# identity, democracy and sustainability

## *Janet McIntyre-Mills with Denise de Vries*

# Focusing thought

To achieve a sustainable future we need to rethink our rights and responsibilities in terms of an expanded sense of space and time and

a wider sense of solidarity.

We will need to think in terms of the next generation of life on this planet and how we can care for it.

To this end I explore identity, democracy and sustainability

in the wake of the convergent social, economic and environmental challenges facing society.

I argue that it is possible to do things differently.

#  Identity, Democracy and Sustainability

##  Foreword by Ken Bausch

Assoc Professor McIntyre-Mills ably defends her conviction that we need to pledge our allegiance to the world and each other.  When we engage in cut-throat competition we do no lasting good for ourselves or for our human project.  By thinking in the large context of our lives, we find immense even magical progress open to us.

McIntyre-Mills points out the prime direction to progress and happiness: respectful dialogue among peoples of different nationalities, cultures, religions, and social-economic classes.  In respectful listening and clarifying ideas, paths of mutual benefit can be pursued.  In making new paths together, the world is transformed and transcendence from the status quo is achieved.

 In the large picture, she opens to us our unity with all life.  This opens to us the great thrust of life.  We make evolution real at our level of expertise.  We are on the leading edge of evolution.

“Respectful, empathic conversation is at the heart of science, democracy and ethics.”  McIntyre-Mills backs up this assertion using the arguments of Habermas and Derrida, among others.  She reflects with approval on Indigenous and even animal roots for common feeling and mutual assistance.   For us today, however, it seems that wars are our default methods for solving conflicts.  Ruthless capitalism in its dissolution of the village commons was a turning point from communal concern to hard-edged individualism.  The debacle on climate change at Copenhagen vividly demonstrates the blind self-destruction contained in selfish competitiveness.

The book addresses many of the hard questions faced by us and the world today:

1. What happens when people become citizens of the world and not just citizens of a state?
2. What happens when a people is deprived of statehood?
3. What hold them together?
4. What happens to their roots?
5. How do we move from state citizens to world citizens?
6. What are the systemic ramifications?
7. How can the points of change be eased?
8. How can this pain be leveraged into positive growth?

She argues that it is going to take a lot of dialogue and a lot of discipline.  Expert-driven prescriptions are likely to generate backlash that will hobble their effectiveness. Integral to this conversation is the issue of sustainability. The dominant Western “solution” is to exploit natural resource and peoples to the max in the misguided belief that these resources are infinite.  Pointing out this inanity for the past 40 years has been the mainstay of scientific models and didactic sermons to the major industrialist and the rest of us.  The result has been some theoretic light, and much academic and political warfare.  Surely, there must be a more human, less competitive way to discuss our global future. McIntyre advocates respectful discussion and structured dialogue as a more potent method for resolving conflict and designing a sustainable future.  By using this method, parties and nations could reach Von Foerster’s conclusion.  “A is better off if B is better off.”

# ACRONYMS

ABC Australian Broadcasting Commission

ANC Australian National Council

ARC Australian Research Council

CRCAH Collaborative Research Centre for Aboriginal Health

CSP Critical Systemic Practice

EP Expanded pragmatism

EU European Union

G20 Group of 20 Nations

ICC International Criminal Court

INGOs International Non Government organisations

ICTs Information and communication technologies

NP Narrow Pragmatism

NGOS Non-Government Organisations

TRIPS Trade related Intellectual Property Rights

UN United Nations

COAG Co-operative Association of Australian Government organisations

WTO World Trade Organisation

# Table of contents

Foreword by Ken Bausch

Preface by Norma Romm

**Introduction: Focusing thoughts**

Overview of the chapters

From commodification to co-existence

Transnational solidarity

Focusing Questions

Listening, telling stories and creating scenarios helps us act as Stewards

-Best case scenario: an inclusive, creative society

-Small changes for the ‘long haul’

-Worst case scenario: business as usual and a large carbon footprint

Global citizenship and sustainability: appreciating our shared fate

**Chapter 1: Reframing democracy and governance to address sustainability**

1. Reconsidering regionalism as a nested system

1.2. Addressing overlaps and boundaries

1.3. Extending the critique of social contract approaches

1.4. The Design of Inquiring Systems to address representation intersubjectivity and accountability

1.5. Social and environmental justice: designing a response to the crises in democracy and governance

1.5.1. Structure and process:

-Relevance of participation for social and environmental justice

-The common good and value pluralism

-- Interactive design and evaluation for democracy and governance

**Chapter 2: Wellbeing, mindfulness and the global commons**

2.1 Reconsidering Identity and Meaning through ‘Earth politics’

2.2. Social and environmental justice in a patchwork of nations

2.3. Making connections: ethical literacy to support social and environmental justice

2.4. Energetic flows not bounded subsystems

2.5. Systemic governance for social and environmental wellbeing

2.5.1. Challenges for governance and democracy

2.5.2. Questioning to enhance capability and ethical literacy

2.5.3. Representation and accountability to the next generation

**Chapter 3: Wisdom and Identity: ‘Joining up the dots’ for social, economic and environmental wellbeing**

3.1. Rethinking Boundaries: Flow and co-determination

3.2. From binary oppositions to Mobius bands and Mandelbrot sets

3.3. Metaphors for communicating and making meaning

3.3.1. The isomorphy of communicated energy

3.3.2. Networks

3.4. Consciousness and connections: implications for sustainability across human systems and natural systems

3.4.1. Patterns and Characteristics of the Feedback

3.5. Subsidiarity and Fractals

3.6. Mindfulness and an Expanded form of democracy

3.7. Communication across conceptual and spatial boundaries to construct the future

3.8. Participation to enhance representation and accountability

3.8.1. The role of values, emotions and consciousness in two-way communication

3.9. Public engagement based on a ‘Design of Inquiring Systems’ to address risk and enhance representation

3.11. A conversation on dualisms and racism: recognition of our potential complicity with Bevin Wilson.

3.12. Co-created understanding

3.13. Reflections

**Chapter 4: Revitalizing democracy, development and sustainability**

4.1. Introduction

4.2. Challenges faced when testing the software

4.3. Reflection on introducing systemic interactive approaches

4.4. Training exercise on how to use the software

4.4.1. Focus groups and action learning

4.5. First Phase of the Research: Enhancing capability and resilience

4.5.1. Re-designing democracy and governance to address transboundary concerns and Approach to research

4.5.2. Description of the rationale and logic of co-creative design

4.5.3. Tapping into intuitive wisdom through narrative, respectful conversation, listening and the arts

4.6. Future Directions: Scaling up a Regionalist Policy Network Approach

4.6.1. Second Phase of the Research: Scaling up participation and the triple bottom line approach

4.7. Interactive Design and Evaluation for democracy and governance: a way forward?

4.7.1. Beyond joining up the dots: Relationships across self-other – the environment

4.7.2. Policy Network Approach for systemic ethics, science and democracy

**Chapter 5: The Pea and the Thimble**

5.1. Introduction to the metaphor.

5.2. Developing capability to understand the challenges

5.3. Scaling up participation for social and environmental justice

5.4. Making the best use of resources for a resilient post national constellation

5.5. Systemic Governance and Democracy

5.5.1. Freedom of information and transboundary action: could the Aarhus convention provide a way forward?

5.6. Case Studies of Transboundary Lessons and Concerns

5.6.1. Overlaps *within* the *sub regional* nation state

5.6.2. Overlaps *within the super national* region

5.7. The potential, limits and risks of participation and solidarity

5.8. Regionalism to support the human security agenda and sustainability

5.8.1. The social, economic and environmental domain and the human security agenda

5.8.2. Wellbeing, economics and social justice within and across nation states

5.9. Diversity and freedom: considering and re-considering individual and collective needs

**Chapter 6: Facing up to the convergent social, economic and environmental challenges**

6.1 An appreciation of the continuum and boundaries

6.1.1. Praxis implications of consciousness: translating theory into practice

6.1.2. Systemic design appreciates the connections across self, others and the environment

6.3. From the landscape of the mind to creative flowscapes

6.4. The importance of humility and empathy

6.5. Conclusion

### 6.6. Post Script: Facing up to convergent social, economic and environmental challenges

6.6.1. Caterpillar Dreaming: Butterfly Being: Visions for the Future

6.6.2. Metaphors for Life, Death and Caretaking

**7. User guide for decision making software by de Vries, D.**

7.1. Requirements

7.2. Installation

7.3. Facets of the pathway

7.3.1. Haves

7.3.2. Needs

7.3.3. Relatedness

7.3.4. In Basket

7.3.5. Out Basket

7.3.6. Barriers

7.3.7. Turning Points

7.3.8. Report

**8. Executive Summary and Details on the Architecture of the Design by**

**McIntyre-Mills, J. and De Vries,D.**

8.1. Introduction

8.2. Expanded pragmatism as a means to enhance decision-making

8.3. Ethics and boundaries

8.4. Democracy and sustainability

8.5. Logic of co-creative design

8.6. Evidence: what works, why and how?

8.6.1. Research methods

8.6.2. Building the knowledge base

8.6. 3.Evolving knowledge

8.6.4. Knowledge management

8.7. Future directions

8.8. Conclusion

**Last Word: Resolving the Greatest War of Human Nature by Alan Raynor.**

**References**

**Index**

# PREFACE

In this book Janet McIntyre-Mills makes a heart-felt appeal to us as humans to practice “caring stewardship” as a way of being on the planet. This is a way of being where, via participatory democracy, we think though (without denying the role of human emotions in the process of thinking) the possible consequences of choices being made on any level (local, national, regional, international). She suggests that “rational caretaking praxis” would amount to ensuring that the voiceless (who need to gain more voice), the very poor (whose poverty the richer are complicit in producing), and the powerless (whose restricted life chances restricts possibilities for empowerment) “do not live in misery”. At the same time she shows that these concerns themselves need to be bound up more closely with an understanding of our responsibilities vis-à-vis caring for the earth of which we are part, so that we do not treat “resources” – whether natural or human – as exploitable for their use-value to us.

   She draws on a range of literature and a range of projects in which she and others have been involved to point to the potential for humans to orient in this direction. This requires “thinking about our thinking” and making a conscious effort to recognize the interconnectedness that characterizes our lived words – where as she notes (drawing on an analogy as used by Indigenous Australians) our actions have a *boomerang effect* and are not without consequences for others as well as for ourselves. Indeed she argues that the distinction between “me” and “others” needs to be re-looked at, so that when we think of “ourselves” we at the same time think of others (including sentient creatures) and the next generation too.

   She argues that as much as certain theorists (largely Western-oriented) have suggested that humans are “naturally” competitively oriented, other literature (and other forms of wisdom) points to the co-operative tendencies of humans. Thus our consciousness (that is, the making of connections between neurons in our brains), can be seen as, and encouraged to become, “wired” for recognizing interconnection as a way of being in the world. This also allows for systemic practice away from compartmentalized thinking to more web-like thinking that can address the complexity of social and environmental problems facing the planet.

   As global citizens she suggests that we need to understand the importance of participation in considering “if-then scenarios” as a way of planning at various levels – including at regional and transnational levels. She suggests in this regard that we need far more international laws and transnational mechanisms for people together to work with, and expand, their different ways of knowing, in order to develop more viable and sustainable solutions to issues such as poverty, various forms of social discrimination, pollution and higher regional temperatures. She points to the potential (that needs to be extended) in, for example, various international regulations and conventions. But she suggests that thus far our largely fragmented way of understanding the world prohibits our mutual efforts to set up and utilize the necessary laws and mechanisms.

 She makes a case for why the reliance on unregulated markets cannot provide a corrective to problems caused via the operation of the market and why we need to “work towards reconceptualizing the market to reflect the value of the planet”. She highlights in this regard that “the politics of environment and social justice spans [local and national] boundaries and so learning to operate on a broader stage is very important”. She urges that now is the time to create this learning because “we face social, economic and environmental challenges that are unprecedented”. This is the time to create, *inter alia*, legal frameworks across the globe to address greed and the commodification of the powerless and the environment. And now is the time to step up public debates on ethics as part of the process of enhancing our reasoning capability, including our empathy and humility in relation to the complexity of challenges being faced.

 The book offers us a range of conceptual tools (language) as well as examples that might be used to inspire new visions that can underpin our efforts to, as she puts it, “change direction” – that is, it explores possibilities for thinking and acting which in my view are indeed inspirational.

                                                                                   Norma R.A. Romm

                                                                                                August 2010

# Dedication

My thanks to my parents and my husband Michael who have given so much to me over the years.

