the lack of places in the Tswane region in particular^{lvi} an effort needs to be made to re-frame education for a new economy that fosters the wellbeing of all within the wider region. The de-colonization agenda could be fostered to include action learning in a vocational curriculum that supports the blue economy and encourages students to learn about ways to re-generate the environment by making opportunities specifically for marginalized young people through a gender mainstreaming approach that fosters opportunities for all genders in supportive learning environments that respect and protect diversity. In Indonesia policy is needed to implement vocational educational pathways to employment within regional areas to protect agriculture and habitat.

4.3.1 Fostering Indigenous capabilities for a transformative economy by adapting the blue economy and biomimicry principles

‘What if’ a the curriculum for vocational learning were to apply the policy ideas of Wangari Maathai, Thomas Piketty, Vandana Shiva or Deborah Bird Rose who show leadership through re-framing policy?

In line with the Paris Declaration (1997) it needs to be framed together with co-researchers with local lived experience. The battle will be to protect living systems by human beings who can be co-opted by states, corporations or populism. Unfortunately co-optation tends to prevail. Both voluntary and post national structuralist interventions are needed to protect people and the planet. Voluntarism involves everyday choices about how we live our lives and what we decide to consume. Structuralism provides the legal and governance framework to ensure representation and accountability. Thus the Paris Agenda, UN Sustainable Development Goals, The Paris Climate Change Agenda and the principle of Subsidiarity (taking decisions at the lowest level possible so that local people have a say) are taken into account in this approach to governance. The approach to governance draws on Foucault (1980), Colebatch (2006) and Mertens et al (2013) in that it extends beyond the state to include the wide range of groups that are affected by policy making. The idea is that those who are affected by a policy decision should be part of the policy making process. Thus the approach to representation is inclusive and based on testing out ideas. The policy silences and the silenced people are placed at the center of this approach. Developing the cascade economy requires addressing policy to enhance representation, accountability and re-generation through re-framing governance. Instead of valuing profit we need to think quite differently in terms of so-called wellbeing stocks (Stiglitz et al, 2010). Gunter Pauli (2010: 230-235) explains that natural systems do not work in linear ways. They are cyclical and abhor any forms of waste.

Policy needs to:

- **Address gendered**, cross cultural perspectives on what it means or could mean to be an ecological citizen who respects multiple species and propose aspirational policies grounded in the necessity to protect current and future generations of life through the fair distribution or re-distribution of resources
- **Enhance representation**, accountability and the re-generation of social, economic and environmental resources.
- **Address the Australian Research Council’s research priority** ‘resilient urban, rural and regional infrastructure’ and ‘develop options for responding and adapting to the impacts of environmental change’ and
- **Contribute to expanding knowledge** through studies of human society by exploring culturally diverse ways of caring and stewardship.
- **Be inspired by original thinkers** such as Professor Wangari Maathai (2004b) who stressed in her 3rd Mandela Lecture:

“There are simple actions we can take. Start by planting ten trees we each need to absorb the carbon dioxide we exhale. Practice the 3R campaign (reduce, re-use, repair and re-use, which is mottainai in Japanese), get involved in local initiatives and volunteer your time for services in your community. Governments should prioritize technical schools and give people knowledge and skills for self-employment”.

Deborah Rose Bird stresses the importance of appreciating on Indigenous understandings of Nature^{lvii}. This approach could help us to understand what Gunter Pauli (2010) mean by the following statement?

“.. While we are obsessed with monetarization (to our own benefit) natural systems generate multiple revenue flows best measured in protein, drinking water, energy resources and defense systems. Nature produces benefit through the calculation of integrated benefit flow....” (Pauli, 2010:235-6).

Pauli (2010:236) then goes on to explain that the costs of the linear economic model cost inputs, through puts and outputs and externalize costs to society and nature and it does not disclose the opportunity costs to future generations of life^{lviii}.

‘The Blue Economy’ approach of Gunter Pauli (2010) outlines more than a 100 ways to create opportunities through environmental thinking that does not privilege the environment at the expense of people, instead his approach is to find ways to

enable the unemployed to benefit through working on environmental challenges. His motto is: ‘There is no unemployment in eco-systems’ (Gunter Pauli, 2016)^{lix}.

In many ways the visionary work has blind spots associated with gender mainstreaming within the political contexts in which he operates. In what ways are the examples of coffee production that also supports protein from waste appropriate in Zimbabwe? In what ways is the construction of a building based on termite construction inspirational? What are the implications of developing opportunities by and with people at the local level without addressing the issues of state capture? What are the issues associated with overcoming boycotts? What is the problem associated with being a-political? How can the re-generative approach maintain agency whilst remaining critical?

Mishra (2016) in an article about his essay on the ‘Age of Anger’ stresses:

“The problem for these critics of Enlightenment rationalism, as Robert Musil defined it, was not that we “have too much intellect and too little soul”, but that we have “too little intellect in matters of the soul”. We suffer even more from this problem today as we struggle to make sense of the outbreaks of political irrationalism. Committed to seeing the individual self as a rational actor, we fail to see that it is a deeply unstable entity, constantly shaped and reshaped in its interplay with shifting social and cultural conditions. In our own time, amid what Hannah Arendt described as a “tremendous increase in mutual hatred and a somewhat universal irritability of everybody against everybody else”, this fragile self has become particularly vulnerable to resentment.”

In Indonesia the United Nations Protection of Rights Working group has stressed that the rights of the disabled have received attention but the Wahid Institute stresses that abuses to religious freedoms could undermine the Pancasila notion of religious diversity and faith (Jong, 2016)^{lx}.

Thus the challenges faced by the most marginalized in cities are likely to grow as urban development strives to meet the needs of the urban elites. At first the citizens in Jakarta did not resist the recent removals^{lxi}.

The social fabric was important for their survival. I discussed this point with colleagues and was assured that the removal was essential for the protection from flooding. Indra Budiari (2016)^{lxii} comments:

“NGO Kota Kita has stressed that Jakarta is becoming a divided city and that the removals from Bukit Duri was indicative of this trend towards top down decision making.”

