Ecological Imaginaries: Organising Sustainability

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A thesis submitted for the degree of Doctor of Philosophy

University of Technology Sydney

June 2013

Certificate of Authorship/Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Student

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Acknowledgements

This dissertation has had a long gestation and its undertaking involved many friends and colleagues. My family has probably had to endure the hardest of times as I cloistered myself away for the duration of my studies. Friends also had to adjust to this under-researched phenomenon, the doctoral distance, and I am glad they all took this in their stride and for the most part with good humour.

Beyond the isolation zone of my cloister was the secluded garden of discipline and practice where the hard work of research transformation took shape. From the outside this garden looks foreboding, from the inside this façade drops away and I have had good fortune in the help and shepherding I have received from many people in the progress of my research. I was fortunate to have a greater number of co-supervisors than would normally be involved in the course of doctoral studies.

I started my research at UTS and I owe Professor Carl Rhodes deep thanks for his patience and guidance helping me appreciate the theoretical and practical considerations that arise in narrative and discourse research. I then moved to Macquarie University where I was fortunate to have Professor Nick Mansfield and Dr Donna Houston as co-supervisors. Nick introduced me to the moral implications framing social inclusion and exclusion to all scales of human systems and Donna provided a deeper understanding of critical theory and its implications for my project. Both Donna and Nick helped me expand my investigation to encompass work in cultural studies and human geography to complement and extend my investigation of organisational change for sustainability.

Returning to UTS my new co-supervisors Dr David Bubna-Litic, Professor Thomas Clarke and, before he left, Professor Stephen Fox provided help with more detailed application of ecological sustainability research to organisational settings and the moral and ethical questions that ecological sustainability addresses.

Beyond my co-supervisors I also owe thanks to many people I have been introduced to in recent years. In particular I would like to thank Professor Bobby Banerjee, Professor Carolyn Egri, Professor John Jermier, Professor Kate Kearins, Dr Andre Reichel, Professor Mark Starik and Associate Professor Deborah Steketee for wise

counsel and their willingness to participate in a number of proposals I submitted to various conferences.

My research progress was in great measure made possible through the guidance of my doctoral supervisor, Professor Suzanne Benn, who went well beyond the normal bounds of help and assistance given to doctoral candidates. She helped not simply in developing the craft of research but understood that good research is a collaborative process. The evolution of ideas in this dissertation is in large measure due to her introductions to and sponsorship by the people I have already mentioned and also to the many others who have assisted me along the way. Her legacy goes well beyond the shaping of research skills and the crafting of a dissertation to the introduction to a wonderful network of people with whom I can share ideas and experiences as I take the next steps beyond my dissertation.

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Abstract

This thesis investigates organisational enactment of sustainability. The problematic addressed is that despite strong evidence supporting human induced global ecological damage, organisational practices remain unchanged and continue to degrade ecological systems. The question addressed is what factors contribute to the inertia that inhibits change for ecological sustainability in organisations? The question is addressed from the perspectives of individuals who are stakeholders in organisations.

The modern concept of sustainability arose during the 1970s and selected aspects of sustainability discourses, for example the concept of the triple bottom line (TBL), have since been integrated into the organising narratives of organisation and society. Despite such success, indicators such as human induced climate change, biodiversity loss and growing inequalities between rich and poor, suggest that mainstream institutions have not taken up change for sustainability. The proposition of this thesis is that alteration to our social imaginary (ies) is a necessary precursor to enactment of sustainability.

The thesis presents findings from three case studies: Landcare, Corcon and Carepoint. These organisations were selected because they represented different sectors and each had initiated a formal sustainability change project: Corcon is an engineering organisation, Carepoint a community services not-for-profit organisation and Landcare an agricultural organisation. Landcare highlights the dialogue that nature has with individuals and organisations and how recognising this dialogue can lead to ecological solutions for sustainability. The Corcon case contributes the importance of boundaries defining inclusion and exclusion as moral constraints and enablers to developing sustainability solutions and the Carepoint case demonstrates that the multiplicity of competing sustainability discourses are understood by individuals who then make decisions based on the context of the dominant imaginary within which they are situated. These findings from the research highlight barriers concerned with meaning construction that view nature as an excluded other. I argue that the adoption of ecological sustainability by organisations and society needs new narratives to facilitate the emergence of meanings of ecological sustainability conducive to the inclusion of nature.

The synthesis of these findings presents two possibilities for stimulating the creation of meaning construction that would facilitate an inclusive approach to nature. The first possibility is the Australian Aboriginal concept of Country, which offers a new source of logics upon which the development of a new socio-political sustainability imaginary may draw. The second possibility argues for the need to create a new social imaginary to support ecological sustainability. A contribution of this thesis is to provide the alternative frame of metabolic organisation to extant models of weak and strong sustainability to stimulate the creation of new ecological imaginaries.

Metabolic organisation is defined as a systemic framework comprising three interdependent concepts: metabolism, values and enmeshment, and brings together three distinct strands of theory: social and biological metabolism, value theory and ecological theories.

List of Abbreviations

ANT	Actor Network Theory
CAP	Complex Adaptive Processes
CAS	Complex Adaptive Systems
CEO	Chief Executive Officer
COP	Conference of Parties
COPs	Communities of Practice
CR	Corporate Responsibility
CS	Corporate Sustainability
CSR	Corporate Social Responsibility
EM	Environmental Management
G8	Group of Eight
G20	Group of Twenty
GFC	Global Financial Crisis
GRI	Global Reporting Initiative
IPCC	Intergovernmental Panel on Climate Change
OH&S	Occupational Health and Safety
PDW	Professional Development Workshop
SSM	Soft Systems Methodology
TBL	Triple Bottom Line
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
WCED	World Commission on Environment and Development

Chapter One

A Human Ecology?

Sustainability, sustainable development and greening are all terms applied to normative expectations in society of organisational environmental and social practices and responsibilities. Collectively the meaning and use of these terms reflect growing concern in organisations and societies that humanity faces an ecological crisis of its own making (Brown & Garver 2009; Plumwood 2002; Rees 2003; Stead & Stead 2009; York, Rosa & Dietz 2003) for which solutions need to be created.

A lineage of environmental narratives criticise the detrimental impact on the environment of our lifestyles and work practices in ways that are self-destructive and self-annihilating. For example, Marx's metabolic rift, which has been all but ignored by organisation and cultural theorists (argued by Buttel 2004; Foster 1997; Foster & Burkett 2000), Carson's (1963) *Silent Spring* that activated the current environmental movement, Flannery's (1994) *Future Eaters* and Diamond's (2005) *Collapse* all comment on the motivations and logic of societies' relationships with nature and how this correlates with their continuity or collapse. More recently, the expert evaluations of human impact on the environment, such as those from the Intergovernmental Panel on Climate Change (IPCC 2007) and the economic assessments of lifestyle and productions on the global environment (Stern Review 2007) are attempts to influence political action to respond to the global warming impacts of humanity's ecological crisis.

The Anthropocene

The fourth assessment report from the International Panel on Climate Change (IPCC) (2007) confirms that the current rate of global warming is explicitly linked to human activities. Global warming, and therefore climate change, is directly linked to the amount of carbon dioxide in the atmosphere and the data collected and presented by the IPCC highlights the continued exponential increase in carbon dioxide concentrations as industrialisation expands from its historical base in the western world to the newer economies of Asia and South America. Global warming, however significant, is only one aspect of the current environmental degradation caused by humanity.

Humanity's capacity to significantly alter its ecological system is recognised in a neologism, the Anthropocene (Crutzen & Stoermer 2000), a new term that has been proposed to mark a new geological epoch that succeeds the Holocene. The Anthropocene is not yet formally acknowledged as a new epoch in the geological time scale; however, recognising that human activity is changing the Earth on a scale similar to past geological epochs the term is being seriously considered by a working group from the International Commission on Stratigraphy (Zalasiewicz et al. 2010).

The boundary marking the transition from the Holocene to the Anthropocene is widely assigned to the beginning of industrialisation in the late eighteenth century, following the invention of the steam engine. As a metaphor that captures the ethos and impact of human activities on the planet the term has been rapidly adopted and is now in widespread informal use by many people in the public and scientific domains. Crutzen and Steffen (2003) note that "the human impress on the global environment is clearly discernable beyond natural variability" (p. 253). Indicators of global impact of human activity that exceed natural variability include the rise of greenhouse gases (CO_2 and CH_4), the large emissions of air pollutants such as SO_2 and NO_2, the extensive transformation of the world's land surface (30 to 50% through cropping, forest clearing and urban settlement), and the associated loss of biodiversity due to an increased rate of extinctions (Crutzen 2002; Crutzen & Steffen 2003; Crutzen & Stoermer 2000; Zalasiewicz et al. 2010). The scale of environmental change due to human impact is clearly linked by these authors to the dramatic rise in human population since the industrial revolution and its attendant demand on the earth's resources to meet the social and ecological needs of individuals within societies.

The demand on the earth's resources has intensified with the rise of consumer capitalism, underpinned by the capability of industrialisation to manufacture goods to meet the need of fulfilling increasing consumer demands. Consumer capitalism's influence on the global economy has also resulted in increased damage to ecological systems through the rising volume of waste that is also a product of consumer capitalism. This change in culture has been termed affluenza (De Graaf 2005; Hamilton 2005) to highlight the nature of excessive consumption as a compulsive disorder that is in dire need of correction.

The identification and labelling of the Anthropocene arose due to the negative impact that humans are having on the environment. However, arguably there is potential for humans to reverse this and have a neutral impact provided they actively undertake change of existing social and economic norms and activities that generate destructive environmental practices. It is this positive potential that is a key motivator for the creation of a new framework of organising: metabolic organisation. This new framework will be discussed in Chapter Seven.

Organisational/Institutional Responses to Ecological Crisis

That human impact is damaging the ecosystems within which we are embedded and upon which we rely is widely acknowledged by many governments and organisations. An indicator of this acknowledgement is reflected in the sample selection of organisations in Table 1.1 that each focus, widely or narrowly, on addressing aspects of the ecological crisis.

Table 1.1: International multi-stakeholder institutional support for sustainability

Organisation	Ecological Focus
World Business Council for Sustainable Development (WBCSD)	Alliance of business organisations that seeks to create a sustainable future for business, society and the environment. Established in 1992 in conjunction with the RIO Earth Summit.
Intergovernmental Panel on Climate Change (IPCC)	Established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) to review and assess scientific, technical and socio-economic information relevant to understanding climate change; 195 countries are members of the IPCC.
United Nations Environmental Programme (UNEP)	Provides leadership and assistance in caring for the environment particularly at national levels to enable people to improve the quality of their lives and ensure that this passes on to future generations. Established in 1972 as the voice for the global environment within the United Nations system. It works with a wide range of partners, including United Nations entities, international organisations, national governments, non-governmental organisations, the private sector and civil society.
Global Reporting Initiative (GRI)	A non-profit organisation promoting economic, social and environmental sustainability and aims to do this by providing a comprehensive sustainability reporting framework for companies and other organisations. For the GRI environmental care is clearly defined as one of the considerations of economic sustainability.

This acknowledgement of an ecological crisis, indicators of which include plastic waste accumulation in the North Pacific Gyre, acidification of the oceans, loss of biodiversity and significant increase in global pollution levels due to human activity,

is reflected in socio-political discourses and yet collectively organisations and societies have not converted this espoused support for changing harmful environmental behaviours into practice (Dauvergne 2010; York, Rosa & Dietz 2010). Since the early 1980s attempts to organise action to effect system change in the harmful environmental practices of business and wider society has gathered momentum. However, there seems to be little if any progress in changing existing human-ecological relationships at a systemic level. A useful indicator of this inertia to systems level change is the ineffectual outcome of the United Nations-led summits (Allenby 2012; Ewing & Gopalakrishnan 2012) whose objectives were to find common ground on which to galvanise action, discussed below.

In 1983 the United Nations set up the World Commission of Environment and Development (WCED), commonly referred to as the Brundtland Commission, to organise international support for sustainable development. Two direct outcomes of this commission were the report "Report of the World Commission of Environment and Development: Our Common Future" (1987), usually referred to as "The Brundtland Report", and the United Nations Conference on Environment and Development (Earth Summit) held in Rio de Janeiro in 1992. The Brundtland Report presented perhaps the most widely accepted definition of sustainable development and the 1992 Earth Summit created an action plan for the implementation of sustainable development: Agenda 21 (1992). Both "Our Common Future" and "Agenda 21" continue to be widely cited by commercial and civil organisations undertaking sustainability/sustainable development projects.

Despite the widespread recognition and advocacy of key ideas (for example, consideration of future generations in current decisions and actions) of "Our Common Future" and "Agenda 21", their implementation has proved to be problematic. The United Nations Framework Convention on Climate Change that led to the creation of the Kyoto Protocol in 1997, which was targeted to come into force in 2005, has not achieved the greenhouse gas emission goals that ratifying nations committed to. The latest measurements show global CO_2 emissions have increased rather than decreased and CO_2 concentrations have now reached 400 ppm, higher than it has ever been in human history (Ewald 2013; Sweet 2013). The United Nations Climate Change Conference held in Copenhagen in 2009 failed to achieve any agreement by nations to

commit to greenhouse gas reductions that would reverse global warming, and the subsequent conference, the Durban Summit held in 2011, has fared little better in the success of its outcomes than Copenhagen, despite last minute agreements to develop legally binding commitments on green house gas reductions to be finalised by 2015 and take effect in 2020. What characterises the initiatives associated with these conferences is a failure to convert commitments to targets into actual reductions in emissions and reluctance to set realistic reduction targets, both in quantity and timeliness, that would deliver the deep cuts to greenhouse emissions that climate change experts (for example, the members of and contributors to the IPCC) advocate.

The reports, conferences and their outcomes that I have highlighted above are only a small selection of a series of international conferences and activities convened to deal with the detrimental human impact on climate. For example, the United Nations Framework Convention on Climate Change's (UNFCCC) supreme decision making body is the Conference of Parties (COP), whose role is to review and promote the implementation of the convention. The Parties comprise all States that are signatories to the UNFCCC treaty established to prevent dangerous anthropogenic impact on the climate system. The COPs have annually held a series of conferences since 1995 and their reports indicate considerable effort in many sections of societies to organise solutions to the current ecological problems facing humanity: human induced climate change, loss of biodiversity, access to energy, access to potable water and access to food (sample of research areas monitored by the Worldwatch Institute 2012). I contend that all of these efforts have failed to galvanise the scale of action, identified by environmental experts, needed to dramatically reduce our demand on our environment. These summits I argue to be indicators of the inertia gripping societal institutions and organisations in dealing with the environmental problems facing the globe today. The research presented in this thesis explores facets of this inertia through what I have labelled the sustainability problematic: the apparent inability to organise action at all scales[1] that reverses the damage being done to ecosystems on which humans depend.

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[1] Scale refers to relative or absolute size at which physical or human structures and processes exist. In geography it may concern space, such as local, regional, national or global. In time, it concerns the unit of measurement and therefore period of observation being undertaken. In human systems, it may be the size of the group being studied or engaged with from individual through communal to organisational and societal.

The sustainability problematic describes a complex of problems and questions related to inaction to address ecological destruction in the face of strong empirical evidence that political action and social change are needed. The sustainability problematic raises many questions, among them why is ecological sustainability so difficult to put into practice. This inertia of societies' institutions and organisations to action responsible environmental and social practices to redress human induced environmental problems is the context for the principal research question of this thesis: what factors contribute to the inertia to enact change for ecological sustainability in organisations?

The Sustainability Problematic and the Social Imaginary

Modern organisations play key roles in the functioning of societies. Even though my focus is on changes to organisational sustainability I link this to change for sustainability in societal settings. My argument is that organisations do not stand apart from their societal settings; there is a close interdependence between the two. I understand organisations to represent all forms of collective activity (Grey (2007), which is a broader view of organisations and organising that is typically constrained to formal institutions of business or government. Organisations as I interpret them are structures both formal and informal through which we purposefully interact with and experience the world. For example, many of the benefits of modern lifestyles are due to our ability to transform natural resources into products and services that provide for the wellbeing and high standards of living enjoyed by the developed world and aspired to by the developing world. The action of transforming natural resources into goods for consumption highlights the important role that organisations perform as a key interface between society and nature. The sustainability problematic is concerned with how this interface is enacted and how its framing may contribute to the ecological problems facing humanity.

The sustainability problematic that I have identified above is the outcome of a multitude of decisions that are taken at all scales, individually, organisationally, nationally and internationally, as we engage in the large and small tasks of our daily lives. Such decisions are situated in a variety of contexts and I argue that these contexts themselves are strongly influenced by a meta narrative, which Taylor (2004)

has labelled the 'modern social imaginary': a shared system of meanings that captures the imaginations of individuals and shapes their social groupings and society.

I use the concept of "imaginary" to define the meaning making and interpretive system through which humans individually come to know their world. The imaginary comprises both aesthetic and cognitive experiences that include sets of values, institutions, laws, symbols common to related social groups and both espoused and actual ways of representing a collective life. The imaginary is fundamentally an individual act (Strauss 2006), which means that there is no imaginary created at the societal level. What is labelled as a societal or social imaginary is the interrelationship and intersection of individual imaginaries and what is shared meaning amongst them. This social imaginary is therefore both rich and complex and lacking in hard boundaries and definition. It is fundamentally a phenomenon of the imagination and not a bounded cognitive construct of reality such as the concept of worldview, which represents more closely a constructed social order based on reflection of individual experience. The social imaginary captures and describes what individuals imagine society to be, not what societies imagine (Strauss 2006, p. 329).

Taylor (2004) argues that the social imaginary is more than a set of ideas. It is what enables the practices of society and this has both aesthetic and cognitive dimensions. The social imaginary is both defined by and at the same time defines the moral order of society. By this measure and understanding the social imaginary may be understood to be the symbolic dimension through which humans create and represent their collective life. It is a dynamic discursive practice that is:

1. … the way [people] "imagine" their social surroundings, and … it is carried in images, stories, legends, etc.

2. … shared by large groups of people, if not the whole society.

3. … that common understanding which makes possible common practices, and a widely shared sense of legitimacy. (p. 24)

Taylor's modern social imaginary is characterised by two facets that have had a powerful formative affect on modern societies: the central place assigned to the

economic in our private and public lives and the importance of equality in our social and political lives that is a fundamental value shaping our decisions and actions.

The dominance of the "economic" as the hegemonic imaginary may be seen in the organisational and political responses to the Global Financial Crisis (GFC) that started in 2008. Despite counter-narratives such as sustainability the response and interpretation of GFC events appears to have been a reversion to business-as-usual approaches to the global capital crisis and strengthening of neo-liberal economic models (Jessop 2012).

I am arguing that the social imaginary that frames our decision making needs to fundamentally change from one grounded in economics to one grounded in ecology – we need to create an ecological imaginary to replace the economic imaginary if we are to successfully resolve the sustainability problematic.

For the remainder of this chapter I will proceed with an introduction to narratives on human-nature relationships that are embedded in the social imaginary (ies) of Western thinking. I will argue that these have deep historical roots and that their originating conceptions continue to influence us today. I will then take up a discussion on categorisations of environmental discourses to frame ways of understanding experiences of "nature" that influence the meaning construction of "social nature", which in turn shapes approaches taken by individuals, organisations and societies towards the adoption of ecological sustainability.

Organisation of nature

My discussion of ecological sustainability situates the maintenance of human livelihood as an outcome of our organisation(s) of nature where nature is understood to be an interpretation of how the ecosystems within which we exist function. By this I mean that humans collectively undertake the activities necessary for the maintenance of their health and wellbeing and in doing so create and then socially endorse preferred approaches for delivering and maintaining, individually and collectively, a healthy and meaningful existence. The obvious activities concern the provision of food and protection from the elements. These tangible activities are strongly influenced by moral and aesthetic sensibilities and judgments. For example, our food preferences are determined by both geography and cultural tastes, the latter

constraining what is generally selected and consumed. The development of these socially endorsed approaches are founded on localised experiences of human-nature relationships and interdependencies and act to pass on knowledge to support and protect their group. Arguably they have specific geographical boundaries that have defined what resources people may utilise, based on the accessibility, predictability and reliability of those resources. I contend that these activities represent a reification of selected aspects of our social imaginaries. The maintenance and propagation of these socially endorsed processes is undertaken narratively. Experience and know-how is captured and transmitted in stories, anecdotes, rules and symbolic collections. Over time such geographically bounded human-nature relationships have resulted in the diversity of social constructions of nature that exist across the globe. This social construction of nature, I contend, is grounded in a social imaginary which Taylor (2004) argues "is not a set of 'ideas'; rather it is what enables, through making sense of, the practices of a society" (p. 2).

In raising the concept of "social nature" (Castree 2001) this thesis pursues two aspects. The first is that social constructions of nature are amalgams of narratives that bound our meaning making and understanding of reality (Bruner 1991), which in turn constrain our decision making. The second aspect is the influence that these narratives of "social nature" have in (re)creating our social imaginaries to (re)define our organisational ecological practices. The narratives in these constructions comprise a variety of texts that singly and collectively may include worldviews, stories, descriptions of experiences, folktales and other explanations of relations and meaningful interactions with the natural environment. I am aware that this constraint to narratives of nature is still a large field of inquiry and I am limiting this to examples of human-nature narratives defined by Western thinking.

The moral order of nature

We live our lives through social constructions of reality that are captured and reproduced in multitude narrative forms (Bruner 1991, 2004). What we define as the reality of "nature" is a response to our collective interpretations of our experiences as actors, or members, of an ecosystem. Castree (2001) in his explanation of "social nature" as an important radical development in human geography emphasises that "nature" is not an arbitrary or capricious social construction abstracted from "reality".

The understanding of what "nature" means emerges from the interactions of humans embedded within ecosystems, of being "in nature". Narratives of "social nature" for Castree reflect how we understand or know nature, define how we engage or interact with nature, and finally how we remake, or reconstitute nature either intentionally or unintentionally.

In all societies, a rich collection of narratives frames the human relationship with nature. These narratives are part of the fabric of our socialisation and learning and in Western traditions include stories such as Aesop's Fables, Grimm's Fairytales, children's stories (for example, *The Lion, the Witch and the Wardrobe*; *Wind in the Willows*, Beatrix Potter's and Dr Seuss's tales) and adult tales (Orwell's *Animal Farm*: A fairy story; Quinn's *Ishmael*: An adventure of the mind and spirit) that draw on nature in symbolic ways to impart moral lessons for social behaviours. These stories use nature allegorically to present to the listeners and readers of these tales normative lessons that validate and reinforce the ideals framing the enactment of moral order in society. Meanings that I associate with a number of animals are that the lion is noble, the fox cunning, the snake shrewd/deceptive, the dog loyal, the raven a trickster and the owl wise.

Landscapes are also endowed with symbolism and relationships defined by their utility and aesthetics. Deep dark forests are threatening, and wild places full of malign creatures that have yet to be tamed or exterminated. Pastoral scenes of copse, farmland, flowers and babbling brooks are the grist of romantic ideals of a nature that is beneficent because it is tamed. Deserts are a metaphor of purity and spirituality; they are harsh, life threatening and life changing, places of spiritual discovery and transformation. The organisation of nature in these narratives is concerned with mastery over the wildness of nature, over the unpredictability of the malign forces that nature can throw at humans. Perhaps the most influential source of narratives societies have constructed to regulate and predict human-nature interrelationships are those drawn from our religions.

The importance of religious narratives that deal with nature is their explicit linkage to the moral order of society. The example I will draw on comes from Christianity, which like the narratives presented above sets a divide between the natural environment and humans, a divide that is understood to be malign once it is beyond

our direct control. The Christian view of nature is an example of a narrative that subordinates the natural environment to human decision making. Christianity sets nature up in ways that are dangerous to humans and in doing so creates fear as a motivating driver for human-nature relationships – nature must be subdued to the will of mankind and at the same time must be made benign.

Christianity organises nature hierarchically: supreme being and heaven followed by humans, then animals, plants and land, and finally hell, which has further layers of organisation to categorise the damned (Dante 1265-1321). Uppermost is the ideal of the Garden of Eden where the fruits of nature are designed to fulfil the desires and needs of mankind and well beneath, and external to the Garden of Eden, are the realms dealing with malevolence, wildness and danger to humans.

Danger comes through the organisation of hell and the pestilential forces of nature that are used for punishment and punitive action against humans that have transgressed universal laws. The Old Testament in the Bible is littered with calamities that may be inflicted on and turned against mankind, for example, the flood, the various plagues that beset individuals and groups, the famines and other malign forces that nature could harness against mankind. This malign force of nature dominates the day-to-day world and is set against the benign force of nature from which mankind has fallen and must through various deeds return.

The narrative of the Garden of Eden sets up an ideal that I suggest models the behaviour of Western thinking toward nature: benign nature is not available or achievable in the temporal existence of humanity, it is something that must be aspired to, a goal to regain in the afterlife. The link to the Garden of Eden creates both a moral relationship and an aesthetic relationship with nature that is at one and the same time grounded in the past and aligned to the future but rejects a moral obligation with nature in the present. The Christian human-nature narrative presents a moral order that is organised hierarchically and sets a boundary that creates nature in its temporal form as an excluded other. I come back to these points in the last two chapters where I shall present an alternative view of human-nature relationships that organises the moral order of society in ways that do not subordinate nature to humans: the Australian Aboriginal concept of Country.

I am not claiming that the Christian legacy is the cause of environmental irresponsibility (see Lynn White 1967 for an example of Western religious causality of ecological disaster). I am claiming, however, that the Christian legacy has a strong influence on our relationships with nature and how we interpret our experiences of these relationships. The hierarchical relationship with nature set out in Christianity positions nature as an instrument of humanity and implies that humans may in unstated ways not need to be mindful of ensuring that nature is not harmed as the supreme being will always provide. In modern times this God given usufruct of nature has shifted to mankind having a stewardship role over nature (Hoffman & Sandelands 2005).

I commenced this chapter acknowledging key narratives that stimulated reconsideration of humanity's dependence on nature, and despite the growing awareness of the harm to ecological systems that humans are causing, there continues to be a gap between awareness of ecological problems and corrective action that I have labelled the sustainability problematic. In the following section I introduce organisational and societal approaches to making sense of the sustainability problematic.

Sustainability and Environmental Discourses – Making Sense of the Sustainability Problematic

Western thinking continues to dominate business practices in the current global economy (Jermier 2008). This dominance is a consequence of industrialisation and colonialism (Banerjee 2000, 2008b) that over the past three centuries has resulted in the global geopolitical ascendency of Western nations. During the twentieth century, an outcome of the evolution of industrialisation from its European beginnings has been the division of nations into industrialised and non-industrialised, which has over the last half century generated new metaphors for these groupings or categorisations. These new metaphors include "north vs. south", developing/non-developed vs. developed, G8 and G20 as advanced societies/economies and by omission every other country, those not categorised as G8 or G20, is excluded from this elite circle of nations. This division between the privileged and developed nations of industrialisation and the non-industrialised or developing nations is an important one for the influence of organising sustainability and has its strongest voice in the

discourse of sustainable development (Banerjee 2003; Redclift 1987; World Commission on Environment and Development 1987).

The discussion developed in this thesis is grounded in the proposition that at its heart sustainability is a contemporary environmental discourse, which has its origins in industrialisation (Dryzek 2005).

Discourses of environmentalism

Dryzek identifies nine environmental discourses ranging from unbounded optimism or naiveté, depending on your ecological position, on nature's abundance and capacity to meet human needs and demands, to radical green discourses that seek socio-political transformation of society. These discourses, outlined in Table 1.2, span the gamut of perspectives from the defence of the status quo to the remodelling of society and are grouped into four meta environmental narratives: Limits, Problem Solving, Sustainability and Green Radicalism.