My thanks to my four footed friend, Winchester who died peacefully on Anzac Day and is buried in the vegetable garden.

My thanks to my Jenny ‘for being herself’, despite her immobility and the challenges of her long illness.

My thanks to Peter for his mentoring and constant stream of news to keep me connected to Alice Springs.

# Acknowledgements

In particular, I thank:

1. Dr Denise De Vries, Flinders University, a Chief Investigator on our current Centre for Collaborative Research into Aboriginal Health (CRCAH) grant and to David Hope for his contributions to developing a proposal to extend this research.
2. Norma Romm for reading and commenting on a draft of this book and for her friendship over the years.
3. Alan Rayner for his insights on boundaries and Allena Leonard for inspiring me and introducing me to the work of Stafford Beer and Donna Haraway.
4. Len Troncale for his innovative classes and commenting on ideas that underpin chapter 2.
5. Louis Kauffman for the reproduction of his conceptual diagram of a mobius band.
6. Ken Bausch for his philosophical wisdom and Aleco Christakis for his praxis on democracy and governance.
7. Susanne Bagnato for her creative contributions to the conceptual diagrams.
8. Daphne and Bevin Wilson for their insights and conversations.
9. Kim O’Donnell for her mentoring in South Australia.
10. University of Indonesia for enabling me to engage in conversations with colleagues in Jakarta and to the Bandung\_Trust for facilitating conversations with participants in Bandung.

The copyright of all photographs that appear in the publication is attributed to the author.

# Biography

**Dr Janet McIntyre-Mills** is Associate Professor at Flinders University and Adjunct Professor at the University of Indonesia. Her experience as a sociologist /social anthropologist spans over 30 years of experience as an academic, researcher and community development specialist. To date she has enabled 15 PhD students to graduate from the University of South Australia and Flinders University. Her research can be summed up as contributing to participatory design and democracy by using cross cultural communication techniques to address areas of concern such as wellbeing and social marginalisation. Her publications address the question: How do we address dualistic thinking and practice that underpins many of the current policy and governance challenges we face? Several articles have addressed alternative ways to address representation, accountability and sustainability, based on her ongoing research. She serves on the International Sociological Association Board for Research Committee 10 on Participation and Organizational Transformation and is a member of RC 51 on socio-cybernetics. She contributes to the International Systems Sciences and acts on the board of several journals. Janet has conceptualised sole authored books, edited the West Churchman Series and contributed chapters to six books. She has acted as invited editor of special editions of journals for Systems Research and Behavioural Science, Systemic Practice and Action Research and the Action Learning and Action Research Association and published several refereed papers and conference papers. Email: janet.mcintyre@flinders.edu.au

**Dr Denise de Vries** is a lectuer at Flinders University in the the School of Computer Science, Engineering and Mathematics, the School of Computer Science, Engineering and Mathematics, She has, since the early 1980s, developed commercial complex database systems for a variety of industry domains including local government, airline, public libraries, para-medical, diet and nutrition, commercial cleaning, automotive parts manufacturing, building and construction, inventory control, conference organisation and commercial photography. Based on this industry experience she researches techniques to preserve digital history and data semantics including techniques to deal with changes to information in a database such as structural change, semantic change and constraint change. Dr de Vries'  research focuses on [complex domain modelling](http://csem.flinders.edu.au/research/programs/cm/%22%20%5Ct%20%22_blank) using more sophisticated methods, such as **mesodata** modelling, as well as other issues relevant to metadata modelling related to [data mining, knowledge management](http://csem.flinders.edu.au/research/programs/dmkd/) and schema evolution. email :denise.devries@flinders.edu.au

# gLOSSARY: AN abc OF sOCIAL AND ENVIRONMENTAL JUSTICE

**Aarhus Convention** on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters Aarhus, 25 June 1998). According to Crossen and Niessen[[1]](#footnote-1) it provides the right to citizens of the EU to have a say irrespective of where they are working’.

**Biospheres** are regions that are currently protected by the UNESCO[[2]](#footnote-2); they have the potential to be scaled up as overlapping regions that respond to regional concerns in an integrated manner to ensure that biodiversity becomes a way of life.

**Boundaries** are understood to be permeable. They are open and closed in different contexts. Ethical decisions involve drawing the line in such a way that we consider who, what and why factors are included or excluded and the consequences for this generation of life and the next.

**Caring stewardship** is a process resulting from thinking and practice based on an understanding that what we do to others and to the environment, we do to ourselves and to our children.

**Contractual rights**  as defined by the **social** contract between citizens and the nation state does not go far enough to protect the powerless, such as children, the dis-Abled and sentient beings. It also does not protect the human rights of non citizens. In this argument it is extended to encompass human rights and earth rights.

**Citizenship** rights need to be extended to enable people to think in terms of earth politics (Beck, 1992) and the Global Commons (which includes air, water, soil and the genetic code of life) on which we all depend for our survival

**Critical systemic praxis** (CSP) is the capability to think and practice critically and in a way that matches appropriate kinds of knowledge to particular areas of concern. It could enable us to transcend conceptual and spatial boundaries. It builds on the work of Flood and Romm (1996), Jackson (2000), Midgley (2000, 2007) and Romm (2001).

**Consciousness** is the ability to think about our thinking and to reflect on our relationships with others, the environment and the next generation of life.

**Co-determination** means that the environment is a living entity which shapes our existence and which we shape through the choices we make every day. It is not a commodity or thing from which to extract endless profit[[3]](#footnote-3).

**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.

**Design of inquiring system** (DIS) is an example of a questioning process (adapted from West Churchman’s work, 1971, 1979, 1982) to enhance our capability to work with maps of knowledge[[4]](#footnote-4). It is a means to enable us to think about complex issues with stakeholders through asking questions. The process unfolds ideas and values and *sweeps in* the social, cultural, political, economic and environmental factors. The stakeholders and the environment of the problem and our practices are considered carefully in the questioning process.

**Ethics** can be considered as a continuum from narrow to expanded pragmatism. 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 the economic bottom line, thus 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 is based on dialogue with those who are to be affected by decisions and decision-making informed by the rights of future generations.

**Emergence (**for the purposes of this work) means the ability to escape the trap of our own thinking. To cite Vickers in Beer, 1994: 252: ‘thetrap 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.

**Emotions** are embedded in our cells (Pert, 1997). Our thinking affects our emotions and vice versa, if they are unchecked through reflection.

**‘Enemies within’**, refers to our values, namely religion, morality, politics and aesthetics (West Churchman, 1979). These values contribute to our humanity and our inhumanity. All human beings have values, but they differ. It is easier to communicate with those who share our values. Thechallenge is to recognise that all human beings see the world through the filters of values. Once we develop this humility and an appreciation of our potential blind spots, it makes it easier to communicate with others (Yu, 2006, Van Gigch, 2006, Bausch, 2006).

**[The] Global commons** needs to be reframed to encompass ‘earth politics’ (Beck 1992, 1999, Singer, 2002) in the interests of this generation of life and the next. We need overlapping regions that recognise the primacy of both social and environmental justice. It requires extending our sense of solidarity with others and the environment through recognising that we stand and fall as part of one system. We can be free and diverse to the extent that our freedom and diversity does not undermine the freedom and diversity of others.

**Human identity** needs to take into consideration that human beings are animals. We survive like other animals, because the earth sustains us. We rely on air, water, food (the earth) for our survival. We are toolmakers as are some other animals. We have emotions and our ability to think about our thinking (or consciousness) is part of our continuous evolutionary tale. Unlike other animals, as toolmakers we have the capability to act as stewards or to destroy the planet. Can we transform out thinking and practice? Can we identify with others?

**Human rights** in this argument refers to the right of all human beings to social and environmental justice protected by a scaled up version of the Aarhus convention that spans overlapping regions which are subject to laws and protected by overlapping regional courts which ensure social and environmental justice. This could enable us to identify with others and the environment that sustains us. Based on understanding the links across all life new forms of knowledge would be generated.

**Participatory design and stewardship** fosters an attachment to ideas and an understanding of responses in terms of rational and emotional intelligence. The process can be enhanced by ensuring that a) people who are to be affected by decisions are part of the decision making process (or well represented) b) decisions are guided by ‘if then scenarios’ that take into account future generations of life.

**Participatory democracy and governance** decisions are made in such a way that people are guided by the common good for this generation of life and the next. The point of governance is that it provides a process and a structure for addressing social, economic and environmental challenges that are intermeshed or convergent. Problems like poverty cannot be addressed by working on single issues by means of organisational or disciplinary silos. Achieving good governance is not merely about meeting the policy requirements of the World Bank; it is about achieving representation, accountability and sustainability.

 **Perceptions** of truth shape the way in which we understand representation, accountability and sustainability. Governance and democracy have to deal with three options pertaining to truth[[5]](#footnote-5): One truth (monist) responses defended by grand narratives; no truth (postmodernist) approached defended by relativism or conflict; mediated (harmonized) responses based on stewardship. International law entails a recognition that global citizens need to protect the global commons and the common good based on stewardship for this generation and the next. Law can be characterized as monist, dualist or based on harmonisation. I argue for the latter *as a means* to strive towards justice based on quality of life for all. The notion of **both** *entailment* *principles and* *harmonisation processes* is central to the argument that an expanded testing out ideas by experts and by people with lived experience is vital for democracy, governance, ethics and the law.

**A recognition** of our complicityis enabled through a range of participatory approaches(see McKay and Romm, 2007, 2008).

**Scaling** up participation is possible given the precedent of the Aarhus convention.

**Zero sum approaches** to governance are based on the mistaken notion that we gain at the expense of others or at the expense of the environment or the next generation of life. We are part of one space ship, earth (Buckminster Fuller, 1979). We are not in separate life boats (Hardin, 1968). The difference between these metaphors is at the heart of the systemic versus the compartmentalised approach to praxis.

# Introduction: Focusing thoughts

My starting point is to build on West Churchman’s notion (1979a, b) that

‘*there is no such thing as a total or universal system’* and that

*‘a system begins when you first see the world through the eyes of another’*

A systemic viewpoint helps to make decisions based on exploring values and considering the social, cultural, political, economic and environmental factors. At the national and international level decisions are made by *‘drawing the line’*. Where the line is drawn on the uneven consumption of resources needs to be informed through careful consideration at the local, national, and regional level, in order to maintain social and environmental justice.

Making legal decisions is part of the fabric of human culture. International law reflects a recognition that global citizens need to protect the global commons and the common good based on stewardship for this generation and the next. Koskenniemi (2005) makes this point clearly in his discussion on international law. A new form of expanded pragmatism based on considering the consequences for ourselves, others and the environment makes it possible to scale up human concerns without falling into the trap of narrow pragmatism or imperialism.

We need to apply our thinking to working with constantly changing systems and recognising that we are capable of transforming our identity and culture through legal means to ensure we become caretakers for the next generation.

The notion that international law is a specifically European concern could be countered by saying that a sense of ‘the law’ as a human means to protect the earth, is deeply felt by all Indigenous people or First Nations, internationally[[6]](#footnote-6).

“It is part of the Law that we should nurture the earth and nurture one another. …. Health is not just one thing.’ (Daphne Wilson, community worker, pers. comm., 2008 cited in McIntyre-Mills, 2008: 163)

This is echoed by Tui Atua Tupua Tamasese Tai’isi Efi[[7]](#footnote-7), November 3, 2009 in the wake of the Tsunami disaster in September:

“I am not an individual; I am integral part of the cosmos. I share divinity with my ancestors, the land, the seas and the skies. I am not an individual because I share my tofi (an inheritance) with my family, my village and my nation. …I belong to my village and my village belongs to me…This is the essence of my belonging.”

The aim of the book is to develop the capability of people to imagine and design sustainable interventions to address human security challenges. It asks the reader to appreciate the implications of systemic approaches for risk management and governance. This has implications for our understanding of democracy, law and the social contract.

It is written for professionals and postgraduate students in public policy, law, governance, sociology, religious studies, philosophy, informatics, engineering, health, geography and development studies.

We face social, economic and environmental challenges that are unprecedented. The global economic meltdown needs to be used as an opportunity to change direction (see chapter 3 and 5)[[8]](#footnote-8). The legal frameworks to address greed and the commodification of the powerless and the environment need to be informed by public debates on ethics to enhance human reasoning capability, empathy and humility[[9]](#footnote-9). Human beings need to develop the capability to make ethical decisions based on a capability to comprehend our stewardship of the land and life.