I returned to Indonesia after three weeks of research in August and early September to attend a conference in Solo and an Alumni conference in Jogjakarta. At that stage there was rioting in Jakarta^{lxiii}. The violence in Jakarta during November against Ahok did not surprise me, because Ahok moved people as a result of recent floods. The local people resented his removals and the way they were being used to foster his political agenda, namely to clear out the slums as a precursor to his political election campaign. Politically, when the time was right, the marginalised found a way to accuse him of being ‘anti Muslim and blasphemous’. This gave the necessary focus for venting their hostility towards his decisions and also an opportunity to try to discredit any attempt to use his position as mayor as a stepping stone to higher office (the presidency) in the next round of elections.

Sudarmo’s research (2008) on informal traders in Solo detailed the challenges of people living on entrepreneurial earnings who faced evictions by a bureaucracy that paradoxically wanted to beautify the city but were at the same time reliant on the levies from the traders to subsidize their salaries. The plan of moving people from the centre to the periphery was resisted in Solo because unless the traders remained near the centre they missed passing trade. Menders of vehicles were told that their spare parts and machinery were both an eyesore and caused noise. Those engaged in activities that were regarded as ‘morally reprehensible’ were also advised that they should move.

5. ENHANCING THE CAPABILITY TO BALANCE INDIVIDUALISM AND COLLECTIVISM

This can be achieved by enhancing human development and the capability to be actively engaged in shaping the future. The difference between the natural system and the human capability system is that people do have choices. The capability to be destroyers of socio-cultural, political, economic and environmental systems or creators is based on will and on values.

This remains an area that is vitally important and it cannot be glossed over. Even though natural resources are limited, human beings have the capability to envisage a different future, but dreams need to be practical: people need to reuse and re-generate resources so as to eliminate waste. Pauli stresses that he does not see carbon as a problem as it can be used as a resource. Instead our wasteful, linear thinking is the problem. Economic performance is determined by the capabilities to maintain the cyclical ecological system or cascade economy. In a cascade economy production and consumption are efficient and effective in order to minimise waste of people and resources.

Economic performance is understood as a flow that assembles ideas like the polymers assembled by the spider who weaves its web by re-assembling the parts to form and re-form the whole.

The re-use and re-assembly of resources is encouraged to enhance the protection of living systems and wellbeing stocks rather than emphasising production. The Planetary Passport (McIntyre-Mills, 2017) is a means maintain and re-generate wellbeing stocks. Production and consumption are indicative of GNP but the focus is on maintaining human and natural resources.

Boulding (1956) and Pauli (2010) distinguish between renewables and non-renewables. Stiglitz et al (2010) stress that economic performance is less important than protecting the fabric of life on which we depend. But Pauli goes further than Stiglitz et al to suggest that a paradigm shift is required to appreciate how economies can be seen as flows that abhor any form of waste. Thus wasted opportunities are important. Unemployment, social and environmental injustice are not externalities in this approach, they pose challenges for policy makers and academics who need to decide if they are going to be part of the problem or part of the solution. Praxis is not a spectator sport and it needs to avoid being blind to the differing life chances that flow from being male, female, educated, uneducated, black, white, a citizen, non-citizen and able to communicate or unable to communicate with powerful decision makers

‘Flows’ refer to the way in which human choices shape the landscape of our daily lives and need to be understood as part of the situated knowledges that are valued or discarded. What we choose to value is translated into being through our thinking and practice. The scope of the new architecture for democracy and governance is to make a plea for a planetary passport to enable us to rethink boundaries and relationships at multiple levels of democracy and governance through applying multiple forms of intervention to protect living systems. The capabilities approach on which this approach rests is non- anthropocentric and it provides a basis for addressing better governance to prevent discrimination against the majority of this generation and the next. Alternative ways of framing human-nature relationships in legal, ethical and spiritual terms are illustrated by the Bolivian and Ecuadorean constitutions in line with their belief in Mother Earth or Pachamana. Despite the fact that the rhetoric is undermined by the political reality of ‘business as usual’, it provides a first step.

The next step is providing the necessary ‘planetary passport’ that aims to inspire loyalty to the planet. This is achieved through the following steps detailed in Planetary Passport to think through the implications of making every day social, economic and environmental decisions that support business as usual, making small adjustments and decisions to support the protection of wellbeing stocks for future generations.

5.1 This approach could enable greater transparency to ensure monitoring from above and below

The process acts as a monitoring system to protect living systems through enabling people to address the UN Sustainable Development Goals at the Local Government Level and recognising their contribution to protecting wellbeing stocks. This form of monitoring could enhance representation, accountability and sustainability and be translated into points through a resilience and stewardship score card. https://archive.org/download/pathway_DEMO_1 pathways to protect wellbeing and wellbeing stocks:

Scenarios along a continuum to address climate change and wellbeing ^{lxiv}	
a) Business as Usual, b) Doing too Little Too Late, c) Sustainable Future and wellbeing.	a) Not coping ^{lxv} , b) Just keeping it together c) Wellbeing.

Participants were asked to think about health, housing, employment, education and social inclusion within their communities. Our conversational structure to address complex needs is to consider the following:

What do I /we have?
What do I /we need?
What do I /we want to add to my life – the resources and networks?
What am I prepared to discard from my life – the resources and networks?
What are the turning points for the better and worse
What are the barriers?