Table 1.2: Environmental discourses (modified from Dryzek 2005)

Meta-Environmental Narratives	Environmental Discourses
Global Limits and their Denial Comprises two contrasting discourses each approaching the resources limits of the Earth from opposite directions: societies face hard finite natural resource limits contrasted with unbounded growth which assumes these limits can all be overcome.	**Looming Tragedy or Survivalism** The finite resources of the Earth impose absolute boundaries on what we can take from nature. Modern society is rapidly approaching the thresholds of the resource limits of the Earth.
	Growth Forever or Promethean Response Whilst recognising that limits exist, argues that these will be overcome due to human capacity to develop new technologies and find new resources and solutions to these limitations. May be inferred as the dominant environmental discourse in contemporary society.
Environmental Problem Solving The problem solving discourses do not challenge the foundation assumptions of industrialisation and capitalism. Arguing that ecological sustainability is achievable by modifying behaviours and consumption patterns, the problem-solving discourses essentially differ in how effective decisions to resolve environmental problems come about.	**Leave it to the Experts, Administrative Rationalism** Argues that the best way to harness the scientific and technical expertise needed to solve environmental problems is to organise it bureaucratically and managed institutionally through regulatory bodies and agencies.
	Leave it to the People, Democratic Pragmatism Recognises that environmental problems are complex and that problem solving needs to bring many voices together and involve participatory processes that bring together people from a variety of fields to collaborate in problem resolution.
	Leave it to the Markets, Economic Rationalism Assumes that market mechanisms will produce efficient outcomes at less cost. This rationale gives rise to market-based mechanisms such as pollution rights and tradable quotas, emissions trading and green taxes. The role of government is to support decision-making mechanisms that leave it to the market and human ingenuity to resolve environmental problems.

Meta-Environmental Narratives	Environmental Discourses
Sustainability Accepts the existing logic of growth but in benign managed form. Essentially the sustainability discourses take the view that economic growth and environmental protection are complementary. There are multiple definitions of sustainability and whilst this results in many competing views they can be broadly categorised into two groups.	**Sustainable Development, Environmentally benign Growth** Assumes that perpetual economic growth to meet the sum of human needs can be met by intelligent operation and management of natural and human systems such that sustainable yields of environmental resources can be maintained.
	Ecological Modernisation, Industrial Society and beyond Argues for a restructuring of the capitalist economy. It views environmental degradation as a structural problem requiring reorganisation and to achieve this, conscious coordinated intervention is needed. Opposes leaving such change to market forces, arguing it is not adequate to this task, which needs cooperative design and implementation. As such Ecological Modernisation requires political commitment to achieve enlightened capitalism. This means governments need to set standards and offer incentives to business to make the required changes.
Green Radicalism Green Radicalism develops a comprehensive critique of environmental, political, social and economic shortcomings of industrial society and is "the most significant ideological development of the late twentieth century. [It faces an incalcitrant and entrenched liberal capitalist political economy that is] beyond the control of most governments" (Dryzek 2005, p. 225).	**Changing People: Green Consciousness** These discourses aim to change the world through the way people think. This change in thinking involves setting up a new kind of ecological sensibility to provide a different context for people's experience of the world.
	Changing Society: Green Politics A group of discourses arguing for political change. Adherents actively seek to alter social structures, institutions and individual consciousness to deliver ecological sustainability.

To show how each environmental discourse approaches solutions to the sustainability problematic Dryzek sets out a loose continuum of responses to consumer capitalism from those that accept the status quo (prosaic) to those that seek to redefine it (imaginative).

Dryzek further ascribes the environmental discourses against a matrix where one axis describes the approach to change from reformist to radical objectives and the other axis describes the novelty of their change approach, their creative response, from prosaic to imaginative. This creates a polarity between prosaic reformist and imaginative radical discourses of environmental change that align with a scale of organisational strategies of incremental and radical transformative change. In Figure 2.1 I map the environmental discourses against these relationships.
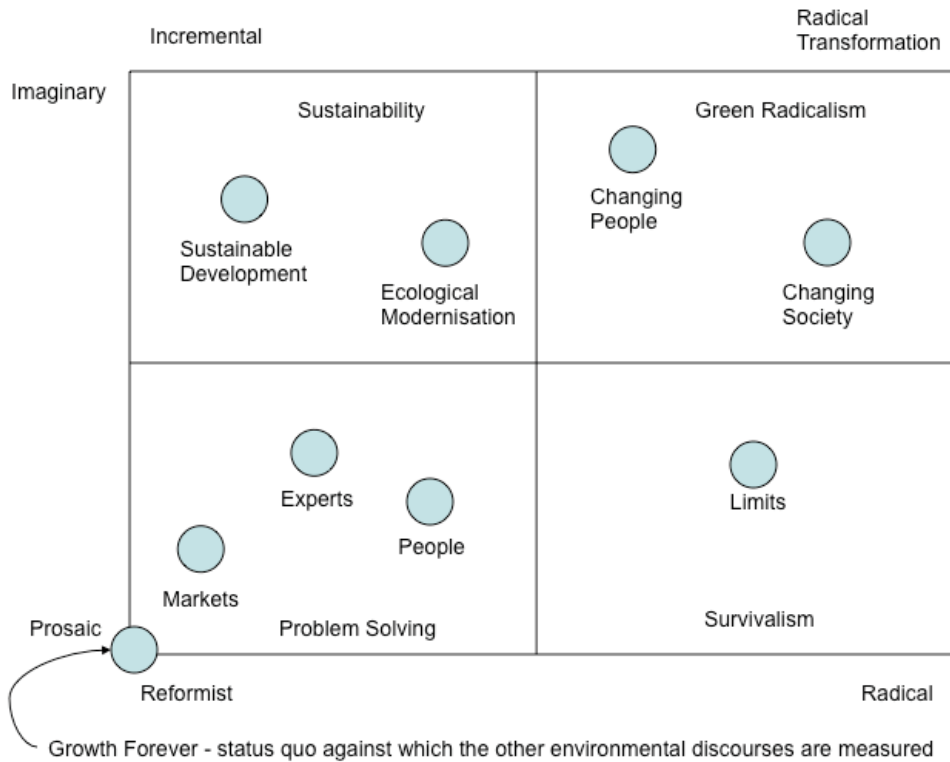
Figure 2.1: Map of societal environmental discourse relationships and change approaches

Whilst Dryzek groups his discourses into a continuum from reformist to radical, I propose another way of grouping them by their location within the dominant paradigm of liberal capitalism or consumer capitalism. Taking this perspective provides three alternate groupings according to their intention for changing the paradigm of liberal capitalism: fix, extend and recreate.

The "fix" group comprises the limits discourses and the problem-solving discourses (Looming Tragedy; Growth Forever; Leave it to the Experts; Leave it to the People; Leave it to the Markets) which have identified problems within the boundaries of the paradigm that need redressing but do not challenge the need to change the paradigm in any substantive way – the philosophy pursued here is one of repair. The "extend" group comprises the sustainability discourses (Sustainable Development; Ecological Modernisation) which are now testing the edges of the paradigm, questioning whether the problems they identify and deal with can be repaired or require more radical

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overhaul. The final group, "recreate", comprises the green radical discourses (Changing People; Changing Society) and these argue that liberal capitalism cannot resolve these problems and therefore a new paradigm needs to be created.

Whilst the environmental discourses are presented separately, their boundaries at times blur and in practice the adoption and application of discourses overlap as people apply them to the contexts they are dealing with. In the case studies in Chapter Five I present an example of an individual drawing on multiple environmental discourses to explain their experiences of sustainability. This observation from the field concurs with Dryzek's caution that we should not privilege one discourse over another but understand that each environmental discourse centres on different problems and applies to different contexts. This suggests that viewing each environmental discourse as a crafted response to these problems and contexts means that we can apply them democratically in selective ways. Dryzek's (2005) thesis is that the responsible goal is to support "environmental democracy" (p. 231), which synthesises the contributions of each of the environmental discourses to address the ecological problems facing humanity today.

Dryzek (2005) is claiming that the rise of environmentalism as seen in the increasing number of discourses has created a situation where we now "have a politics of the Earth, whereas once we did not" (p. 5). This politics has emerged due to contestation of environmental perspectives each based on different assumptions and each interpreting human-nature relationships in ways that are often mutually contradictory or seemingly opposed to each other. To engage productively with Environmental Problem Solving, Dryzek advocates a pluralist democratic approach, arguing that elements of all the discourses have relevance and value; that it is not a case of privileging one discourse over another. The green radical discourses are pushing for narrative constructions of society based on new assumptions that support different behaviours and processes. The other discourses operate within paradigms that help to refine and resolve the internal issues and problems of their paradigm. I view all of the environmental discourses pursing a goal of enfoldment in the sense that if they are taken up and applied they will deliver an all-encompassing resolution to the environmental problem they address. The radical discourse of today becomes the

survivalist discourse of tomorrow, assuming of course that the radical discursive challenge succeeds in changing the worldview(s) they are targeting.

The growing application of "sustainability" – useful or problematic?

Sustainability is a messy term. There are multiple interpretations of sustainability and as a consequence a wide range of situations and contexts to which the term is applied. This messiness in the use of the term sustainability is problematic for projects in organisations that are attempting to implement change for sustainability. A weakness is that the term has become "fashionable" and is now commonly applied to a wide range of activities and situations. For example, Swyngedouw (2010) notes that we have "a whole array of 'sustainabilities': sustainable environments, sustainable development, sustainable growth, sustainable wetlands, sustainable bodies, sustainable companies, sustainable processes, sustainable incomes, sustainable cities, sustainable technologies, sustainable water provision, even sustainable poverty, sustainable accumulation, sustainable markets and sustainable loss" (p. 190). Such a range of applications of the term "sustainability" spans maintenance of the status quo through to radical re-imagining of ways in which organisations and wider society interact with nature. The messiness in the use of the concept of sustainability contains contradictions and tensions that pull in opposite directions, which creates difficulties for the enactment of sustainability. These contradictions are not merely contested definitions that are essentially in basic agreement with each other, but are meanings that in some instances oppose each other, such as maintenance of the status quo and the need for fundamental change to current work-life values and practices.

Yet, even if there is a lack of agreement on a definition of sustainability, there is probably more common agreement on what is unsustainable. The unsustainable includes environmental degradation, impacts of rampant consumption, food and water crises caused by human population growth, social justice and human rights abuses, and global warming and its impact on humans and biodiversity. The understanding expressed in these concerns is on ecological sustainability "and above all (if we were to think deeply about it) the meaning of life" (Fricker 1998, p. 368).

I argue that sustainability is a contemporary interpretation of the human-nature relationship. As a messy term the use of sustainability is not organised through a

commonly agreed definition. I do claim that the leading interpretations of sustainability all present a rationalised utilitarian perspective of nature (see Dryzek's categorisation of sustainability discourses in Table 1.2). Sustainability is concerned with the ongoing provision of natural resources necessary for human flourishing and this need/goal necessitates support of healthy ecosystems. This view centres on economics not biology – my argument here is that current interpretations of sustainability are framed by the economic imaginary as by Taylor (2004) whereas it should be framed by an ecological imaginary which would lead to different societal outcomes and therefore different organisational outcomes. For Paehlke (2005) sustainability "establishes a systematic entry point into economics, policy analysis, politics, and public administration for ecological considerations" (p. 36). Paehlke argues for sustainability as a bridging concept between the natural and social sciences: the role of the natural sciences is to measure the impacts of humans on nature and assess nature's capacity to support human impositions on it, and the role of the social sciences is to help rebalance social and economic priorities in ways that support the conservation of ecosystems.

Stepp et al. (2003) not only make a case for a clear difference between human ecosystems and natural ecosystems but also argue that belief systems are integral to human ecology. Human ecosystems are distinct from biological ecosystems and the important difference is the flow of information and the existence of systems of meaning that exist in addition to the metabolic processes of biological systems. They assert that the challenge for humanity is to effectively integrate belief systems into human ecosystems. Their model of human ecosystems aligns with those views that privilege humans over nature and sees humans as distinct from nature.

Newton and Freyfogle (2005a) present a counter-argument to the usefulness of sustainability to support and advance the conservation of ecosystems. Their concern lies in the conservation of healthy ecosystems, which they see as under threat from human activities: "we have problems with the earth because we do not live well on it" (p. 25). On this view, what is needed to solve these problems is for humans to improve their behaviour patterns, not sustain them. Sustainability has for these authors too many defects to be useful for supporting a conservation goal and the term needs to be replaced. Among the defects they raise are its vagueness, which has given

rise to multiple definitions, its inability to articulate precisely what is being sustained, its implicit "assumption that we can aggressively manage nature so long as we are prudent and scientific in doing so" (p. 25), and its emphasis on the natural resource flows that have economic value, not about maintaining healthy ecosystems. Finally, they criticise the concept of sustainability because they "cannot extract from it a clear answer to [their] questions about humans and nature" (Newton & Freyfogle 2005b, p. 42).

As a counterpoint to leading usages of sustainability, conservation as presented by Newton and Freyfogle aligns more closely with the logic and understanding of human-nature relationships encompassed by Dryzek's categorisation of Green Radicalism discourses. Conservation is for Newton and Freyfogle (2005a) a far more useful construct than sustainability. Conservation is based on a view that nature does exist and is far too complex for humans to understand completely, which results in simplified mental models that reflect a "mind-nature gap" (p. 28) that is embedded in all social constructions of nature. It is science that attends to the mind-nature gap and improves our understanding of the real nature. It is science that is the foundation for conservation and by implication it is the lack of science that gives rise to the confusion and vagueness of sustainability.

An important quality of these environmental discourses is that they are predominantly concerned with normative change and represent a variety of interest groups, each advocating different interpretations and constructions of human-nature realities that are socially validated (Castree 2001).

Humans are dependent on the natural environment for their existence. Humans rely on nature for their material and spiritual needs. Food and shelter are derived from healthy functioning ecosystems and our psychological and emotive wellbeing is linked to interacting with our aesthetic sensibilities of nature. However, in recent years technological advances are pushing society to new unknown frontiers: the engineering of DNA and other radical technologies intruding on what we have traditionally considered to be the boundaries of what is human and what is nature[2]. I consider that

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[2] For example, consider the visceral threats to what we consider to be the acceptable moral order regulating the interrelationships between humans and nature that are evoked in Mary Shelley's *Frankenstein* and Donna Haraway's *Cyborgs* (1991). Both Shelley and Harraway present hybrid constructions of humanity that counter cultural understandings of what it means to be human.

one of the consequences of their hybrids is to confront deeply held beliefs of what it means to be human and that human interference in natural processes is itself disruptive and dysfunctional to the socially accepted natural order of things. These challenges to the moral order of humans and nature are challenges to the ways in which we organise our relationships with nature.

Nature is frequently taken to mean everything that is not human (Soper 1995). Whilst there are numerous variations of what defines the boundary between nature and humanity, this dualism in the West, that nature and humans are separate, is perhaps what most people understand as reality. My opening sentences to this section appeal to this understanding. An alternative, but less widely held view is that the distinction made between nature and human is not a distinction that makes sense. Humans are part of nature and so other distinctions and categorisations are needed to engage with the collection of actors in nature. This more holistic perspective may be seen in discourses such as the deep green discourses, for example deep ecology (Naess 1990) and certain schools of eco-feminism (Plumwood 1993). This holistic perspective of humans as an integral part of nature is in my view different to the more widely understood interpretations and uses of the term sustainability where a distinction between humans and nature is perpetuated However, confusingly, interpretations and usages of the term ecological sustainability do embrace the holistic perspective of humans as part of nature.

These scholars capture the sense of the wider debate attempting to understand and identify solutions to the sustainability problematic. Both the natural and social sciences have difficulty with the term sustainability and its usefulness for normative change in society. Sustainability evokes a mixed response ranging from discounting its usefulness to accepting its worth even though it is not judged to be clear or specific in its goals or process. The issues raised in this wider debate are also issues that concern management and organisational scholars. An introduction to organisational sustainability discourses, which span weak and strong interpretations of the concept and its practices, will be taken up in Chapter Two.

Organisation and sustainability

Brown et al. (1987) identified key themes and issues in the discourse of sustainability that continue to define the organisation of responses to the sustainability problematic. In their view the human relationship with nature concerns the maintenance of natural resources to support a sustainable society and economy. They broadly defined sustainability as maintaining a symbiotic relationship with nature and noted that most definitions of sustainability "either state or imply that the goal of sustainability is human survival" (p. 718). A key conclusion they reached was to emphasise the political nature of sustainability and its dependence on social value systems to navigate cultural expectations and environmental constraints. An important consequence of the political nature of sustainability is that it is a value-laden process dependent on conceptualisations of sustainability and cultural requirements for sustainability. Brown et al. (1987) argue that the political negotiations may imply that compromises about what is sustainable will be taken and that the outcomes of what is desirable may extend to rationalisation of selected economic, biological or social systems on the planet.

Kearins, Collins and Tregidga (2010) in their discussion on the centrality to business engagement with sustainability of human-nature relationships make the point that "environment" and "nature" are different. "Environment" is equated with the conditions that surround us and can be treated dispassionately whereas "nature" evokes an emotive response in part because "nature" as a concept is contestable. It is how we understand our reality and therefore how we engage with our reality. This distinction between environment and nature is too neat and in my view cannot be so clear-cut. My argument is that both environmental and natural are social constructions and that the distinction made by Kearins et al. (2010) draws attention to the embeddedness of these constructions in the sense that the more deeply embedded the less likely we will challenge an idea and the more likely the idea will be taken as reality. Following this interpretation environment is assumed to represent reality whilst nature is not. The distinction that they note between "environment" and "nature" raises an interesting concern about amoralisation (Crane 2000) and moral distancing (Bandura 2007), a concept that I develop further in the discussion presented in Chapter Three.

A less clear-cut distinction is claimed by Driscoll and Starik (2004) who argue that "the natural environment holds coercive and utilitarian power over business organisations" (p. 58), and that the influence of nature on business, despite the exceptional cataclysms of storms or droughts, is constituted by subtle persistent power over organisations that are observable retrospectively. Examples of this communication by nature include depletion of fish stocks, changes in climatic conditions that affect agriculture and the distribution of invasive species that alter ecosystems. Ignoring this dialogue with nature comes at a cost for organisations and society and their remedy for this is to change our governance structures to elevate nature as an equal stakeholder in our deliberations and organisation of business and society.

Finally, Newton (2002, 2005) has consistently argued that social constructivist positions of nature in general do not adequately deal with "the real" aspects of nature. Nature has physical impacts and cannot be reduced to language alone, it has an "extra-discursive reality" (Newton 2005, p. 873), for example the hole in the ozone layer, rising sea levels and increasing extinction rates for species across the globe. Ignoring the real in nature has resulted in a sustainability discourse for business that is often utopianistic with little practical usefulness due to its inherent idealism. This critical realist commentary on organisational "greening" is mirrored in criticisms of social constructivist approaches to nature that are pursued in the social sciences (see, for example, Nash 2005).

My intention in introducing the historical context of human-nature narratives is to demonstrate the complexity of our relationships to nature and to emphasise that there are multiple extant perspectives and positions that are historically grounded in our cultural traditions.

Environmental discourse and ecological imaginaries

This thesis argues that the perspectives that frame our relationship with nature are deep-seated in society's organising narratives, the narratives that people create and use to explain, give meaning to and control their interactions and interrelationships with their perceptions of reality. Therefore, to resolve the ecological problematic which my research question addresses involves the organising narratives for society

being dramatically changed and through changing them, changing the ways we value and relate to nature. In the next chapter I will expand on the understandings and experiences of sustainability that have been taken up by organisations. This discussion on meanings, definitions and interpretations of sustainability will also include discussion of the variety of viewpoints that contest the dominant human-nature relationships that are replicated in organisational settings. In Chapters Six and Seven, I will take up the development of alternative frames that could contribute to changing our organising narratives from instrumental to intrinsic valuing of nature.

Liberal or consumer capitalism is now the major force shaping industrialisation and strongly influencing modern interpretations of environmental discourses (Alexander 2012; Dryzek 2005; Kovel 2007). The social imaginary outlined by Taylor (2004) suggests consumer capitalism encapsulates values such as: growth, technical genius of humanity, competition and not collaboration as the preferred relationship ideal between people and nature, nature as a resource for humans, an evolutionary biological hierarchy that privileges humans over other species and sets a division between nature and humans. These, and other values, in varying degree, are embodied in the narratives of the environmental discourses outlined above.

As a socio-political discourse ecological sustainability has from its beginnings advocated change, and it still remains a discourse advocating change. Given such a long period of change advocacy then why does it seem to have made so little impact on organisational and societal ecological actions? Is there something inherent in the ideas and demands of ecological sustainability that are limiting its acceptance?

The conclusion I develop in this thesis is support for a "new ecological imaginary" that is needed now in order to effect an ontological shift in human-nature worldviews. In proposing such a shift I agree with Dryzek's claim that all the environmental discourses have important contributions to make in addressing the sustainability problematic. This argument will be presented in Chapter Seven where links between Survivalism and metabolic theory will be explored and environmental discourses connected to aesthetics and moral obligations.

Research Approach and Thesis Structure

The research strategy for investigating how organisations were organising for ecological sustainability was to collect and analyse "sustainability experiences" of individuals in their workplace settings. The research design set two key criteria for identifying suitable case organisations to approach to participate in my project.

The first was that they had to have an active sustainability change project underway and the second was that each case organisation represented a different sector in the marketplace. This strategy to involve organisations from different market sectors that in the normal course of their operations would have minimal contact or influence on each other raised possibilities for exploring similarities and differences in the way these organisations approached the sustainability problematic. The three organisations selected contribute to this rationale, with Landcare an NGO operating primarily in the agricultural sector, Carepoint a not-for-profit organisation in the community services sector and Corcon a large engineering firm in the construction and mining sectors.

This strategy favoured the methods associated with narrative work in organisational studies. "Narrative inquiry" (Clandinin 2007) was adopted as the methodology for organising the collection of data and the basis for its analysis and interpretation. Narrative inquiry explores systemic change in social systems that are understood to comprise highly networked meaning-making structures. A key strength of narrative inquiry is its focus on analysing the experiences of individuals to better understand complex issues and situations such as those involved in organising for sustainability. Telling narratives is not simply an aesthetic experience or "window dressings" (Slicer 2003, p. 2) since a narrative is an important vehicle for meaning construction and interpretation through lived experience. Narratives encompass forms such as stories, anecdotes, myths, excuses and reasons to justify action or inaction. They "are a version of reality whose acceptability is governed by convention and 'narrative necessity' rather than by empirical verification and logical requiredness, although ironically we have no compunction about calling stories true or false" (Bruner 1991, p. 4).

The analysis of interview narratives identified several key factors that influence the actions and decisions of individual and organisational responses to implementing

ecological sustainability. These factors I argue represent factors that both contribute to understanding the inertia described by the sustainability problematic and also facilitate the development of possibilities to overcome this inertia. The first factor describes the issues individuals have with the multiple definitions and meanings that the concept of sustainability has in modern organisational and societal settings. The second factor describes the importance of moral boundaries for constraining or enabling options for sustainability actions. The final factor describes how the emergence of a new relationship with nature can facilitate adoption of ecological sustainability at organisational and societal levels.

Outline of the chapters

The argument developed in this thesis is that to overcome the inertia and resistance to ecological sustainability requires the creation of a new relationship between society and nature. This new relationship needs to recognise that humanity is part of nature, not distinct or separated from it. This new relationship recognises the deep interconnection between nature and humanity and can only come about through the creation of a new social imaginary.

The thesis is presented in seven chapters, which are loosely conceived of as three sections. The first section introduces the sustainability problematic and outline of the research argument, and the sustainability discourses within which the thesis is situated. The second section explores the methodology framing the research and then presents findings from each of the case studies. The third section, Chapter Seven, introduces suggestions for resolving the sustainability problematic and sketches a new conceptual model: metabolic organisation to facilitate changing the social imaginary so as to privilege nature instead of humanity that I argue is needed to overcome the inertia characterised by the sustainability problematic.

Chapter One provides an overview of the research project, outlining the context for the research and the argument and findings developed in the subsequent chapters. I introduce the sustainability problematic: the seemingly slow process of change for ecological sustainability. I argue that this in large part is due to our social construction of nature and that to make progress a change in the moral order of the social imaginary from economic to ecological is needed.

Chapter Two presents the concept of ecological sustainability and explores its relationship to the sustainability discourse(s) in organisation theory. The need for structural change to organisational discourse which facilitates a change in relationship to nature, and which alters the responsibility of business to nature and society, is identified. I also argue that sustainable development is the dominant discourse informing organisational approaches to change for sustainability and that this is a factor contributing to the inertia inhibiting the take-up of ecological sustainability by organisations.

Chapter Three explores the importance of patterns of meaning created by the narratives and discourses that individuals and organisations use to make sense of sustainability. The methodology used is narrative inquiry and the approach taken is that of a case study that follows three organisations' implementation of sustainability. I also introduce the concept of moral distance as an important mechanism for sense-making of sustainability in organisational settings. Moral distance is the way in which we accept or reject others in our socially defined reality.

Chapter Four describes the research approach and outlines the case study organisations. These organisations are operationally and structurally different. The first is Carepoint, a large not-for-profit engaged in social work and the second is Corcon a large engineering firm and the closest of the three to a conventional view of business and a firm. The third is Landcare, an Australia-wide movement organised at the local level to alter land management practices.

Chapter Five presents the findings of the research. Each case organisation shared the general responses and experiences of sustainability but also had dominant narratives that could be said to better reflect their ecological sustainability perspectives in their unique organisational settings:

Carepoint takes up the confusion individuals and organisations face in having to engage with multiple interpretations of sustainability. Sustainability continues to be a problematic concept and practice in organisations, particularly where the intention is to implement ecological sustainability. I undertake a detailed analysis of one interview drawing on a methodology used in Sveningsson and Alvesson (2003) to

understand how that person is responding to sustainability initiatives in their organisation.

Corcon presents the issue of moral distance as it is used to engage with organisational stakeholders: nature is considered not to have stakeholder status. I explore the sustainability experiences of senior management in this large construction company that is in the initial stages of a significant culture change program based on a new set of core values that defines their interpretation of sustainability. I look at the role of moral distance in the sense-making processes that these managers enact.

Landcare takes up an issue related to nature communicating with landholders to enact change. I examine the role that implicit narrative construction and explicit processes of knowledge acquisition play in the generation of effective ecological solutions. The sense-making that occurred was defined by three processes: collective aggregation of subtle cues, knowledge acquisition and sharing, and acting on nature's voice.

Chapter Six offers an analysis of the findings and links this back to the critique of the triple bottom line (TBL) - three dimensions of sustainability - which presented a meta-level assessment of organisational responses to sustainability that apply across these very different organisations. I then introduce the Indigenous concept of Country as an exemplar of an ecologically grounded social imaginary, which is in distinct opposition to the economically grounded social imaginary of Western thinking. I suggest that offered concepts of Place, Connectivity and Moral Obligation adapted from the Aboriginal concept of Country, a radically different ontology to the TBL's sustainability rhetoric, can shape the creation of a new ecological social imaginary.

Chapter Seven introduces a new conceptual model that emerged through the research of the study: metabolic organisation. This model has three facets: metabolism, appreciation and interdependence, and it provides a different framework to those more widely used in organisational settings for decision-making by individuals and organisations. I argue that models such as metabolic organisation better support the implementation and adoption of ecological sustainability because they force individuals to critically question the influence of their social imaginary on their sense-making and decision making.

In this chapter I have introduced the focus of my research, the sustainability problematic, and I have explained how I have derived my proposition that the organisational and social inertia to adopt ecologically responsible practices is constrained by the dominance of economic values and symbols in the modern social imaginary. In Chapter Two I discuss the sustainability theories that dominate organisational discourse. The problematic that this thesis addresses is the reluctance of organisations and society to embrace nature in other ways than instrumental worth despite acknowledgement that current practices are self-harming structurally and institutionally.

Chapter Two

The Imprint of Sustainability Discourses in and on Organisations

Organisational sustainability discourse(s) at a meta-level advocates change to institutional practices at all scales that result in a detrimental ecological impact (Andersen & Massa 2000; Brown et al. 1987; Castro 2004; Clark & York 2005; Doppelt 2003, 2010; Dunphy, Griffiths & Benn 2007; Georg & Fussel 2000; Hoffman & Bazerman 2007; Packalen 2010; Stead & Stead 1994). I suggest that this ecological core to more academic organisational sustainability discourse(s) reflects the criticism across wider society of the dominance of the existing "economic" logic of the "modern social imaginary" (Taylor 2004).