My focus is on the intergenerational challenge to care for the environment and the need to develop our ongoing capability to draw and redraw the territory of the mind in response to the challenges we face.

I make the case that creativity, imagination, deliberation and the exploration of scenarios could transform traditional democracy based on liberal voting procedures to include participatory democracy and governance.

# Overview of the chapters

This book argues that we need to develop our ability to address convergent social, economic and environmental challenges. It draws on past and current research to develop a means to enhance democracy and governance. The challenges are discussed by looking at the intersections of power as they shape the life chances of people of all ages and backgrounds within an environment that they share with other animals. I use examples spanning violence from within the home, the community, the nation state and across nation states.

The intersections of power *play out* in the way the powerless are commodified by the market (with which the state and civil society is complicit).

Trafficking, cruelty to powerless human and other animals is prevalent in a globalised economy from which the powerful profit[[10]](#footnote-10). The book explores the way in which markets control knowledge and patents and how it leads to competition for scarce resources (such as non renewable forms of energy and water). These examples address social and environmental justice through providing sites for exploring the intersection of the market, identity and power politics.The way we identify with others and the environment will affect the wellbeing of the planet.

Patricia Hill Collins (2000) makes a point about empowerment that has far wider applications[[11]](#footnote-11). Her approach resonates with the critical reframing process developed in this book in which I re-work the social contract by exploring alternative forms of government and governance to protect those who fall outside the mantle of citizenship rights (as a result of their age, gender, race, species or level of ability).

“The significance of the hegemonic domain of power lies in its ability to shape consciousness via the manipulation of ideas, images, symbols, and ideologies -where ideas matter, reclaiming the ‘power of a free mind’ constitutes an important area of resistance. Reversing this process whereby intersecting oppressions harness various dimensions of individual subjectivity for their own ends -becomes a central purpose for resistance. Thus, the hegemonic domain becomes a critical site for not just fending off hegemonic ideas from dominant culture, but in crafting counter hegemonic knowledge -that fosters changed consciousness. Regardless of the actual social locations where this process occurs- families, community settings, schools, religious institutions, or mass media institutions- the power of[[12]](#footnote-12) reclaiming these spaces for ‘thinking and doing **not what is expected of us’** …(Hill Collins, 2000: 285)[[13]](#footnote-13).

I make a case for greater awareness of our shared complicity (Odum, 1996) in shifting the burden of responsibility for social, economic and environmental challenges to separate nation states. It allows international powers to play an ‘us versus them’ game in which there will only be losers[[14]](#footnote-14).

The environment needs to be seen as a living entity that co-determines our very existence, not as a commodity from which to extract endless profit[[15]](#footnote-15).

We cannot remove poverty and pollution by shifting the burden to those we construct as ‘other interest groups, or ‘ other cultures’, ‘other races’, ‘other classes, ‘other nation states or ‘other regions’.

We cannot address the challenge of population reduction merely within the boundaries of the nation state.

Regional areas (within and beyond the nation state) need to be open to support neighbours facing the challenges of drought or flood or conflict. Social, economic and environmental issues are regional and they comprise a planetary problem.

By framing population reduction within the nation state O’Connor and Lines (2010) (intentionally or unintentionally) support the argument that human beings are likely to exploit the commons, because they are greedy and wish to make a profit[[16]](#footnote-16).

Global citizens need to: a) Face up to the convergent social, economic and environmental challenges facing the planet. b) Extend the social contract to regional areas that protect people within and beyond the boundaries of the nation state using a regional/biosphere approach. c) Scale up local participation and decision making so that social and environmental justice concerns can be addressed. d) Become conscious of our rights and responsibilities.

The idea that population pressures are responsible for the problems facing the planet are undeniable, but the pressures by developed nation states and the rich are undoubtedly greater than the pressures by less developed nations states and the poor and all people continue to aspire to a standard of living that is unsustainable. We need to change our cultural aspirations and to re-think our identity.

**Chapters 1 to 2** discuss the idea that ‘evolutionary consciousness’ (Banathy 2000) can be developed through thinking about our thinking and translating our awareness into practical ways care for others and the environment. For example money as a token needs to be re-constructed to reflect the convergent value of safe water, air, soil and food.[[17]](#footnote-17)

I explore the challenge as to how people can be free and happy to the extent that they do not undermine the freedom and happiness of others or the next generation of life. Our policies will need to prevent the further deterioration of our regions and take into account the needs of our neighbours, for example: Oxfam has stressed in a recent report that climate change refugees from Pacific Islands will be a major challenge by 2050 because of rising water levels and storm damage.[[18]](#footnote-18)

I suggest an approach to democracy, governance and ethical decision making based on considering both the existing *a priori norms* linked with a particular time and space through contextual , ‘if then’ scenarios that enable participants to consider the implications of their decisions. The structure and the process need to support respectful dialogue.

“Because the medium of state power is constituted in forms of law, political orders draw their recognition from the legitimacy claim of law. That is, law requires more than mere acceptance; besides demanding that its addresses give it de facto recognition, the law claims to deserve their recognition. Consequently all the public justifications and constructions that are intended to redeem this claim to worthiness of recognition are part of the legitimation of a government constituted through law….The moral universe, which is unlimited in social space and historical time, includes all natural persons with all the complexities of their life histories. By contrast a legal community, which has a spatio-temporal location, protects the integrity of its members only insofar as they acquire the artificial status of bearers of individual rights.” (Habermas, 2001:113- 114)

**Chapter 3** discusses the convergence across many different kinds of knowledge and makes a case for ensuring diversity and freedom to the extent that any individual or group’s diversity and freedom are not given at the cost of others or the next generation. Thus, stewardship ensures that rights and responsibilities are limited for the sake of the common good.

**Chapter 4** discusses a process and software to combine participatory democracy (to generate social, economic and environmental policy agendas) with ‘if then’ scenarios to inform regional decision-making. Testing ideas is constructive, because it a) enhances a participant’s sense of attachment to ideas through co-creating ideas with others and thus b) makes connections – bonds and bridges with others (Putnam, 1995, McIntyre-Mills 2006b). It explores the implications of decisions. This can be vital for balancing individualism and collectivism, because it enables people to think about self, others and the environment including the next generation of life. Thinking about our thinking and appreciation of our emotions develops a greater number of connections across different parts of our brain. The firing of interconnections and feedback across the neurons, living creatures and the environment is consciousness.

Agency or caring stewardship are defined in terms of people’s awareness of their rights and responsibilities to voice their ideas critically and their capability to engage in rational caretaking praxis to ensure that the voiceless, very poor and the powerless do not live in misery of fear, homeless and hunger[[19]](#footnote-19). Stewardship, according to Laszlo (2000 cited in Romm, 2002: 461) from the verb ‘steward’, meaning to ‘bring forth’, needs to underpin what is regarded as reasonable, future-oriented oriented praxis. If we accept that systemic approaches involve our thinking and practice, then we are potentially part of the problem and the solution. Our choice to drive to work or to walk or catch public transport could make a difference.

**Chapter 5** addresses the uneasy relationship that exists insofar as individual rights are upheld by the collective, constructed law. If people do not feel a sense of connection to the over-arching laws then they will resist them. The law needs to be made meaningful and accessible through processes that enable the involvement of people who are to be affected by legal decisions[[20]](#footnote-20). The Western notion of individual identity and individual citizenship rights have been taken to an extreme. Unless we consider the common good human rights cannot be supported. This requires rethinking the notion of rights and responsibility. It requires a mindfulness[[21]](#footnote-21) based on the capability to think about not only ourselves, but also others (including sentient creatures) and the next generation of life. Our human perspectives are always situated or framed and filtered by our diverse values[[22]](#footnote-22). But this does not mean that we can be free and diverse in ways that undermine the freedoms and diversity of others. This is where the balancing act of democracy and governance comes into play, if we are to sustain the global commons.[[23]](#footnote-23)

The more we can appreciate (and take into account) our thinking, our emotions, the way we engage with others and how this impacts on self-others and the environment, the more likely we are to make ethical and sustainable decisions. Our fragmented way of understanding the world is a product of western culture. We need to develop greater mindfulness in order to ensure that our individual and collective needs can be met. We need to use a range of methods (narrative, text or interactive software) to enable greater understanding of one another’s perceptions and to engage in designing for the future. The global commons needs to be reframed to be more inclusive than the OECD definitions, because our relationships across organic and inorganic life are co-determined.

The challenge is to find ways to foster mindfulness[[24]](#footnote-24) through local community discussions that hold governments to account.

We need both centralised controls to protect the global commons (the sine qua non of life) and decentralised engagement to test out ideas. Where and how we draw the lines of inclusion and exclusion will be relevant for decision making in the sciences, democracy and ethics. Scaling up value pluralism from local to regional requires the ability to be open to diversity, but also to find patterns.

**Chapter 6** develops a conclusion about our need to face up to convergent social, economic and environmental challenges through creative stewardship based on caretaking and expanded pragmatism.

The book strives to address social and environmental justice through narrative, scenarios and dialogue to enable global citizens to join up the dots and to build evidence based policy.

Merely telling people about impending disaster, or making people feel guilty about the way they live at the expense of others has to date had little impact. We need both international law and transnational processes of engagement that a) honour the primary limits set by intergenerational concerns. b) enables people to work with many different kinds of knowledge and to balance individual interests and collective concerns through facing up to convergent social, economic and environmental challenges. The focus on international law and transnational processes link up with the argument about regionalism by introducing the notion of federalist approaches. The current UNESCO biosphere[[25]](#footnote-25) model of protecting just some specific areas needs to be extended to protect the planet. This needs to be achieved through movements to protect the wellbeing of ourselves, others and the environment through a form of overlapping regions supported by legal structures and processes that are driven by ‘planetary politics’(to adapt Beck’s , 1992).

Complex challenges (such as poverty, social inclusion, pollution, higher regional temperatures) pose risks for human security. As global citizens, we need to understand that issues facing the world are systemic, because they straddle many different factors and involve diverse stakeholders.

The systemic nature of the challenges creates complexity in part because of the diverse values of the stakeholders. All challenges need to be understood contextually. When we consider the interconnections of social, economic and environmental challenges, we need to understand how different forms of knowledge and disciplines relate to the whole and the interconnectedness of the challenges. This requires addressing the underlying causes rather than the symptoms of a problem. This book develops the argument that one of the ways to address both democracy and sustainability is to understand the concept of feedback. Feedback means being able to recognise different perceptions of what is positive and negative and being able to recognise the different ways in which people perceive a problem and its environment.

**Chapter 7** is a user guide to the software written by Denise de Vries. It has links to our website, which explains the software and enables access to the demonstration versions of the software for local governments and human service organisations.

**Chapter 8** is a summary of the book for busy practitioners. It will be shared on networking sites as a way to introduce the ideas explored in the book.

I make the case in this book that we can achieve our human security by becoming stewards of other forms of life and the environment. We need to adapt our way of life and re-create our identity.

 Anthony Giddens (2009) in ‘the Politics of Climate Change’ responds to Sir Nicholas Sterns (2006) book the ‘Economics of Climate change’ and argues that rational decision making in response to facts is optimistic. The economy will not necessarily protect the environment, because it is the rational decision. Politics and self interest at the national level could influence decisions.

The best chance of a sustainable future is through:

1. Developing an appreciation of our shared fate.
2. Social and environmental justice movements (driven by multiple communications by ‘we the people’). As Global Citizens **we have a right and a responsibility** to design our future. Human needs ought to be considered *to the extent that they are convergent with sustainable, liveable futures* for this generation of life and the next[[26]](#footnote-26) (see chapters 3-5). The people of the world need to recognise their integral relationships with one another, the environment and the next generation of life.
3. Legal mechanisms to ensure this protection need to be established through overlapping regional federations protected by regional courts , to which nation states are responsible. The market and the state need to be held to account by global citizens who use networks to raise awareness. The process, structure and software to enable caretaking and holding organisations to account is detailed in chapters 1- 8[[27]](#footnote-27).