Praxis aims to:

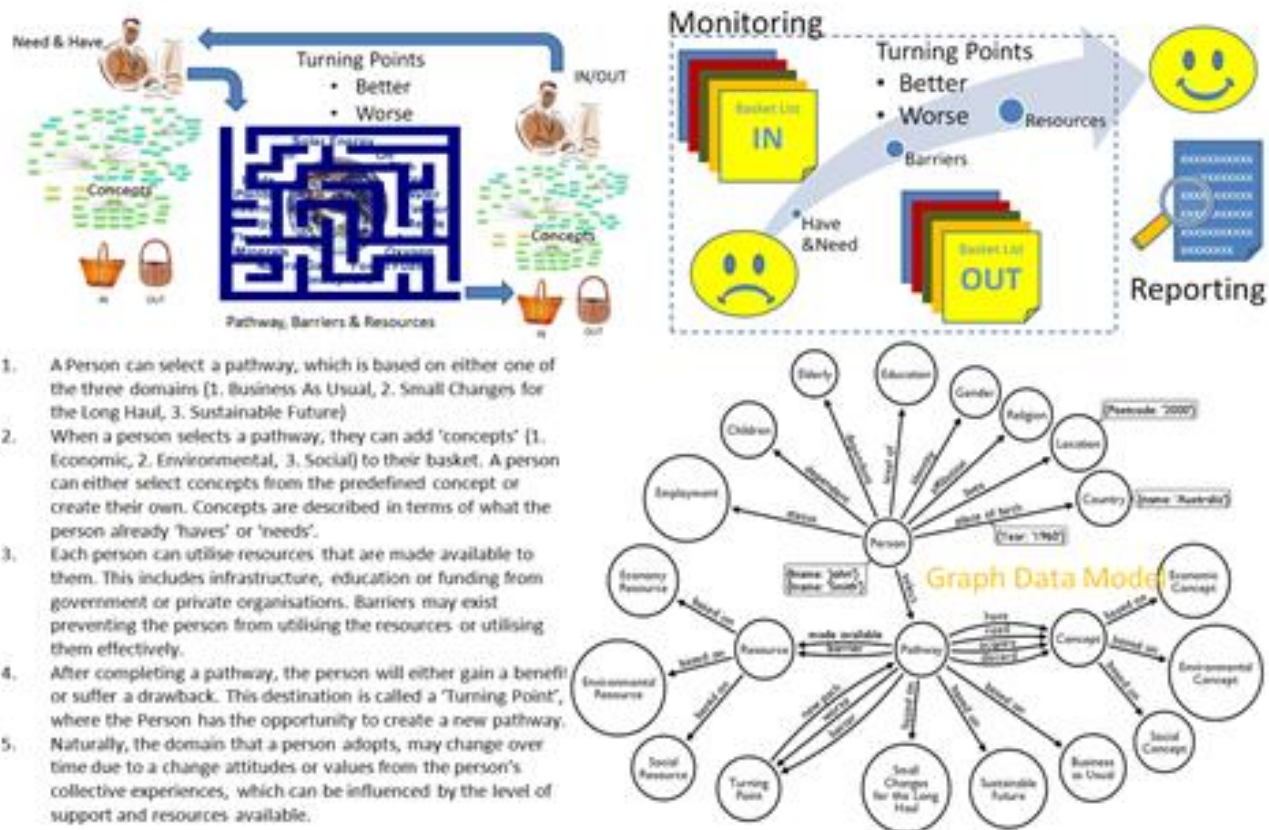
- **Build** the capacity of people undertaking policy research or implementing governance to think about the consequences of their choices for self, other and the environment.
- **Co-create** policy and governance literature based on testing the principle of subsidiarity and Ashby's rule of Requisite Variety and explores the policy implications for complex decision making.
- **Extend social** theory through re-framing and re-considering boundaries (conceptual and spatial) in relation to social and environmental justice.
- **Contribute** to systemic ethics by: a) expanding pragmatism through addressing 'what if' heuristics and 'if then scenarios' to enable individual self-reflection, group considerations and pilots of participatory democracy and governance. b) Considering i) identity and relationships, ii) boundaries and flows and iii) Policy decisions based on drawing the ethical line through questioning taken for granted ideas about the state, market and society together with those who are to be affected by the decisions that respect our relationships with others and the environment of which we are part.

The participatory design process and the use of metaphors and scenarios that were used in the local government research in South Australia was inspired and adapted from the Mont Fleur Scenario Approach (Kahane, 1992) used to inspire policy design for transformation in South Africa.

The scenarios included a) policy based on denial or 'the ostrich approach', b) policy based on doing 'too little too late' or the 'lame duck approach' or policy based on making small adjustments for the long haul or the 'flamingo approach'.

Participants are asked to consider the implications of policies along a continuum of denial, too little too late or making small ongoing adjustments towards using resources sustainably and living differently. In the Mont Fleur engagement process policy that pushes for more immediate and extreme changes is symbolized as the flight of Icarus too close to the sun. When addressing the scenario approach with Local Government in Adelaide South Australia it was adapted to enable people to think about 'business as usual' and not making any changes, making 'small adjustments' and living in ways that support wellbeing. The idea was to establish to what extent the engagement in thinking about thinking made any difference. The approach was piloted with a middle and higher income community with a heavy carbon footprint to assess the extent to which thinking about life style and climate change made a difference to their choices. This symbolism was discussed in focus groups with participants and the need to move from 'Business as Usual' to a new way of doing things.

Diagram 1: Monitoring the usage of resources at the local level through personal contracts that reward the protection of wellbeing stocks.



Source: McIntyre-Mills and Wirawan (2017, in press)

By addressing so-called 'wellbeing stocks', a concept developed by Stiglitz et al (2010: 15) to refer to a multidimensional measure of wellbeing 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."

The aim of the concept is to enable people to re-evaluate economics and to become more aware of the way in which we neglect social and environmental aspects of life. The pursuit of profit at the expense of people and the environment is a central problem for democracy and governance.

Marin-Guzman (2017) has stressed that the ability to conceptualise and design ways to respond to challenges is the key contribution that human beings make to the world of work. Technology responds to design. 'We are the boundaries', as Donna Haraway (1992) reminds us.

6. CONCLUSION

To sum up, this paper develops a response to the sense of exclusion by those left behind by a neo-liberal economy that has resulted in high levels of unemployment or underemployment and a destruction of the environment and habitat. It addresses the importance of addressing social, cultural, political, economic and environmental factors through practical, pragmatic responses to the sense that the majority are unfairly treated by elite minorities. Better urban governance needs to ensure that cities remain liveable and sustainable during and after the development process and that development enables the creation of wellbeing stocks and the

environment. Another central concern that urban governance schemes need to consider is the balancing of resources to meet both collective and individual needs and goals. Land usage, either for agricultural production or for urban development, strategies and policies need to be well informed to ensure not only optimal production is achieved but also that elements of justice and equity prevail for balanced development. Thus the critical systemic approach addresses production, consumption, evaluation and policy based on participatory democracy and governance that is user-centric. The challenge we face in the 21st century is the challenge to develop full employment for those who are marginalized.