The sustainability discourses argue for maintenance of societies existing in harmony with nature and some form of corrective action to contemporary social behaviours at all levels, from individuals to organisations, and at all scales, from local to global, in order to reach that "harmonic" goal. The discourses that comprise "organisational" sustainability are discourses for change. Some, such as limits to growth discourses and strong versions of ecological modernisation, set organisational change within a broader context of societal change from "industrial society" to "ecological society" (Dryzek 2005, p. 236). I argued in Chapter One that achieving an ecological society is only possible through a change in the social imaginary from its current privileging of economic logic and rationale to privileging a new ecological logic and rationale. The sustainability discourses, at societal and organisational levels, I see as forays into understanding and creating such an ecological imaginary.

In this chapter I will introduce the main interpretations of sustainability in use organisationally and outline both environmental and ethical components of these discourses. I shall complete the discussion with an introduction to the emerging discourse of degrowth that captures the sense of both needing, and attempting to create, a new social imaginary. In my view this new social imaginary is an ecological imaginary.

Organisation and Sustainability

The industrial revolution marks a watershed in our "methods of ordering" (Law 1994, p. 7), of reorganising the production and provision of goods and services and the

organisation of society and its attendant moral order. Industrialism heralds the social imaginary (ies) of modernity,

> … that historically unprecedented amalgam of new practices and institutional forms (science, technology, industrial production, urbanisation), of new ways of living (individualism, secularisation, instrumental rationality) and new forms of malaise (alienation, meaninglessness, a sense of impending social dissolution). (Taylor 2004, p. 1)

The imaginaries of modernity enable sense-making of the practices of society and facilitate the ways in which individuals imagine and enact their social existence and their expectations of how others should also act. This sense-making is a discursive process, shared in stories, images, myths and other symbols. Like liberalism, conservatism, socialism, fascism and Marxism, environmentalism is a response to industrialism, yet unlike these traditions environmentalism rejects the practices of industrialism because of the lack of environmental concern that defines its ideology and practices (Dryzek 2005). It is a dissenting voice that has, and always had, an explicit agenda for changing organisations and institutions.

Contemporary advocacy of environmentalism builds on and extends three major lines of critique that emerged in the earlier history of this movement: the disconnection between nature and society due to capitalism (for example, Boles 1998; Foster 1997; Foster & Burkett 2000; Moore 2000,); critiques of industrialisation and its methods, processes and underlying assumptions (Anderson & Massa 2000; Buttel, Gould et al. 2000; Foster & York 2004; Mitchell 2001; Schnaiberg 2002), and environmentalism as a social problem requiring social reorganisation (Beck 2010; Beck, Giddens & Lash 1994; Boles 1998; Bookchin 1998; Fischer 1998; White 2003). Scholars have also noted that normative discourses in management and organisations have selectively edited out (Levy 1997; Perrow 1997) much of the environmental components of historical texts, which in many cases were major omissions, or failures, in understanding the theories proposed and their translation into practice. For example, Marx's (1978) critique of capitalism extended to the alienation of the land as being as important as the alienation of labour. This "omission" of ecological awareness in organisational practices is I suggest being redressed in current sustainability discourses that seek to confirm or (re)define organisational social and

ecological responsibilities. In the following section I take up the discussion on how organisations are engaging ecological awareness through these discourses.

The ecological and social responsibilities of organisations

Within the management and organisation literature the obligations and relationships to "nature" are taken up in the narratives of the social and ecological responsibilities of business that constitute the discourses of Corporate Sustainability (CS) and Corporate Social Responsibility (CSR). Montiel's analysis of definitions of CS and CSR in the organisational literature notes that whilst both categories share a similar vision "to balance economic responsibilities with social and environmental ones" (2008, p. 246), they do have differences that create a distinction in practice stemming from their historical traditions: CSR emphasises social sustainability whilst CS tends to emphasise ecological sustainability. The awareness of ecological responsibility as an important factor in organisational practices, in particular the practices of business, is a relatively new addition to the more extensive corporate responsibility discourse and its literature and has been growing steadily over the last few decades.

Wren and Bedeian (2009) note that the responsibilities of business in relation to society have an extensive history of scholarship reaching back to the early twentieth century with the work of Henry Gantt who advocated that business needed to serve society. In the first half of the twentieth century the claims for responsibilities of business towards the community do not explicitly extend to the natural environment, being more concerned with the social obligations of business in society. Environmental awareness and its associated responsibilities in the wider community first make an appearance in the 1970s and are concerned with pollution and its impacts on society and the natural environment (Whetten, Rands & Godfrey 2001, p. 375-378). The change in business awareness of their environmental responsibilities reflects and responds to the increase in community awareness of human environmental damage. The catalyst for this "new" environmental awareness in business and society is associated with the publication of *Silent Spring* (Carson 1963), which documents the harm of industrial chemicals on ecosystems and correspondingly on humans. The progression of environmental awareness, noted by Whetten et al., through the 1980s and 1990s and into the present reflects a shift from general awareness to more detailed understanding of the environmental issues and

impacts being taken up in business discourses of their corporate responsibilities (Basu & Palazzo 2008; Benn & Baker 2009; Doppelt 2010; Kearins, Collins & Tregidga 2010; Packalen 2010; Smith 2011; Smith & Scharicz 2011). By this I mean a shift from general awareness of pollution as a problem when it occurs to be addressed at the organisational level to understanding the wider system's impacts on the natural environment at the societal level to include pollution such as toxic wastes, loss of biodiversity, the need for recycling and human induced global warming. A consequence of this evolution of the discourse of the social responsibilities of business was the emergence of two distinct but related narratives, CSR and CS, which as previously noted Montiel (2008) claims having split but which now seem to be in the process of converging again.

Corporate Sustainability (CS) and Corporate Social Responsibility (CSR)

Carroll (1999) presents a concise overview of the evolution of CSR, pointing out that as a modern construct its origins can be dated back to the 1950s. The 1970s is a period of exploration of the meaning of CSR, giving rise to multiple definitions, followed by attempts in the 1980s to ground these definitions in research and practice in corporate social performance. For Carroll "the CSR firm should strive to make a profit, obey the law, be ethical, and be a good corporate citizen" (p. 289). What is notable in Carroll's overview is the absence of any comment or discussion of the natural environment in the CSR discourse as the focus remains firmly with economic and social responsibilities of business.

Carroll's four keys to good CSR practice are also to be found in Garriga and Mele's (2004) assessment of CSR theories and practice. They noted that most current CSR theories focus on four main aspects of business performance: (1) Long term profit, (2) Using business power in a responsible way, (3) Integrating social demands, and (4) Contributing to a good society by doing what is ethically correct. Garriga and Mele identified four groups into which the complex variety of CSR theories could be clustered: instrumental, political, integrative and ethical. Instrumental CSR encompassed those practices and theories that used CSR as a strategic tool to promote the economic interest of the firm and argued for the maximisation of shareholder value and competitive advantages. Where instrumental approaches considered the natural environment it was through the lens of the "resource-based view of the firm"

(Garriga & Mele 2004, p. 54), which views resources, both natural and manufactured, as important stocks for competitive advantage. Political approaches were concerned with the responsible use of business power in the relationship between business and society, explored through, for example, the role of corporate citizenship. The integrative approach involved detection and scanning of the social environment for issues that threatened or supported organisational legitimacy and recognised that organisations depend on societies' values and consent if they are to function successfully. Finally, the ethical approach took up questions of the moral actions of organisations to their stakeholders, with a key question being "what is the right thing to do?"

A further attempt to explain how corporations are increasingly engaging with CSR was provided by Aguilera, Ruff, Williams and Ganapathi (2007) with their multilevel theoretical framework linking CSR to social change. They argued that an explanation of the motivation to undertake CSR depends on scale of observation and the context in which decisions are made. Their model explains multilevel motivations for undertaking CSR activities, ranging from individuals through to transnational scales and categorising CSR motivations at each level into instrumental, relational and moral rationales. Their assessment of CSR initiatives noted that reactive responses were invariably initiated to counter and redress problems and proactive initiatives were commonly associated with organisations voluntarily engaging in "TBL" thinking (Elkington 1997). Their assessment of motivations to undertake CSR change activities is weighted heavily to instrumental decision-making:

> Managers will implement CSR initiatives when these align with their instrumental interests of enhancing shareholder value and increasing firm competitiveness and profitability so that managers can ensure firm survival and raise their compensation packages, which are generally tied to profitability. (Aguilera et al. 2007, p. 847)

Governments are also seen to generally act instrumentally although this can be advantageous for wider societal change where governments typically focus their attention.

At an institutional level they identified the predominance of a relational approach in

the tendency for individual managers not to improve social and environmental standards until their industry acts collectively – because their relational motives within the industry are stronger than their instrumental motives to use CSR for competitive advantage in the market – should be understood as a market failure and a rationale for government regulation. (Aguilera et al. 2007, p. 857)

This observation of the influence of relational motivations to influence decision making at organisational levels supports the logic advocated by proponents of ecological modernisation for the role of government in facilitating societal change (Andersen & Massa 2000; Davidson & Frickel 2004; Hajer 1995; Lundquvist 2000; Mol & Spaargaren 2005). Ecological modernisation argues that a key role of government is to establish the institutional structures that facilitate societal change, a role that business and industry are not able to achieve because their attention is self-centred not other-centred.

Van Marrewijk argues that the new and distinct phenomenon of CSR is derived from its

societal approach [which] appears to be a (strategic) response to changing circumstances and new corporate challenges that had not previously occurred. It requires organisations to fundamentally rethink their position and act in terms of the complex societal context of which they are a part. (2003, p. 97).

The societal approach of CSR recognises that organisations operate by public consent and that this imposes obligations on organisations. Van Marrewijk argues that CS is a special case of CSR where CS is the ultimate goal and CSR an intermediate process. Adoption of CS may be voluntary or coerced but its enactment results in a set of organisational practices that balance the dimensions of TBL, which van Marrewijk defines as people, planet and profit. The model of CS/CSR that van Marrewijk develops (Table 2.1) is a multilevel model drawing on the theory and practice of "spiral dynamics" (Beck & Cowan 1996) to explain a progressive maturity of motives and ambitions for organisational practices.

Table 2.1: **Motivation and ambition levels of CS/CSR (created from van Marrewijk, 2003, pp. 102-103; van Marrewijk & Were, 2003, pp. 112-113)**

CS/CSR Level	Characteristics
Pre-CS/CSR	No motivation or ambition for CS/CSR. Any actions to approach CS/CSR are initiated when forced from the outside (e.g. through legislation or stakeholder pressure). Promotion of self-interest characterised by exploitation, distrust and manipulation.
Compliance-driven	CS/CSR – providing welfare to society, within the limits of regulations from the rightful authorities; may respond to charity and stewardship considerations. The motivation for CS is that it is perceived as a duty and obligation, or correct behaviour.
Profit-driven	CS/CSR – the integration of social, ethical and ecological aspects into business operations and decision-making, provided it contributes to the financial bottom line. The motivation for CS is a business case and improved reputation with stakeholders.
Caring	CS/CSR – balancing economic, social and ecological concerns, which are now all important in themselves and initiatives go beyond legal compliance and beyond profit considerations. The motivation for CS is that human potential, social responsibility and care for the planet are important.
Synergistic	CS/CSR – search for well-balanced, functional solutions creating value in the economic, social and ecological realms of corporate performance, in a synergistic, win-together approach with all relevant stakeholders. The motivation for CS/CSR is that sustainability is important in itself, especially because it is recognised as being the inevitable direction progress takes.
Holistic	CS/CSR is fully integrated and embedded in every aspect of the organisation, aimed at contributing to the quality and continuation of life of every being and entity, now and in the future. The motivation for CS/CSR is that sustainability is the only alternative since all beings and phenomena are mutually interdependent. Each person or organisation therefore has a universal responsibility towards all other beings.

Van Marrewijk argues that different understanding and therefore different definitions are needed to explain organisational practices that range from "compliance-driven" through to "holistic" (p. 102) where practices are fully integrated and embedded in the latter. His model is based on categorising different value systems that individuals and organisations draw on to undertake decision making and behaviours. There is a progression here that assumes maturity develops over time and that actions to develop this maturity can be designed and implemented. Van Marrewijk's highlighting of the importance of values in framing the moral order of sustainability is a discussion I take up in relation to metabolic organisation in Chapter Seven.

Montiel's (2008) analysis of CS and CSR, discussed above, notes that managers tend to apply both terms to environmental and social dimensions of TBL. Historically CSR narratives emphasised the social responsibilities of organisations, and Environmental Management (EM) specifically dealt with environmental responsibilities. In recent years CS has included both social and environmental responsibilities. The key

differences between CS and CSR that Montiel presents are in the main due to the approach scholars take. CS scholars approach the dimensions of TBL as a nested system, arguing they are interconnected, whereas CSR scholars are more likely to engage with the social and economic dimensions as independent components of the TBL model. CS scholars are also more likely to pursue an ecocentric paradigm whereas "CSR arguments seem to fit better within the existing business paradigm, with its strategically focused anthropocentric paradigm" (Montiel 2008, p. 259). This latter distinction also signifies a difference in the way CS and CSR scholars value nature. Given these differences Montiel also notes that CS and CSR discourses having split now appear once again to be converging.

Renewed attention on "nature" and "natural systems"

Dealing specifically with corporate sustainability, Dyllick and Hockerts (2002) note that economic and social growth were the major concerns for the last 150 years and that concern for the carrying capacity of natural systems to sustain this growth is a new phenomenon that they link to the Rio summit. They argue that the organisational case for sustainability needs three distinct components: the economic which comprises tangible and intangible capital, the natural which considers natural resources and ecosystem services, and the social which comprises human capital and societal capital. They build their argument around a triangle with business, nature and society at each apex. Their model interprets and re-presents the holistic perspective of the three pillars of sustainable development. The case for sustainability extends beyond the traditional business case to include a natural case and a societal case. The business case maintains its economic logic; however, this is now complemented by the need to consider ecological and social equity in the (re)distribution of economic, natural and social capital "for the greater societal good" (p. 138). How organisations individually and collectively progress in promoting corporate sustainability and moving "beyond the business case" is dependent on the "set of political-ethical values that are entrenched in the firm's culture" (p. 138).

The growing societal pressure for ecological quality and wellbeing (Cramer, van der Heiden & Jonker 2006) influences how organisations approach CSR. Cramer et al., using Weick's (1995) sense-making framework, explore CSR as a learning process to better understand the creation of meaning which influences the process of change.

They note that in their studies CSR usually started with a diffuse understanding of the concepts and its goals and that a CSR project needed the appointment of a change agent once awareness had been heightened in order for progress to be made. They outline five sense-making approaches: pragmatic, external, procedural, policy oriented and values driven, the choice of which is strongly influenced by organisational values..

The CS/CSR discourse pays attention to the obligations of business to society and the claim that for a business to function these obligations must be endorsed or sanctioned by society. CSR as a discourse concerns itself with defining and refining the obligations of business to the moral order of the wider society. The understanding of moral obligation circumscribed by CSR recognises that there is interdependency in the relations between society and business in the organisation and execution of practices in the pursuit of individual and community livelihoods. The current CS discourse, as Montiel and van Marrewijk have noted, places greater emphasis than the CSR literature on incorporating ecological sustainability into organisational strategies and operations.

The relationship with nature as having more than instrumental value is a relatively new phenomenon in the CSR discourse and is still in a formative stage. With a few exceptions, such as Starik's call for equal standing for trees (1995), Jermier et al.'s (2006) call for a new corporate environmental discourse and Whiteman's (2004) exploration of traditional ecological knowledge the current CS/CSR discourse avoids association with radical green discourses (Dryzek 2005) and is predominantly aligned to the rationale of the weak form of sustainable development and its economic, social and environmental dimensions. The other feature characterising the CS/CSR discourses is recognition that organisational change for "sustainability" is a multi-scalar problem. Sustainability activities need to pay attention to individuals, organisations, institutions and society as each play a role in the change processes. For example, Aguilera et al.'s (2007) micro (individual), meso (organisation), macro (country) and supra (transnational) is an attempt to both explain the multilevel differences and provide direction for change interventions targeting one or more of these levels. What is notable in the literature is that scholars recognise the need to work across more than one level (scale) to effect sustainability changes. Yet, whilst

scholars have drawn from a wide field of disciplines to investigate organisational sustainability approaches, many note the lack of sustainability theoretical development at the organisational level (for example, Bansal & Gao 2006; Jermier, Forbes, Benn & Orsato 2006; Kallio & Nordberg 2006). I return to this point in Chapter Seven where I introduce the framework of metabolic organisation.

Corporate sustainability and corporate responsibility reframing moral order

Both CS and CSR discourses argue for a strong moral obligation on the part of organisations to external stakeholders: "the Other". By "Other" I mean the processes by which we understand and (re)create our understanding of the self and at the same time the non-self. The concept of "the Other" is an aspect of identity construction (Czarniawska, 2008) at all scales, from individual through all varieties of social groupings, and involves active differentiation of who and what is included in the identity of the self and excluded in that identity construction. This moral obligation to the Other is established as an important responsibility of business and expands both the range of, and obligation to, an organisation's stakeholders. The social sustainability of CSR extends to community, staff and other organisations (Carroll 1979, 1999; Whetten, Rands & Godfrey 2001). The ecological sustainability of CS extends the boundary of an organisation's stakeholders to now include, in its stronger interpretation, nature (Shrivastava & Hart 1994; Starik 1995). The strong moral obligations to external stakeholders in CS and CSR narratives characterises them as discourses that support inclusion of the Other.

The responsibilities of business advocated by CS and CSR stand in opposition to the widespread neoliberal ideals that maintain a narrow view of the obligations of business based on the primacy of responsibility to return a profit to shareholders (Freidman 1962, 1970), i.e. where "green management" is pursued this should not in any way interfere with the goals of shareholder wealth and profitability (Siegel 2009). In contrast to CS/CSR discourses this neoliberal view of external stakeholders argues strongly for exclusion of the Other.

Between the polarities of CS/CSR inclusion and neoliberal exclusion of the Other exists a body of critical discourse, which criticises the implementation of CS and CSR in organisations arguing that these discourses have been captured and have therefore

failed to work for society or for the environment. The mechanism commented on in these critiques is managerial capture, which is understood to be the means by which corporations take control of debate over what CS/CSR entails and then steer this debate to align with a view that strongly promotes their narrow conception of responsibility, restricted to supporting shareholder wealth maximisation (O'Dwyer 2003). A broader definition views managerial capture as the means by which organisations control information and messages to promote their goals and objectives using communication practices that range from hiding information through to exaggeration of claims supporting their responsible actions (Owen, Swift, Humphrey & Bowerman 2000).

The context for managerial capture is a discursive battle over narrative hegemony between the extant economic moral view of corporate responsibility and the "new" moral view promoted in CS and CSR discourses. This is a discursive battle for the control of meaning and O'Dwyer (2003) points to the conflation of moral understanding of obligation and duty with economic self-interest as evidence of economic narratives prevailing. The normative influence of economic narratives is reflected in the reluctance of companies to sacrifice profits in favour of the common good and proposes that the failure of CS/CSR to make significant inroads into the dominance of the economic view of the firm is in part due to trying to justify CS/CSR on economic grounds (Valour 2005).

A stronger critical view that frames the boundaries of CS/CSR as politically defined is taken up by Banerjee (2008) who argues that CS and CSR discourses are idealist normative managerialist discourses that promote narrow business interests and curtail the voice and influence of external stakeholders through co-optation or marginalisation. Complementing this political view Baker (2008) argues that there is a more deliberate attempt to control the agenda within stakeholder dialogues by deflecting accountability through a variety of mechanisms that lead to managerial capture of the natural environment discourses.

In identifying a convergence of CS and CSR, Montiel (2008) also noted the tendency of social and environmental responsibility research to converge. Other authors have commented on this convergence as Integrated Corporate Sustainability (Dyllick & Hockerts 2002), Holistic Corporate Sustainability (Linnenluecke 2010), or

increasingly, Corporate Responsibility (Griffin & Prakash 2010; Scherrer & Palazzo 2007). This convergence of CS and CSR literature raises some concerns for the environmental/ecological aspects of sustainability by marginalising its importance through exclusionary language and metaphor and a claim to take a balanced perspective on the TBL (Elkington 1997) responsibilities of business. Alternately, this convergence of CS and CSR literature and their associated practices may prove to be beneficial to the adoption of the environmental/ecological aspects of sustainability.

Finally, it seems that the progress that Shrivastava and Hart (1994) anticipated for the year 2000 where all organisations would have strong ecological sustainability policy and strategy in place has yet to materialise.

The next section will explore the influence of the discourses of sustainable development on organisational understandings and responses to the responsibility claims defined by the discourses of CS and CSR. I will argue that the three dimensions of sustainable development: economic, social and environmental, have a powerful formative effect on organisational sense-making of sustainability.

Organisational sustainability and the discourse of sustainable development

There are many attempts and proposals for defining what sustainability means in organisational settings. Milne, Kearins and Walton (2006) categorised the contested nature of sustainability along the lines of incrementalism (weak) and radical or critical (strong) strands of thought, where the former is characterised by the discourses of sustainable development and ecological modernisation and the latter aligned with limits to growth discourses that argue for the imposition of constraints on how business and society organise. For Milne et al. (2006) weak sustainability links economic growth with environmental protection and seeks to ensure that we can have what we desire with minimal downside risk, whereas the strong versions relate to discourses of ecological Survivalism. Along similar lines Springett (2006) also explores the divide of weak and strong sustainability through a critical analysis of narratives of sustainable development. She notes that the weak version constitutes a "managerialist" framing supportive of "green" constructions of business-as-usual and the strong version a dialectical interpretation that seeks alternate meta-theories to economic rationalism.

This contested nature of sustainability is reflected in the widely acknowledged paradigmatic distinction between weak and strong versions of sustainability discourses (Neumayer 2010). My assessment of these is that weak versions do not challenge the economic foundations of the current social imaginary, whereas strong versions do attempt to challenge this and are more likely to stimulate the cognitive and emotive shifts needed to support the emergence of an ecological imaginary. Weak sustainability assumes that natural capital is abundant or can be substituted with man-made capital to maintain the production of goods for consumption. Strong sustainability argues for the creation of steady state economies (Daly 1992) in recognition of the damaging environmental consequences of economic growth and argues against the substitutability paradigm of weak sustainability.

Dryzek (2005) identifies two discourses that he categorises under the label of sustainability: sustainable development and ecological modernisation. Both discourses, he suggests, are integrative in intent and combine "ecological protection, economic growth, social justice and intergenerational equity" (p. 143), locally and globally in perpetuity. These two discourses are conciliatory to a capitalist worldview and the change solutions that they propose maintain the logic of growth that underpins capitalist consumerism.

Ecological modernisation differs from sustainable development in that it addresses restructuring of the capitalist economy, which may be achieved by shifting to green production technology. In its strong form (Christoff 1996), ecological modernisation offers greater potential than sustainable development for more thorough institutional transformation through political change. Even though ecological modernisation and sustainable development share similar assumptions on ecological change goals and strategies, it is sustainable development that has been taken up more widely institutionally, in business, in governments, in the NGO and not-for profit sectors and it is to this discourse that I now turn.

Sustainable development

Within organisational settings sustainable development has had, and continues to have, an influential role in informing the evolution of corporate sustainability. Montiel (2008) in his review of CSR and CS identifies this influence on two broad

approaches taken by scholars to conceptualise and communicate their research on corporate sustainability. The first, ecological sustainability, argues for the privileging of environmental over economic and social considerations in business, as for example in Starik and Rands (1995, p. 910): "As ecosystems provide the foundations of existence for both biological entities and organizations, sustainability of ecosystems must have higher priority than the economic sustainability of specific organizations." The second approach develops a sub-discourse of sustainable development, the discourse of TBL (Elkington 1997), and argues that firms need to promote corporate sustainability through responsible management of social capital, economic capital and natural capital (for example Dyllick & Hockerts 2002).

The Brundtland definition of sustainable development is perhaps the most widely applied sustainability definition in the corporate organisational world. Its support for responsible growth and its advocacy of responsibility to future generations has strongly influenced the development of reporting frameworks (for example the Global Reporting Initiative (GRI) (GRI 2010)) and business advocacy groups (for example WBCSD 2011). Given the wide recognition of the Brundtland definition, I present it as a possible pathway to sustainability:

> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
>
> - the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and
>
> - the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. (WCED 1987 Ch 2 para 1 www.un-documents.net/wced-ocf.htm)

However, there is an implication in the sustainable development goal for sustainability of an ideal that does not involve radical change, an ideal that will accommodate growth and the logic of business as we know it but in an environmentally benign form. There is a logic of maintenance of the existing system, and the debate generated is ultimately about "the preservation of a particular social

order…rather than the reshaping of markets and production processes to fit the logic of nature" (Banerjee 2008, p. 65).

Whilst sustainable development is widely referred to across organisations as a process to reach the ideal of sustainability, it is still not institutionalised. Bansal (2002) presented a case for institutionalising sustainable development at the level of the firm through the mediation of the international standard ISO14001. In the context of CSR, Banerjee (2007) assesses sustainability as an inherently environmental discourse that is tightly coupled with social justice issues and singles out for critical analysis the sub-discourse of sustainable development due to its wide adoption by policy makers, governments, organisations and NGOs. Recently, Smith and Sharicz (2011) review the shift to what they define as "triple bottom line sustainability" (TBL Sustainability) in organisational practices and conclude that there remains a lack of a clear definition of sustainability to guide change in the adoption of sustainability as a long-term strategic goal.

Operationalising sustainable development

TBL was introduced into the organisational lexicon during the 1990s and its landmark reference is John Elkington's (1997) *Cannibals with Forks*. The strategy at the time appeared to be a sound one, to introduce and have accepted a balanced measurement and reporting system that facilitated the adoption of sustainable development throughout the business world. The adoption of TBL into the discourse of business has been rapid. Within ten years of its introduction, the troika of economic, environmental and social performance has become embedded in rhetoric and underpins the implementation of sustainable development in organisations (see Bansal 2002; Gauthier 2008).

Through the discourse of TBL the three dimensions of sustainable development are now well entrenched in institutional and organisational discourses (for example, Stead & Stead 2009; Suggett & Goodsir 2002). People often explicitly refer to the social, economic or environmental in their conversations to demonstrate that they are taking these aspects of sustainability into account in their actions and considerations. TBL is most commonly represented as a Venn diagram of overlapping circles representing the domains of environmental, social and economic performance. An alternative

representation of TBL presents the domains as nested to demonstrate that the economic is dependent on the social and both the social and economic are dependent on environmental limits. These two symbolic representations of TBL, presented in Figure 2.1, in some quarters are explained as demonstrating a maturation of understanding and application of sustainability (The Centre for Sustainable Development 2006), moving from the simple conceptualisation of the Venn diagram, where each of the domains is depicted as independent and interacting, to the understanding of it as nested, where economic activity is constrained by limits imposed by society, which is further constrained by limits imposed by the natural environment. I suggest that an alternative interpretation may be applied to the use of these symbolic representations of TBL. Each diagram represents two different narratives related to the application of the three dimensions of sustainable development. The Venn interpretation sees each domain as separate and distinct, which implies that they may be treated independently and do not necessarily intersect or have equal influence. A Venn interpretation would explain privileging the economic over the social, for example, and excluding the environmental or any other combination. A nested interpretation may be understood to privilege the environmental constraints and the narrative related to this symbol would allow far less flexibility, separating the dimensions in its application, as it takes all three domains to be interrelated.

Venn representation demonstrating intersecting influence of each dimension. Sustainability identified as the domain where all three dimensions intersect.