# from commodification to co-existence

An understanding that we co-exist could help to prevent our commodification of relationships[[28]](#footnote-28). Kant’s ‘Moral Law’[[29]](#footnote-29) applies only to human beings. The humanist idea of respect (based on treating people as ends in themselves and not means to an end) has been translated into practice in limited ways. The social contract (Rawls, 1997) is based on the Kantian notion that we should design laws ‘from a veil of ignorance perspective’ to ensure that we would be prepared to live with the laws if they were applied to us. The social contract, however has not been extended beyond the nation state. Instead we rely on human rights declarations, treaties and covenants, (which although very important) are not always buttressed by national laws. The notion of treating the environment with respect and insisting on an obligation to ensure that this generation respects the rights of the next generation of life has not been addressed. The meeting in Copenhagen (December, 2009) was a failed opportunity to co-create a shared international response to changing our way of life. Unless the capability to understand the implications of our thinking and practice is extended, we are unlikely to implement sustainable developments. We need to pay more attention to ‘earth politics’ (Beck, 1992, 1995) and the implications for democracy and sustainability. We need to help people to ‘join up the dots’[[30]](#footnote-30). We need to consider **both** *a priori norms and principles* **and** also be able to hold people and organizations to account using *a posteriori measure*s to prevent wrong doing.

The challenge is to:

1. **Promote** an *ever extending*  or *widening circle of solidarity*
2. **Care for** the next generation of life including sentient, voiceless beings who are not protected by the social contract or human rights.

Striving for rights and responsibilities is ongoing and according to Aristotle can be regarded as the purpose of a good life. Although Aristotle can be accused of thinking in terms of fixed or essential categories[[31]](#footnote-31), a deeper reading of Aristotle’s work suggests that he was concerned with a careful matching of responses in context. The geometry that suits this sort of approach is not a fixed category, but instead an ongoing dialogue to work out the implications of our decisions.

Taking a decision to draw the line is important if we are to ensure that people are free to the extent that they do not undermine the freedoms of others. Whistle–blowing legislation is important in so far as it buttresses accountability. It also needs to be buttressed by providing support for people who are prepared to speak out about corruption. The importance of speaking up frankly and fearlessly has been highlighted by whistleblowers highlighting examples of corruption (Brown et al 2007) in Australia. Internationally the corruption of corporations and banks reached unsustainable levels. The old principles of lending amounts of money that are backed by real assets have evaporated along with the citizen’s trust in their financial system. If so-called established democracies cannot set an example of a well governed, transparent political economy, then what hope is there for emerging democracies? Citizenship rights and responsibilities need to be extended through re-making a sense of identity which embraces the common good. Public officials are supposed to be:

‘citizens in lieu of the rest of us. The common good is, so to speak their speciality’ (Preston, 2001:164).

How can we hope to develop a fair and decent society when the gap between rich and poor is so wide? How can we hope for respect for those in power when governments make decisions that enable these gaps to persist?

The answer is through international law and covenants that provide the means through regionalist courts to ensure that federalist governments support social and environmental justice (see chapter 5). Social and emotional distance within and between nation states widens as the life chances of people become so very different. This is aptly summed up as follows:

“A child born in Sweden today has a life expectancy at birth of 79.9 years. A child born in Sierra Leone has a life expectancy at birth of 34.5 years. In the United States, gross domestic product per capita is $34.320, in Sierra Leone it is $470. Twenty four nations among the 175 surveyed by the United nations Development Programme have GDP per capita over $20 000 Sixteen nations have GDP per capita under $1000. Eighty three nations are under $5000, and 126 nations are under $10 000. Adult literacy rates in the top 20 nations are around 99 percent. In Sierra Leone the literacy rate is 36 percent. In 24 nations the adult literacy rate is under 50 percent…..Any theory of justice that proposes political principles defining basic human entitlements ought to be able to confront these inequalities and the challenge they pose, in a world in which the power of the global market and of multinational corporations has considerably eroded the power and autonomy of nations (Nussbaum, 2006: 224-225)

Similarly within developed nations the gap between rich and poor is widening:

“The growth of inequality made it harder for people to maintain standards relative to others. The increased pressure to consume led people to save less and to borrow more to such an extent that the expansion of consumer demand became one of the main drivers of the long economic boom and financial speculation which ended in crisis. This fits well with the fact that spending on advertising also varies with inequality- in more unequal countries a higher proportion of Gross Domestic Product is spent on advertising, with the USA and New Zealand spending twice as much as Norway or Denmark…” (Wilkinson and Pickett, 2009: 223)

…levels of trust are connected to income inequality….There are several reasons why we believe that equality is the precondition for greater trust (although almost certainly there is a feedback loop between the two (Wilkinson and Pickett, 2009:62)

Their research shows that people work longer hours in more unequal countries and are less prepared to trust others within their nation state and less able to trust others in other nation states. As their social capital is eroded by long hours, less time for themselves, their family and friends their wellbeing is eroded too. They suggest that by reducing inequality the world would be healthier and happier. Unfortunately they do not suggest how to make a difference other than suggesting that co-operatives would be better for the health of workers than capitalist corporations. They do not propose how these companies could be governed at a wider level. Alternative governance and new forms of democracy (Florini, 2003) are outlined and explained from chapter 4 to 8.

Democracy as it is currently configured allows for wide gaps between the rich and poor within nation states and across nation states. Homelessness is increasing in Australia, farmers are giving up the struggle on the land because they cannot compete with large corporations and cannot cope with the drought[[32]](#footnote-32), the number of refugees accepted into Australia has not increased and Aboriginal Australians remain disadvantaged, for example the stolen generation of children (taken away from their parents)[[33]](#footnote-33)were unpaid for their work[[34]](#footnote-34) The obscene size of corporate salaries in comparison to the majority of people in both the developed and the developing world is regarded as legal and it sets a standard of unsustainable global aspirations.

The challenge is to create a more equal society in which the quality of life for all is the right and the responsibility of multilevel and multilateral forms of governance and democracy in chapters 4 and 5.

# Transnational solidarity

Berlin (1981) stresses that some human values are in conflict, for example individual freedom and equality within and across groups.[[35]](#footnote-35)

The book strives to address this paradox by means of a ‘design of inquiry approach’ based on a consideration of different kinds of knowledge, namely subjective, objective and intersubjective. It is built on an appreciation of different kinds of knowledge such as logic, empiricism, idealism, the dialectic and a form of expanded pragmatism.

Solidarity can be achieved when we address the ultimate human paradox that cultural ideologies can predispose people to believe a) that there is only one way to do things (monists ranging from arch capitalists to arch radicals) or c) an anything goes (post modernist) approach fostered by the multiple views expressed simultaneously in the media or c) that truth needs to be co-created and tested out so as to respond to the challenges we face as a planet.

Solidarity to support sustainability is based on an idea that values can be diverse to the extent that they do not undermine the diversity and freedoms of others, the environment or the next generation of life. The notion of planetary health needs to be placed in the forefront of our minds[[36]](#footnote-36) so that we are able to scale up our understanding of rights and responsibility across national borders in constellations or federations. For example throughout the Asia Pacific Region we face challenges as a result of climate change.[[37]](#footnote-37) Indonesia faces the challenge of implementing Decentralization Law 22 of 1999 and Gender Mainstreaming Law 9/2000 and Law 23/2002 to ensure greater opportunities for minorities, women and children, respectively (Barton 2002 and Karni 2006, Bessel in McLeod and MacIntyre,2007). In both Australia and Indonesia, for example, the need to address these concerns could provide common ground across diverse religions and interest groups (pers. com, Suedy: 2008, Director of Wahid Institute, and Prof Dr Gumilar, Rector of University of Indonesia). A way to achieve this balance is to involve people in policy making so that they feel engaged and committed to the policy that ensures the wellbeing of their children[[38]](#footnote-38).

# Focusing questions

1. Can we move beyond zero sum categories[[39]](#footnote-39) and us/them stereotypes to group solidarity, based on planetary consciousness? [[40]](#footnote-40)
2. What is a nation if it is not a state?
3. Can we move beyond tribalism and colonialism to face a broader sense of who we are?

These questions are relevant to the nature of democracy and governance and to exploring alternative ways to govern.

1. What is the principle of subsidiarity and proportionality?[[41]](#footnote-41)
2. To what extent could social and environmental justice that balances individual and collective interests be supported by the Lisbon Treaty?

“Subsidiarity is the idea that a central authority should have a subsidiary function, performing only those tasks which cannot be performed effectively at a more immediate or local level. Subsidiarity is a fundamental principle of European Union law. According to this principle, the EU may only act and make laws where member states agree that the action of individual countries is insufficient. The principle was established in the 1992 Treaty of Maastricht and is contained within the proposed new Lisbon Treaty.”[[42]](#footnote-42)

1. To what extent can subsidiarity support discursive dialogue without jeopardising the commons and common values?

…of course, it also remains to be seen what sort of institutional arrangements can foster Europe wide deliberation. Interaction in a shared public sphere might be necessary to foster and maintain mutual respect and solidarity. …” [[43]](#footnote-43)

Translating the balance between collective and individual needs will be the challenge for the EU. Cameron (2004) discusses the democratic deficit that will be felt as Europe is enlarged without deepening the opportunities for people to have a say. The European Parliament is regarded by many as unable to give adequate representation to diverse interest groups:

“The EU institutions are the target of complaints about creeping centralism, the democratic deficit and lack of transparency. According to critics, power seems to flow in a one–way direction to Brussels” (Cameron 2004:10).

An alternative form of governance needs to be constructed that could enable social and environmental justice to be done and to be perceived to be done, because it takes into account the social, economic and environmental factors and weighs up the implications for all stakeholders. A potential way forward is to ensure that the principle of subsidiarity is applied at a regional level internationally. In other words, the decisions are made at the lowest level possible and in a way that honours freedom and diversity to the extent that the freedom and diversity of others is not undermined. The *means to achieve* these goalshas already been demonstrated through the Aarhus Convention detailed in chapter 5. It could be scaled up the assistance of the software that is detailed in chapter 8.

# Listening, telling stories and creating scenarios helps us act as stewards

Vignettes and detailed narratives provide a means to explore complex challenges systemically by working with knowledge to create praxis wisdom.

“ …democracy needs to be deepened…We are at the cusp of a new era wherein the nation state will no longer be the sole arbiter in defining the meaning of citizenship…” (Kivisto and Faist: 2007:140).

The notion of nested systems and overlapping regions has influenced how we think about democracy and governance. New discourses on identity, citizenship, rights and responsibilities are emerging (Kivisto and Faist, 2007[[44]](#footnote-44), Faist, 2009). In our life times we need to acknowledge that we could *be* or *become a*sylum seekers or refugees displaced by conflicts or disasters

( fire and flood) citizens within a state with minimal rights[[45]](#footnote-45)or we could be powerful citizens who are (overtly or covertly) dual or multiple citizens. Alternatively we could become transnational citizens who receive reciprocal rights (not merely because we are members of a commonwealth or federation, such as the European Union) but because we see ourselves differently, as citizens of ‘one world’ (Singer, 2002, Florini, 2001, 2003) where the social contract is extended (Nussbaum, 2006) to include young people, non-citizens and the voiceless.

 I argue that for human rights to be implemented (even in democracies) it will require some overarching broad regionalist approaches (as detailed in chapter 5) to ensure that differences in life chances are not translated into disrespect for others and an overweening pride that allows us to deny the rights of others.

The law of the nation state has prevailed in undermining human rights and the environment. To have any hope of buttressing wellbeing and the global commons we are going to have to find ways to identify with the future of the planet, rather than the rights of the powerful to make the law to protect their own human interests.[[46]](#footnote-46)

Rockström (2009) has stressed the importance of lowering carbon emissions in a paper published in Nature entitled ‘A safe operating space for humanity’. He argues that the level of emissions will need to be lowered from 450 to 350 parts per million, in order to ensure the sustainability of the planet. He points out that the IPPC report will need to be revised.

Even if the role of human kind is not central to climate change, we should manage the risk that our role could be central, by making policy in the interest of future generations of life.[[47]](#footnote-47)

We need to address the temperature rises, the extensive fires, the rising sea levels, the regionally convergent disasters (fire, floods and hurricanes) and discuss ways to ameliorate these changes by co-operating within and across regions. The aim of this volume is to propose a sustainable approach. The problem of social and environmental justice cannot be addressed by nation states operating in silos or in technocratic ways that are not informed by systemic praxis. By this I mean that thinking and practice are interlinked and that policy should be made with those who are to be affected by the decisions.

Geo–engineering the planet’s climate could be our ultimate act of hubris as a human race unable to reduce our emissions and refusing to admit that our way of life is unsustainable. Lin (2009) argues that addressing the cause of a planet’s ill health is better than treating the symptoms by means of ‘geo engineering’. The issue is that our planetary health has declined so far that we will need to take drastic measures to prevent a decline into the end phase of disease management. The planet can be likened to a human body. We can either treat it with medicine or we can improve our life style. The use of aerosols and reflectors could impact on the ozone layer or lead to unintended side effects, according to Lin (op cit). He concludes that governance will need to take into account planetary concerns and cannot be limited to the nation state. But the dangers of allowing interventions to be made at a planetary level are very problematic. Regional interventions such as the Aarhus convention supported by the Lisbon Treaty could be adapted to suit other federal systems of government and scaled up to enable accountability beyond the nation state under the auspices of regional parliaments and courts that support international justice (Petkova and Veit, 2002)[[48]](#footnote-48).