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ⁱ It extends the potential of Max-Neef’s Being, Having, Doing and Interacting Index (Max-Neef, 1991, 33) by adapting it to address the United Nations Sustainable Development Goals (2014) and to thereby develop and test a means to balance individual and collective needs (McIntyre-Mills, 204,2016,2017).

As such the approach extends the ‘frontiers of justice’ (Nussbaum, 2006) to address the 10 capabilitiesⁱ of a life worth living for human and sentient beings (Nussbaum, 2006). Nussbaum’s ten central human functional capabilities (Nussbaum, 2011, pp.33–34)ⁱ cover wide aspects of life that are essential for all human and sentient beings and are supported by the Human Development Index and the UN MDG which support human rights and an appreciation of sentient beings. The creation of employment opportunities need to be designed to protect sentient beings, to re-generate the environment and social fabric and prevent the waste of people and resources.

ⁱⁱ 46th Annual Meeting of the International Society for the System Sciences at Shanghai, People’s Republic of China, August 2-6, 2002.

ⁱⁱⁱ https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp210-economy-one-percent-tax-havens-180116-en_0.pdf

^{iv} For the purposes of this paper I focus on the zero waste approach^{iv} which is based on a systemic approach to recognizing sources of abundance through re-using, re-purposing and re-cycling, in order to re-generate living systems. Our current structures and approaches are inadequate. Exclusive politics will prevail for as long as people think in terms of zero sum paradigms, rather than comprehending that they stand or fall together and that we are co-determined by the environment of which we are a part. In the environment there is no waste, because what is waste for one is food for another. But let me caution that although in nature this is a way to foster diversity, because it provides multiple niches and habitats. But in the social context it is necessary to take the analogy of living carefully in ways that re-use and re-cycle so as to support creating something worthwhile out of waste.

^v In this sense the approach extends the work of Bacchi (2009) by enabling user-centric policy design based on the perceptions of what works, why and how. In this sense the mixed methods approach is non-linear and participatory. It also honours the policy environment that stresses the need for a sense of ownership of a problem and the way in which it is framed. Thus the Paris Agenda, UN Sustainable Development Goals and The Paris Climate Change Agenda are taken into account in this approach to governance. Developing the cascade economy requires addressing policy to enhance representation, accountability and re-generation through re-framing governance. Instead of valuing profit we need to think quite differently in terms of so-called wellbeing stocks (Stiglitz et al, 2010). Gunter Pauli (2010: 230-235) explains that natural systems do not work in linear ways. They are cyclical and abhor any forms of waste.

^{vi} It is based on a program of research that has tested the following hypotheses to date:

- The greater the level of participation the better the match between service users and providers.
- The greater the level of local participation across diverse stakeholders the more likely representation and accountability can be achieved in increasingly diverse nation states
- The greater the level of public engagement in considering ‘if then scenarios’, the greater the level of understanding of the short, medium and long term consequences of policy decisions
- The scaling up of local engagement could provide the basis for better generation, re-generation, redistribution, of basic needs for a life worth living. The assumption on which my research rests is that human beings and other sentient beings deserve a live a life that is worth living and thus human beings need to become non-anthropocentric stewards of living systems.

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- vii To sum up, the challenge is to move beyond the rhetoric of cosmopolitan citizenship and to address both justice and sovereignty. The nation-state needs to be held to account by an Earth Charter that is supported by overlapping regional institutions (supported by inclusive regional research institutions, policies, the rule of law including parliaments and courts).
- viii The question needs to be asked whether increased levels of multiculturalism and diversity can be not only tolerated but appreciated when jobs are considered to be scarce. The case is made that levels of tolerance to others tends to decline when people compete for scarce resources. So the answer is to strive for the appreciation of why in a more equal society, people experience higher levels of wellbeing and lower levels of risk (Wilkinson and Pickett, 2009). The case is made for transformational systemic thinking and practice that supports both people and the environment through job creation. According to Pauli (2010), an integrated Blue Economy approach supports a so-called Cascade Economy, because more jobs that will support, sustain and re-generate the environment on which we are mutually dependent. Unemployment has been represented as a problem associated with policy representations ranging from the most conservative to more progressive approaches, for example: lack of appropriate skills, lack of motivation, over mechanization, lack of resources, lack of will from government, lack of capability as a result of lack of vision and imagination, Inability to include diverse representations of the so-called problem.
- ix The argument is that just as in the Weimar Republic, people were prompted to elect a strong leader, namely Hitler, people look to strong leaders when they face what seem to be overwhelming challenges. Paradoxically the election of Trump who is held up as a strong leader in the mold of Vladimir Putin who it has been suggested had an interest in seeing Trump elected to office. The election which brought Trump to office was at the time of writing under scrutiny resulting in the departure of Michael Flynn from government as a result of having conversations with the Russian Ambassador and failing to disclose these. See also : <https://www.theguardian.com/us-news/2017/mar/04/donald-trump-wiretap-barack-obama-coup>
- x <http://www.thejakartapost.com/news/2017/05/16/prosecutors-appeal-ahoks-verdict.html>
- xi <http://www.thejakartapost.com/news/2017/05/09/ahok-guilty-of-blasphemy-sentenced-to-two-years.html>
- xii Value applied to people and the planet. People, plants, animals and the environment are
- xiii No community can be expected to transform from a high carbon lifestyle (or aspiring to this lifestyle) without feeling part of the design process and owning the decisions as to how resources should be used. Young people (Osler and Starkey, 2005); the disabled, asylum seekers and sentient beings (Nussbaum, 2006) along with future generations live ‘precarious lives’ (Butler, 2005). Those perceived as different are not protected (Young, 2011). The ability to show compassion underpins cosmopolitanism (Butler, 2011). Butler’s work stresses ‘the need to rethink the human as a site of interdependency’. She emphasizes that humanity needs to be able to ask for assistance and we need to be able to anticipate that we will be heard and that people will respond with compassion. Do we wish to live in a world where we do not want to help one another and in which we deny the pain of sentient beings? (Butler, 2011). If we are prepared to recognize not our resilience, but our mutual vulnerability, it provides a basis for stewardship. We are all reliant on others and need to be able to depend on our connections with others. Held et al. (2005) proposed that the core challenges of the day are to address the vast differences in the standard of living between the rich and the poor. The problem is not only one of externalities that are not factored into calculations of the degradation to the environment, it is a way of thinking and ‘being in the world’ that shifts the extraction of profit to where labour is cheaper and where governments and citizens are less likely to complain about degradation of environment. Short-term profits are made at the expense of future generations.
- xiv <http://www.theguardian.com/sustainable-business/blog/sustainability-unhelpful-think-regeneration>
- xv Florini (2003) suggests the potential of the Aarhus convention. I have combined this with the policy potential of the UN Local Agenda 21 and other policies detailed below, such as Paris Development Agenda and the UN Development Goals. Thus the participatory action research aims to:
- “[A]ddress the challenge posed by the Earth Charter: “Everyone shares responsibility for the present and future wellbeing of the human family and the larger living world” (cited by Hayden in Wallace and Brown, 2010: 368). The challenge is to move beyond the rhetoric of cosmopolitan citizenship and to address both justice and sovereignty. The nation state needs to be held to account by an Earth Charter that is supported by overlapping regional institutions (supported by inclusive regional research institutions, policies, the rule of law including parliaments and courts). Co-determination in regions needs to be based on a new architecture for governance, democracy and ethics.”^{xv}
- Planetary Passport (2017, in press) discusses research aimed at piloting and testing out new architectures for democracy and better governance through:
- Addressing the issue of a priori norms and a posteriori measures for transformation towards re-generative living.
- Finding ways to match social, cultural, economic and environmental decisions to perceived needs with a focus on food, energy and water security.
- Narrowing the gap between perceived needs and the way resources are distributed and the way it impacts on service outcomes.
- Previously oral histories connected people to their place and the wisdom of the elders was handed down to the next generation through re-membering the vital social, economic and environmental information needed to survive. Cultural memory was aided by association with myths and landmarks. Ritual, song and artefacts reminded people of knowledge they needed to survive (Kelly, 2016).