Nested dimension representation demonstrating interdependence of social and economic on the environment.
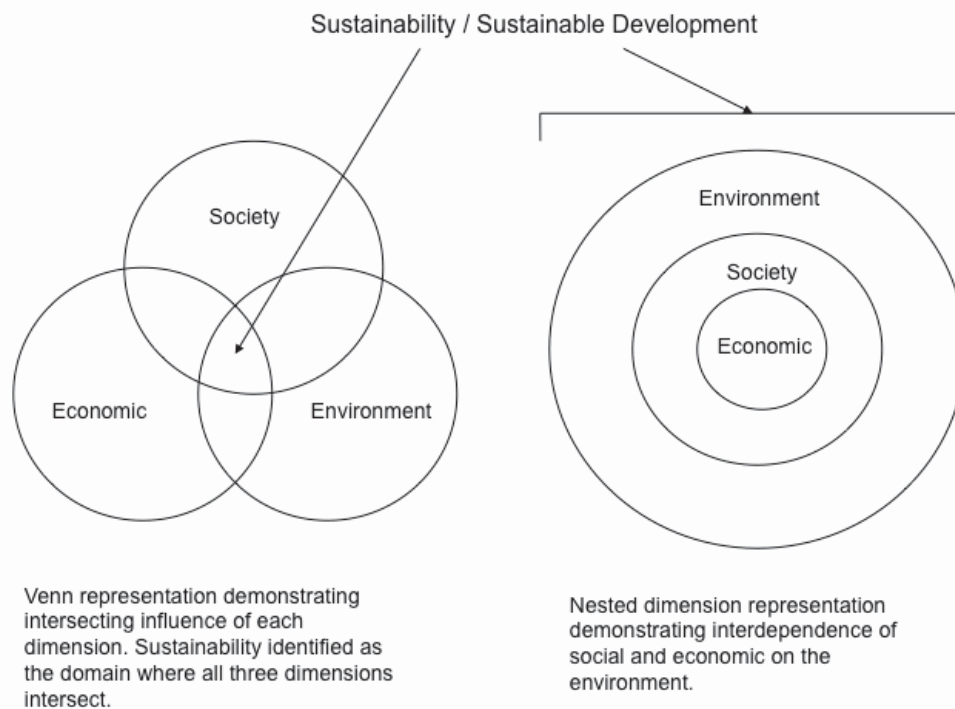
Figure 2.2:   Representations of TBL (modified from O'Riordan 1998, Fig 3.1, cited in The Centre for Sustainable Development 2006, p. 26)

TBL's original intention, according to Elkington (1997), was to introduce a measurement system that could complement fiscal/economic measurements that were institutionalised in organisational settings, in two new areas, the social and environmental, which typically were not assessed or measured in any formal, universally agreed manner. An important consideration for Elkington, both tactically and strategically, was that TBL should be presented in language that was familiar to "business" to facilitate its rapid adoption in the organisational setting. The intention in using existing narrative(s) and language was to enable users of TBL concepts to enact organisational change for sustainability. More accurately, TBL was intended to measure the institutional adoption and penetration of sustainable development.

The structure of TBL with its three categories is problematic as it permits selective reductionism in the way in which individuals and organisations work with the concept. What I mean here is that individuals and organisations can choose to focus on one of the domains, the social, the environmental or the economic, to the exclusion of the others. This categorical selectivity is problematic if we think of sustainability as

a holistic concept that enacts all three of the TBL domains simultaneously. Categorical selectivity means, for example, that the ecological/environmental domain can be ignored which is counter to the intention of the sustainability narratives presented and discussed above. This I consider is a major flaw in the TBL strategy as a narrative for change. I also extend this criticism to the discourse of sustainable development, from which TBL emerged. Sustainable development in practice also allows for the separation of these domains.

Questioning sustainable development

I have suggested that the dominant environmental discourse in organisation and management theory and practice is sustainable development (see Bansal 2002; Dyllick & Hockerts 2002; van Marrewijk 2003). Sustainable development argues for "environmentally benign growth" (Dryzek 2005, p. 145) and its institutional legitimacy was promoted with the publication of the Brundtland Commission Report (World Commission of Environment and Development 1987). Sustainable development as defined by the Brundtland Report argues for acting in ways that do not destroy the natural environment's capacity to support human endeavours now and ensuring that our current actions do not diminish the potential for the natural environment to support future generations in their endeavours. Individuals, organisations and governments often quote these two core principles as the sustainability ideals they are striving for. Appeals to the Brundtland definition are also made by numerous industry bodies (such as the World Business Council for Sustainable Development) to underpin the legitimacy of their ecological responsibility.

Whilst sustainable development is now the dominant institutional environmental discourse it has attracted criticism in development and organisational arenas (Banerjee 2003; Bendell & Kearins 2005; Castro 2004; Gautier 2008; Gray 2010; Milne, Tregidga & Walton 2009; Redclift 1987; Springett 2003, 2006; Ulhoi & Welford 2000). A common thread to the criticisms raised against sustainable development is that the interpretations and the implementations of sustainable development have not, and according to some scholars (for example Jackson 2009b; Redclift 1987; Stead & Stead 1994), cannot initiate the paradigm shift needed to deliver change to modern societies' ecological practices.

A key criticism of sustainable development is that it does not challenge the underlying logic of growth that defines capitalist consumerism and hence business practice today.

> Sustainable development if it is to be an alternative to unsustainable development, should imply a break with the linear model of growth and accumulation that ultimately serves to undermine the planet's life support systems. Development is too closely associated in our minds with what has occurred in western capitalist societies in the past, and a handful of peripheral capitalist societies today. (Redclift 1987, p. 4)

Banerjee (2003) extends this critique and argues that sustainable development in its current form is a proxy for modernising historical practices of colonialism and hence is an exploitative narrative. In its development context, sustainable development does not redress the imbalances between societies of the south and societies of the north. Sustainable development constructs neologisms of underdevelopment and development to maintain the logic of economic growth and access to cheap resources and raw materials for developed economies at the expense of underdeveloped economies. The assumptions of the Brundtland approach to sustainable development of "achieving economic growth, environmental protection, and equity simultaneously" (p. 156), whilst laudable, are an attempt to reconcile the irreconcilable. This claim comments on the compromises taken during the development of the Brundtland Report that have resulted in a hybrid model that is for practical purposes flawed. That the mainstream view of sustainable development has a structural weakness in the tension between support for economic growth and environmental and social justice "reflects a political compromise between growth and environmental sustainability that the pro-growth delegations at the United Nations could accept" (Castro 2004, p. 196). The advocacy for compromised support for growth coupled with the problem of climate change and other ecological crises has led in recent times to the resurgence of the discourse of limits perhaps best captured by the rise of the "degrowth" movement (Latouche 2009) that is calling for a radical recreation of society to live within ecological limits. Degrowth may be considered as a discourse that is following Dryzek's claim to synthesise environmental approaches that draw on the multiple logics in the broad range of the environmental discourses that he identified.

A further line of criticism is concerned with the implementation of sustainable development and its as yet untapped potential for transformational change. Gautier (2008) argues that sustainable development has not been integrated into organisational practice because mainstream thinking is still bounded by Cartesian rationality that has difficulties in recognising and working with the numerous interactions between its environmental, economic and social dimensions. For Gautier, reframing sustainable development as a complex system would offer managers a radically different way of thinking that has positive implications for them and that organisations could benefit from.

Springett (2003) notes that sustainable development is still potentially a dialogue that for the most part is superficial and susceptible to being labelled greenwash. The TBL of sustainable development has entered the discourses of business but "fails to be problematised" (p. 84) and therefore radicalisation of the discourse of sustainable development in organisations has yet to materialise. What was needed was greater discursivity and a more inclusive approach to voices outside organisational boundaries, the wider community and in New Zealand the context of indigenous views. Failure to adopt such an approach "suggests that the discourse is likely to become reified to the 'triple bottom line' and conceptions based in eco-modernism and will be lost to the hegemony of the management paradigm" (p. 84).

Sustainable development both institutionally and socially remains a narrative of modernism endorsing capitalist consumerism. Sustainable development argues for a continuation of industrialisation and this is extended to the developing countries where standards of living are equated with material wealth, maintenance of growth is endorsed, and the role of "responsible" business as usual models of commerce are promoted.

Whilst the criticisms of operationalising sustainable development span both societal and organisational approaches it is the discourse of TBL that is more closely associated with organisational, particularly business, attempts to undertake change for sustainability. In the following section I raise several issues relating to the limitations of TBL to redress the ecological problems that prevent achieving ecological sustainability. Recent literature now refers to "TBL Sustainability" (Smith 2011; Smith & Sharicz 2011) as a strategy for organisations to adopt and this seems to give

credence to Springett's claim (2003) that sustainable development and its implications for business has yet to be problematised.

The appeal by TBL to the language of accounting is immediately evident in its title. Elkington (1997) argued for a "bottom line" in the form of universally accepted measure(s) to be applied to the social and environmental domains in a similar manner to the bottom line of the economic domain.

Elkington (1997) reasoned that society needs to undertake an environmental revolution and that such a revolution involves paradigmatic changes to society's organising narrative(s) in seven key dimensions (7D): market, values, transparency, life-cycle technology, partnerships, time, corporate governance (summarised from his figure 1.1, p. 3). Elkington considered that business is in the driving seat to help achieve this 7D shift and that TBL, by focusing attention on economic, environmental and social performance, is the framework to help achieve "sustainable capitalism" (p. 2). As an institutional device TBL was expected to alter dialogue in organisations to privilege equally environmental quality, social justice and economic prosperity, which would lead to changes in organisational practices due to improved mechanisms for measuring organisational sustainability performance.

The rapid adoption of TBL has not been without its critics. There are two lines of argument critiquing TBL. These two lines of argument are not mutually exclusive. They overlap and are for some authors interrelated. The first takes issue with TBL's efficacy and appropriateness as a performance assessment tool, and the second concerns assessment of its effectiveness to support sustainability in organisational settings. These critiques situate TBL as a new entrant in the long tradition of social and ethical accounting, auditing and reporting (SEAAR) (Milne et al. 2005, 2008; Norman & Macdonald 2004).

The issue of the practicalities of performance measurement that TBL raises concern the difficulties of attempting to regulate and condense measurement of the new domains of social and environmental performance. The arguments include the difficulty, if not the impossibility, of creating a bottom line for social and environmental performance (Bendell & Kearins 2005; Milne et al. 2008; Norman & Macdonald 2004), the lack of defined frameworks for social and environmental

performance that are standardised (Milne et al. 2008) and the effectiveness of applying these sorts of measures to organisations (Gray 2010).

The second line of argument about the usefulness of TBL to support the implementation of sustainable development in organisations arose soon after its introduction. These warnings on the efficacy of TBL were presenting a wider assessment of progress of sustainability and sustainable development discourses in organisational settings and business in particular. Ulhoi and Welford (2000) argued that business/industry had already taken over the environmental debate, neutralising its call for radical change by incorporating it into self-regulated eco-modernist actions. In the same year, Owen et al. (2000) stressed that a real change in corporate governance was needed; otherwise social audits, and therefore TBL, would become captured by business discourse, turning social responsibility reporting into simply a public relations exercise.

At a deeper level Gray (2010) takes aim at the sustainable development discourse and its growing influence in accounting literature and questions whether or not an understanding of sustainability through the discourse of sustainable development has any meaning at the organisational level:

> [It] is not possible currently (and it may be that it never will be possible) to construct a fully reliable narrative that directly speaks of sustainability at the corporate or organisational level. (p. 56)

These are narratives of the way in which organisations and institutions account for sustainability and Gray (2010) argues that with the possible exception of ecological footprints, organisational reporting fails to substantively define what an account of sustainability is. For example, he cites the GRI as attempting "to offer a narrative which can be thought to approximate a notion of sustainability through some variant on the triple bottom line" (p. 50) as an attempt that is primarily rhetorical. He argues that there is little evidence to suggest "that models such as the GRI offer a substantive approximation of the TBL" (p. 50).

With the institutionalisation of TBL and its derivatives such as the GRI, Milne et al. (2008) argue that these performance assessment approaches are insufficient to deliver sustainability due to a lack of standardised frameworks and measurement systems and

this incapacity to deliver sustainability, they note, paradoxically reinforces business as usual. Milne et al. (2008) also note that coupled with the institutionalisation of TBL there has also been a shift in its usage in practice to act as a synonym for sustainability[3]. This conflation of TBL as a performance measurement mechanism and an alternate label for the discourse of sustainable development is an evolution of organisational sustainability practice (as mentioned above, Smith (2011) and Smith & Sharicz (2011) use "TBL Sustainability" as a new definition).

At the start of this chapter I commented that organisational sustainability discourses were focused on change. The criticisms of sustainable development and its sub-discourse, TBL, I suggest are all concerned with the capacity and capability of these discourses to effect change. The criticisms that I have outlined above argue that sustainable development and TBL have weaknesses and failings that inhibit these discourses effecting change for sustainability. Yet these discourses are widely used and do have agendas for changing societal and organisational practices to become socially and ecologically responsible ones. In the next section I examine the scope for change to effect ecological sustainability in the organisational discourses discussed earlier.

The imperative for Change in Organisational Sustainability Discourses

The organisational sustainability discourses are normative, arguing the need for changing existing practices. The normative goal of CS/CSR is to change the dominant environmental discourse of "growth forever": "the promethean response" (Dryzek 2005). To achieve this goal the principal environmental discourses discussed in Chapter One that CS/CSR draw on are Sustainability (sustainable development and Ecological Modernisation) supported by the problem solving discourses (Administrative Rationalisation, Democratic Pragmatism and Economic Rationalism). There is widespread acceptance of the TBL logic and the dimensions of economic, social and environmental are noticeable in the texts. In organisational settings support for the discourses of Green Radicalism is limited to the strong interpretations of sustainability (Christoff 1996; Daly 1992; Kearins & Springett 2003; Shrivastava & Hart 1994; Starik 1995). The green radical discourses in organisational contexts are

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[3] In Chapter Six when discussing an alternate social imaginary I argue that it is grounded in ecological sensibilities not economic sensibilities and I use the triple bottom line as a sustainability synonym setting it up as a straw man representing the economic social imaginary.

more usually seen as extreme and the label "greenies" as generally applied to advocates of these discourses is pejorative even though "green products" or "green practices" are acceptable terms and goals for responsible organisations (see examples in Georg & Fussel 2000 and Green, Morton & New 2000). "Green products" or "green practices" are also claims made by corporates seeking environmental legitimacy in wider society and such claims are often criticised as "green rhetoric" or "greenwashing" (Newton 2005, Ramus & Montiel 2005) where such claims lack substance.

The CS/CSR literature on change processes may be grouped into the following areas of focus or preoccupation:

> Scale – level of observation or intervention of a change process/action such as individuals or institutions;

> Inclusion – modification of the existing social imaginary (ies) involving discussion of particular change strategies, discursive strategies and values shifts; and

> Reframing – calls for paradigm shifts and a re-imagining of the worldviews supporting processes of organisation.

Scale – explanation of context

Sustainability is explored in relation to different scales in organisational studies literature, in particular individual, organisational, institutional and societal. Texts at the individual level tend to deal with personal values, beliefs and decision making to better understand collective responses such as Slimak and Dietz's (2006) comparative analysis of selected lay public and environmental risk professionals' ecological risk perceptions of the impact of climate change on commercial fishing. As a rule, analysis and discussion of scale at the individual level is usually combined with discussion of scale at the organisational level.

At the societal scale the importance of shared social constructions of reality are important areas of research[4]. Andersen and Massa's (2000) review of the state of ecological modernisation and its discourse assessed its future directions, arguing that it is trending to more radical structural changes that support ecological effectiveness, not simply interpretations of efficiency that represented its earlier interpretations. This assessment was further supported by Janicke (2008), arguing that ecological modernisation needed a reinvention of government if its innovations (cleaner technology, efficient logistics, efficient use of materials) were to become widely adopted. Janicke notes that "the ecological effectiveness of environmental innovation depends on its radicalness but also on the degree of its diffusion" (p. 558), especially the mechanisms that need to be in place for a global strategy for ecological modernisation to be successful. Again at the societal scale, Upadhyaya (1995) investigates the transformative possibilities of alternate narratives to displace conventional dualistic thinking that is so deeply ingrained in Western thinking: recontextualising and simultaneously detextualising societies (p. 38). Recontextualising refers to embedding our knowledge and action in the fullness of our lived experience. Detextualising is a call to balance our cognitive processes by grounding them in concrete human conditions. Upadhyaya proposes three narratives to convey new ways of knowing: the sacred (sublimely joyful existence), the erotic (the play of the senses) and the ecological (connectedness and intimate relatedness), arguing that these are universal constructs shared by all societies.

At a practical level the early work of Brown et al. (1987) argues that

> Sustainability may be defined broadly or narrowly, but a useful definition must specify explicitly the context as well as the temporal and spatial scales being considered. Although societies differ in their conceptualizations of sustainability, indefinite human survival on a global scale requires certain basic support systems, which can be maintained only with a healthy environment and a stable population. (p. 713)

Similarly, Pedersen (2006) views organisations as inseparable from their environments and responsive to dialogue with its stakeholders. Scale for Pedersen

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[4] I consider that organisational studies do not adequately deal with scale and therefore I have drawn on other bodies of literature, for example environmental policy and planning and cleaner production.

may be considered as horizontally organised where stakeholders comprise classes of actors that include customers, suppliers, distributors, investors, employees, NGOs and governments. The more common view of scale is where actors are viewed as nested or hierarchical (see Aguilera et al.'s (2007, p. 843) multilevel model on the interplay of motives within and between levels) as in the approach of Benn and Baker (2009), who, looking at planned organisational development, argue that insights from Complex Adaptive Systems (CAS) thinking and targeting institutional action is needed to effect change for sustainability at the organisational level. They argue that change for sustainability needs to adopt co-evolutionary approaches because of the "simultaneous" multi-scalar impacts on systems that constitute organisations.

Many researchers (for example Blum-Kusterer & Hussain 2001; Kearins & Springett 2003; Orssatto & Clegg 1999; Walck 2007) identify the importance of the institutional level for processes of corporate ecological change. For example, Blum-Kusterer and Hussain (2001) in their survey of the pharmaceutical industry in the UK and Germany found that regulation was a primary driver for sustainability improvements and new technology a secondary driver. Kearins and Springett (2003) argue that a radical change perspective based on concepts of a strong sustainability paradigm should inform the business and environmental management curricula. Orssatto and Clegg (1999) investigate the political ecology of organisations and propose the organisational field "as the optimal level of analysis of business-environment relationships" (p. 263). Walck (2007) argues that organisations are temporary structures and that change for sustainability initiatives should target the institutional level because it is able to handle the long view in dealing with societies' ecological problems – organisational "memories" are short whilst institutional memories are not.

Other variations on the recognition of scale include arguments for change at individual and cultural levels (societal) in order to effect organisational ecological change. Hoffman and Bazerman (2007) argue that CS/CSR initiatives cannot be accomplished without a concurrent set of strategies to tackle sources of resistance to individual and social aspects of change. Tischler (1999) and Egri (1997) present the importance of spirituality and ecological sense-making as individuals seek more than

material rewards in their workplaces, noting that such shifts in meaning making take place at micro and macro levels of society.

Hoffman's (2001) examination of how diffusion of corporate environmental practice may be engaged with is in the context of field-level dynamics, in particular how "collective rationality first emerges and then subsequently changes" (p. 133). He argues this has both institutional and cultural components most visible in regulatory compliance and social responsibility, and he describes a model for linking these to the communication channels of an organisation at the level of the field. His argument is that "by tying environmental concerns to the institutional constituents driving it, environmental protection becomes less an environmental issue, framed instead in terms that reflect the cultural interests, beliefs, and perspectives of its occupational community source" (p. 143). Hoffman's model demonstrates the strong isomorphic pressures in and on organisations. The logic of institutional theory that institutional structures are a force for driving change has an affinity to the claim that I am making in this thesis: the need for an "ecological imaginary" frames the imaginary as a critical institutional structure.

Inclusion – working with what exists

Scholars focusing on inclusion tend to investigate how individuals and organisations make sense of their experiences of sustainability or they present normative strategies for how individuals and organisations should make sense of sustainability. A prominent feature of this literature is an attempt to explain how existing discourses and their related practices may accommodate or adapt to the often challenging new ideas of CS/CSR (Bansal 2003; Fricker 1998; Moore 2002, Prakash 2001; Pulver 2007; Walck 2004; Winn & Zietsma 2004).

An example of the challenges that CS/CSR present is Srikantia and Bilimoria's (1997) appraisal of the intense coercive and mimetic pressures that force organisations to conform to dominant institutional patterns. They look at both business practitioners and academic scholars, and argue that these socialisation pressures "constrain the ability of participants to change anything dramatically, resulting consequentially in a high degree of homogenisation of theory and practice" (p. 387), and that there is a

reinforcing series of ties that make it difficult to change even small aspects without causing systemic disruption. They give this as an example:

> imagine how severely the implicit contract between business schools and the business community would be affected if business schools substituted conventional courses on the competitive profit-maximising strategy of individual forms with courses on sustainable development emphasising multi-sectoral cooperation in a paradigm of planetary well-being. (p. 388)

For Srikantia and Bilimoria (1997) the tendency is for sustainability in non-business texts to highlight representations of alternate futures and criticism of established institutional structures that ignore ecosystems and holistic human development, in contrast to sustainability in business texts, where it is used to "ratify and reinforce individualistic, competitive, short-run-oriented, and financially driven economic growth" (p. 394).

Srikantia and Bilimoria's study outlines one context for meaning making and is part of a growing body of research seeking to understand sense-making processes of CS/CSR change in organisations (Basu & Palazzo 2008; Cramer et al. 2006; Gale & Cordray 1994; Metcalf & Benn 2012; Starkey & Crane 2003; Visser & Crane 2010). To better understand CS/CSR meaning construction researchers have explored the process of greening in a public hospital in Denmark (Georg & Fussel 2000), analysis of environmental policy aspects of leadership (Prakash 2001; Sharma & Nguan 1999) and the application of Giddens's structuration theory to analyse constraints in Swiss food processing companies to the adoption of organic produce (Maier & Finger 2001). This limited selection of the literature demonstrates the breadth and depth of the research into meaning construction related to sustainability.

A significant category of sense-making studies is the body of work commenting on individual, organisational and societal values and beliefs related to CS/CSR. I contend that there are two main categories according to which "values" studies are clustered. The first involves the value that is placed on nature and the second is analysis of the multilevel enactment of those values by individuals to societies: How nature is "valued" is a significant discourse polarising,

- Those who view nature primarily as a body of resources necessary for successful functioning of modern society; and

- Those who argue nature is more than a body of resources it has aesthetic qualities that are necessary for the enjoyment and wellbeing of human life.

Whilst advocates of each of these positions evaluate the "use value" of nature they seem unable to agree on common ground (Burkett 2003). Clark and York (2005) also compare these two commonly held views of nature and like Burkett argue for a Marxist dialectical approach as a way to resolve this impasse. Such values conflicts also characterise attempts to implement sustainable development in complex social situations. Ratner (2004) explains what happens in such complex situations as "a dialogue of values" (p. 50), arguing that this process of negotiation is essential and needs support from appropriate social institutions if sustainable development initiatives are to succeed.

The second category of values studies investigates how individuals and groups enact their ecological values and how they organise in relation to the natural environment. In a longitudinal study of the use value assigned to a specified place (land in the American Southwest – 1860-2004), Walck (2007) investigated how organisations and the community over time negotiated access to and use of land that was in large part public commons. Walck's study is multi-scalar and contrasts with more specific research at organisational levels such as Livesey and Kearins' (2002) study of the implications for CS/CSR implementation and decision making of the corporate discourses supporting sustainability values in reports published by The Body Shop and Royal Dutch/Shell. Similarly, Joyner and Payne (2002) studied organisational responses to requirements of the modern workplace to support "ethics, values, integrity and responsibility" (p. 297) and Pruzan (1998) reviewed the emergence of social and ethical accounting and reporting practices, which reflected organisational responses to institutional CS/CSR pressures and the mechanisms and techniques supporting the enactment of these CS/CSR pressures. Finally, the importance of aesthetic sensibilities in CS/CSR decision-making is introduced in Marshall and Toffel's (2005) sustainability hierarchy, which emphasises the importance of values beliefs and aesthetic preferences. Their hierarchy has been developed to assist people organise and apply sustainability. I will expand on the importance of aesthetics for

sustainability adoption and implementation in my discussion of metabolic organising in Chapter Seven.

Another discursive strategy in use by the participants of organisations is amoralisation defined by "depersonalisation, morality boundaries, appropriation of discourse and mobilization of narrative" (Crane 2000, p. 688). This is achieved through the manipulation of language and symbols, which carries with it "accepted norms and their implicit value implications… the privileging of certain discourses means that organisational and cultural knowledge can become institutionalised and legitimated by creating "a way of seeing" which reproduces its own truth effects" (p. 689). The context of this unfolding drama is "the self-sustaining order of the modern organisation [that] is one of utilitarian based techno-rationalism, a social architecture where moral code is constructed around growth, consumption, profitability, and personal success" (p. 690). On this argument, the possibility of any corporate greening is limited to powerful, internal green champions or coercion from powerful stakeholder groups, such as regulators and pressure groups.

The importance of creating new environmentally responsible values to develop sustainability was a strong claim repeatedly made in popular and academic literature during the 1990s (Harris & Crane 2002). Harris and Crane's findings indicate considerable confusion amongst managers regarding definitions, understandings and differences in practices found in green business discourse. There also appeared to be a correlation between official and unofficial organisational positions and the positions taken by managers toward sustainable development. Where there was an official documented espoused stance then support amongst managers was generally forthcoming; however, where there was an unofficial stance, or no stance, then managerial support was either hostile or mixed.

Reframing – call for re-imagining/re-design

Underpinning the demand for change is an imperative for transformation in organisations and society, and therefore the need for new organisational theory that accommodates the shifts in thinking driven by CS/CSR to be developed. This recognition of the need for new organisational theory has a long history. Cooperrider and Khalsa (1997) argue that to achieve this a paradigm shift in thinking is needed

and that a new focus in organisational theory needs to be developed to accommodate the global impact of organisations. In a similar vein Egri (1997) argues that a global change is needed to help transform society and that this may be achieved through reframing spirituality to help change values and beliefs. Purser (1997) proposes that we need a new transformative epistemology to overcome the rhetoric of sustainable development that he maintains will not lead to the change needed to avert the ecological crisis. A different insight into power relations that can help us to better understand the current situation and develop strategies for bringing about ecological democracy and economics through a partnership culture as opposed to our current gendered power imbalance (Gaard 2001; Hanson & Salleh 1999) is a line of critique found in less mainstream discourses, for example, Ecofeminism. Finally, Moore (2003) argues that capitalism is a utopian fraud, divorced from the environment, which perpetuates dualistic thinking and utopian ideals of limitless expansion.

These explicit demands for paradigmatic or transformational change and the meta-narratives share a critical assessment of historical and present phenomena of organising and organisation that our current practices and behaviours are structurally flawed. Our current patterns are identified as self-harming and if we wish to stop this self-harm then we need to change at all levels, from individual through to societal.

Harris and Crane (2000) also reinforce the central tenet running through much of the sustainability discourses (Castro 2004; Cooperrider & Khalsa 1997; Dunphy et al. 2007; Old 1995; Stead & Stead 1994) for "extreme change in management philosophy" (p. 216) if the new environmental beliefs and processes are to become institutionalised in modern organisations. On this point their study affirmed that green culture change confronts ways of thinking and beliefs that are highly resistant to change as they are deeply embedded in industrial/institutional paradigms and therefore "change possibilities [are] constrained by the values underlying the system in which they operate" (p. 230). A novel approach to help move beyond such highly resistant ways of thinking is the use of narrative scenarios deliberately constructed as utopias as a technique to model ecologically stable futures, understand current issues and act as a navigational compass to move in the direction of ecologically sustainable systems (De Geus 2002).