The structure, process (aided by software) for achieving this is detailed in chapters 4, 5 and 8. Multiple regional courts that subscribe to a global convention could avoid the dangers of a single system of government. We need to pause and consider the implications of political and policy decisions for the next generation of life.

Compliance with public, private and NGO sector ethics needs to be augmented by the rights of citizens within overlapping polities to have freedom of information and the right to report wrong doing. We need to support transnational citizenship and loyalties through public and NGO organisations.

Making and invoking treaties and conventions has to be ongoing. The volume explores the potential of the Aarhus Convention on freedom of information pertaining to the environment to be extended to other areas to ensure sustainability across the generations.

The United Nations Human Rights Legislation[[49]](#footnote-49), the Convention on the Rights of the Child and the principle of subsidiarity need to be applied within regions. The European Union[[50]](#footnote-50)could provide a means to test out forms of federalism to address the rights of the next generation. The need for deepening democracy beyond the scope provided by current social contracts needs to be re-addressed. For example, the Australian Disability Discrimination Act of 1992 insists on accessibility to information. This has implications for inclusive infrastructure and communication styles that are mindful of intergenerational rights and responsibilities at the local and regional level.

Designers of policy need to accept that thinking in terms of categories such as *culture* versus *nature i*s no longer possible[[51]](#footnote-51) (Beck 1999: 27, 51, Haraway, 1991): ‘You are not caught in congestion, you are the congestion’ (Beck, 1999:130)[[52]](#footnote-52). Our choices of food create the environment that future generations will inherit. Consciousness is therefore a subject worth studying in the social sciences. Mindfulness is essential if we are to appreciate the global commons and if we are to have a hope of sustaining the future. Emotions play a role in mindfulness (Nussbaum, 2001). Paradoxically they can cloud our thinking or they can prompt us to ask what is more important than anything else? We need to be able to examine our emotions. The capability to do this stems from being able to engage in thinking about our own thinking and being able to think through ideas with others. To do this we need to engage with one another respectfully and to be guided by processes that make this possible.

Many networks for change exist. One such network is 350.org which is based on the need to reduce our carbon emissions. ‘Wellbeing is an idea whose time has come’ (Fougere, 2007) could be a rallying cry for ‘planetary politics’ along with the notion that 350 pp million of carbon is the magic number for sustainability of the planet. We need to use less carbon for a more sustainable quality of life’.[[53]](#footnote-53) For example, Bill Mckibbon invites us to join 350.org on line to raise awareness, but also to make a difference through mobilising people in our communities throughout the world. [[54]](#footnote-54) This is an example of a social movement which could help to change the way we think and the way we live. It is also a way to raise awareness of why we need to enable people at the local government level to speak out across all the regions of the world.

How do we hold in mind multiple, diverse variables with different value dimensions? A way forward is through enhancing the capability of people to draw together the knowledge they have gained through experience, telling stories and considering different scenarios and their implications for the future. In South Africa, change was achieved through ‘people power’ and the ability to think through different scenarios (Kahane, 1992). The following general scenarios are starting points for considering the implications of our human designs and choices within specific contexts:

Scenarios such as the following can be used at the local government level as a starting point for an engaged conversation aided by decision-making software to foster the development of transnational networks for change.[[55]](#footnote-55) These conversations are a form of discursive democracy that can help to change the way we live. The way in which the scenarios can be used locally and regionally is explained in the user guide detailed in chapters 4 and 8.

### A – Best case scenario: an inclusive, creative society that balances individual and collective interests

We live in an environment that can support this generation and the next. Women, children and men have a say in local public agoras. Those who wish to do so, attend the face-to-face meetings in the local town hall. Others log on to the website to follow the debates and to add their own ideas (using a form of software explained in Chapter 4). The summaries of ideas are shared with other local governments. These findings are shared by local government representatives at a regional forum every three months, which is held to address whether quality of life concerns are being met in a timely, transparent manner. We define quality of life in terms of social, economic and environmental indicators by the people in terms of what works, why and how. Housing is affordable and made of sustainable materials. We have faced up to the convergent social, economic and environmental challenges and we are resilient. We live in clusters of modest, well- designed homes. We share rain tanks and solar grids that are subsidised by local governments. Poor local governments and rich local governments form twinning arrangements to support one other. No one in our community is homeless, because those who are ill or unable to work are assisted in community housing where they contribute in many different ways to public projects spanning home construction, food production, repairs, art projects and recycling materials. They learn skills and develop their capabilities through education that fosters freedom and diversity to the extent that it does not undermine the rights of others.

Alternative energy powers our living and working areas. The new status symbol is the environmentally friendly lifestyle. Public transport is green. Off road vehicles are no longer permitted to private citizens, but they can be hired for specific tasks and the kilometres are logged. The green economy supports a vibrant job market spurred by subsidies to enable packaging goods, housing people, transporting people, educating and entertaining the public. All members of the public are encouraged to share their experiences and ideas for living sustainably. The futures market has been reconstructed by overarching regional governments to take into account the air, water and earth we need to grow organic, safe food.

People develop new economies and new trading systems that enable them to have time to enjoy many activities. The clothes and shoes we wear are made of renewable resources. The windmill and fabric shoes are the new chic symbols of sustainable living! Because they understand that their carbon basket can be stretched further by growing their own vegetables people are mostly vegetarian. Most waste is recycled locally and used for building or composting. Packaging is designed to ensure that waste is minimal.

Animals live in a carefully monitored environment to ensure *their* quality of life *and ours*. We are better off because we respect ourselves, one another (including sentient creatures) and the environment. Bird flu, swine flu and bovine disease are unheard of in this scenario. We no longer take too many antibiotics, because we encourage prevention and the protection of our immune systems.

We live in harmony with the people of our region and our economy prospers through being able to work in one another’s countries. We learn many languages. We are enriched by the diversity of language and culture. We are free and diverse in our neighbourhood, sub national region and supernational region, to the extent that our freedom does not undermine the freedoms of others.

Each local area enables each resident to be heard. The concerns that they raise about living in the hills or on the plains or near the coast are given careful consideration when making complex policy and planning decisions to support safe communities.

 Community networks are formed to enable people to discuss their fears about bush fires, drought and the inundation of coastal properties. People who are worried or stressed are able to access specific services to address their mental health needs and their practical concerns about building regulations and the safety of their neighbourhood. Through interactive democracy and governance software, the ideas of local people are scaled up. People have a say in ensuring social and environmental justice.

We are happy and creative, because we have time to sleep, make slow food (in contrast to fast food, which is unhealthy and expensive), talk to our neighbours, work in communal gardens, irrigated by water harvested and saved in many ways. We have green parks where the trees look healthy because they thrive on grey water. We play sport and express ourselves in a range of art forms. We have hope for the future. We do not commute long distances to work. We meet in both virtual and local communal areas. We have inexpensive technology. By living in ways that not only sustain, but regenerate resources, our desire for recognition and status is supported. We live not only for ourselves but for others and the environment. As a result of thinking about the consequences for our own family and neighbours and also for the next generation of life, we make decisions based on an *expanded form of pragmatism*. We understand that what we do to others and to the environment, we do to ourselves.

### B- Small changes for the ‘long haul’[[56]](#footnote-56)

People make annual progress towards goals that they meet for the benefit of their children and grand children. But they do not move quite fast enough. People of all ages and from all walks of life who are able to ‘join up the dots’, help to motivate movement towards a better future. They are motivated by concerns for others and the environment and are becoming increasingly less selfish and more concerned about the common good. They empathise with others. Local governments and non-government organisations take the initiative. We hold workshops to demonstrate how people can make a difference. We listen to the people and help local groups to respond to local challenges. Together we undertake model projects that demonstrate how it will be possible to live differently. We model different ways of thinking and through ‘living the changes’. We show that it is possible to balance individual and collective interests, because we are able to create alternative ways of governing at a regional level.

### C- Worst case: Business as usual and a large carbon footprint

We continue to believe in economic arguments that ignore the social and environmental dimension. We continue to think that our way of life is sustainable and are not prepared to manage the risks of climate change by changing our way of life. We see the increasing risk of drought, bush fires and floods as unrelated events or deny that climate change could mean rising temperatures in some areas and plummeting temperatures in others (as melting ice effects the ocean currents). The sea is used as a dumping ground and it no longer helps to regulate our climate. More and more of us suffer from viruses and food poisoning. Animals are diseased. Most of our rivers are polluted and many have dried up. We fight over non-renewable energy and natural resources.

We export our waste material to poorer nations who ‘offer’ to store it.

‘The government’ and ‘the economy’ are blamed for the problems, but we do not make any changes to our personal lives, because it is too hard, or not our problem. The corporate business sector continues to tell us that the market self -regulates. We compete with one another and are proud to wear designer labels or to carry designer packages. We engage in fund raising activities and give money to charity. These small gestures are to enable us to pretend that we are making a difference. We refused to enter an agreement in Copenhagen, because we considered it bad for the state of the economy. We continued to wrangle after the inconclusive Climate Change talks in Copenhagen (18 Dec 2009).

We cannot achieve agreement internationally as to how we will go about reducing our emissions and changing our way of life. We feel anxious, stressed or depressed and we use drugs, alcohol and shopping to provide temporary relief. We flop in front of television and watch mind numbing programs or endless DVDs so that we ignore the problems in our neighbourhood. We withdraw and do not know the people in our street. We feel we cannot be bothered, because we are too busy making a living and worrying about our own problems. We base our decision on *narrow pragmatism*, because we think about the consequences only for ourselves and not others. We believe that our power and profit must be driven by self-interest and the bottom line, namely ensuring our powerful positions and our profits. We think that social and environmental considerations are ‘externalities’, rather than imbedded in the current system.

# Global citizenship and sustainability: Appreciating our shared fate

In April 2010 the annual International Federation for Systems Research met at the University of Vienna and continued in Pernegg. The conversational approach to design originated as a result of Bela Banathy (1996), who asked that conversationalists remember the next generation, by placing a chair in the middle of the circle to remind us that we are global stewards[[57]](#footnote-57) who need to think about our thinking and our practice and the implications for future generations. Consciousness is, in effect, the key to a life examined, for better and for worse…consciousness helps us develop a concern for other selves and improve the art of life.’ (Damasio, 1999: 5)

‘…the relationship between the people and their country is understood to have existed from time immemorial- to be part of the land itself’ (Rose 1996: 35-6 cited in Atkinson, 2002:29)

The warnings made by the Kogi[[58]](#footnote-58) from the Sierra Nevada de Santa Marta mountains of northern Colombia, South America are now being echoed by the President of the Maldives, President Mohammed Nasheed (9 May 2009) who explains how flooding will bring the end to their homelands. Failure to change the way we think and practice will cost us the world[[59]](#footnote-59). The treatment of people and the land as resources for exploitation is the root of the problem based on the notion of externality. It is a form of dualism based on misunderstanding that we shape and are shaped by the land.

Paul Hawken echoed similar sentiments as the President of the Maldives at the graduation ceremony ‘Commencement Address’ at University of Portland (2000) stressed:

“Forget that this task of planet saving is not possible in the time required. Don’t be put off by the people who know what is not possible. Do what needs to be done, and check to see if it was impossible only after you are done. …What I see everywhere in the world are ordinary people willing to confront despair, power, and incalculable odds to restore some semblance of grace, justice, and beauty to this world. The poet Adrienne Rich wrote, ‘So much has been destroyed I have cast my lot with those who, age after age, perversely, with no extraordinary power, reconstitute the world”. There could be no better description. Humanity is coalescing….”[[60]](#footnote-60)

The theme of the power of social movements has been echoed by many, but as Giddens (2009) said, social movements will not be enough to make the planetary changes required to achieve ‘earth politics’ (Beck, 2005).

We will need to enable government officials and policy makers to engage with people (including the most marginalised, poor and powerless) and to strive for social and environmental justice. Few people are keen to give up their national identity. They fear that they will be subject to the rules of others and disrespected. What seems to be important to human beings is to be individuals and part of a wider group with which they identify. We need to be free and diverse to the extent that we do not undermine the quality of life and the common good for this generation of life or the next.