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- ^{xvi} Addiction to coffee can be linked with using coffee grinds to grow mushrooms, the plastic containers could be replaced with biodegradable options derived from local plants, and tin cans can be used as the insulation for building walls and for creating decorative artefacts in creative co-operative hubs for artists.
- ^{xvii} Anthropocentrism and humanism need to move towards respect for Biodiversity (Nagoya Summit in Japan in 2010). The purpose of this research paper is not to rehearse the same arguments about rights and responsibilities – these are taken as a given. This paper is also not about ‘what is the case’ or ‘what ought to be the case’. Instead it takes it as given that social injustice and inequality exists and that the disappearance of biodiversity will make a difference to the eco systemic web of life and to human wellbeing. The loss of insects, such as bees along with greed and hubris will impact on food security – just as it will jeopardize seed security. Instead this research is located in the domain of how to develop a new architecture in response to Dahl’s (1967) pessimism about extending the scale of democracy and governance.
- ^{xviii} But we also need to realise that democracy needs to ensure that structures are in place to hold the powerful to account and to ensure that constitutions provide the structures that support respectful dialogue that makes the best use of different kinds of knowledge and that human knowing needs to be considered as a double edged sword. We have shaped the planet in ways that are no longer sustainable and it is time to appreciate that we are merely a strand within a web of living systems.
- ^{xix} <https://biomimicry.org/what-is-biomimicry/>
- ^{xx} **Dualism** is based on thinking in terms of body and mind, us and them. It results in dividing self from other (including sentient beings) and from the environment. It also results in dividing thinking from practice.
- ^{xxi} http://www.archdaily.com/804110/william-mcdonough-on-sustainability-carbon-is-not-the-enemy?utm_medium=email&utm_source=ArchDaily%20List
- ^{xxii} **Emergence** is the ability to escape the trap of our own thinking, to cite Vickers in Beer, 1994: 252: ‘the trap is a function of the nature of the trapped.’ According to his theory of ‘recursive consciousness we are able to emerge from our entrapment through making connections and realising that we have the capability to achieve transcendence as we become more conscious. One way out of the trap is to become more creative in our thinking and more open to learning from the environment, even if we do not mimic it!
- ^{xxiii} Vogel, E, Meyer, C. and Eckard, R. 2017. <http://theconversation.com/severe-heatwaves-show-the-need-to-adapt-livestock-management-for-climate>
- ^{xxiv} https://en.wikipedia.org/wiki/Samuel_Edward_Krune_Mqhayi author of Inkosi Sele I Afrika
 Tiyo Soga – Presbyterian missionary who married a scots women and worked as a missionary in Eastern Cape. Soga was the first black South African to be ordained and worked to translate the [Bible](#) and [John Bunyan](#)’s classic work [Pilgrim’s Progress](#) into his native [Xhosa language](#).^[1]
- ^{xxv} The design is sketched in ‘Wall Street to Wellbeing’ and ‘Systemic Ethics’ and is extended in the forthcoming volume. West Churchman’s critical and systemic Meta approach to working with, rather than within the boundaries of a single paradigm inspires my work. I draw on several approaches that locate Nussbaum’s Ten Central Capabilities – relevant to all sentient beings (Nussbaum, 2011, 33-34). Nussbaum includes the rights of the most powerless and voiceless. They are young people, children, asylum seekers, the dis Abled and sentient beings who are commodified and traded. The need to address capabilities to protect the planet is extended in this approach by addressing planetary rights and the inadequacies in current architectures of governance and democracy. A case is made for the social contract to be extended beyond the nation state to represent social, economic and environmental justice concerns.
- ^{xxvi} To sum up: governance and democracy have to deal with three options pertaining to truth:
- One truth (monist) responses defended by grand narratives.
 - No truth (postmodernist) approached defended by relativism or conflict.
 - Mediated (co-created) responses based on stewardship and testing out ideas with professional experts, people with lived experience of many kinds of knowledge, including an appreciation of animal knowing, which could be vital for enhancing our resilience. Held’s Global Covenant and Shiva’s on Earth Democracy provides a macro level approach to protecting the global commons based on social democratic control to protect the common good and the global commons. The will to make a difference is the challenge (Held, 2005: 33-34):
 “We may lack the will but it cannot be said that we lack the means. ...What do we require to make a substantial difference to the basic wellbeing of the world’s poorest? Again the statistics are available. ...Required would be 6 billion per annum on basic education, 9 billion per annum for water and sanitation, 12 billion per annum for the reproductive health of women, 13 billion per annum for basic health nutrition... These figures are substantial, but when judged against the major consumption expenditure in the US and EU they are not beyond our reach . Moreover if all the OECD agricultural subsidies were removed and spent on the world’s poorest peoples this would release some 300 billion per annum In addition a small shift between military and aid budgets-900 billion and 50 billion a year globally would make a marked difference to the human security agenda....”
- ^{xxvii} As such it goes well beyond the previous notions of knowledge management as conceptualized by Nonaka and Takeuchi (1995) centred on solving problems within the workplace and translating the tacit learnings into experiential knowledge that could give businesses a competitive edge. The quality learning circle approach in Japan enabled workers within the white goods industry of photocopy industry to re-think ways to extend their market share and thus preserve jobs. It is informed by Etienne