So we come back to the imperative for change (Newton 2002; Newton & Harte 1997) and the link to radical, deep-seated change within organisational practices, based on change of the economic myth underpinning management orthodoxy (Stead & Stead 1994). Such transformation occurs at the deeper levels of organisational systems in a reconfiguration of the underlying patterns and structures that shape decision making and action (Old 1995). A necessary precondition to reverse the environmental destruction that is the outcome of behaviours based on existing underlying patterns and structures is the development of a new ecological consciousness (Christopher 1999). Such a trend may be seen in the emerging discourse of degrowth.

The special case of degrowth

An example of reframing is the emerging discourse of degrowth. Degrowth, or a-growth (Jackson 2009a, 2009b; Latouche 2009), is a discourse that draws heavily on the Limits to Growth discourses. The finite limits of resources is the catalyst for degrowth but unlike the Limits discourses degrowth advocates a radical reframing of the underlying logic of consumer capitalism and in its advocacy of change aligns with Green Radicalism.

Degrowth according to Latouche (2010) is a deliberate attempt to create a new discourse rather than a new concept of a resolution to socio-economic problems. Latouche is clear that the intention of coining the terms "degrowth" and "a-growth" "is a political slogan with theoretical implications" (p. 519). As a political slogan degrowth makes no explicit claim to contribution of a new concept, model or socio-political theory. It does claim, however, to revitalise discussion in earlier criticisms of economies based on the pursuit of growth. However, there is an important qualification that Latouche puts forward and that is that degrowth is not simply a foil or counter to the logic of growth in orthodox economic models dominating society today. Degrowth is not an attempt to stimulate negative growth or static growth but a move to replace growth both conceptually and materially with different language and assumptions about what constitutes a good life, business practices and societal measures of wellbeing and success. Degrowth aims for institutional change and in this goal shares similarities with strong versions of ecological modernisation, the treadmill of production, the new ecological paradigm and the social and ecological justice discourses of Green Radicalism outlined above.

Degrowth is not without its critics. Fotopolous (2010) argues that degrowth is a single-issue movement, not the broad political discourse it claims to be. Degrowth also attracts criticism from within its support base, which takes issue with the perceived attempt to reverse or counter existing assumptions and advocates of growth in the market economy. An example of this is van den Berg's (2011a, 2011b) argument that degrowth should be reframed to a-growth where growth is essentially ignored as an irrelevant and counterproductive concept to an ecologically responsible economic system. However, acknowledging the concept of growth, even being in opposition to it, does not shift it to a different paradigm. The best way of shifting to a different paradigm is to cease privileging the concept and the assumption and implications of its enactment; ignoring growth will allow for better outcomes as the utopianistic restraints that growth applies as a belief system are lifted. Van den Berg's argument is an argument against the effectiveness of growth as a measure of good economic systems, a line of thinking and advocacy that he has pursued/developed over a number of years.

In arguing for a replacement of the ideal of growth, degrowth discourses recognise that this will involve radical changes to structures that define the activities of individuals and organisations. An example of this reframing is the reconception of what prosperity means in a degrowth economy (Jackson 2009a, 2009b). Jackson argues that this reconception of prosperity has started but is still to receive political endorsement, as politicians are still trapped in the logic of growth and not free to reconceive alternatives that better support these shifts in society. The shifts that he notes are occurring in the rise of the service economy, which changes the orthodox view of and emphasis on labour as the means of production and the impact of the logic of efficiency that replaces labour with technology, leaving structural problems to society. His argument is that the labour content of service economy jobs, for example, health services, education and community work, intrinsically rely on human input, which is where the value in this work resides. The activities of this service-based economy constitute the new economy and they do not respond to the old economy tactics for increasing productivity, in contrast, they will not stimulate relentless consumption-based growth.

Need for New Organisational Sustainability Narratives

In this chapter I have explored the normative character of this sustainability literature and what changes to the perspectives of organisational relationships with and obligations to nature and wider society are being advocated.

Within the expanding body of work on sustainability exploring the relationships between organisations, society and the environment, two categories of discursive practice are of particular interest to the aims of this thesis to understand what factors contribute to the inertia to enact change for sustainability in organisations: CSR and CS. These two sustainability discourses contain two interweaving narrative threads. The first is concerned with the ethical responsibility of organisational practice and the second focuses on the ecological responsibility of organisational practice.

A primary goal of the CS/CSR discourses that they share with environmentalism is to change organisational and institutional behaviours that define our way of life; CS/CSR is intended to facilitate solutions that address the sustainability problematic. For example, to counter the socio-economic practices that drive human induced climate change, energy reduction is now a major organisational objective for which solutions need to be found.

The limited success of CS/CSR to drive organisations to change their behaviours and practices is due to the inability of the narratives and metaphors embodied in these discourses, particularly those of sustainable development and TBL, to offer a significant challenge to modify or discard mainstream organisational narratives. Quite the opposite seems to have happened with the mainstream discourses capturing the sustainability discourses. The three dimensions of sustainable development promoted through the TBL strategy to stimulate the creation of operational environmental and social performance measurements is based on what I consider a flawed logic. The promotion of these dimensions was couched in ways designed to appeal to the language of business that is dominated by accounting terms and categories (Roberts 2003), for example, human capital, social capital, bottom lines and cost-benefits. Using the language of business has not created the dissonance necessary for creating different and potentially new performance measures for the environmental and social dimensions to counterbalance the economic. The outcome has been to appraise them

using the tools (language and terms) of the economic dimension and this in my view has facilitated the capture of these discourses.

The need to create new narratives to support ecological behaviour change in our organisations and institutions is also the conclusion reached by the critics of TBL. Bendell and Kearins (2005) suggest that a "complete change to instrumentalist assumptions" (p. 381) is needed to overcome the deficiencies of TBL. Change was also needed in the interrelations within organisational settings where more participatory forms of governance (Owen et al. 2000) were required to facilitate adoption of sustainability, and related to changes in governance were calls for greater discursivity and more inclusive approaches to change to embrace indigenous voices (Springett 2003; Ulhoi & Welford 2000) and nature (Starik 1995). Finally, the need to reconceptualise our business models and "make real demands for business to re-frame unsustainable industry" (Milne et al. 2008, p. 18) to return to harmony with our ecological foundations should be pursued.

What is needed to shift our current economic patterns of thinking is a new narrative(s) based on models better suited to privileging decision making for ecological solutions. One possible model that I introduce in Chapter Six is the Australian Aboriginal concept of Country. In the next chapter I take up the role of narrative in helping individuals and organisations make sense of their environment.

Chapter Three
Making Sense of Meanings of Sustainability

Chapter One introduced the research question and its context, the inertia characterising the adoption of ecological sustainability: what factors contribute to the inertia to enact change for sustainability in organisations? I labelled these factors and their related issues the sustainability problematic. The argument situated the field of inquiry at the boundary of organisation and society, arguing that changing ecological behaviours and practices transcends categorisation to one or other of these constructs. Tackling the sustainability problematic I contend requires systemic solutions. Drawing on Taylor's social imaginary (2004), which I suggested would be better labelled an economic imaginary, I argued that a new social imaginary was needed for nurturing the systemic change that sustainability required, an imaginary based on ecological sensibilities: an ecological imaginary.

Ecological sustainability was classified as an environmental discourse(s) (Dryzek 2005) and part of a tradition of dissent to redress the destructive aspects of industrialisation. I proposed that the ecological imaginary would be the structure to synthesise the strengths of each of the environmental discourses identified by Dryzek.

In Chapter Two I presented the major sustainability discourses used in organisational settings, noting that key concepts from the discourse on sustainable development were widely recognised and applied. The widespread support given to sustainable development may be understood to emanate from its continued advocacy of growth, tempered with a moral imperative to demonstrate responsibility to others both now and into the future. It is this moral imperative that I argue is a key shaping force for sustainability discourses and it is closely aligned to the outcome of creating and maintaining moral order that is a foundation of our social imaginary. The other key concept of sustainable development that has captured or at least been elevated in the public and corporate consciousness of sustainability is the imperative for social and environmental factors to balance economic factors. These three dimensions of sustainable development are often referred to as TBL or in less business-like terminology, people, planet, profit. I argued that a recent development is the coining and application of TBL Sustainability as an emerging organisational sustainability narrative.

What is a common thread throughout both previous chapters is that the ecological sustainability discourses are challenging the existing moral order of how societies and businesses should operate and in doing so attempting to create new boundaries within which they are permitted to function. I argue that this challenge to the existing moral order is a challenge to patterns of meaning that we hold in order to make sense of our reality. In this context the sustainability problematic may be understood as a meaning-making problematic. The construction of meaning which had settled into a stable pattern under that "old" social imaginary dominated by economic assumptions is now required to account for ecological assumptions that were previously not considered important. My research aims to explore the meaning individuals construct from their experiences of sustainability in order to better understand how their sense-making relates to organisational inertia to enact change for ecological sustainability. Within organisations, these experiences may involve individuals in activities related to sustainability projects, observing others engaged in sustainability projects or reflecting on proposals and communication on organisational sustainability commitment. Outside the organisation, individual experiences may involve practices in their homes, reactions to government policies, or the observation of others in their community or wider society. In all these settings experience involves both cognitive and emotive personal encounters with sustainability.

My investigation into meaning construction of sustainability shares some common ground with phenomenological approaches (for example Conklin 2012; Kupers, Mantere & Statler 2012). Phenomenology views individual meaning construction of phenomena such as sustainability as "intrinsically narrative" and "always embodied" (Kupers et al. 2012, p. 84). However, understanding embodied knowing is not part of the methodology of this thesis, which is focused on the narratives that people create, not the understanding of the embodied experiences and processes of creating these narratives.

Meaning construction is a creative process of construction and destruction (Gray et al. 1987). It is a social process that relies on multiple actors even though the final synthesis is individual. In this chapter I shall start with a discussion of meaning construction that characterises sustainability discourse and then look at one form of action, moral distancing, that humans individually and collectively practise when

confronted with something that does not conform to their existing narratives of reality. This discussion outlines the context and reasons for my research, followed by a discussion on the narrative and sense-making approaches that I have followed in pursuing my research.

Organisations and Sustainability Adoption

As the pressure on organisations to change for sustainability increases (Beck 1997; Bookchin 1991; Levy 1997; Perrow 1997; Schnaiberg 2002; Stead & Stead 1994; Stigson 2007) environmental narratives become crucial as a means of understanding the options for change. Some of the options for change that may occur include outright rejection, denial of elements that do not fit the current sense-making boundaries of the organisation's narratives, or redrafting the discourse boundaries.

Whilst the concepts of sustainability have received increasing attention in organisational studies (for example Linnenluecke & Griffiths 2010), there is still limited empirical work that researchers may draw on to better understand adoption processes for sustainability in organisational settings.

There is a growing body of literature commenting on sustainability discourses that study the requirements for change for sustainability (for example Benn & Baker 2009; Harris & Crane 2002; Jermier et al. 2006; Kearins, Collins & Tregidga 2010; Livesey 2002; Newton 2005; Starkey & Crane 2003). These scholars argue that a gap remains in terms of empirical cases that investigate the role of nature from a wider systems perspective in organisational adoption of sustainability and that organisations continue to have difficulty reframing their engagement with nature in non-anthropocentric ways. I suggest this problem is at least partly rooted in the number of environmental discourses that vie for organisational attention.

In Chapter One, I summarised Dryzek's (2005) four main socio-political environmental discourses (Survivalism, Environmental Problem Solving, Sustainability and Green Radicalism) that compete for attention (see Table 3.1). Dryzek makes the point that these discourses construct meaning and relationships for actors and provide the context for judgement and decision making.

Table 3.1: Dryzek's environmental discourses (Dryzek 2005, pp. 15-16)

Environmental Discourse	Nested Discourses
Environmental Problem Solving	Leave it to the Experts: Administrative Rationalism Leave it to the People: Democratic Pragmatism Leave to the Market: Economic Rationalism
Survivalism	Looming Tragedy: Survivalism Growth Forever: The Promethean Response
Sustainability	Environmentally Benign Growth: Sustainable Development Industrial Society and Beyond: Ecological Modernisation
Green Radicalism	Changing People: Green Consciousness Changing Society: Green Politics

Of these, "Sustainability" and "Environmental Problem Solving" are the discourses that dominate normative pressures on organisations for remedial environmental action. An organising narrative frames each of these discourses forming the foundations of logic, assumptions, evidence and beliefs by which each discourse's advocates enact these narratives, through reading, writing, speaking and listening. Each of these environmental discourses provides a boundary for meaning and sense making, "which serves to stabilize and organize the flux of reality" (Grant & Iedema 2005, p. 44).

I also acknowledge that organisations exist as dynamic discursive spaces, collections of multiple realities, each a discourse construct (Porter 2005) within which new discourses, such as the sustainability discourses, must establish themselves. Change in this context is recognised as being discursively polyphonic, not monolithic (Brown 2006; Ford 1999; Humphreys & Brown 2002), organising as socially constructed from networks of dialogues (Stead & Stead 1994; Humphreys & Brown 2008), and the meanings that people share as fundamentally fluid (Allard-Poesi 2005). In this context, individuals and groups author their own realities and the resulting narratives are always in a perpetual state of becoming (Brown 2006). In this way, discursive exchanges help define the organisation. These discursive exchanges, however, are not unbounded but are constrained by their context and their place in time. The implications are that approaches for engaging organisations in change for sustainability could be usefully informed by an exploration of how discourse and narrative intersect in the processes of social interaction as it occurs within and across organisations.

Before taking up a detailed discussion on narrative approaches the next section will introduce the concept of moral distance and argue that it is also an important meaning

construction process that is understood emotively and cognitively, and visible in narratives that define inclusivity and exclusivity. Moral distance I am arguing is another important process of meaning construction that is shaped by the social imaginary within which it operates.

Moral Distance

Moral dissonance is a "broad class of cognitive dissonance" (Rabin 1994, p. 178) that deals with the conflict with our sense of ourselves as moral persons/people when we are undertaking immoral activities. The cognitive dissonance (Fesinger 1957) in such situations arises when a person's held beliefs, of right and wrong, are in conflict with the action(s) that a person undertakes. The consequence of such dissonance is cognitive discomfort characterised by an unpleasant feeling arising from the inconsistency between a person's actions and beliefs. Moral distance is a mechanism to mitigate the unease or discomfort caused by moral dissonance and achieves this mitigation through objectification, removing the agent from personal emotional engagement with the subject of their action(s). A working definition for moral distance that I will use in this thesis is the degree of moral obligation that one has for an "Other". The concept of the Other is complex and there are no clear neat definitions of the term or its application. The Other is generally accepted as being another person but it may extend to non-human forms including nature. My usage of Other takes this wider understanding and I include individuals, groups, and all aspects of nature. Common to all applications of the Other is its linkage to the Self, where the Self is understood to be embedded in a network of social relationships. The embedded Self is responsible to and has obligations for the others in its network and can only exist because of these relationships to others: the Other[5]. My understanding of the Other draws on interpretations of Levinas's ethics of responsibility (Hutchens 2006) which claim that the Self is constituted by the Other and can only exist because of and through the Other[6].

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[5] Czarniawska (2008) in her discussion on the interplay of alterity and identity in image construction captures a sense of the Other that I am following. She argues that research and dialogue on identity (Self) is privileged in current organisation theory and there is a need to counter this with study and development of alterity construction related to individuals and organisations.

[6] The Other and its related social action of Othering are concepts that are extensively discussed in the literature on subjectivity and intersubjectivity. The Levinasian view is part of this wider debate and offers the radical interpretation that Self only exists because of the Other.

Time and place matter morally (Chatterjee 2003) and these criteria affect decision-making and actions that influence our obligation to the Other. How far into the future should or will one's actions and decisions have influence on the Other? How closely connected should one be with the Other, both physically and socially? The values and beliefs that one holds as important, together with one's moral compass of right and wrong, good or bad, are factors that influence our obligation to the Other. Situations of moral dissonance stimulate action to create "moral neutrality" (Jones, Parker & ten Bos 2005, p. 92), which is achieved through physical, temporal or categorical distancing between a person and the object of their moral discomfort and may also be established institutionally through formalised organisational structures.

The moral setting of organisation

The processes of organising and the organisational structures we create influence and are affected by the assumptions about interaction and responsibility we individually and collectively have to others. These structures constitute a social network (Latour 2005; Rogers 1995) and with this social setting comes a set of rules, expectations and principles that form the basis of social cohesion and interaction within the network (group) and in relation to other networks (groups) and the environment within which all networks interact. The principles of right and wrong form the basis of this/these interaction(s) and define moral agency, which is derived from the moral identity of individuals and groups (Weaver 2006).

Identity, or sense of self, is defined in relationship to the Other (Mansfield 2000) through where the boundaries' intersubjectivities' are drawn and then traversed. Organisationally the boundaries of identity are defined internally by organisational members asking and answering "who we are" (Santos & Eisenhardt 2005, p. 500) and defined externally through formal corporate identity processes of branding (Cornelissen, Haslam & Balmer 2007). Interacting with the Other necessitates boundary spanning. Organisations have developed formalised processes to manage this interaction as, for example, with marketing functions. Marketing functions navigate an organisation's boundaries and a typical argument of marketing scholars is that in order to serve the interest of the firm, the firm needs to satisfy the demands of customer desires: "those who serve the interests of the customer best, best serve their own interests" (Desmond & Crane 2004, p. 1224). In this setting, morality is an

emergent property of the marketplace or system in which organisations operate (Desmond & Crane 2004, p. 9).

As an emergent property of an organisational system, morality is conditional and localised, its boundaries defined by the nature and strength of organisational inter-relationships. The attribution of morality follows a gradient that depends on the strength and closeness of the relationships of the actors involved, both within their organisation and with those outside with whom they interact. Morality applies to those within the organisation (group) and less so to those outside its boundaries (Desmond & Crane 2004, p. 1225). Morality is also linked to the nature and strength of relationships between individuals and groups, which are affected by boundaries of time and place that in turn influence moral distance. Morality hinges on the distinction between who is included in the group and who lies outside the group, the group being defined as a moral community within which actors share culture, values and principles in common. This moral categorisation can lead to behaviours where people can be ruthless and humane at one and the same time depending on who is included or excluded (Bandura 2007, p. 9) from an individual's or a group's social boundaries.

Moral distance is about boundaries, not indifference; boundaries determine the limits of our moral concern (Chatterjee 2003). Moral distance operates when boundaries defining the moral community need to be crossed or are transgressed in some way. For organisations, such boundary spanning occurs when stakeholders such as customers, suppliers, regulators and others are engaged within the course of day-to-day activities. Organisations have formalised internal structures to deal with the necessary situations that arise in interactions between the internal moral community and the external stakeholders, such as in the example of marketing introduced above. Marketing then is a boundary spanning activity or function where agents and activities outside the organisation's boundaries are seen as operating outside the values and principles shared within the organisation and are viewed as a potential threat to the self-interest of the firm (Desmond & Crane 2004). This structuring of the moral community as those within being different to those outside sets up the situation for decision making that creates moral distance as a consequence of the processes of organising.

The processes of organising have other effects on moral distance. The organisational structures we create affect the relationship individuals have or can have with others, through categorising relationships with others in a variety of ways. In addition to setting up physical and temporal distance between organisational members and others, organisational structures establish and adopt labelling conventions that increase moral distance both inside and outside the organisation through embedding moral distance into the day-to-day discourses of organising processes. For example, organisational structures and processes are designed using the conventions of accounting that value objectivity set up through language that is neutral and impersonal (Mansell 2008; Roberts 2003; White et al. 2009) and can result in moral distance. I argue that accounting creates such a discourse as a categorical system that promotes cost, profit, return on investment and various forms of capital, such as financial, stakeholder, social and human, as measures of both business performance and social performance. These accounting categories have extended to metaphors by which we "interrogate the self" (Roberts 2003, p. 254) and judge the Other. Roberts emphasises that people scarcely appear in what is economically relevant to accounting systems and yet accounting discourse is taken to be the authoritative means of displaying and measuring individual and collective action within organisations. An example of this appeal to the authority of accounting as a means of legitimising the adoption of new discourses is evident in both the framing and criticism of TBL discussed in the previous chapter.

Moral distance and moral actions

Moral dissonance emerges from the tension that exists between desired action in the interest of the self and the moral obligations that frame the decision to undertake that action. If an individual's morality defines that action as wrong then this sets up a moral tension (White et al. 2009) that the individual needs to resolve. The tension may be resolved by not acting or if the desire to act or the pressure to act in the "wrong" way is great enough, then rationalisation takes place that establishes increased separation, moral distance, to lessen the tension. There are a number of tactical mechanisms to achieve this that include attribution of blame, euphemistic labelling and displacement of responsibility (see Table 3.2). A structural moral disengagement mechanism to facilitate the establishment of moral distance is the process of diffusion of responsibility (Garcia et al. 2002) observable in the bystander

effect where individuals will fail to act to help another person when they are part of a large crowd.

> A person who faces a situation of another person in distress but does so with the knowledge that others are also present and available to respond is slower and less likely to respond to the person in distress than is a person who knows that he or she is the only one who is aware of the distress. (Garcia et al. 2002, p. 843)

Hudson and Bruckman (2004) in their case study of student participation in classrooms emphasise the point that the bystander effect is a complex pattern of social behaviour that emerges in certain situations where an intervention is necessary. The decision making of bystanders is not linear and involves a number of factors that include noticing that action is needed and necessary, and that it calls for them to take action and to determine what type of action to undertake. In weighing up these factors bystanders also actively look to those around them for social cues to guide their decision making. The longer the inaction, the less likely it will be for the bystander to respond. The bystander effect is a social response.

Organisational responses to ecological sustainability have a strong resemblance to the bystander effect. Over many decades there have been numerous instances of drawing attention to the human causes of the distress of nature and the need to change our environmental practices. These warnings include the devastation of insecticide use and the unintended consequences to ecological systems (Carson 1963), the excessive consumption of natural resources upon which our wellbeing relies that have dire social consequences for future generations (Diamond 2005; Flannery 1994), and a lack of understanding that humans are not separate from nor above nature and that nature will survive humanity (Lovelock 1987, 1988). I have used these examples because they are based on rigorous research but more importantly because they are evocative. They engage a reader at multiple levels, factually and emotionally. Contrast these texts with the equally rigorously researched IPCC (2007) report on human induced climate change where the engagement of emotion in the text is not deliberative. My point here is that *Silent Spring*, *Future Eaters* and *Gaia* through the deliberate use of emotion are attempting to negate moral distance and reduce diffusion of responsibility, unlike the neutral, objective language of the IPCC report(s), which

in my view facilitates the establishment of moral distance between organisations and the natural environment. My assessment of the collective organisational responses to human induced ecological distress, as instanced through these writings, is that it bears a strong resemblance to the bystander effect and raises the question of when the impasse of this diffusion of responsibility will be broken. Related to diffusion of responsibility another moral action influencing the creation of moral distance is the neutralisation of language.

Crane (2000) explores the amoralisation of language and practices of corporate greening, a strategy of moral distancing (Baker 2008), as an important means by which change for sustainability may be engaged so as not to conflict with existing organisational norms and practices. And, in similar vein, the structuring of organisations based on the language and concepts of accounting also promotes moral distance. Accounting's categories define the language used in organisations, the boundaries by which individual and organisational performance is judged and the identity of the organisations and those within it. In that sense accounting categories can be described as impersonal and amoral (Crane 2000).

Associated with the categories of accounting are the categories of economics, specifically of externalities. The concept of externalities specifically excludes actors, such as the natural environment, from the moral community. The environment continues to be categorised as an "externality associated with producing the organisation's goods and services" (Griffin & Prakash 2010, p. 181). Whilst the externality of the natural environment is problematic for organising ecological sustainability within economics (see Baumgartner & Quaas 2010; Ekins 1993; Kallis 2011; van den Berg 2010, 2011) I suggest that the externality of the natural environment is not simply an economic indicator but also a moral indicator of where we draw boundaries for social inclusion and exclusion of nature. By categorising the environment/nature as an externality, we assign it to the place of the Other and structure our relationship with the environment as Other according to the morality of our preferred meaning system.

Diffusion of responsibility and amoralisation are examples from a more extensive list of moral disengagement mechanisms that have been identified by Bandura (2007) in analysing how individuals and organisations are resisting ecological sustainability.

Also in a similar vein White, Bandura and Bero (2009) explore the strategies used in four industries (tobacco, lead, vinyl chloride, and silicosis-producing industries) to maintain operations and community endorsement even though their products and processes are harmful to human health. Table 3.2 summarises these moral distance mechanisms.

Table 3.2:   Moral disengagement mechanisms (modified from Bandura 2007 and White et al. 2009)

Mechanism	Strategy
Moral and social justification	Investing harmful practices with a worthy purpose
Euphemistic labelling	Cloaking harmful practices in innocuous language – doublespeak
Advantageous comparison	Contrasting harmful practice with even more harmful practices – sanctifying the lesser of two evils
Attribution of blame	Ascribing causality to personal choice or some other factor not under the organisation's control
Displacement of responsibility	Shifting the blame – often used in industrial disasters
Diffusion of responsibility	Diluting personal agency by attributing this to the group or others responsible for collective decision making – can even attribute to natural agency, e.g. global warming
Disparagement of critics and victims	Impersonalising event(s) or behaviour(s) and dehumanising the victims; also labelling them in some form of derogatory manner
Minimising, denying and discounting wellbeing consequences	In the absence of absolute proof there must be doubt that the behaviour is harmful – exploiting variability in data and disputed discourses

These moral distancing mechanisms are psychosocial strategies set up to mitigate or eliminate moral tension or moral dilemmas when the desired practice of an individual or organisation conflicts with the morality of what is considered right and wrong. In day-to-day actions where individuals must exercise moral agency they will choose to do things in ways that do not violate their moral standards by using strategies of moral disengagement (Bandura 2002; Moore 2008). Where people are put into situations that set up moral dissonance they usually adopt one or more of the "many psychosocial manoeuvres that can be used to selectively disengage moral self condemnation" (White et al. 2009, p. 42). These situations of moral dissonance create an environment where people take stock of their identity and reflect on meaning construction of their social order, in other words, their enactment of sense-making.

The constructed social order, or moral order, within which the enactment of sense-making of moral dissonance takes place, is reflected in the textual landscape (Abolafia 2010; Barry & Elmes 1997; Bruner 1991, 2004; Keenoy & Oswick 2004; Luhman 2005) of organisational and societal settings. This textual landscape is dynamic and constructed through narratives that individuals create, endorse and

exchange. In the next section I introduce the keystone of my methodology, narrative inquiry, and take up discussion on narrative performance and the importance of narrative ways of knowing for engaging with organising moral order and ecological sustainability.

Textual Landscape of Organisation and Organising Narrative Construction of Organising

Narrative inquiry

Gill (2001) asserts that the purpose of narrative inquiry is to reconstruct the meaning of change processes that individuals and groups undergo. For Gill, narrative inquiry is also a method for exploring systemic change within social systems, which are conceptualised as systems of communication. Social systems are understood as meaning-making structures that comprise highly networked "multiple dialogic relationships" (p. 335). These dialogic relationships include those between researcher and research participant, which are integral to the meaning constructions that take place during the research process. A central question that arises for narrative inquiry is which voice the researcher should use. Should it be the researcher's voice or the participants' (Chase 2005)? I take up discussion of this question of whose voice is used and by way of example explore applications of representative voice in further detail in Chapter Five in the presentation of case material from Carepoint.

Narrative inquiry allows an inquirer to appreciate how people make sense of their situations and environments through representing reality through narrative (Hansen 2006) where "narratives provide meaning by describing and creating a relationship between ideas which we act on" (p. 1049). I suggest that embedded in Hansen's view is another important feature of narrative in use and that is the qualities of performance and performativity. Narratives as performance (Boje 1995; Brown 2006; Cunliffe et al. 2004) highlight the active role narrative plays in day-to-day living. People tell stories that both constitute and represent them in relation to their situations. This interaction people have with their stories or their narrative context describes their performativity in relation to their narrative(s), an interaction that both creates and reacts to that context. Narrative as performance describes an iterative creative process that is fundamental to being human. Approaching ecological sustainability as a

narrative performance raises questions about how it produces and reproduces through practices, behaviours, habits, conventions and ethics to which it refers. Understanding the performativity of ecological sustainability is to make sense of the narrative of the social context that is being articulated, structured and struggled over (Langellier 1999).