Air, water and soil sustain us and we return to these elements after death. We exist not merely because of our connection to others and the environment but because we are part of the environment (Harris and Wasilewski, 2004a, b)[[61]](#footnote-61).

 I argue that protection of resources and addressing the burden of growth does not require closing our boundaries to immigrants or refugees. It requires a realisation that our common future hinges on the way we choose to live at a regional level. While children’s rights ought to be upheld, the conditions that make it possible to achieve them should also be addressed[[62]](#footnote-62).

For example, ESKOM (South Africa’s Energy Supplier) could be said to have been poorly managed. For those on low incomes or unemployed a 35% increase in electricity prices will influence their life chances of the very poor as the costs of services and resources increase. The provision of affordable sustainable alternatives needs to become a priority.

In situations of poverty, examples of conflict and competition for scarce resources are prevalent as illustrated by the case of Masiphumelele shack dwellers in the Western Cape, South Africa. Local residents threaten the Somalian immigrant traders (who have opened small shops in the informal settlements) in South Africa with eviction and death. Democracy fora in South Africa (which are held as telephone phone–ins to radio stations) need to bear in mind that democracy is undermined by xenophobia - not by an entrepreneurial spirit that could be fostered in ways that ensure the collective good. Being creative at the local level needs to be supported in ways that foster a communal spirit, rather than greed.

Opportunities such as the World Cup in South Africa could foster local creativity. But the international committee for the soccer cup decided that a plastic leopard would be preferable to the innovative designs of local South African and African artists who make their products through a bricolage of found objects and recycled materials. Surely, we can make better, more ethical decisions that take into account the need to reduce our use of petrol-based products?

Students in my ethics class were asked to reflect on the nature of commodification of people and the environment and ways to reframe economics. The article written by Dr Simon Longstaff, St James Ethics Institute was provided to them as an example of an ethical thinker who discusses slavery as a form of commodification of people and the environment.

He argues in his article that the *commodification and enslavement* of the environment - *for the extraction of profit* - parallels the commodification and enslavement of people. He makes the connection between the ***need* *for*** *a) ethical economic agreement to reduce carbon emissions* and b) *the economics of commodification and slavery*.[[63]](#footnote-63)

But I argue that the notion that carbon markets (a commodification reseponse) could solve problems is debatable[[64]](#footnote-64). Why should foxes guard hen houses? In other words why should global markets and separate states be entrusted to protect the planet? Nation states and markets run the danger of commodifying carbon emissions in a trade agreement that could do little to change our way of life, unless global citizens act as stewards for a sustainable future. It is worth quoting Longstaff (2009) albeit with some reservations as to his perception that slavery was banned, because of the work of one man or that it was only the result of a social justice movement. It was progressed by William Wilberforce’s appreciation of the political context and his careful attention to legal details of parliamentary process that enabled the legislation to pass through the British parliament:

“When laws were passed to change slavery, it was because of the determination of a single man – Wilberforce – who was reviled for undermining the economy ….... before the House should proceed to adopt the resolution now proposed, he felt it his duty to call their attention to the situation of Liverpool - a town which, from a miserable fishing hamlet of about 150 huts, had within a century risen to be the second town, in point of commercial wealth and consequence, in the British dominions, entirely by the African [slave] trade. He begged to impress on the recollection of the House what the situation of Liverpool was when the right Hon. Gent. and his colleagues came into power….So, does the debate about the ETS possess the ethical gravity of an earlier issue like slavery? If the standard scientific predictions prove to be correct, then there are millions of people whose lives will be diminished (or lost) simply because we were indifferent to their interests when compared to our own. In essence, we will be preferring our comfortable affluence to their survival. As the President of the Federated States of Micronesia, Emanuel Mori, recently observed, "We will all be drowning in our own backyards if leaders of developed nations do not take swift action to reduce greenhouse gas emissions."(Longstaff, 2009)

The so-called ‘comfortable affluence to which Longstaff refers will not continue as the world becomes increasingly polluted. We share a common fate. What happens to our neighbours could happen to us. Maria Ramon responded to the question and participated in the discussion as follows:

“I was just in Tonga at a meeting where 22 Pacific Island countries were represented by heads of state and ministers. Many commented on the consequences on their countries from climate change due to consumption and behaviour in developed nations. I agree with Longstaff that the ETS and other big issues on the climate change table are on the ethical level of an issue as abhorrent and contested as slavery was long ago … In the case of the Copenhagen Conference (CC), small island nations are banding together to present a united front at Copenhagen. However, the message is just not yet clear enough. While HIV has received attention, the massive tangible consequences of climate change are not yet addressed by most of the world. I was on an island in Kiribati where 300 people were moved, as their village is now underwater. They just had to shift to their relatives, build new leaf houses, and adjust. But that was not easy and now other villages are overcrowded, and food is harder to get. Land is disappearing. If this happened in America or Europe, it would be big news. In Kiribati, it just happens. And happens all over the place…So unless there are some champions who are well respected [to couch this] in tangible economic terms if necessary, and equate this issue to slavery and the like, we may lose even more time in facing what is occurring every day, more and more, to the point where Al Gore needs to make a new movie which will show the same glaciers reduced by half again! The issue transcends party politics…

“This is an ETHICAL issue. It is a MORAL imperative that developed nations enforce the changes needed to save the Pacific from sinking beneath the rising waves!” (Maria Caldwell Rimon 17 October 2009).

1. Crossen, T. and Niessen, V.2007. NGO standing in the European Court of Justice- Does the Aarhus Regulation Open the Door? RECEIL 16 (3) PAGES 332-338. ISSN 09628797 at 332 [↑](#footnote-ref-1)
2. [http://portal.unesco.org/science/en/ev.php-URL\_ID=4793&URL\_DO=DO\_TOPIC&URL\_SECTION=201.html](http://portal.unesco.org/science/en/ev.php-URL_ID%3D4793%26URL_DO%3DDO_TOPIC%26URL_SECTION%3D201.html) See also Takar, B. 2003. *Perspectives in resource management in developing countries*. Concept Publishing. New Delhi. [↑](#footnote-ref-2)
3. Thus I a) extend the argument to address the social contract and b) explore alternative forms of government and governance that can protect those who fall outside the mantle of citizenship rights as a result of their age, gender, race, species or level of ability. c) Develop an ethical framework to enhance human reasoning capability and a new form of democracy and governance based on a recognition of our role as caretakers. The Copenhagen Climate Change Summit illustrates that even when organisations try to include diverse stakeholders and diverse viewpoints, the challenge remains as to how to include diverse viewpoints. [↑](#footnote-ref-3)
4. West Churchman’s student Werner Ulrich has designed 12 questions which focus on what is the case and what ought to be the case, in order to guide better decisions. [↑](#footnote-ref-4)
5. McIntyre-Mills, J. 2000 *Global citizenship and social movements: creating transcultural webs of meaning for the new millennium*. The Netherlands: Harwood .Crowder, G. 2003 *Pluralism, relativism and liberalism in Isiaiah Berlin* Refereed paper presented to the Australasian Political Studies Association Conference University of Tasmania Hobart. 29 September-1 October. Crowder outlined: “Three approaches to pluralism and its relevance for democracy”. *The first approach* is agonistic, based on the idea that values are addressed through conflict. *The second* is culturalist, based on the argument that values are contextual. *The third* is liberal pluralism which accepts that diverse values co-exist and that they can be in conflict (such as equality and freedom), but that through dialogue and careful thinking a rational decision can be made. Staff seminar held on 3 May, 2009. Flinders University. [↑](#footnote-ref-5)
6. See Koskenniemi (2005, 2006) for a discussion on international law as a counter to universalist arguments. His book ‘From Apology to Utopia’ explores the need to see law as a responsive, evolving language. [↑](#footnote-ref-6)
7. Key note address; New Zealand Families Commission Pasifika Families’ Fono, cited by Gualofa Matalavea-Sa’aga, 2010, January in a paper submitted for a Critical Systems Thinking and Practice assignment, POAD 9114 at Flinders University. [↑](#footnote-ref-7)
8. Discursive democracy within and across nation states is important for testing out ideas and improving the sustainability match across human beings, their policy choices and their environment. Action learning and participatory action research supports expanded testing of ideas for development, not only by ‘the experts’ but by people with lived experience.