Wenger (1998, 2009) who conceptualized communities of practice as a way to enable people within and beyond organizations to form communities based on sharing ways to address an area of concern based on reciprocity. As a social anthropologist he was aware of the anthropological research on giving and receiving. The idea that a ‘gift’ requires a return is widespread (see Marcel Mauss (1990/1922) ‘The Gift’. Those who do not return information or assistance soon become more peripheral members of a situated community of practice. Also Peter Senge (2006) develops a more systems oriented approach to learning and learning communities beyond the organizational context. He stresses the need for team learning based on specific skills that enable working across disciplines and pooling different skills.

^{xxviii} Another central concern that urban governance schemes need to consider is the balancing of resources to meet both state and individual needs and goals. Land usage, either for agricultural production or for urban development, strategies and policies needs to be well informed to ensure not only optimal production is achieved but also elements of justice and equity prevail for a balanced development. Thus the critical systemic approach addresses production, consumption, evaluation and policy based on participatory democracy and governance that is user-centric. Modern society becomes increasingly divorced from the environment in modern cities where people become ‘lost’ within the concrete and tarmac spaces separated from other living systems and without a daily ritual of spiritual connection to people and place. The question needs to be asked whether the resurgence of fundamentalist religion is a response to fundamentalist economics? Is this a response to the lack of connectivity?

^{xxix} The bombing of Syria by France and now UK in response to the atrocities in Paris in 2016 provide low points in the past year. The impact of drought has been cited by some as one of the reasons for the war in Syria which had experienced one of the worst droughts in a decade which resulted in migrations to the cities, others disagree (Pearce, 2015:26). But it is undeniable that as resources decrease, conflict in congested ghettos and camps will result in conflict and that the conflict in Syria and the Sudan was also linked with the political issues and a government system that lacked transparency and fairness.

^{xxx} The prospect of 65% of South African’s living in cities has implications for food, energy and water security. UN estimates—71% will be in cities by 2030 and 80% in urban areas by 2050 if current rates maintained—Rand Daily Mail, 26thMay, 2015. This will impact food security in cities but also place a strain on infrastructure—Oxford Research Group on Sustainability, 2014. This requires addressing sustainability at the local level in municipalities. For this to occur people need to have a voice and feel that they have a right to voice their ideas openly. Need to address food security through re-generation and support of a closed loop of production consumption and evaluation that re-frames socio-economics as environmental economics.

^{xxxi} Donald Trump road on the wave of concern about mechanization by stressing a nationalist response. In some ways his dismantling of the TPP is not a bad outcome as critics on the left have stressed that it was developed without respect for commoners. See also <https://www.theguardian.com/commentisfree/2017/jan/24/donald-trump-tpp-trans-pacific-partnership-president-hillary-clinton>

^{xxxii} We are human animals, who have rights and responsibilities to care for humanity and other species as we are one strand of a living system. ‘Social contract’ refers to protection of citizens within the boundaries of a nation state. According to the 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). And yet the needs of the displaced are not addressed through the current architectures of democracy, governance and education. Surely it is time to reframe the social contract and to support public education to enable people to join up the dots?

^{xxxiii} The emotions are expressed in new forms of identity politics that expresses the polarizing of the politics into interest groups, such as being unemployed, women’s rights, rights of minorities and in some contexts use the rhetoric of culture and demographic profiling

^{xxxiv} Zero sum approach’ is expressed as competition across species, classes or sovereign states needs to be set aside in recognition that we are part of one web of life – that we are interdependent and that all sentient beings have rights. As stewards – human beings have the additional responsibility to care for the land on which we are all depend. Exclusive politics will prevail for as long as people think in terms of zero sum paradigms, rather than comprehending that they stand or fall together and that we are co-determined by the environment of which we are a part.