Organisation and organising

The starting point for venturing into the field is the concept of organisation as something other than a static reality. Organisation in the sense I am using the word represents two usages of the term. My first use is the widely accepted understanding that formal organisations are places where we congregate to learn, work, play and worship. This is an organisation in the legal sense, defined and operating as an identifiable institution within society in the sense of a physical presence and a recognisable identity. Formal organisations are also represented in ideal textscapes (Keenoy & Oswick 2004) and reified in a multitude of narrative forms that are used as reference points for action and decision making. Examples of reification include: policy documents, organisational charts, communication texts, video material and pictures that project the espoused identity of the organisation, and organisational philosophies in the form of values and purpose statements.

Secondly, I am also using the term organisation more broadly as meaning the result of collective interaction and negotiation where a number of individuals have created, and continue to re-create, an organisational structure in order to achieve a mutual objective. Organisation in this sense has a dynamic quality as it is always in the process of becoming (Tsoukas & Chia 2002) and can only be known at the moment of observation. A description of such organisation comes about through a reflective act that temporally abstracts an interpretation out of the dynamic process of collective interaction.

Organisation in both senses is an outcome of processes of organising. Both senses of organisation as I am using them are constructed through conversations (Cunliffe 2003; Cunliffe et al. 2004; Czarniawska 1998; Grant et al. 2004). Both senses share the understanding that organisations for a certain period of time represent stable patterns of interaction, stable patterns of interrelationships with recognisable

boundaries. Even as stable patterns of interaction, an organisation remains in a constant state of flux that is constituted through dynamic processes of discursive negotiation and narrative construction (Tsoukas 2009). Social reality is relative to its actors and always in process.

Discursive negotiation links social and organisational change to the alteration of these patterns of interaction that constitute organisation (Ainsworth & Hardy 2004; Gergen, Gergen & Barrett 2004; Keenoy & Oswick 2004). Change is thus viewed as a progressive series of interpretations that result in altered systems of meaning. These altered systems of meaning emerge from the re-creation of their meaning systems and may occur deliberately, as in formal change projects with intentional objectives, or as an unintended/unanticipated emergent outcome of the dynamic interrelationships that constitute the meaning system in its day-to-day flow. An important mechanism to support the creation of new narratives in an organisation is the establishment of discursive space (Cunliffe, Luhman & Boje 2004; Humphreys & Brown 2002; Humphreys & Brown 2008) to facilitate generative narrative construction and exploration of new ideas.

A growing body of literature now focuses on the process of organising rather than the fixity of an organisation as being better suited to reality as a social construction and the day-to-day activities of organising (Dawson 1994; Dawson & Buchanan 2005). Czarniawska (1997) brings processes of organising, the resulting patterns of interaction and the narratives that are in use together to define what she labels "action nets". Action nets define a selected set of relationships, which "can be regarded as producing both identities ('actors') and institutions ('structure')" (p. 179). Action nets are constituted by shared meanings and are not singular. There will be multiple action nets in progress at any one moment and action nets are not restricted to an organisation's boundaries. They may span into and beyond conventional categories of studying organisations and create a new ordering that Czarniawska defines as an "organisation field" (p. 66). The organisation fields within which action nets are constituted are categorised institutional meaning systems such as banking or construction, meaning systems that are also related to organisational products and services that institutional members provide. There is similarity to institutional fields in institutional theory (Di Maggio & Powell 1991), the difference being the focus of

analysis for action nets is on relationships and associated meanings not the unit of the field. Action nets are flexible, dynamic and operate at many different scales at any one time. Action nets are infinitely flexible and malleable.

For Czarniawska, action nets form the central unit of analysis rather than the conventional hierarchy of individual, group, organisation, society (1997, p. 179). In this usage there is a similarity to the construct of fractality in complexity theory. A fractal defines rules and principles that organise a system. Fractals are geometric structures that display self-similarity regardless of scale, and in mathematics the equations that produce fractals have an iterative quality where feedback is an important aspect of generating a new structure at a different level of observation and analysis (Mandelbrot 1982). Each fractal structure represents a whole within a whole and whilst we talk of scale in a linear sense with a linear logic, fractals are anything but linear. Fractals are coexistent, and all scales manifest at the same time, and it is only the position of the observer in relation to the "fractal network" that changes – fractals are paradoxical. One of the conditions of fractality is that a fractal organises all states (scales) simultaneously. An implication for the application of this condition is that it contributes to the development of a systemic view of the relationships between scales in a fractal. I am arguing that applied to social systems the concept of fractal offers an alternate scale independent categorisation to the more familiar scale dependent categorisations such as local, regional or global. The similarity to fractality in action nets occurs in the flexibility of accessing/applying action nets at any scale and an implied assumption that action nets share characteristics regardless of scale, for example, the whole is always represented in the unit of analysis.

Action nets also draw on Actor Network Theory (Latour 2005) in its expanded view of relationships and interrelationships that are formed through meaning construction and not defined by human subjectivity alone. For example, action nets consider mechanisation of a production line to involve mechanical actors in relationships with each other and human actors that create new systems of meaning. The expanded definition of Actor Network Theory (ANT) to include human and nonhuman inter-relationships is drawn on in action nets as a more influential concept and construct for understanding organising and the resulting temporal stability of organisations that emerge from speech acts (Austin 1975) that I suggest are part of many of the

conversations that constitute organising. Action nets also survive their actors (Czarniawska 1997, p. 179). This assertion takes for granted that the actors that constitute an action net, a meaning system, will over time be gradually replaced and that the rate of replacement of actors will allow sufficient socialisation of the meaning system to take place. A seemingly logical conclusion of the rate of replacement of actors/agents would be that the meaning system that defines an action net will collapse if all its actors disappear in a short period of time or a critical number disappear before the socialisation of meaning has had time to take place. Meaning systems and therefore action nets do have a temporal component for their stability and continuity, which is dependent on the reproduction and transmission of their constitutive texts. As textual spaces action nets are constituted through and by narrative that are a particular type of text. Gabriel (2004) argues that the particular form of text that narrative takes is characterised by structures that involve temporal chains and characters. Narratives require action and sequencing, a plot, in order to create and convey meaning.

Narrative – meaningful textual landscape

Narratives are plastic; they may be moulded in myriad ways. This quality of plasticity allows narrative to be a highly adaptable form that supports the social construction of meaning. Narrative can be descriptive and accessible as a defined text or dynamic and enacted through communicative performances. When we enact narratives through reading, writing, thinking, acting, speaking or listening, we do so within a defined discourse or discourses that provide a boundary for meaning and making sense of our experiences. In this view a discourse is a frame by which meaning is interpreted, reconstructed and also socialised. I define discourses as normative meaning systems that are narratively constituted. This close relationship between discourse and narrative is widely noted (see for example Barry & Elmes 1997; Boje et al. 2004; Hardy et al. 2000). However, it is not a connection that I shall explore deeply in this thesis, as a detailed analysis of the differences and similarities of the linguistic structures does not further my exploration of meaning construction in organising ecological sustainability. My usage of these two terms for this thesis recognises that narratives constitute and are constituted by the organising principles of the discourse within which they are situated. Narratives are discursive processes and the tight coupling of the terms narrative and discourse means that at times they may be used

interchangeably. In general I shall use discourse to mean both a collection of narratives bounded by a coordinating theme, and the dialogic process of creating and performing narrative(s).

Narrative plasticity imposes no fixed genre or style, nor is narrative restricted to simply the printed word or oratorical transmission. Narrative includes symbolic representation, the visual and plastic arts, and drama, all of which I describe as performative constructions of knowledge. It is the performative component (Brown 2006; Ford & Ford 1995) that defines narrative from mere information by giving narrative a purpose. This performative aspect manifests internally in the narrative piece through the development of plot, and externally through engaging with the narrative piece by enacting the meaning of the plot. By performative, in this context, I mean interacting with emplotment, for plot structures meaning (White 2009) and is an important defining characteristic of narrative (Czarniawska 2004; Boje 2001). Internally the components of the narrative, its setting, its actors, its purpose both define and are defined by the plot, which sets the piece in space and time (Cunliffe et al. 2004) and gives the narrative the dynamic qualities of action, movement and drama. Externally performative action with the narrative comes from engaging directly with it. In doing so, the plot becomes re-enacted through a reinterpretation and rewriting of the narrative as part of a sense-making process; this has an emotive quality that engages with the reader: "evocative writing touches us where we live, in our bodies" (Richardson 2000, p. 931), and I extend the reactions noted by Richardson to all evocative narratives.

I consider the performative aspect of narrative to have three distinct components. The first is the performance of the narrative itself such as when we tell stories, create texts or engage directly with stories and texts when others are narrating them. Narrative as performance (Boje 1995) involves editing and the conscious exclusion and inclusion of content to ensure that the desired plot is conveyed. A second way in which narrative is performative is through language used during a narrative performance where we utter speech acts (Austin 1975) in which the language describes the action: I declare this bridge open, I sentence you to three years community service. Finally, there is the performativity of narrative that Butler identifies (Butler 1990), where people act out their daily lives according to socially endorsed narrative scripts. In the

research cases studied in this research, the role of a green radical or the role of a captain of industry are examples of endorsed narrative scripts. The performativity of narrative in all these instances is an integral part of making sense of the world in ways that are bounded discursively and often transmitted through stories.

Boje (2001) makes a distinction between story and narrative – narrative contains "the plot" and stories do not contain the "proper plot sequence and mediated coherence preferred in narrative theory" (p. 2). He argues that the narrative of a situation is reflectively constructed and this process imposes order on the messy development of our experiences and that this order is "the plot". The messy development of our experiences are themselves told and enacted through stories that in themselves may have a plot, but it is a plot that is localised and only a fragment of "the plot" of the narrative; this fragment he has defined as antenarrative, the multiplicity of incidents and events that make up our daily lives. Boje's antenarrative construct is useful as it recognises and allows us to work more easily with the fragmentary nature of making sense of our lived experiences (Boje 2001). The process of sense making then is also a process of plot development. For Boje antenarratives are an important narrative structure that is both active in, and helps to explain, the dynamic nature of narrative organising. Antenarratives have several qualities. The first is that they are assemblages that contribute to the nature of our conversations and exchanges. These conversations are neither smooth flowing complete texts nor aligned to a single purpose or plot. There are multiple possibilities that are and may be developed; antenarratives describe the polysemous engagement with meaning construction we have at any moment. In the actual performance of exchange, conversations and exchanges are done in snatches of text that over time cohere to form an agreed meaning between the actors. The resultant text is retrospectively constructed as a meaningful narrative and retrospectively given coherence yet its evolution was negotiated in a form similar to that described by Mead (1967): turn taking. Stacey (2001), building on Mead, understands turn taking as the important mechanism for exchange and creation of knowledge. The implication here is that there are other collections of antenarratives that were dropped or left by the wayside, either to be picked up in future or abandoned: the coherence of the final narrative is but one possibility – it succeeded.

For Boje the second aspect of antenarratives deals with the polyphonous nature of intertextuality that arises from the meaning-making processes of dialogue. There are many possibilities on offer at any instant that are being tested for meaning construction and in this setting antenarratives are the mechanism for exploring these possibilities. For Boje this aspect of antenarratives is what he calls a bet (2001, p. 1), gambling on the possible direction that the meaning construction could and will take. This is sense-making with an eye to the future, an exploratory process rather than a retrospective consolidation process. Prospectively, plot becomes an emergent property of polyphonous exchange.

For Czarniawska (2004, pp. 17-19), plot describes chains of events or action sequences, a change of state or equilibrium in its subject(s) that gives meaning to the narrative rather than simply the presentation of information such as occurs in lists, schedules, annals and chronicles. Plot then reduces ambiguity in the sense-making process. It does not eliminate it, but it does situate the narrative within a discourse to enable its meaning to be shared and assimilated. Czarniawska's illustration of the "Annals of Saint Gall" (p. 18), a list of selected chronological events that took place in Gaul from the eighth to the tenth centuries, makes this point well. In it there is little ambiguity in the interpretation of the dates and events presented to us as facts. There is no indication of purpose linking these events, nor does it seem to have been the intention of the writer. Attempts to impose meaning on these annals will result in considerable disputation, as there is little common ground for shared meaning to take place. Part of the reason is that these annals lack an interpretation of causality and reasons for acting and linking these events within which shared interpretation can take place. A list such as the annals provides information that the chronicler deemed important to record and write down, but why? The list lacks an explanation of how and why these events were important and how they interrelate. As such it forms part of a narrative that remains hidden from the reader. A narrative of the annals or the narrative of which the annals are part would fill in the gaps and provide an explanation of the significance of these events to the chronicler and for the reader.

A narrative has a purpose defined by its plot (Boje 2001; Czarniawska 1988), yet a narrative need not be contiguous. Narrative pieces may exist without a clearly discernable plot within their text; the plot for these narrative fragments lies external to

their texts. Narrative fragments may also be stories, and as stories they are defined by their own plot, but in this case it is a plot within a plot, an event within a series of events. This encapsulates Boje's distinction between narrative having a proper plot and stories having sub-plots. Both stories and narratives are acts of sense-making giving order to events (Weick 1995) and acts of attempting to impose order on future events.

Making sense – narrating meaning

Methodologically sense-making explores how individuals and groups construct meaning from their experiences (Agar 2005; Basu & Palazzo 2008; Foreman-Wernet 2003; Weick 1995; Weick et al. 2005) of unanticipated disruptive events.

The implication for change in human systems that sense-making introduces is that meaning making is deliberative and not simply reactive. Even though sense-making is undertaken reflectively and retrospectively, it is done so with the intentionality of preparing for future actions and events. Meaning making here then provides the learning and the contexts for future security not only as a justification for past actions, although the latter is important in the sense-making process. "A distinctive feature of sense-making, and one that distinguishes it from interpretation, is the way action and organisation collaborate to make up the structure [of communication through stories and language]" (Browning & Boudes 2005, p. 36).

Sense-making deals with dilemmas, paradox, paradigm shifts (Luscher & Lewis 2008; Plowman et al. 2007; Weick 1995), all of which present challenges to an established order or pattern of activity governed by the frames of reference, the worldviews and mental models, used by individuals and groups. These events that trigger sense-making and disrupt established patterns stimulate an individual or group to re-evaluate their foundational knowledge.

As a negotiated process of communicative action, sense-making is intimately linked with narrative and stories: stories that are essential to building community meaning (Boyce 1995; Cunliffe et al. 2004), stories that facilitate learning, especially stories of failure (Browning & Boudes 2005), stories of shared noticing and change (Agar 2005), and stories that support decision making (Weick 2007; Weick & Roberts 1993; Weick et al. 2005).

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The term "sensemaking" is a neologism created by Weick (1995) to make distinctive or to emphasise his strong linking of the cognitive processes of meaning construction to the role of identity in sense-making processes. Coupled with the role of identity in sense-making, there is also a recognition of the importance of power in decision making and the privileging of meaning as a dynamic process that is considered in the construction of identity at individual and group levels. These fields of study are each supported by extensive bodies of literature. The focus of this thesis, however, investigates the role of interpretation and meaning construction in sense-making rather than in the creation / exercise of power and identity.

The development of sense-making theory has spurred a body of work focused on the role of leadership in interpreting, synthesising and then imparting new meaning or authorised meaning to employees in organisations. These studies explore sense-giving as the function of leadership (Gioia & Chittipeddi 1991; Luscher & Lewis 2008; Maitlis & Lawrence 2007; Plowman et al. 2007). This is particularly so in times of change, where the role and function of management is to interpret and make sense of change that is happening and to impart that meaning to staff and others.

Sense-making and sense-giving are a function of meaning making at all times (Boyce 1995; Weick et al. 2005), and the roles of sense-making and sense-giving change as the power relations in a conversation shift during turn taking (Shaw 2002; Shaw & Stacey 2006). "There is no simple causality at work here; rather, meaningfulness is being socially constructed among participants and, in the process, the relations between people are organising themselves" (Shaw & Stacey 2006, p. 3).

Weick et al. (2005) perhaps put this best when they say "sensemaking is incomplete unless there is sensegiving" (p. 416), and as Cunliffe et al. (2004) emphasise, "meaning-making is a negotiated polyphonic process" (p. 274).

The process of sense-making that I have presented involves a network of multiple interdependent actors. How this network of actors is defined and its actions understood is, I suggest, best approached using systems thinking, which I introduce in the next section. Systems thinking is an approach that takes into account the inter-relationships and interdependencies of an individual, a group or an event, and argues that the interplay of these relationships is key to understanding what has occurred and

what course of action should be taken. Czarniawska's (1997) action nets, for example, are an approach that applies systems thinking to organisational settings. Systems thinking is also claimed to be a necessary approach to understanding and engaging with problem situations that are complex and messy (Checkland 2000; Ison 2010) such as the problems that constitute ecological sustainability, for example, climate change, biodiversity loss, human population growth and consumer capitalism. Sustainability thinking is an emerging practice based on systems thinking, and is claimed to be a necessary approach to understanding the complex interrelationships that affect the ecological systems important to human wellbeing (Doppelt 2003, 2010; Espinosa 2008; Hoffman 2003, 2005; Porter 2009).

Systemic thinking – organising complexity

Systems thinking is well grounded in organisational research and practice, emerging as a distinct identifiable field some fifty years ago with Forrester's work on systems dynamics (1971). Forrester's approach is situated in the traditions of logico-scientific reasoning (Bruner 1986; Tsoukas & Hatch 2001) and falls into Porter and Cordoba's (2009) category of functionalist systems theory. Systems Dynamics uses constructs of stocks and flows to characterise inputs and outputs of systems processes and is able to be represented in detailed systems process models. The systems approach advocated by Senge (2006) in his *Fifth Discipline* is based on this functionalist systems framework. The ecological domain as represented in the work of Meadows et al. (2005) also uses functionalist systems logic to model the stocks and flows of the environmental impact of various organisational and societal socio-ecological practices.

Functionalist systems are one of three theoretical systems approaches in organisational studies with specific application to sustainability identified by Porter and Cordoba (2009). The other approaches are interpretive and complex adaptive. Functionalist approaches are characterised by linear models and draw on the traditions of Operations Research (West Churchman 1970) and General Systems Theory (Bertalanffy 1971). The foundational logic is that the whole is the sum of its parts and that problems affecting a system have technical solutions. For sustainability problems an example of functionalist strategies for remediation is the design work of McDonaugh and Braungart (2002) in the field of industrial ecology life cycle

analysis. This perspective largely focuses on material energy flows but can be thought of as applying more widely to technical, bounded systems approaches. The interpretive frame assumes the whole is more than the sum of its parts, as does the complex adaptive approach. Holism and inclusiveness define systems under investigation and interpretive approaches focus on social construction of systems through meaning making. Interpretive approaches have an affinity with symbolic interactionism and critical theory. Finally, CAS is the framework that more closely relates to the complexity sciences and develops borrowed concepts such as self-organisation, emergence and bottom-up change. Systems here are envisaged as learning systems comprising flat networked topologies. CAS is the least well developed of these three frames.

Porter and Cordoba (2009) make the point that whilst the three theoretical systems approaches are incommensurable with each other they are not mutually exclusive. I agree with their proposition on the incommensurability and suggest that the distinction between their three theoretical approaches to systems and their relationship to complexity in organisation may also be constructively approached through the categorisation of logico-scientific and narrative domains identified by Bruner (1986) and extended by Tsoukas (2009) and Tsoukas and Hatch (2001). I approach functionalist systems logic as suitable for modelling tightly bounded situations that lend themselves to analytical reduction of sub-processes to create predictive models. Functionalist approaches do not consider meaning making and human decision making in their models and this is a limitation on their usefulness in social systems that are characterised by ambiguity and equifinality. A different class of systems thinking has emerged that is, I suggest, better suited to the problem solving of ambiguous situations. I suggest the label narrative systems better categorises this different class. Using Porter and Cordoba's (2009) categorisations, narrative systems draw on both their interpretive and CAS approaches. Examples include Soft Systems Methodology (Checkland 2000), Actor-Network Theory (Latour 2005) and Complexity Theory (see Stacey et al. (2000) for their proposition of complex adaptive processes). Exploring social organisation through the science of complexity, Tsoukas and Hatch (2001) argue for the recursive nature of knowledge development and the essential power of narrative to handle associations that logico-scientific modes

attempt to eliminate as distractions such as spatial proximity, metaphor, co-occurrence and other non-causal associations.

Ambiguity and equifinality are symptomatic features of situations that have multiple interpretations and multiple possible trajectories that influence emplotment choices for meaning construction. Ambiguity and equifinality arise in complex situations where the choices available are not easily categorised as right or wrong or relevant or not relevant and to do so would be simplistic. Narrative is an ideal tool to handle ambiguity (Czarniawska 1998, 2004; Tsoukas & Hatch 2001) in complex situations that contain multiple meanings and interpretations, and equifinality (see Boje 2001, 2008 and the role of antenarrative, and Weick 1995 as a problem in sense-making) where the efficacy of decision making is reduced because of too much choice.

Narrative has been applied in organisational practice and studies to create new understandings of theories and practices and I maintain that its use as a systems thinking tool has been to apply fiction to reality in order to stimulate meaning making and new understanding of situations. The role of fiction in organisational studies and practice had been discussed and advocated by Whiteman (2004) and used effectively in theorising by Jermier (1985) and Taylor (2000). In practice fiction is used productively in scenario planning (Van der Heijden 2005). In each of these examples, Jermier's "When the Sleeper Awakes", Taylor's "Capitalist Pigs", and Van der Heijden's "scenarios", the approach taken is holistic. It is a systems or systemic approach that is taken where boundaries are fuzzy, making sense-making difficult. Fuzziness also encompasses permeability of system boundaries, which in the language of science equates to open systems, or systems that interact with their environments, in order to exchange materials and information (Bateson 2002; Bertalanffy 1971; Deleuze & Guattari 1998; Latour 2005). In these situations engaging effectively with fuzziness is enabled through the ability of narrative to handle the complexity of meaning interpretation.

It would seem that complexity of meaning interpretation is a key factor contributing to the inertia to enact change for sustainability. I base my claim here on the multitude of sustainability definitions that compete for attention at all levels, individual, organisational and societal. The contested nature of the sustainability discourses creates an environment in which there are too many options for sense-making, an

environment that is unnecessarily complex and results in resistance to change. It is this confusion of options that in my view underpins the complexity of meaning interpretation, and I suggest that reduction of this complexity is facilitated by the application of the tools and techniques offered by narrative systems, which I have outlined above. In Chapter Five I take up this problem of action to support ecological sustainability being curtailed by having to deal with too many meanings and interpretations of sustainability because there is no integrating narrative of ecological sustainability for organisations to follow.

"Complexity" in narrative organising – narrative patterning

The recent turn to complexity theories has been argued to be better suited to recent evolution of thinking on organisations as holistic dynamic systems. Burnes (2004) uses three concepts from complexity theories to reinterpret Kurt Lewin's work in organisational development and change: the dualism of chaos and order, the edge of chaos, and order generating rules. Stacey (1996, 2001) and Stacey et al. (2000) develop an applied approach, Complex Adaptive Processes (CAP), from the concept of complex adaptive systems (CAS), arguing that the equilibrium of a system and the stability of its interconnectedness with other systems are directly affected by the dynamics of relating between actors. The important fundamental structure of a system is this dynamic process of relating and any change to them changes the system. Houchin and MacLean (2005) applied four concepts drawn from complexity theory to analyse the development processes of a new regulatory organisation: sensitivity to initial conditions, positive and negative feedback, disequilibrium and emergent order.

In working with "fuzzy" or complex situations, I draw on ANT, complexity theory and Soft Systems Methodology (SSM) as useful tools that are complementary and not mutually exclusive tools. Used in conjunction with each other they provide a useful set of constructs, terms and metaphors for working with the messiness of social constructions (Law 2004). Each of these theories takes an open systems approach. ANT defines its area of concern by identifying which actors and their inter-relationships will be considered in the analysis. Complexity theory recognises that systems interact with other systems and therefore the assigning of system boundaries for research is arbitrary and determined by the observer. SSM initiates with a problem to be dealt with and proceeds by creating a narrative that defines the boundaries of

investigation and provides a rich or thick description (Geertz 1973) of the nature of the system under investigation. In all applications of these systems, a narrative is a basic requirement to stimulate understanding and meaning construction for change.

The usefulness of ANT is its development of structure/agency dualism (Giddens 1984) through extending the classes of actors/actants that may be considered to have agency in the functioning of a system. ANT makes explicit the influence inanimate objects have over the nature and the outcome of interrelationships between actors/actants, associated with a blurring of the separation between structure and agency. ANT looks at the exchange of information between actors as a defining characteristic of the boundaries of the network under consideration. The usefulness is that networks may be considered as dynamic, purposive, organising structures. An application of this construct is the call by Starik to give trees (nature) managerial standing (1995).

Secondly, the usefulness of SSM is its reliance on a coherent narrative, the "root definition" (Checkland 2000, p. 317), to create and provide the context for purposive action. This context is constructed using the mnemonic CATWOE (Customer, Actors, Transformation process, Weltanschauung, Owners, Environment) (Checkland, 2000, pp. A22-A27) which identifies key characteristics that influence the dynamics of the system defined by the root definition. Questions that are answered during the construction of the root definition include who is served by the systems and how? Who has power over the direction that the system can take? What underlying worldview forms key assumptions for meaning construction and what structures are necessary for the functioning of this system? The root definition is a constructed narrative and SSM encourages multiple root definitions to be created. SSM is a methodology that encourages polyvocal and polysemic perspectives.

Finally, the usefulness of complex systems theoretical approaches lies in their holistic perspectives and the constructs that are both organising principles and help explain systems' behaviours: emergence, self-organising, fractality, attractors, sensitivity to initial conditions and non-linearity. Tsoukas and Hatch (2001) summarise these constructs as five properties that apply across natural, biological and social systems:

1. Complex systems are non-linear: there is no proportionality between causes and effects. Small causes may give rise to large effects. Non-linearity is the rule, linearity is the exception.

2. Complex systems are fractal: irregular forms are scale dependent. There is no single measurement that will give a true answer; it depends on the measuring device. For example, to the question "how long is the coastline of Britain?" there is no single answer, for it hinges on the scale chosen to measure it. The smaller the scale, the larger the measurement obtained.

3. Complex systems exhibit recursive symmetries between scale levels: they tend to repeat a basic structure at several levels. For example, turbulent flow can be modelled as small swirls nested within swirls, nested, in turn, within yet larger swirls.

4. Complex systems are sensitive to initial conditions: even infinitesimal perturbations can send a system off in a wildly different direction. Given that mutual conditions cannot be adequately specified with infinite accuracy, complex systems have the tendency to become unpredictable.

5. Complex systems are replete with feedback loops. Systemic behaviour is the emergent outcome of multiple chains of interaction. As the level of organisation increases, complex systems have the tendency to shift to a new mode of behaviour, the description of which is not reducible to the previous description of the system's behaviour. These emergent novelties represent bifurcation. (p. 988)

Proponents of ecological sustainability argue for adoption of holistic perspectives to underpin problem solving. I commented above that systems thinking or holistic thinking has become a foundation of sustainability thinking (see Doppelt 2010; Porter & Cordoba 2009; Tilbury & Cooke 2005). The problems for ecological sustainability concern analysis and interpretation of the complex interactions human activity has on ecosystems. The problem with such analysis and interpretation is making sense of and understanding the network of relationships between actors in an ecosystem and the network of relationships that an ecosystem has with other ecosystems. This network of relationships is dynamic and the scale of consequences of any actor's activity is not

predictable; this aspect of network behaviour is termed non-linearity. An example of unintended and unpredictable impacts on ecosystems is the destruction of ozone in the stratosphere due to the release of manmade halocarbons leading to the rapid expansion of the "ozone hole" over the Antarctic. Developing solutions to the ozone hole problem involved mapping and understanding the dynamic interactions of actors involved in the "ozone system" and utilising tools and thinking based on systems methodologies.