 The challenges of extending democracy and governance are addressed by considering the implications of steering ‘from above and below’ for a) evidence based policy and b) matching services to needs and c) its potential for scaling *up* social, economic and environmental wellbeing using participatory democracy and governance [↑](#footnote-ref-8)
9. Nussbaum (2006) confronts some of the key ethical challenges for our generation, namely *disability, nationality and species membership* .We need to take the time need to work out the implications and to think through policy decisions. This point was raised by Somerville (2000) in ‘the ethical canary’. Prions are proteins that are carried from species to species and they have resulted in trans species diseases. Recent examples include H1N1 (swine flu), avian /bird flu and CSJ or mad cow disease. The cause of transmission is feeding offal to cows, crowding birds in cages and confining creatures to farming conditions that undermine their quality of life. If we understand the ‘One World ‘(Singer, 2002) principle, we understand the notion that self-other and the environment are one co-created system. [↑](#footnote-ref-9)
10. All human beings are animals. Power and market position has lead to the commodification of the powerless; animals and the environment on which we depend. Powerless human beings are likened to animals, because when they are regarded as ‘beasts of burden’ that can be commodified and exploited. [↑](#footnote-ref-10)
11. “To maintain their power, dominant groups create and maintain a popular system of ‘commonsense’ ideas that support their right to rule. In the United States, hegemonic ideologies concerning race, class, gender, sexuality, and nation are often so pervasive that it is difficult to conceptualise alternatives to them, let alone ways of resisting the social practices that they justify. ….However, an increasingly important dimension of why hegemonic ideologies concerning race, class, gender, sexuality, and nation remain so deeply entrenched lies in part, in the growing sophistication of mass media on regulating intersecting oppressions” (Hill Collins ,2000: 284). [↑](#footnote-ref-11)
12. This is a verbatim quotation in which I have inserted the footnote and bold type to aid readability and to explain that the author means that power resides in reclaiming spaces for thinking differently. [↑](#footnote-ref-12)
13. Colonisers and conquerors throughout the ages have likened the powerless as ‘other’, as animals or as outside the boundaries of our own cultural frame of reference (Douglas, 1978, Midgley, 2000). We are complicit in the way we construct our identity and culture. Hill Collins (2000) has shown how slaves were treated as objects when sold in the market place. Workers in a range of industries (who are required to meet targets irrespective of their personal needs) share much in common with this commodified construct. By telling stories about the powerless and showing the connections, it helps the users and abusers to realise their complicity in ‘power over’ approaches. Hill Collins emphasises the importance of raising awareness as the first step for empowerment. Today women may not be displayed on auction blocks in chains, but commodification continues. The trafficking of the powerless from war zones, natural and economic disasters is a case in point; as is the trade in pornography, the sex industry and body parts by those who have nothing else to sell in a market economy. The trafficking of animals in the live meat trade and the treatment of farm and laboratory animals remain an area of contention as they are inadequately protected in social contracts or existing rights based approaches. [↑](#footnote-ref-13)
14. This book stresses the importance of an increased mindfulness of our place in the world and the way we can shape social movements and planetary politics to support social and environmental justice within overlapping regions which do not ‘shift the burden’ of poverty and pollution elsewhere. I disagree with the argument developed in ‘Overloading Australia’ (O’Connor and Lines, 2010). They emphasise a nationalist approach to addressing policy issues. Whilst I share many of the concerns, I believe that openness to our region is essential for social and environmental justice to prevail. [↑](#footnote-ref-14)
15. ‘It is no accident that racist biology, religious justifications for slavery and women’s subordination, and other explanations for nineteenth-century racism and sexism arose during a period of profound political and economic change. Symbolic means of domination become particularly important in mediating contradictions in changing political economies.’ (Hill Collins, 2000:139) The way forward is to re-conceptualise governance and democracy to prevent this mentality and to raise awareness that as a human race we are playing out the same problem at multiple levels [↑](#footnote-ref-15)
16. Hardin’s (1968) notion of the ‘tragedy of the commons’ can be used as a means to support nationalism . Hardin argues that capitalism and that the waste of resources can best be curbed within a nation state. This argument rests on the ‘zero sum’ approach which stems from a misunderstanding of the critical problems facing the planet. [↑](#footnote-ref-16)
17. This has been clearly developed by the literature from Aristotle in Nichomachean Ethics 9 Irwin, 1985) to Nussbaum (2006) in ‘Frontiers of Justice’. The links are made by Elkington (1997) in triple bottom line accounting ‘Cannibals with Forks’, David Held on globalisation, Al Gore in ‘Assault on Reason’ (2008), McIntyre-Mills (2006) in ‘Systemic Governance and Accountability’ and in the ‘Economics of Happiness’ by Carol Graham of the Brookings Institute who clearly stresses that wellbeing is linked with social and environmental factors, not just with economic bottom lines. Similarly, Anthony Giddens’ recent book on the ‘Politics of Climate change’ stresses the importance of both social engagement and steering 'from above'. What is lacking in the literature is the means to achieve governance from above and below. [↑](#footnote-ref-17)
18. <http://www.commondreams.org/headline/2009/07/27-1>, published: 27 Jul 2009 “An Oxfam Australia report published today highlights the urgent need for next week’s Pacific Islands Forum in Cairns to address the dramatic effects of climate change within the region. The Future is Here: Climate Change in the Pacific finds that Pacific Islanders are already feeling the effects of climate change and need greater support now. People are facing increasing food and water shortages, losing land and being forced from their homes, dealing with rising cases of malaria, and coping with more frequent flooding and storm surges. The report argues that unless wealthy, developed countries like Australia take urgent action to curb emissions, some island nations face the very real threat of becoming uninhabitable. Pacific leaders will raise the issue of climate change with Prime Minister Kevin Rudd at the Pacific Islands Forum from 4 – 7 August. Oxfam Australia Executive Director Andrew Hewett said ‘*with only months to go until the crucial UN negotiations in Copenhagen in December, it was clear Australia needed to* show Pacific leaders it was willing to do its fair share to address one of the most pressing challenges in the region. “People are already leaving their homes because of climate change, with projections that 75 million people in the Asia-Pacific region will be forced to relocate by 2050 if climate change continues unabated. Not all will have the option of relocating within their own country, so it’s vital that the Australian Government starts working with Pacific governments to plan for this now’.” [↑](#footnote-ref-18)
19. To summarise, freedom and diversity need to be **sustained** to the extent that freedom and diversity is **maintained**. In other words, I can be as free and diverse as I like, but the line is drawn where my choices impinge on the capability of others (including sentient beings) to experience quality of life. The book builds on Sen. (2000), Nussbaum (2006), Held (et al 2005), Beck (1992, 1998, 1999, Giddens (2009) and is informed by the Design of Inquiring Systems Approach inspired by the work of C.West Churchman (1979) applied to local and postnational regions (Habermas, 2001). Subsidiarity (in other words the participation of people in questioning and dialogue to inform the decisions that will affect their lives) can be combined with regionalism (if it is guided by laws to support regionalism) in ‘post national constellations’ (Habermas, 2001). Thus providing the conditions to support people’s sense of agency is my starting point [↑](#footnote-ref-19)
20. The Aarhus convention for example enables people living in the European Union to have access to environmental information and it enables them to have a say on matters of concern. Thus, they can be engaged and can learn more about social and environmental concerns in response to the ongoing challenges that play out in a political context. [↑](#footnote-ref-20)
21. Mindfulness is the ability to make connections and to respond to others and the environment based on questioning and applying a design of inquiring systems to be adaptive, accountable and responsive. [↑](#footnote-ref-21)
22. “What balance should Berlinians strike between belonging and liberty? My suggestion is that liberty take priority where there is a conflict. My reason once again appeals …in favour of liberalism in its Enlightenment form….pluralism implies the desirability of cultural diversity, but only so far as the cultures concerned themselves promote a diversity of good. The internal diversity of culture in turn requires that their members possess a capacity for exercising personal autonomy…a form of politics which maximally accommodates the full range of human goods, and which equips people to make good choices among those goods when they conflict. A system which gives priority to belonging over liberty will not pass this test, since it will favour settled local traditions regardless of the extent to which these value diversity or personal autonomy. … Finally, scientism rests on moral monism: the belief that all moral questions have a single answer, and that the answers fit together systematically. Monism is the ur-faith of nineteenth-century utopianism and eighteenth-century rationalism, but of the dominant strand…of Western thought as a whole…On its face, the monist assumption seems harmless, even beneficial, since the same assumption underpins the progress we have made in understanding the natural world. Indeed even in the moral world the monist assumption may be beneficial in the hands of some thinkers…the problem is that monisim can also be pressed into service by those with less benign intentions and versions….Berlin’s alternative to moral monism is value pluralism…..His idea is that human values are in reality irreducibly multiple, often incompatible and sometimes incommensurable.” (Crowder 2004:186-187). Conflicts among values “frequently generate hard choices not resolvable by any simple abstract rule” (Crowder 2004:190-191).” [↑](#footnote-ref-22)
23. Whilst finalizing this draft after returning from the ‘Towards a Science of Consciousness Conference’ in Hong Kong, I was asked by Ingrid Fredriksson to explore the question of consciousness and non-local space. Thinking and practice are embodied in the choices we make. The destruction of the landscape is written in the choices we have made and the ripple effects of our choices are shaping the planet. [↑](#footnote-ref-23)
24. The ethical *low road* to justice is a realization that our lives are intermeshed and that ideas and institutions buttressed by selfish interests will lead to our common demise. The ethical *high road* recognizes that we need to use our creativity as carers of this generation and the next. Human beings are the problem and we will have to be part of the solution if we wish to have a liveable future for our grandchildren. Mindfulness is needed to foster the ability to think in terms of multiple variables. This requires assemblages of ideas spanning many kinds of knowledge. Mindfulness could help to avoid the dangers of ‘one truth’ fundamentalism and ‘no truth’ postmodernism. Instead we need to develop new sustainable forms of representation and accountability based on steering ‘from above and below’ as detailed in chapters 4 and 5. [↑](#footnote-ref-24)
25. [http://portal.unesco.org/science/en/ev.php-URL\_ID=4793&URL\_DO=DO\_TOPIC&URL\_SECTION=201.html](http://portal.unesco.org/science/en/ev.php-URL_ID%3D4793%26URL_DO%3DDO_TOPIC%26URL_SECTION%3D201.html) See also Takar, B. 2003. *Perspectives in resource management in developing countries*. Concept Publishing. New Delhi. [↑](#footnote-ref-25)
26. We need to use every form of communication that is available to support integrated sustainable policy, such as the United Nations Brundtland Report, United Nations Local Agenda 21, the United Nations Ottawa Charter to support wellbeing, the Aarhus Convention and the Lisbon Treaty and finally an adapted version of UNESCO Biospheres for integrated approaches to sustainable futures. International protocols, standards, charters, covenants and laws need to be constructed to span social, economic and environmental concerns from the local to global. [↑](#footnote-ref-26)
27. Alport and MacIntyre (2007) in ‘Citizens to Netizens’ make a case for digital participation. McIntyre-Mills (2006c and 2008) makes a case for participatory design in public agoras that are linked with the digital media. [↑](#footnote-ref-27)
28. We can only objectify others and the environment if we see ourselves as separate and in binary opposition. We need to see ourselves as part of one whole. If we can understand the notion of being at one with others, we will be less likely to treat people, living creatures or the environment as means to an end, rather than as ends in themselves. [↑](#footnote-ref-28)
29. ‘The Moral Law’, translated by Paton, H.J. Hutchinson. Oxford. [↑](#footnote-ref-29)
30. Descartes stressed ‘I think therefore I am’ (Veitch 1977). This means we ‘can can think about our thinking’, not that body and mind are two separate entities. Durkheim stressed the whole is ‘greater than the sum of the parts’, this entails emergence, not fragmented functionalism. Once again we missed the liberative potential and lapsed into binary oppositions. [↑](#footnote-ref-30)
31. Raynor, A. ‘From emptiness to openness’, page 43 downloaded and accessed 16 October 2009 vis <http://www.inclusional-research.org/furtherreading/inclusionalessays.pdf>) [↑](#footnote-ref-31)
32. [http://www.news.com.au/adelaidenow/story/0,,26560520-5006301,00.html](http://www.news.com.au/adelaidenow/story/0%2C%2C26560520-5006301%2C00.html) Wills, D. 2010 “Hear our pleas and show the River Murray mercy. The Advertiser Newspaper revealed that “not a drop of the floodwaters had been reserved for SA sparked outcries from devastated river towns and led Premier Mike Rann to demand immediate intervention from Prime Minister Kevin Rudd”. [↑](#footnote-ref-32)
33. See the report 'Bringing them home: A guide to the findings and recommendations' of R Wilson, M Dodson - Sydney: Human Rights and Equal Opportunities 1997. [↑](#footnote-ref-33)
34. McMahon, V, 2010 ‘Inequities in compensation need reform’, The Australian. January 2-3: 11: “I was recently travelling through central Australia …when I heard a plaintiff story of one of the stolen generation. She spoke of the emotional dislocation of separation and, as a small child the gruelling work and complete lack of warmth at the station where she was made to work. Finally she spoke of the years without wages and a desire for fair compensation to provide her with a decent life. This is set against the back ground of the Peter Beattie-led Labor government acknowledging that as much as $500 million in Queensland may have been taken from Aboriginal wages and supposedly placed in trust accounts that were later found to be deficient or nonexistent. A reparation scheme subsequently paid out about 35 million to 7000 applicants, averaging 5000 per person for years of lost income….” [↑](#footnote-ref-34)
35. Reason needs to over ride the emotional connection we have to privilege only our own kind at the expense of others. De Waal (2006) argues that all animals, including human beings have a tendency to privilege our own kind. But our survival as an ecosystem requires an ability to appreciate that we exist because we are part of a wider whole. As carers we recognise the primacy of the environment and all the organic and inorganic forms that together make life possible. This requires the capability to think about our thinking and about our emotions. [↑](#footnote-ref-35)
36. Planetary Health, Professor Erica Frank, School of Population and Public Health, Department of Family Practice, Faculty of Medicine, University of British Columbia public lecture on 2nd September, 2009 Flinders Medical Centre. [↑](#footnote-ref-36)
37. The Future is Here: Climate Change in the Pacific see Oxfam Report July 2009 <http://www.oxfam.org.au/campaigns-climate-change/docs/The> future-is-here-final-report.pdf. Published: 27 Jul 09