^{xxxv} Expanded Pragmatists including researchers, thinkers and practitioners) ^{xxxv} who strive to achieve the best outcomes for people and the planet and who are aware that dualism is imposed on nature and is not a characteristic of the brain, the body or nature and that the more we are able to weave together the strands of connection the better. The move from binaries to flows needs to be appreciated in thinking, design and practice and it is perhaps a worthwhile challenge for a local workshop. Policy makers need to learn from the wrong turns taken by misunderstanding our place and role as stewards within natural systems. We can be free and diverse to the extent that our freedom and diversity does not undermine the rights of others. The nation state has not protected the global commons or ensured social justice for all. Policy guided by pragmatism takes a consequentialist approach based on considering the meanings of the ideas and practices for the majority of stakeholders. It is a *a posteriori* approach and it takes into account the points of view of the stakeholders in specific contexts. Pragmatism can be divided into ‘*narrow pragmatism*’ that considers the majority, but not all stakeholders. At the other end of the continuum of pragmatism is ‘*expanded pragmatism*’ that considers the consequences for all life. **Narrow pragmatism** is based on thinking about the consequences only for ourselves and not others. It leads us to believe that our power and profit must be driven by self-interest and that the bottom line, namely ensuring our powerful positions and our profits. We tend to think that social and environmental considerations are ‘externalities’, rather than embedded in the current system. **Expanded pragmatism** (EP) is the capability to

think in terms of the consequences for self, others (including sentient beings) and future generations of life. It has much in common with idealism in that it considers the consequences for all life. It also has much in common with virtue based ethics in that it is based on dialogue with those who are to be affected by decisions and with the rights of future generations in mind.

^{xxxvi} Thinking matters and has implications for design^{xxxvi}. As stewards human beings have the ability to create or to destroy. Just as Candace Pert (1997) recognized that thinking and emotions matter. Thinking affects molecules in the human body, so too our thinking shapes the conceptual pathways we create in our neighbourhoods, workplaces and wider environment. The more we appreciate that thinking matters the more likely we are to live in ways that re-generate life and creativity.

^{xxxvii} The need to address the emotions of Australians who feel 'left behind' is now the clarion call of many conservative thinker.

^{xxxviii} The key aspects are : 'Might right' – Genealogy of power, Analysis of discourses, Assemblages of meaning, making connections and critical analysis of discourses – requires both qualitative and quantitative data and an understanding of how it is obtained.

^{xxxix} Michael Hardt (2010) in conversation with Astra Taylor as part of her interview on 'the Examined Life' stresses the need for ongoing training for participatory democracy and the need to achieve transformation. His approach stresses revolution, but you cannot demonstrate empathy and democratic values through violence, so it needs to be achieved as peacefully as possible. He stresses that a great deal of the arguments about morality, human rights and transformation potential rests on a debate about whether humanity is capable or incapable of self-rule. He stresses that Bolivia and Ecuador are places to watch for examples of how to live differently – because of their constitutional protection of the planet – although they have some failings and although the rhetoric perhaps outweighs the reality of what has actually been done to protect the forests and to limit mining. But as Hardt stresses they are indeed 'places to watch' for examples as to how to do better. But what is even more important is the world view based on a belief in 'Pachamana' and the legal transformations that could eventuate from the spiritual connection to the land. I would argue that the hypocrisy of appearance needs to be avoided through implementing ways to ensure that the ideals are translated into practice in an open and transparent manner. <https://m.youtube.com/watch?v=f0lopDh1e3s>

^{xl} To cite Constitutional Recognise: 'Since 2010 there has been two expert committees, The Expert Panel and the Referendum Council which have consulted and reported on constitutional recognition, and the process to the Parliament.

The Expert Panel – which included Indigenous and community leaders, constitutional experts and parliamentarians – consulted extensively across the nation and reported to the Prime Minister in January 2012. The Panel recommended that Australians should vote in a referendum to:

Remove Section 25 – which says the States can ban people from voting based on their race;

Remove section 51(xxvi) – which can be used to pass laws that discriminate against people based on their race;

Insert a new section 51A – to recognise Aboriginal and Torres Strait Islander peoples and to preserve the Australian Government's ability to pass laws for the benefit of Aboriginal and Torres Strait Islander peoples;

Insert a new section 116A, banning racial discrimination by government; and

Insert a new section 127A, recognising Aboriginal and Torres Strait Islander languages were this country's first tongues, while confirming that English is Australia's national language'.

^{xli}<http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3238.0Media%20Release02001%20to%202026?opendocument&tabname=Summary&prodno=3238.0&issue=2001%20to%202026&num=&view=>

^{xlii} <http://www.theguardian.com.au/story/4597814/the-four-letter-words-politicians-dont-dare-use/?cs=8>

^{xliii}

<https://www.theguardian.com/politics/2016/dec/08/welcome-age-anger-brex-it-trump>

^{xliv} Kirkham, E. 2015. <https://www.gobankingrates.com/savings-account/62-percent-americans-under-1000-savings-survey-finds/>

^{xlv}<https://businesstech.co.za/news/wealth/150853/the-wealth-of-these-3-sa-billionaires-is-equal-to-the-bottom-half-of-the-population/>

^{xlvi}<http://www.htxt.co.za/2014/09/03/a-third-of-south-african-households-still-have-no-electricity/> Shezi, L 2014 cites [Stats SA. http://www.statssa.gov.za/](http://www.statssa.gov.za/) : "The number of households with access to electricity grew over the course of 2013, according to the latest figures published in the Non-financial census of municipalities by [Stats SA. http://www.statssa.gov.za/](http://www.statssa.gov.za/). According to the report, which looked at 278 South African municipalities, the number of homes with power increased by 2.3% from 9.7 million households in 2012 to 10 million in 2013. In total, there are around 15m households in the country. Which means almost a third are still without a regular power source from the grid'.

^{xlvii} As the child of holocaust survivors she understands that culture and race matter, whether we like it or not. Zilla (past leader of the Democratic) is married to a sociologist Johan Maree who has stressed the importance of class in labour force studies and in his support for unionists during Apartheid. He suffered exclusion from his Afrikaner community when he supported an anti-apartheid campaign against SA Rugby team. So he emphasized class analysis whilst being aware that culture plays a pivotal role in everyday life in South Africa.

^{xlviii} Urbanization poses a systemic threat to quality of life and has implications for policy. Food deserts are the likely scenario if more emphasis is not placed on balance, greening cities and supporting small farmers. It has been wrongly assumed that growth in the economy will sustain a growing population. During my sabbatical I attended workshops or held conversations with

colleagues at Living Hope, Embrace Dignity and Africa Tikkum in Cape Town. The concerns they raised were for food security and how it relates to educational and employment opportunities for all especially young people.