I have introduced the three sources of systems thinking that I draw on for the research of this thesis: SSM, complexity theory and ANT. The case studies presented in the following chapters of section two were analysed using this complex systems ontology. The analysis of the cases created new insights for working with complexity in social systems, for example, Deleuze and Guattari's (1988) rhizomatics and deLanda's (2006) flat ontology, and led to further development of my complexity ideas. These are taken up in Chapter Seven where complexity theory applied to social constructions is further developed: the development and presentation of the concept of Metabolic Organisation.

In the next chapter I set out the methodology in detail and introduce the case study organisations in which my research participants worked.

Chapter Four
Narrative Collection and Investigation

The strategy developed for this research was to understand the production of meaning through the narrative(s) social actors used to describe their understanding of ecological sustainability in their day-to-day settings. Meaning construction and sharing was one of the factors that I considered may be contributing to organisational inertia to enact change for sustainability. The strategy developed situates this project in the interpretive tradition, bordering on critical research traditions (Gephart 2004). The questions explored attempted to elicit the narrative(s) individuals used to make sense of their realities and the analysis of these narratives was intended to understand how their sense-making was enacted. The overlap with critical research traditions acknowledged the importance of competing environmental discourses (Dryzek 2005) and their influence on meaning construction of social actors in organisational settings.

Given the exploratory nature of this research project, a case-based approach (Flyvberg 2006; Yin 2003) allows flexibility in the data gathering and analysis phases of the research (Eisenhardt 1989; Eisenhardt & Graebner 2007; Siggelkow 2007; Yin 2003). A case-based approach also favourably supports narrative inquiry questions that seek to understand the background and context of phenomena, the how and the why, rather than the what.

Flyvberg (2006) provides support on the suitability of case studies for research using discourse and narrative methods, noting that case studies themselves are narrative events. He makes the point that "case studies often contain a substantial element of narrative" (p. 237) and that they readily support narrative inquiries from the multiple perspectives of "participants, researchers, and others" (p. 240).

I have discussed the role of discourse and narrative in the social construction of organising and organisational change, and how organisational changes come about "as a result of discursive processes of negotiation" (Grant et al. 2005, p. 6). My argument has been that narrative is deeply ingrained in our social makeup and that this has implications for gathering and analysing data, the collection and exploration of narratives, discourses and meaning making that are the processes of storying our lives and institutions (Boje 1995, 2001; Czarniawska 1998, 2004).

Here I return to Boje's (2001) ideas on antenarrative and the role of the researcher in creating different narratives to explain the coherence of fragments and stories that seemingly have no structure. Each narrative identified in research is the result of the researcher creating order retrospectively. This order and coherence of meaning is reflective, and is a process through which we, as individuals and researchers, make sense of organising and organisations. For Boje (1995, 2001) and Czarniawska (1998, 2004) construction of the plot of the narrative is a conscious intervention by the researcher; it is the researcher who brings the meaning of the plot to the surface. Surfacing this meaning is a reflexive process that involves selection of antenarratives from interviews. Antenarratives are created to clarify meaning in the texts and to give coherence in the form of a developed storyline of the research findings.

In this research, the collection of narrative data on sustainability, I used interviews and focus groups, and also obtained a selection of texts published by the case organisations. In taking this approach I was conscious of the risk of being in the role of the monological researcher, where the researcher is in control of meaning making and knowledge generation (Holstien & Gubrium 1995; Mishler 1986) using objective interviewing techniques and approaches, and that this presents a problem if I wish to retain the polyphonic nature of discourse and narrative that I have argued for in chapter three.

The implication, particularly from Boje (2001), is that the stories and anecdotes, the fragments of meaning we construct as we interact in the day-to-day, are created without reference to a plot or determining narrative to guide us. "The folk of organisations inhabit storytelling spaces outside plot, not tidy rationalised spaces" (p. 2), and he reiterates that to impose order on this fragmented experience is to impose counterfeit coherence.

A rescue of sorts to counter this "counterfeit coherence" and the monological researcher's control of interviews is to use the methods of "the active interview" (Holstien & Gubrium 1995) to allow "the [researcher] to encourage the respondent to shift positions in the interview so as to explore alternate perspectives and stocks of knowledge" (p. 33). Polyphony and multi-vocality here can be literal, namely multiple people in a focus group, or it may be contextual, multiple perspectives or positions

that are taken during the course of the interview by both the researcher and respondent (p. 66).

An active interview approach has two key aims, "to gather information about what the research project is about and to explicate how knowledge concerning that topic is narratively constructed" (p. 56). These two aims strongly align with the intention of my research project, to identify and understand how sustainability narratives are enacted in organisational settings.

An important consideration for the research was to understand the context[7] in which meaning making was taking place and how context and meaning construction were related. A strength of the case study approach is that context for the phenomenon studied is considered important to the research design (Hartley 2004) and was a further reason for using a case-based strategy. In addition a case study approach was selected to better support an inductive research strategy (Eisenhardt 1989; Siggelkow 2007) providing inspiration for new ideas. A final advantage for me of a case study approach is that it is flexible. A case study approach accommodates a dynamic mix of methods to be deployed and allows theory building as data collection and analysis proceeds and this allows opportunistic shifts in research strategy to take place to better explore the phenomena under investigation; case study strategies lend themselves to reflexive research approaches.

Reflexivity

Reflexivity has strong links to narrative inquiry as a research approach and the emergence of systems thinking as an important tool (Ison 2010) to engage with and understand complex patterns of meaning for researchers and practitioners alike. The starting point for reflexive social research is that it is marked by a process that turns back on itself and takes account of itself (Holland 1999). Such a turning back involves recursivity and reflection on research activity in order to understand and create meaning from the research process. Knowledge and meaning as defined by reflexivity are continually in process of construction, therefore interviews are not so much

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[7] I understand "context" to include both the situation and processes of the interview, which explicitly influence the dialogue taking place and hence the narrative being constructed. I also include the wider setting of the interview, both spatial and temporal. The interview takes place in an organisational setting that has both place and history and this wider context, I am arguing, also directly influences the sense-making and narrative construction in the interview dialogue.

guided by strategies to mine and elicit existing knowledge as recognise and then synthesise knowledge as reconstructed in the interview dialogue process (Cunliffe 2003; Hardy & Clegg 1997). This attention to co-construction of meaning and knowledge is based on an argument that social activity is constituted in interaction (Cunliffe 2003) and that in this process meaning is negotiated and emerges from the interaction of what is said and unsaid in the dialogue that is taking place. This understanding of the emergent properties of meaning and knowing is also captured in Stacey's (2001) conception of human interactions as complex adaptive processes where the participants actively create their reality in the turn taking of communicative activities. Reality here is intersubjective and knowledge is created through inter-connectedness (Bradbury & Lichtenstein 2000). The underlying assumption is that the research involves dialogue through some form of interview and that the participants, including interviewers, are active in meaning construction (Alvesson 2003; Alvesson et al. 2008; Cunliffe 2003; Hardy et al. 2001). This also means that the researcher is actively involved in the creation of meaning during the interview process through the framing of questions and responses and subsequent analysis and synthesis of the interview material (Alvesson & Skoldberg 2009). This active involvement of the researcher in meaning construction also implies that the researcher's preconceptions and assumptions may shift during the research process. In narrative inquiry the researcher is also an active participant in meaning construction and not an objective bystander asking probing questions to uncover extant knowledge.

Reflexivity acknowledges complex patterns of interaction and that contexts constrain and facilitate possible trajectories for meaning to emerge. Hardy and Clegg (1997) make the point that researchers are bound by their discipline and the research community that frames and endorses what is acceptable for research activity in their field. This potentially creates problems for research in organisational responses to ecological sustainability because one of the assumptions for sustainability research is that it is interdisciplinary which means it steps outside the status quo of organisational and management theory and research experience.

Advocates of reflexive methodology outline the need for the researcher to declare their position with respect to the field they are investigating (Alvesson et al. 2008; Alvesson & Skoldberg 2009; Hardy et al. 2001). My position in the field is that of an

advocate of ecological sustainability behaviour change across all levels of society, individuals, organisations and civil society. I do not endorse many of the assumptions that underpin our modern lifestyles, in particular the fetish of growth (Hamilton 2003, 2005) that drives industry and services and defines status and identity. I also do not accept the hegemonic society-nature relationships dominated by an instrumental view that treats society and nature as separated and distinct from each other.

Reflexivity also comes with a caution for the researcher to beware "navel gazing", to be trapped in the cycle of self-referentiality (Alvesson & Skoldberg 2009; Cunliffe 2003) and therefore not develop useful insights for the wider research community. Alvesson and Skoldberg (2009) suggest that reflexive methodology is not so much concerned with the exposure of the researcher, rather its emphasis is on the researcher actively taking a multi-perspectival approach to intentionally open interpretation and analysis to different lenses in order to create new meaning. An important part of this process is acknowledging the limitations brought to the process by the researcher and also the limitations that extend to the research community to which Hardy and Clegg (1997) draw attention. For the researcher, reflexivity questions what limitations we impose on others and the self in order to open up theorising (Cunliffe 2003). For me these limitations are influenced by the position I take on ecological sustainability and the theoretical tools that I consider relevant for undertaking this research project.

Validity

Validity is an important criterion for positivist traditions where a single truth needs confirmation. Validity for such a single truth uses different data sources to point to and confirm the identified fact. The assumption is that there are single truths that need to be isolated in order to be accepted and therefore able to be trustworthy when knowledge claims using this truth are being made. As Polkinghorne (2007) notes, different knowledge claims require different kinds of evidence. Narrative research issues make claims about meaning and understanding, which are intersubjective processes that draw on multiple truths. In my view this means that communicating research is an intersubjective process involving the reader and listener in validating information according to their truths not to an objective fixed truth: in this thesis, how individuals through their experiences construct meaning. Meaning in this context may have multiple possibilities, therefore multiple truths, and the narratives that

individuals relate will demonstrate intertextuality due to the intersubjective context of their creation. With narrative inquiry a single truth is not relevant (Webster & Mertova 2007) and therefore triangulation is not an appropriate tool to satisfy validity. The problem here is that context defines interpretation of narrative and therefore agreement of context is what satisfies validity. Agreement of context requires, in Polkinghorne's (2007) terms, different kinds of evidence.

Narrative research argues for reliability and trustworthiness (Webster & Mertova 2007), believability (Polkinghorne 2007), plausibility (Preuss & Dawson 2009) and craftsmanship (Kvale 1995). For narrative researchers reality is not objective but is always represented through the perspective(s) of an observer (Kvale 1995) and always undergoing social and linguistic (re)construction that continually modifies those perspectives. The truth of a story lies in its meaning (Gabriel 2004) and the meaning of any utterance depends on its functioning within a relational matrix (Gergen, Gergen & Barrett 2004). Texts are endosymbiotic (Hansen 2006), meaning they exist within contexts where texts and contexts constitute each other and are always in flux and texts outside of contexts lack meaning. Texts represent experiences of actors and their context is a dynamic interrelationship of actors that is a temporal snapshot, arbitrarily fixed by the narrator (researcher) for the purpose of meaning construction or making sense of the situation.

What this means is that the ideal of generalisability that characterises triangulation is not possible or desirable in narrative research. Precision is achievable in narrative research but it takes a different form. Precision in narrative research looks for similarities and patterns in texts (Polkinghorne 2007) or as Cunliffe, Luhman and Boje (2004) present it, this is precision as pattern replication, not precision as mirrored duplication. Similarities and patterns are not precise or exact. They are fuzzy and have multiple possible interpretations, therefore precision is not a useful validity construct, even though I have used this above, when working with narrative. This is because validating narrative knowledge claims depend more greatly on an argumentative process (Polkinghorne 2007) to convince readers and peers of the trust-worthiness of the data. The argumentative process is the mechanism by which truth is established through dialogue (Kvale 1995) as the facts of social sciences and everyday life are intersubjective constructions (Kvale 1995, p. 25).

The desirability of precision in narrative research has an implication: singular truths are not to be found in narrative. Narratives arise from polyphony and reflect multiple perspectives and multiple truths. Similarity of narratives may occasion similarity of perspectives but these will all vary from each other to a greater or lesser extent. Engaging with narrative involves some form of sense-making and in the process there will always be a reconstruction of the narrative. As Keenoy and Oswick point out, texts are continually co-constructed and recreated (2004). The implication is that the legitimacy of a narrative depends on the fit with a "reader's" experience (Preuss & Dawson 2009) and that the research process itself involves a re-narration (Cunliffe, Luhman & Boje 2004) of the data/texts gathered by the researcher. The researcher and their research writing is part of the process of negotiation involved in constructing, identifying and endorsing narratives in their social context (Ainsworth & Hardy 2004).

Validity in narrative research is characterised by trustworthiness of the sources and includes the credibility of the researcher, in what Kvale (1995) terms "craftsmanship". Craftsmanship involves demonstrating through the research text that the research processes and results are plausible, believable, and that the readers of research texts are able to relate to and recreate similar narratives in their sense-making processes of review. Craftsmanship is the process of conveying trustworthiness. Validity here demonstrates the point made in Chapter Three that narratives are dynamic and are continually in process of (re)construction. Meanings are constructed in our discourses and readers of research are part of the validation processes of these narratives. They all form part of the intersubjective creation of meaning attributed to a narrative.

Implications for data collection

The implication of my discussion on narrative and meaning construction so far perhaps gives the impression that I am an abstracted observer of others' sense-making of sustainability. The reality here is otherwise; I am engaged in the sense-making of sense-makers, and very much part of the process, theirs and my process, that at times will intersect and at others be operating at distance. The distance I am referring to here is distance between me, the researcher, and the other, the participant(s). The consequences of taking this position has implications for the methods I choose to gather and construct narratives: the interviews, focus groups, the selection of

documents for analysis, and the writing up of findings will be through my meaning making frame.

Approach to interviews[8]

My approach to interviews is that interviews are conversations that have a structure and purpose (Kvale 2007). They are contextual and do not gather objective data in the traditional sense of scientific investigation (Fontana & Frey 2005). The interview is dynamic and interactional and during its course generates knowledge (Fontana & Frey 2005; Kvale 2007).

Kvale (2007) introduces two interesting metaphors to describe the epistemological approach of the interviewer/researcher: the miner and the traveller (p. 19). The miner draws on the realist assumptions of uncovering the truth or the reality that forms the foundation of the interviewees' conversations/answers. The miner has detailed questions to which specific responses are required, and the field of responses is bounded a priori. There is a notion of right and wrong answers and the necessity of establishing triangulation, or checks and balances to get to objective data that has inherent reliability. The traveller, on the other hand, is epistemologically a constructivist, approaching the interview knowing that it has a context that has subjective and temporal boundaries (Cunliffe et al. 2004). The objective of the traveller is to elicit meaning from the descriptions of the interviewees' life-world, and during the process they may undergo change themselves (Kvale 2007). Here meaning construction is recognised as dynamic and shared between the participants of the interview process. The outcome of the dialogic exchange of an interview affects both the interviewer/researcher and the interviewee/researched in ways that may reinforce or challenge the life-worlds of both.

Alvesson et al. (2008) also use the metaphor of the traveller to describe reflexive practice, an important quality of the researcher. For them,

> the reflexive researcher uses a set of practices involving the juxtaposition of
> perspectives to draw attention to the limitations in using a single frame of

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[8] When I use the term interview I am also including focus groups unless I specifically state otherwise. From a methodological position the relationship between researcher and participant, or interviewer and interviewee, are for sense-making purposes the same.

reference and, in so doing, provide new insights. It is the accumulation of these perspectives that amounts to reflexivity…. (p. 483)

When this view of reflexivity and the role of the researcher is applied to interviewing, then the conventional understanding of the roles of interviewer and interviewee no longer hold, and interviews are understood as being events where meaning is co-constructed (Alvesson 2003; Alvesson et al. 2008; Denzin 2001; Fontana & Frey 2005; Kvale 2007).

Interviews are situations of active creation of meaning, achieved through a dialogue between interviewer and interviewee. Interviews do have a context and are at least initially bounded by the questions the interviewer brings to the event. However, there is no objective reality or fact to elicit. There is no source of objective knowledge to be tapped (Alvesson 2003). Interviews are performative events (Denzin 2001), are dialogic and involve shared experience. This shared experience is not random but is formed through the interaction of the reflected experiences of the participants, including the interviewer. The shared experience of the interview elicits a new interpretation of meaning that draws on the participants' interpretations interacting with the researcher; it is at one and the same time a sense-making event and a sense-giving event.

Whilst the purpose of an interview is to elicit a narrative or narratives from the interviewee, the interview can proceed in unexpected ways. Here I am referring to semi-structured and unstructured interviews where responses are shaped by the partnership between interviewee and interviewer. The interview is a collaborative process that is active in its nature, and results in a mutually created story (Fontana & Frey 2005). An awareness of this creative process in interviews and understanding that the interview itself is contextually bound indicates a need to adopt different interviewing methods to those interview approaches that assume the researcher's role is to gather objective data and that the researcher can be objective in this process. Methods such as active interviewing (Holstein & Gubrium 1998) that assume interviews are dialogic events in which meaning is interpreted and re-constructed by all participants are well suited to research as a co-creative process.

This approach to interviews is not a source of bias but requires a technique that tests the plausibility of what is being said by rephrasing questions and using different frames when conversing with participants. This is because context for both questions and answers is important and in particular understanding what or which contexts the interviewee is using. The interviewee is also not beyond politics in their response, giving you the company line or what they think you may wish to hear (social desirability bias).

Also from the researcher's position, a response to a question may appear to head off in a totally different direction, seemingly addressing issues that appear unconnected or irrelevant. In such situations, should the researcher intervene and curtail the direction the conversation is now taking or let the conversation run its course? This means that the researcher is coming to the interview with preconceived ideas of appropriate responses. There is no clear prescriptive answer to this question and in situ judgement needs to be made. What is at stake is how the researcher appreciates and facilitates the differences in meaning making of individuals including their own sense-making of events. In these situations, if a response is cut off early, a rich response to the inquiry and the insight it provides for the research will be missed.

In the next section I introduce the organisations participating in my research project and provide a detailed explanation of the research process I followed.

Introduction to Cases

This section introduces the three cases that formed the basis of the research. For each case an outline of the organisation is provided, drawn from secondary material such as websites and organisational documents. In addition, material from the interviews has also been used to supplement the secondary[9] data and create a link to the experience of individuals working in and for these organisations.

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[9] The secondary data that was not publicly available comprised internal working documents and memoranda. For Landcare: a Draft Catchment Action Plan for the Cessnock LGA, and an internal communiqué from the Australian Landcare Council – ALC35 14-15 February 2006. For Corcon: internal sustainability issues paper on impact of Climate Change for the organisation, 2007 Sustainability Report, and internal briefing notes on the progress and aims of the sustainability project. Finally, for Carepoint: CSR and Sustainability project work plans, briefing notes and papers for the Carepoint Management Committee, and internal management presentations to the senior leadership team covering key issues for the service divisions.

In Chapter One an overarching strategy for selecting cases was introduced. This strategy was to select organisations that had an organised sustainability change project underway. Regarding the case organisations, Landcare had an established program that had been underway for 15 or more years, Corcon had recently embarked on a sustainability change strategy and at the time of research Carepoint was in the process of reinitiating a dormant sustainability project.

Landcare

The Landcare organisation

In Australia the imported European practices and the shift to industrialised agriculture since World War Two has seen drops in productivity and widespread degradation of farming lands, characterised by extensive erosion, loss of topsoil and increasing salinity. Landcare was formed to address the need to change the farming practices that had degraded the fertility of the land.

The Landcare organisation is a complex national coalition of community groups, government agencies, regional organisations and a promotional company, Landcare Australia Limited. This organisation operates on three distinct layers. The first layer encompasses the community groups, composed of both commercial and recreational landholders. These community groups may be formalised into recognised statutory bodies that take on the role of a centralised point of contact for their local community groups. A key activity that such formal statutory bodies undertake is the application for funding or resourcing from government bodies or other sources to support local projects. However, the majority of these community groups are informal groups that come together for specific projects. Communities of Practice (COPs) (Wenger 2000) is the concept that best describes the nature of the groups that form this layer. Examples of projects range from the practical, such as tree planting or fencing off areas to allow regeneration of the land, through participation in research with universities or government research bodies, to political activities to influence policy changes to better support environmental protection of natural resource areas.

The second layer comprises regional representative bodies of Landcare groups, for example, the representative Landcare bodies at state level. These regional bodies organise conferences, interfaces to government and shares knowledge to underpin

capacity building across the networks. This layer also comprises levels of state and local government that interact with Landcare groups, either for provision of funds or to control or assist in community projects.

The upper layer of Landcare comprises national policy bodies for the federal government that both support and control Landcare funding and capacity building. At this level there is also an incorporated body, Landcare Australia Limited, responsible for securing non-government funding sources. A major mechanism for doing this is through leveraging the brand of Landcare through licensing arrangements to commercial organisations.

The federal government has now brought Landcare under a newly created umbrella programme, Caring for Our Country, which was launched in 2008 to continue redressing unsustainable natural resource practices.
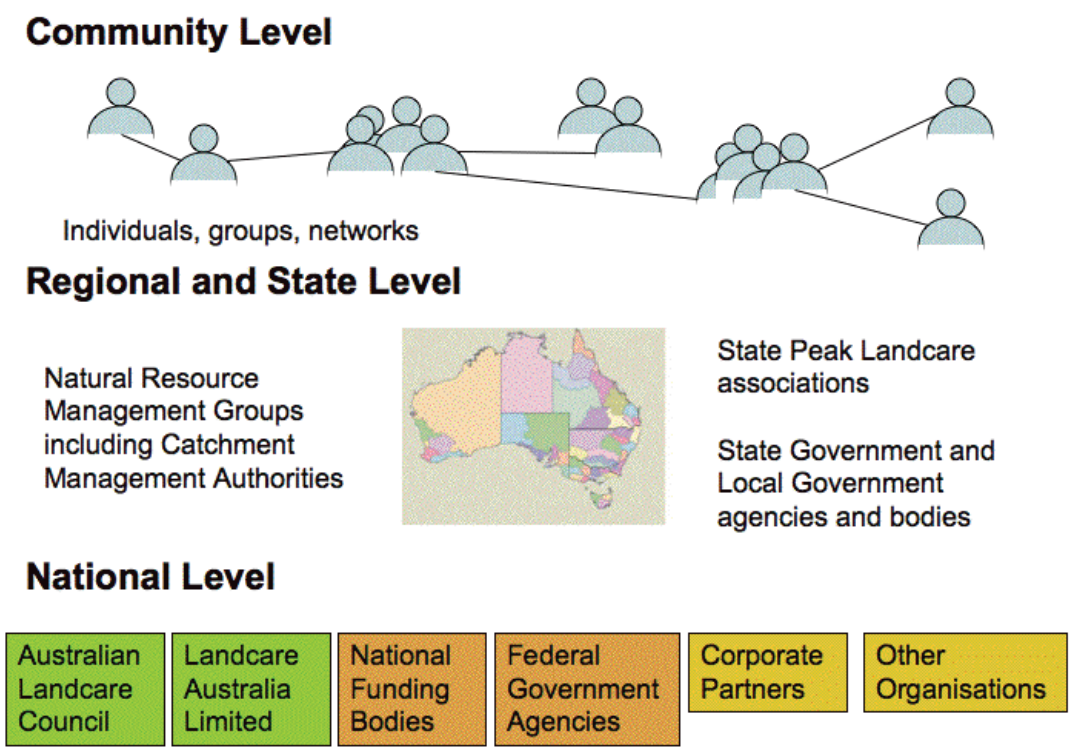
Figure 4.1: Landcare structure

Carepoint

Carepoint is a community services organisation that has its roots in charity services developed as part of their strategy for missionary work in working class areas of Sydney in the nineteenth century. It is still grounded in these traditions and continues to operate as both a church and a charity organisation. Carepoint operates as a not-for-profit organisation and is one arm of a nationwide church-based community services group. Carepoint has had a successful history that has seen it grow both as a church and as an institution to which the working poor could turn for help.

Organisationally, it has a centralised policy and administration group that sets strategy and provides shared services support such as HR services, research, IT and purchasing to its operating divisions. The centralised group, referred to as Head Office, also lobbies governments and other institutions for both funding and policy shifts that will benefit their constituents. Under the coordination of Head Office there are approximately ten service areas through which they provide community services. ranging from aged care homes through disability services and youth care to employment and training services. Each of these areas operates as a separate business with limited resource sharing between them.
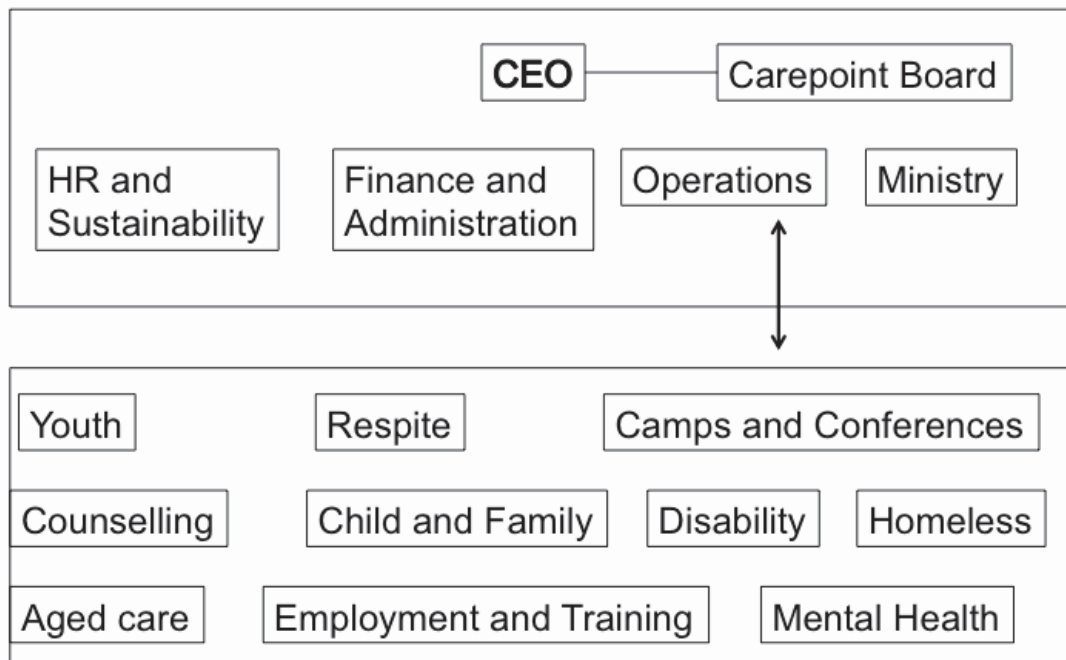
Figure 4.2: Carepoint structure

The nature and structure of the work means that the operational centres are semi-autonomous, seeking direct external funding for specific programmes and often answering to both Head Office and the funding agency for their specific projects. Reporting to two "heads" often leads to conflicting interests as programme heads need to decide who should get priority at times, head office or the funding body.

Carepoint has had several attempts to implement sustainability over the last 10 years, all of which have met with partial success before fading. The current sustainability project was initiated by the previous CEO who wanted to include in the annual corporate reporting cycle Carepoint's sustainability practices. At the time of writing this thesis, it was still a project that was in its early stages and one that was still being negotiated and debated within the senior executive team. So whilst formally accepted as an endorsed change project, and with initial activities underway, it was facing early barriers to adoption.

Corcon

Corcon has five divisions, each servicing different industry sectors: construction, resources, telecommunications, industrial and energy, and investment and facility management. The two largest divisions are construction and resources and these two divisions shape the majority of the organisation's policies and practices.

Corcon is part of a national consortium that is owned and controlled by a parent company. The consortium comprises several independent construction companies that are kept apart both in governance terms and in practice. During the interviews, participants commented on the deliberate operational separation and segregation of the consortium companies. They observed that without the connection to the parent company there would be little if any commonality and sharing between them; for all practical purposes they are competing entities.