An Oxfam Australia report published today highlights the urgent need for next week’s Pacific Islands Forum in Cairns to address the dramatic effects of climate change within the region. The Future is Here: Climate Change in the Pacific finds that Pacific Islanders are already feeling the effects of climate change and need greater support now. People are facing increasing food and water shortages, losing land and being forced from their homes, dealing with rising cases of malaria, and coping with more frequent flooding and storm surges. The report argues that unless wealthy, developed countries like Australia take urgent action to curb emissions, some island nations face the very real threat of becoming uninhabitable. Pacific leaders will raise the issue of climate change with Prime Minister Kevin Rudd at the Pacific Islands Forum from 4 – 7 August. Oxfam Australia Executive Director Andrew Hewett said with only months to go until the crucial UN negotiations in Copenhagen in December, it was clear Australia needed to show Pacific leaders it was willing to do its fair share to address one of the most pressing challenges in the region. “People are already leaving their homes because of climate change, with projections that 75 million people in the Asia-Pacific region will be forced to relocate by 2050 if climate change continues unabated. Not all will have the option of relocating within their own country, so it’s vital that the Australian Government starts working with Pacific governments to plan for this now,” Mr Hewett said.” [↑](#footnote-ref-37)
38. At the conference ‘Making Liveable Sustainable Systems Unremarkable July 12-17, 2009) University of Queensland, biosphere projects were discussed as a way to protect the environment. This ecosystemic approach to managing regions could be precursors to a more inclusive way of governing at a regional level. It also provides another way to think about who we are and what we value. [↑](#footnote-ref-38)
39. Zero sum approaches are based on the idea that we have power or profit as a result of your loss. This is based on a lack of appreciation of our interconnected fate. [↑](#footnote-ref-39)
40. Could we reconstruct the economy so that we factor in not just liveable environments for ourselves but we consider wellbeing for the next generation? Earth politics’ is the term coined by Beck (1999, 2005) and it is to this concept that I wish to develop. How can we shift from narrow pragmatism to expanded pragmatism, based on choices informed by an understanding of systemic feedback and feed forward loops? Multidimensional and multispatial design is what is needed for a just and sustainable world. We need to be able to apply dialogue for policy and practice in such a way that we take into account time (past, present and future) and place (our own, our neighbours and that of children and their children's) (See McIntyre-Mills 2006 a, c).The nation state is responsible for its citizens, but who is responsible for ensuring the fabric of life is maintained? Nation states need to be aware that zero sum logic is flawed. If people can develop the capacity to think through scenarios it will facilitate pragmatic co-operation rather than merely imposing decisions (based on environmental colonialism exerted by the powerful and privileged classes and nation states). People who are struggling to survive have different views. This needs to be appreciated. [↑](#footnote-ref-40)
41. http://www.arena.uio.no/publications/wp99\_21.htm [↑](#footnote-ref-41)
42. http://www.ofmdfmni.gov.uk/content\_-\_co-operation-subsidiarity-and-proportionality [↑](#footnote-ref-42)
43. Follesdal, A. Subsidiarity and Democratic deliberation Arena Working Papers WP99/21 see http:www.arena.uio.no/publications/wp99\_21.htm accessed 1/9/2009. [↑](#footnote-ref-43)
44. “The four themes are inclusion, erosion, withdrawal and expansion reflect the foci of contemporary discourses on citizenship.” Kivisto and Faist: 2007: 13) [↑](#footnote-ref-44)
45. Because of the way we are categorised in terms of our age, gender, culture, class/ level of income or education. [↑](#footnote-ref-45)
46. Sociology and biology have to be able to appreciate the role of boundaries. Not all diversity is good. Democracy and governance require enabling freedom and diversity to the extent to which diversity does not undermine the freedom of others. I do not follow the Feyerband approach that ‘anything goes’ in all contexts. In some contexts decisions have to be made to exclude thinking and practice that is cruel, harmful or unjust. Without the capability to draw the line, we would live in a world where we could not talk about social and environmental justice. But I try to avoid essentialising what is right by arguing that this is determined contextually through a careful matching process, but which still allows for ‘drawing the line’ and declaring some diversity unacceptable. The combining of different kinds of knowledge gained from different stakeholders and the appreciation of different points of view and different values can enable making better decisions that are mindful of the social, economic and environmental consequences. [↑](#footnote-ref-46)
47. Unlike Western white males, other frames of reference such as Patricia Hill Collins (2000) argue that relationships and caring based on another view of the world are important, but that often these ideas are given short shrift. Even within Western male, mainstream thinkers, alternative views about relationships are found. Freud and Nietzsche argued that human beings are driven by the ‘will to power’ and pleasure, but Frankl (1955) argues that the most important goal for human beings is ‘the will to construct and make meaning’ this is what makes us human. We can and ought to decide what is sacred and encourage free thinking about the sacred, to the extent that it does not undermine the sustainability of life. We could also avoid conflict about the causes by simply refocusing on finding and supporting the development of alternative energy sources. [↑](#footnote-ref-47)
48. Petrova, E. and Viet, P. 2002 Environmental Accountability Beyond the Nation State: The implications of the Aarhus Convention. Governance Notes. World Resources Centre. Institutions and Governance Program. <http://www.wri.org/wr> [↑](#footnote-ref-48)
49. <http://www.theage.com.au/opinion/politics/human-rights-should-be-valued-as-highly-as-the-anzac-spirit-20091007-gmdp.html> Lynch, P Human rights should be valued as highly as the Anzac spirit*,* October 7, 2009“Human rights should be part of the Australian identity. The National Human Rights consultation was a historic opportunity for Australians to have our say about the promotion and protection of human rights. And have our say, we did. The independent committee conducting the consultation received more than 35,000 submissions and hosted 66 roundtables in 52 locations around the country. This represents one of the most extensive exercises in participatory democracy in Australian political history. …The Government's response represents a watershed opportunity to tap into these admirable but often latent aspects of our national identity, a concept explored by Canadian political scientist Alison Brysk in her new book, Global Good Samaritans. Why, Brysk asks, do a small number of countries sacrifice their national interest to promote human rights and help strangers? Her simple answer is — they don't. Instead, she explains, countries such as Sweden, Canada and the Netherlands have nurtured national identities that have a deep commitment to human rights at their centre. ……For Australia to realize our potential, however, will require political leadership, budgetary prioritization, and legislative and institutional reform, Most critically, it will require the mobilization of a national identity that values human rights every bit as highly as beaches, barbecues, the Anzac spirit and the Ashes. That is the opportunity, and responsibility, that the conclusion of the national human rights consultation presents*”.* [↑](#footnote-ref-49)
50. <http://eur-lex.europa.eu/en/dossier/index.htm>,http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12004V/PRO/32:EN:NOT **C2009/069/02** Case C-277/06: Judgment of the Court (Third Chamber) of 9th October 2008 (reference for a preliminary ruling from the Finanzgericht Hamburg, Germany) — Interboves GmbH v Hauptzollamt Hamburg-Jonas (Directive 91/628/EEC — Export refunds — Protection of animals during transport — Transport of bovine animals by sea between two geographical points of the Community — Vehicle loaded onto a vessel without unloading the animals — 12 hour rest period — Obligation*)* OJ C 69, 21.3.2009, p. 2–2 (BG, ES, CS, DA, DE, ET, EL, EN, FR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV). [↑](#footnote-ref-50)
51. “Between environmental destruction as a result of well-being and environmental destruction as a result of poverty there is, however, an existential difference. Whereas many wealth-driven ecological threats stem from the externalization of production costs, in the case of poverty driven ecological destruction it is the poor who destroy themselves with side effects for the rich. In other words, wealth-driven environmental destruction is distributed evenly around the world, whereas poverty driven environmental destruction strikes at particular spots and becomes international only in the form of side-effects appearing over the medium term” (Beck 1999: 35 cites Zurn 1995:51). [↑](#footnote-ref-51)
52. Quotations like this are at one level profound, but on closer inspection a little glib. How do we make a difference? How can we be the change and take a stand or make a choice if poor people cannot afford to pay inner city prices so that they can live nearby their work places? How can we make collective, resilient decisions to mobilize against the public and private sector decisions that undermine our social, economic and environmental viability? Open testing based on critical, systemic (open channel processes to address complexity) is quite different from mono rationalist responses , including closed systems thinking (Beck 1999:126) argues:’ this is how the foundations of the oblivious mono rationality (economic, technical, political, scientific, and so on) characteristic of linear modernization are shattered; this same mono rationality is being exaggerated even today in the form of systems theory (with the insinuation that functionality and autonomy depend precisely on screening out the outsider perspective). Both factors- the inquiry into our own inability to know and the ability to empathize with outside rationalities- mark the transition to the second modernity of (self-) uncertainty which is both constructed by civilization and known. Only then does the question gradually arise of how these antagonisms and differences in known *unawareness* can be related to one another, worked out and joined in procedures for reaching decision in new forms and forums. [↑](#footnote-ref-52)
53. Global citizenship spans political divides. ‘Less is more’ when we think about designing for future generations. We are the global citizens. We need to create new institutions that protect regional biospheres. We will need to become increasingly aware that individual wellbeing is determined by group wellbeing. We will need to find ways of working across conceptual and spatial boundaries if we are to address the challenge of avoiding zero sum approaches (McIntyre –Mills 2009, ALAR and SPAR special editions). [↑](#footnote-ref-53)
54. <http://www.350.org/map> Find a work party or create a work party, so that you are the change

http://fora.tv/2009/05/06/Bill\_McKibben\_350\_The\_Most\_Important\_Number\_in\_the\_World [↑](#footnote-ref-54)
55. The pathway address for local government scenario is: <https://socsci.flinders.edu.au/fippm/pathways_lg/> [↑](#footnote-ref-55)
56. See Kahane (1992) for a discussion of why scenarios are helpful to enable people to think in terms of many interrelated variables. [↑](#footnote-ref-56)
57. The 28 delegates invited to participate were asked to contribute to a conversation. The invitation appealed to me as an opportunity to address the challenge of reframing national citizenship as global citizenship to address social and environmental challenges within regional biospheres. One of the leaders of our group is sponsored by UNESCO to foster a regional biosphere approach. The conversational approach enables those working towards this agenda to pool their resources. The process of conversation required that we introduce ourselves within our sub groups. We met in a chamber named for a nun, ‘Rosalia’. The participants in our sub group spanned a range of academic disciplines, (besides our shared contribution to systems thinking or systemic praxis). The disciplines from which we originated included, mathematics, engineering, horticulture, environmental studies, development studies sociology, anthropology and fine art. The age of the participants ranged from 60’s to 30’s and spanned Iranian, Australian, English , American, Austrian and South African , South American, Japanese cultural heritages. Of the 28 delegates only six were women, which is indicative of the way in which formal systems science is perceived. Nevertheless a wide range of fields including women’s studies and sociology /cultural studies and disciplines concerned about knowledge management and social justice has contributed greatly to a systemic approach. Children’s issues were represented, and it would be worthwhile to ensure diversity in conversations about future generations. [↑](#footnote-ref-57)
58. <http://www.theelderbrother.com/kogi/index.cfm?ObjectID=17> <http://www.eremite.demon.co.uk/Tairona/1pages/secb/b1kogi20c.html> Review by Raymond Rugland, Ereira, A 1992 *The Elder Brothers* Alfred A. Knopf, New York [↑](#footnote-ref-58)
59. We have an opportunity to work together or if can be a suicide pac<http://intersect.ning.com/video/president-of-maldives-talks> [↑](#footnote-ref-59)
60. http://www.up.edu/commencement/default.aspx?cid=9456 [↑](#footnote-ref-60)
61. The capability to do this is clearly needed to operate in terms of international protocols, standards, charters, covenants and laws that span social, economic and environmental concerns from the local to global. I argue that based on an understanding of our common, intermeshed fate (Beck, 2005, Giddens, 2009, Held et al 1999) that rational responses need to be systemic. By systemic I mean recognizing that we exist not merely because of our connection to others and the environment but because we are part of the environment. This systemic recognition is mindfulness. Systemic praxis could be helpful in terms of shifting approaches from compartmentalized thinking and practice to matrix web-like thinking and practice that is suited to addressing complexity. [↑](#footnote-ref-61)
62. For example, taking away the liberty and freedom of a child by an exhausted foster care mother in Kwazulu Natal, Southern Africa can be said to be unacceptable. Nevertheless, we can also feel compassion for the exhausted foster care mother who chained a child she perceived to be ‘difficult’ in a hen house, because she wanted to collect other children from school. Social policy and practice needs to take into account the socio-political and economic context of the woman and the foster child. [↑](#footnote-ref-62)
63. Australian Broadcasting Commission, 2009.Emissions-trading arguments evoke slavery debate posted Thu Aug 13, 2009 8:38 am AEST Updated Thu Aug 13, 2009 9:10 am AEST: “The debate about global warming has been recast in response to the threat posed by the global financial crisis. (Library of Congress). It may seem like a long bow to draw, but the arguments against the emissions trading scheme draw parallels with the 1806 debate in the British parliament to abolish slavery, writes St James Ethics Centre Executive Director Dr Simon Longstaff. ‘While I know many of the critics of the Government's proposed emissions trading scheme to be entirely sincere, I wonder if they have inadvertently adopted a stance in which economic considerations have taken primacy over all others. It is easy enough to do - as invoking economics seems to avoid the underlying ethical issues that must be addressed. Given the dire predictions of otherwise disinterested and sober scientists, I want to suggest that global warming poses an ethical challenge of an order equal to that faced by Members of the British House of Commons when debating Wilberforce's bill to abolish the slave trade in 1806. My suggestion will be labelled, by some, as a fanciful comparison. However, the similarities in the debates of then and now are just too remarkable to be ignored’. …Indeed, I would strongly urge that the issues, now before the Parliament, warrant the extension of a free conscience vote to all within the House”. Dr Simon Long staff is executive director of [*St James Ethics Centre*](http://www.ethics.org.au/). [↑](#footnote-ref-63)
64. We considered whether we need to achieve change through raising taxes on carbon and thus making it worthwhile for people to develop other ways of living and to consume less. See Berkovic, N. 2009 ‘Frank and fearless scientific debate comes with a few too many strings attached. The dispute over a paper by Clive Spash, based at the CSIRO that is critical of the ETS raises the question of censorship’. The Australian, Nov 14-15: 13. “Australian National University Professor John Dryzek, who is on the editorial board of New Political Economy, says question marks remain over whether the ETS policies are effective in tacking climate change and the paper canvasses some of these issues in an analytical way.” http://www.theaustralian.com.au/news/opinion/frank-and-fearless-scientific-debate-comes-with-a-few-too-many-strings-attached/story-e6frg6zo-1225797535057 [↑](#footnote-ref-64)