^{xlix} The first time regeneration has been used in the SA context is perhaps by Pixley Ka Seme who provided some of the founding ideas for the organization that was the precursor to the ANC, namely the South African National Congress <http://www.sahistory.org.za/people/pixley-ka-isaka-seme>

^l <https://m.youtube.com/watch?v=fIMvwjR8o>

^{li} “UNICEF’s Generation 2030 Africa” reports that next year, out of South Africa’s projected population of 53 million people, 18 million of those would be under the age of 18.

This is reported in the following article on [24.com/Web/News24/](http://www.news24.com/Web/News24/) :“Over one third of South Africa’s population is expected to be under the age of 18” in 2015, according to a United Nations Children’s Fund (UNICEF) report released on Tuesday. “South Africa was also expected to have 65% of its population living in urban areas next year, the ninth highest level in Africa. According to the report, in 2050 around 41% of all births world-wide would take place in Africa, while in the same year 25 people out of every 100 would be African. This was against the expected figures in 2015, where Africans would make up 16 people out of every 100 around the world. In 2015, 40% of Africa’s population was expected to be living in cities, versus over 50% in 2050 href=<http://pubads.g.doubleclick.net/gampad/jump?>

^{lii} Chakraborty, A. ‘Hidden money corrupts’, *The Guardian Weekly*, 15.0416.

^{liii} Cape Town’s water usage up, despite calls to cut down <http://www.news24.com/SouthAfrica/News/cape-towns-water-usage-up-despite-calls-to-cut-down-20170111,2017-01-10> 20:18. James de Villiers, News24 : “Dam levels are currently at 44.3%, having decreased by 5% since December 21. City of Cape Town spokesperson Priya Reddy told News24 in December that dam levels may become dangerously low. “According to our projections, dam levels may 'bottom out' at a very low 20%. This leaves a very low margin of safety, as it is difficult to abstract the last 10% of a dam’s volume.”

^{liv} <http://www.iol.co.za/news/south-africa/western-cape/99-cape-fires-a-day-1970179>: “Cape Town - The City of Cape Town’s Fire and Rescue Service has responded to 495 fire calls since Thursday. ...”

^{lv} <https://businesstech.co.za/news/finance/149049/these-are-the-20-most-expensive-schools-in-south-africa-in-2017/>

^{lvi} <http://www.news24.com/SouthAfrica/News/school-shortage-is-departments-fault-report-20170114> In the Tswane region alone more than 35000 students still needed to find placements

^{lvii} To what extent is there : A divide and rule approach?, Exclusion of subjects from participation, Might is right approach?, Reduction of complexity, Limiting the terms of reference, To what extent is a problem constructed in a way that is in the interests of the entrenched power elites? See <https://www.youtube.com/watch?v=qp3Ktlfy0Hw&app=desktop><https://www.youtube.com/watch?v=suSbvoAw0g4>

What does Deborah Bird Rose mean by the colonisation of the land and the mind?

•Caring for country? Gift of country?

•What does she mean by *multispecies ethnography*?

•What does she mean by the human/nature divide?

•What is the implication for ethics and public administration?

•What does she mean by species extinction?

•What is the relevance for current policy decisions?

Please watch and then think about responses to the questions

•<https://m.youtube.com/watch?v=suSbvoAw0g4>

•<http://umaincertaantropologia.org/2013/08/17/the-emergence-of-multispecies-ethnography-cultural-anthropology/>

•What are the implications for Human/animal habitat in South Africa?

^{lviii} See <https://www.youtube.com/watch?v=sLh-U99avso>, <https://www.youtube.com/watch?v=sLh-U99avso>

^{lix} <https://www.speakersassociates.com/speaker/gunter-pauli> Accessed 20/12/2016 He stresses the need to provide integrated opportunities through design that taps into the abundant talent and environmental opportunities that can be found and to ensure that the designs protect both people and habitat. This is a systemic approach that could ensure that people come up with solutions that do not create binary oppositions between people and the environment. It is unnecessary to argue that for people to flourish the environment must suffer.

The policy proposal is to develop more educational institutions that focus on teaching design skills from primary to secondary and tertiary level based on the blue economy and biomimicry in ways that draw on the lived experience of the learners

^{lx} Jong, H.N 2016. UN to grill RI on rising rights abuses Jakarta Post Thursday 29th Sept

^{lxi} Some said they would challenge the evictions in the courts. Most have found alternative accommodation and will strive to maintain the bonds they developed in the urban villages in Jakarta.

^{lxii} <http://www.thejakartapost.com/news/2016/10/04/public-participation-needed-create-livable-city-all.html> Accessed 29th October

^{lxiii} The reason for the rioting was cited as being a comment made by the mayor who is a Chinese Christian: http://www.japantimes.co.jp/news/2016/11/05/asia-pacific/political-meddling-instigated-deadly-jakarta-riots-indonesian-president-says/#article_history... President Joko “Jokowi” Widodo said the riot showed “political actors have taken advantage of the situation.” He did not identify any individual as responsible, but earlier in the week former President Susilo Bambang

Yudhoyono went on national television to say he supported plans for the massive protest. <http://www.thejakartapost.com/news/2016/11/03/more-muslim-groups-to-join-anti-ahok-rally.html>

^{lxiv} For the purpose of scoping out this area of concern, please draw on narrative and auto-ethnography (own story) to address closing the gap data for South Australia and more specifically the Southern Region. Note for research facilitator, please take the independent variables of unemployment by access to housing and other indicators of social wellbeing across the age cohorts as a starting point. Please use the following as prompts:

- What does the participant have in their life? (material, non-material and conceptual aspects) pertaining to social, economic and environmental factors (for all the questions please)
- What does the participant need?
- What is the participant able to add to their life?
- What does the participant need to discard from their life (material, non-material or conceptual aspects?)
- What barriers does the participant face (social, economic, environmental)
- What are the turning points for the better? Explain in detail
- What are the turning points for the worse? And how are they addressed?

^{lxv} This reflects the underlying science, but from the point of view of the some /perceptions they probably don't perceive themselves as not coping. The software is aimed at enabling participants to make the connections.