To complement the interviews other sources of information included their corporate website and publicly available annual reports and sustainability reports, with production of the latter having commenced in 2009. In addition to these documents, I was also given access to internal memoranda and communications, which enabled me to construct a richer understanding of the company than relying solely on interview material. Corcon as a construction company had extensive experience with environmental protection regulations prior to this sustainability change project but these were often seen as inconveniences or obstructions to sensible engineering. Part of the sustainability strategy was to shift this thinking from a compliance mindset to a proactive endorsement of sustainability as a source of opportunity for progressing Corcon business and for growing the company.
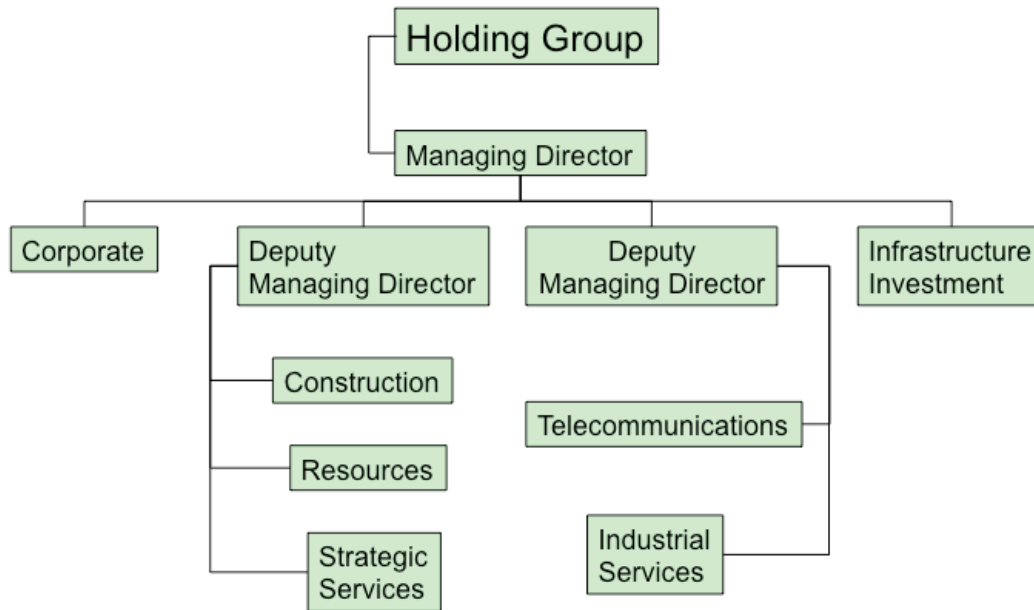
Figure 4.3: Corcon structure

The sustainability change programme is the outcome of an organisational revitalisation under a new CEO. This new leadership developed a strategy to turn the fortunes of Corcon around as at the time of his appointment the company was suffering financially. The change project was based on the creation and implementation of a new set of corporate values that aligned with a sustainability vision from the CEO. Personally the CEO signalled his own commitment to sustainability principles through changing his car to a more environmentally friendly one, and letting it be known that he had altered behaviours and practices at his home regarding energy efficiency, water reduction, etc. The change program had been underway for approximately one year and was a leadership-led model. The strategy was to educate the top layers of the corporation in the sustainability initiative and then have these people take it into the field. The interviews were undertaken during the initial stages of this implementation.

Research Process

In this section I provide a narrative of the establishment of the research project and then explain how the research was undertaken.

I have argued that change for sustainability is significantly influenced by a quest for meaning, a struggle to interpret new information that is often at odds with existing frames of reference held by individuals and organisations. It is the process of re-creating frames with new meaning for decision making by synthesising different perspectives into existing frames and it is the outcomes of this that researchers have, and are, commenting on. These are activities of interpretation of making sense of changing circumstances and they are systemic; both the researchers and "their" participants, the researched, are engaged in the same dynamics of interpretive practice. If, as I am claiming, the researcher and the researched are both engaged in interpretive practice, then what differentiates them, and what are the implications for the research project? The differentiation between the researcher and the researched is in my view one of intentionality. The researcher is consciously pursuing a question or problematic, with a clear objective of writing up their interpretation. This involves reflexivity, textual practice and control of the authorial voice (Alvesson et al. 2008).

For a researcher, interpretive practice actively engages the hows and whats of social reality (Holstien & Gubrium 2005), involving the construction of meanings from experiences that individuals perform. Contextualisation is an important aspect of meaning making (Fontana & Frey 2005; Gibbs 2007; Holstien & Gubrium 2005; Schwandt 2003), and hence for research analysis it provides the setting and particularly the boundaries through which social reality is constructed and interpreted. Schwandt (2003) argues that social inquiry is distinctive (p. 294); it transforms into doing, acting and thinking, practice and theory, where all are linked in a continual process of reflection and transformation. Here, understanding is participative. It is produced in dialogue between researcher and researched, and this is a radical departure from the interpretivist position that argues that inherent meaning in a narrative may be uncovered by the interpreter (p. 302). In particular, understanding is "lived", it is existential (p. 303) and in the conversational processes it is recognised that humans construct and make knowledge (p. 305) and that "there is never a final and correct interpretation" (p. 302).

I have also argued that meaning making is embodied in the narratives we construct, and this favours the adoption of a methodology such as narrative inquiry to understand and interpret how meaning, specifically around change for sustainability, is constructed, transmitted and enacted through the powerful social actions of individual and organisational narratives.

The research strategy to address the problematic of resistance to change for sustainability was to investigate how individuals within an organisation experienced the variety of demands placed on them to act in ecologically sustainable ways. Whilst resistance may occur at many levels in an organisation the focus of my research is on how individuals' sense-making of ecological sustainability may contribute to this. As stated, the main method for collecting data was interviews.

The approach to data collection and analysis for each of the case organisations followed the process depicted in Figure 4.4.
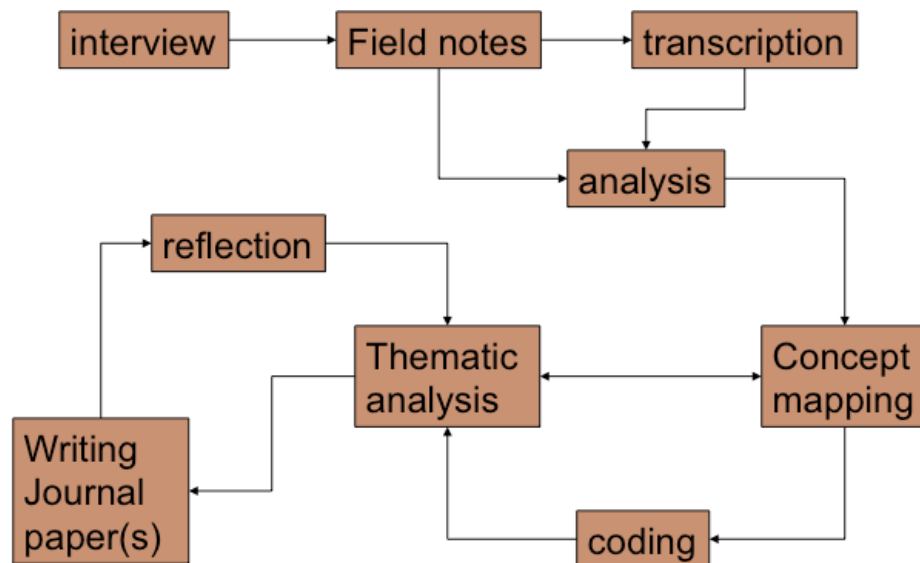
Figure 4.4: Research process map

Data gathering focused on interviews and was supplemented on a few occasions with focus groups when it became too difficult to arrange individual times with focus

group participants. After each interview session my (the researcher's) impressions of the discussions were written up in field notes and in focus groups impressions of group dynamics during discussions were also added. All interviews were recorded and then transcribed. After transcription, an initial analysis was undertaken and a concept map of the interview created. This concept map was continually referred to during the later stages of thematic analysis and writing up of the findings. The progressive writing up of the findings as a journal paper was an important part of my meaning construction of the conversations in interviews. The process of writing papers was an important aspect (Richardson 2000) of the research process. The iterative cycle of reading, writing and reflection on the interviews, related research literature and the emerging thesis was essential to the elicitation and reification [10] of meaning construction. The iterative writing process also included development of conference papers to progressively communicate research findings and integrate criticism and comments from the presentation of these papers (Appendix 3 lists these conference papers).

For each of the case studies I was looking for patterns in participants' understandings of sustainability. I was also interested to see what patterns may have been shared across the cases and the differences that may have existed due to the different contexts that each case represented. My expectation was that identification of patterns of understandings of sustainability would help me address my principal research question: what factors contribute to the inertia to enact change for sustainability in organisations?

Case and participant selection

The principal criteria for selecting the case organisations was that they had an active sustainability change project identified and underway. Each case organisation was at a different stage in their sustainability change project. Corcon was commencing their project and had yet to take this beyond senior management level, Carepoint was in the early stages of their project implementation across the whole organisation and Landcare had been established for over a decade and was in my view consolidating their sustainability efforts. With each case the aim was to select a group of

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[10] Whilst my aim is not to reify I do consider that there is a paradox here when communicating research. My view is that the very act of writing an interpretation/meaning down is an act of reification, which stands in contrast to my intention not to reify.

participants that was representative of the current stage of their organisation's sustainability change process. The result was a different profile of participants for each of the case organisations. A component of the research agreement with each of the case organisations was to share research findings that each organisation could use to inform their sustainability change programmes.

The Landcare case study started with an Australian Research Council (ARC)[11] grant to investigate the governance tensions arising from the interplay of multiple stakeholders (Beck et al. 1994; Beck 1997) of Landcare in two Landcare sub-regions in New South Wales: the Hunter and the Northern Rivers. This ARC project comprised four researchers: two chief investigators and two research assistants of whom I was one. The chief investigators undertook the interviews and the research assistants coded and analysed the interview transcripts and field notes of the investigators. During the early stages of the ARC project I observed an overlap with the research objectives of my thesis as both projects were investigating organisational change. My research objectives focused on the impact of narrative and the ARC project objectives focused on the impact of new collaborations between Landcare, business and government. The chief investigators supported my request to pursue my research questions on ecological sustainability in parallel with the ARC research project's questions on stakeholder tensions.

In the Landcare study the participants represented various roles and functions that characterised the flat-networked structure of the Landcare organisation at the local level. The participants represented landholders, local business people and members of local government and state government bodies connected with Landcare. Overall the number of participants[12] was 42, of whom 16 were from Northern Rivers and 26 from the Hunter region.

Corcon and Carepoint were approached directly with a request to each become a case for my project. My research design was to select a representative vertical section of the organisation for interview. This was possible for Carepoint but not for Corcon. Carepoint's sustainability change project had been underway for one year prior to

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[11] Australian Research Council Grant Number – DP0452501 "Collaborating for Environmental Sustainability: Managing Tensions between Multiple Stakeholders." The Chief Investigators were Professor D. Dunphy and Professor S. Benn.
[12] The 42 participants comprised 37 interviews and five focus groups.

agreeing to participate in my research project. Corcon, however, was in the early phase of their sustainability change project, which at the time of my interviews had only engaged the top two tiers of the senior management team. The selection of participants from Corcon's senior management team did represent a vertical section of that group and was representative of that level within the organisation and a cross-section of their operating groups. This group represented the senior management team which were charged with the implementation of the sustainability strategy throughout the organisation. The research sponsor selected the participants and my agreement with them was to provide feedback of the analysis of the interviews to help them refine the corporate sustainability strategy implementation. The number of participants for Corcon was ten. For Carepoint, the participants represented a vertical slice of the organisation, from senior executives through to volunteers. Again, the research project sponsor identified the participants that I could approach for interviews. For the Carepoint group profile there was a weighting to the middle management ranks, with the final group comprising 14 participants[13].

In each case, what emerged was a group of individuals that I argue was representative of the maturity level of the sustainability discourse for their organisations at that stage of their projects and that they were therefore immersed in the narrative processes of their discourses.

The interview structure

Each interview started with me introducing my research area, using a general description of how sustainability may be defined or interpreted. I employed a broad definition of sustainability that was a bricolage of many of the sustainability discourses in play in civil society and organisations:

> Sustainability is about changing our behaviours, actions and systems, at home and at work, to ensure that our environmental and social impacts are not harmful to us, and future generations. Sustainability covers a wide area that includes terms and ideas that you may be familiar with such as climate change, peak oil, fair trade, carbon credits, end poverty, social justice, slave labour,

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[13] Only Carepoint participation comprised both focus groups and interviews, Corcon participation was solely interviews. With Carepoint there were two focus groups in total over the two rounds of interviews.

extinction, work-life balance, employer of choice, etc. In a business sense sustainability is often referred to as corporate social and environmental responsibility.

The intention here was to set some boundaries yet provide ample scope for the participant to provide their interpretation, either as a construction that emerged during the interview or from their sense-making of previous experiences.

The next step was to ask the participant to select one or more pictures (Appendix 2 contains the full set of pictures used) to stimulate memories of sustainability experiences. The use of images, or image elicitation (Harper 2002), was intended to stimulate a different form of symbolic representation of sustainability experiences to those usually viewed through text. Image elicitation recognises embodied elements of human knowing that complements cognitive processes. In selecting these pictures, the participants are told to do this quickly, and not to consciously or critically analyse each image. The essence of the exercise in this step of the process was speed of selection. This selection process is sense-making in action as decisions are made relatively quickly, without discussion, analysis or disputation, and are only consciously meaningful retrospectively. Weick (1995) emphasises that "sensemaking tends to be swift, which means we are more likely to see products than process" (p. 49), and that "the extracted cues, and what an extracted cue will become depends on 'context'…" (p. 51). The process of selecting the pictures is to make explicit the act of sense-making and the products it produces in the initial interpretations and meanings stimulated by the images. The explicit context in the interview is the personal experience of sustainability both inside and outside the workplace, yet framed by the workplace. Also, the sense-making of these experiences during the interview is not a rational process, although it potentially becomes one in the acts of reflection and conversation that followed.

The next step is reflection on the selected images, followed by a series of semi-structured questions to elicit explanation of the images and their relationship to their sustainability experiences, how these experiences related to their role in the organisation and its undertaking of sustainability, what positive and negative experiences of sustainability were elicited, and finally what would an ideal sustainability picture look like for them and their organisation.

Appendix 1 presents the script that I used for interviews and focus groups and contains the questions and the sustainability introduction. I used this script as a cue to ensure that I covered all the topics listed to ensure consistency across all interviews, not as a strict format to follow in a linear way.

On completing an interview the recording was then transcribed either by myself or using a transcription service. In the next section I outline my approach to analysing and synthesising my data and the methods used to support this.

Reflection on data collection

Through interviews, focus groups, observation and analysis of secondary texts, my aim is to elicit the meaning(s) of ecological sustainability that individuals construct and then act on in their organisational settings. The starting point for what I am seeking is the stories, the fragments that Boje calls the antenarratives that individuals use to make sense of their realities.

The nature of the material is that the data collected is rich, but in some ways constrained. The responses are clearly constrained by the questions I have asked and the topic area(s) being investigated. I am never sure what other information is missing that my participants could have provided. The interaction involves an active engagement in conversation between the researcher and participants in which the role of researcher and participant will in all likelihood be exchanged numerous times during an interview. Where then is control of the data as the conversation meanders, in all likelihood, away from the theme or initiating question(s)? Does it matter? If I am to collect these stories, then an important rule for a dialogical process would be to enable the research participants to present their storyline based on the initiating questions. The role of the researcher is to facilitate the development of their storyline and trust in the creative directions that emerge from conversation.

This also has implications for the researcher and the research process as a reflexive practice. "Reflexivity leads us to question the limitation we may unknowingly impose on ourselves and others, and in doing so open up new ways of 'theorising' practice" (Cunliffe 2003, p. 1000). These "limitations" are precisely the problems on plurivocal representation and researcher involvement in meaning making. Alvesson, Hardy and Harley (2008) have identified four sets of reflexive practices that researchers in

organisation and management theory have used in order to give voice to the other: multi-perspective, multi-voicing, positioning and destabilising.

My reflexivity at this stage is situated within the first two of these sets. The multi-perspective includes multiple paradigms "as ways of reflecting on knowledge" (Alvesson et al. 2008, p. 482), multiple vocabularies, stories and interpretations to answer the question "what are the different ways in which a phenomenon can be understood and how do they produce different knowledge(s)?" (p. 483). The multi-vocal focuses on "the authorial identity of the field worker and their relation to the 'Other'" (p. 483), in which the researcher is also a subject of the research practice and employs techniques to "open up space for the Other in research accounts…to co-produce knowledge" (p. 484).

Shaw (2002) argues that it is the changing conversation that effects organisational change. To effect organisational change conversation is understood to be a discursive activity that has agency (Hardy et al. 2000). The conversation here is the day-to-day, the conversations we all engage in whilst undertaking and executing our tasks. Its very nature makes it difficult to capture, indeed it may be argued that it is not important to capture the complete details of conversations and that what is important is to capture examples over time that may be able to describe the patterns and directions these conversations take. The dynamic aspect of discursive practice that Shaw (2002) and Hardy et al. (2000) discuss is also investigated by processual change approaches (Dawson & Buchannan 2005) which explore how individuals and groups narrate their experiences and attempt to influence others. What Shaw (2002) describes and what I am arguing is that the researcher is given only privileged access to portions of the conversation. This is a point strongly made by Boje (1995, 2001) in his references to Tamara.

Method for Analysis

Analysis and synthesis of data

Interviews and focus groups were recorded and subsequently transcribed. Soon after the interview, field notes were jotted down. These field notes captured my emotive response to the interview that included what I thought the conversation that had taken place covered.

Two approaches were pursued for transcription. The first approach was to do the transcription myself with the aid of voice-to-text software. I thought this approach using the newer voice-to-text software may have been quicker and easier and also more accurate than engaging a transcription service. In part this was the case regarding accuracy but not so for speed. For example, a one hour tape could take as long as six hours for me to transcribe. Whilst my transcription was thorough, I was not undertaking discourse analysis and therefore the "accuracy" of transcribing unfinished words, ums and errs, and other linguistic structures was not necessary for my research. The second approach to transcription of interviews was to contract the second round of interviews for Corcon and Carepoint out and then check the transcriptions for accuracy on their return. Overall the accuracy of the outsourced transcriptions was good and the transcription was completed in much less time than I had managed. Each script was then loaded into an NVIVO[14] database for coding and analysis.

Coding utilised template analysis (King 1998) which looks for themes that emerge from the data in order to develop a coding map that was then used to reassess the data in an iterative fashion to better understand underlying structures and meanings in the narratives. Coding here is a label applied to a piece of text, indeed many labels or codes can be applied to the same text. This is a process King (1998) refers to as parallel coding (p. 120), which is important to the researcher's interpretation. King (1998) describes the coding of the template as proceeding in a hierarchical fashion; however, his is but one structure that may be mapped, and does not preclude for other coding relationships, for example, using concept mapping to identify networked structures. On completion of coding the database in NVIVO was then interrogated to identify themes that were present in the data.

In the following section I use the Landcare case to demonstrate the process, which was replicated for each case study.

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[14] Nvivo is a qualitative research tool from QSR International Pty Ltd ©. Nvivo enables text to be imported into project databases where it can be searched and modelled for thematic analysis and retrieval. Multiple thematic schemas may be developed for the same data.

Landcare narrative inquiry using template analysis

Each interview was semi-structured and undertaken in conversational style to explore participants' associations elicited by the research questions. This strategy of dialogue provided richer data more suited to narrative analysis and emergent theory making than is available using highly structured approaches to interviews where specific assumptions have been made a priori about the nature of outcomes. Analysis occurred through a three-step process, incorporating elements of a grounded approach.

The first stage and the beginning of familiarisation with the data involved summarising on a single A3 sheet of paper the key ideas, topics and issues arising from the initial engagement with each recorded session. This led to the development of a conceptual map (code map) that would be used for tagging and analysing data. This code map was derived from analysis of the concepts and themes that emerged from the transcripts, captured on the A3 sheets, and was to be used across all data from all interviews. The code map allowed consistency of coding across all Landcare regions in preparation for further analysis and synthesis to facilitate the production of theory. The completed conceptual map (Figure 4.5) comprised some 40 codes that easily fitted another A3 sheet such that it provided a quick reference visual scan of all codes to simplify selection when applying these codes to excerpts and fragments of the narratives that were being explored.
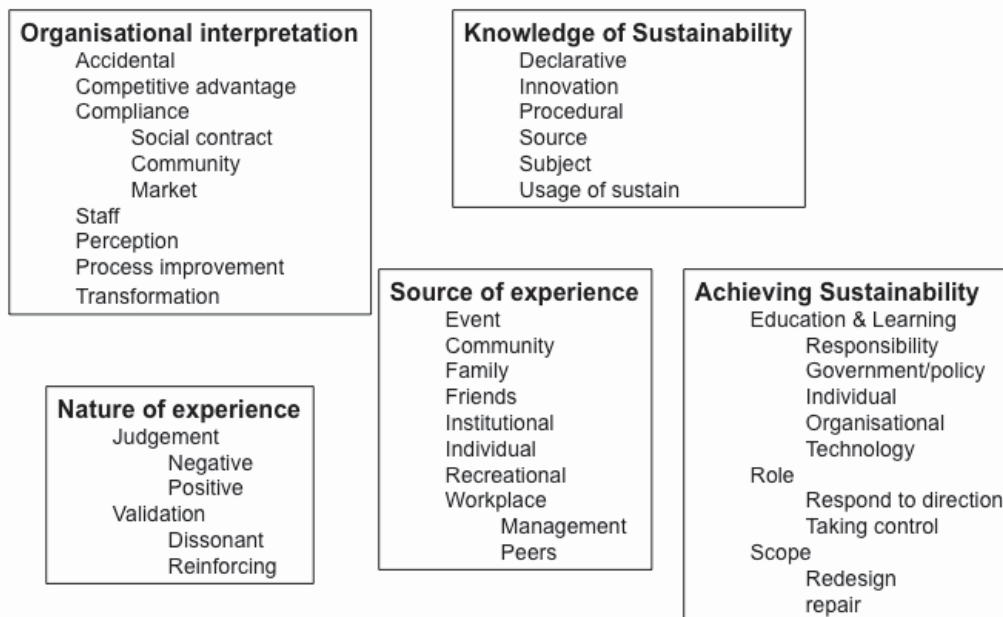
Figure 4.5: Conceptual map

The next phase of the research analysis commenced when the transcripts were imported into the software analysis tool Nvivo. Transcripts were coded according to a schema of nodes stemming from the code map derived from the first analysis phase (as depicted in Figure 4.5). "Nodes" is a Nvivo term and they equate with my "codes". The coding was not line-by-line coding but more akin to selective or focused coding. It is a more conceptual process than line-by-line coding, spanning amounts of data (Charmasz 2000, p. 516). Instead of coding each phrase or sentence for concepts, what were identified were the underlying themes for chunks of data, themes equating with codes on the map. In this sense the code map was used to identify narratives, "chunks" of data, from each of the interviews. These narratives were often identified by multiple codes, in other words multiple themes, and importantly provided a context for each theme such that the analysis was able to deal with high-level abstraction and situate it in a respondent's discourse and also a group's discourse. For example, the following quote is described by the codes "declarative, judgement/positive, event, community":

Knowledge is through telling stories not through dry scientific jargon and stuff and not being able to put your knowledge into a story that your average man relates to.

The third step in the method was to identify new themes emerging from steps one and two by exploring combinations of codes to see what new patterns emerged. An example of such an emergent theme is "expertise", which refers to the importance and evolution of local knowledge to achieving the aims of Landcare. To illustrate this step the following is a description of the process of analysing for emergent themes and identification of new codes to support these.

All the sections of text in the data that had been coded under the categories "declarative" and "institutional" were extracted and then further analysed to draw out their central meanings. A new concept summary map that depicted each of these meanings was then created. This resulted in a new higher order theme, "expertise" and new lower order themes to better explain the local knowledge dynamics and processes. Figure 4.6 reports findings of this conceptual mapping in raw form, structured around the key concept of expertise that emerged from the data and linked to major structural sub-contexts, each finally linking back to source data.
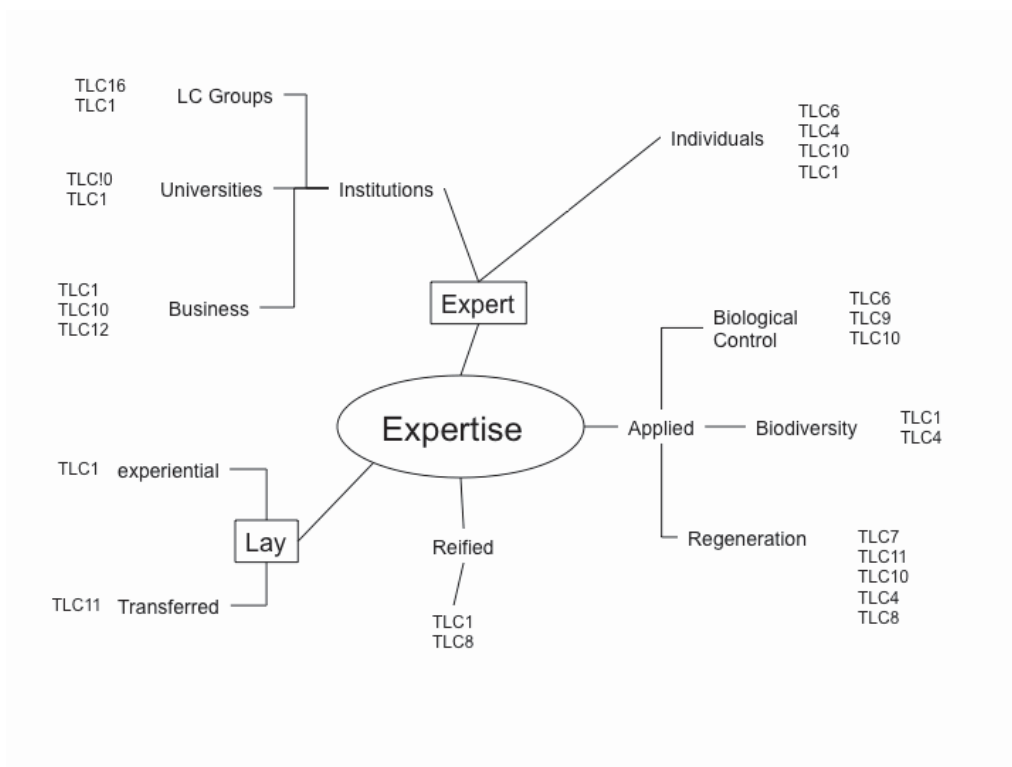
Figure 4.6: Concept summary map

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The above description of the coding process that was used for Landcare was followed for each of the two other cases, Carepoint and Corcon (Appendix 4 reproduces their concept summary maps). Of the themes identified three were selected as they represented dominant narrative patterns for each organisation and also represented narratives that I determined were replicated more broadly in organisational practice and theory: polysemy of meaning, moral responsibility to others, and cooperative dialogue with nature. These narrative plots and linkages to theory and practice are taken up in each of the detailed case studies presented in the following chapters.

Chapter Five

Understanding Experiences of Sustainability

Even though each organisation operated in distinct and fundamentally different sectors, they did share similar understandings of sustainability concepts essentially drawn from the discourse of sustainable development. At least when a definition or explanation of sustainability was shared by the participants, key aspects of their understanding of the concept and its practices largely seemed to align with sustainable development principles.

In this chapter I will discuss key findings from the cases. I shall start with how participants engaged with the concept of sustainability and explore commonalities in their understanding of sustainability that occurred across all cases. I will then engage in a deeper discussion on distinctive aspects of engaging with sustainability that highlights significant differences in the collective experiences of individuals in each organisation. What I mean by this is that whilst there were similar understandings of sustainability across all organisations/cases there were also significant differences in meaning and engagement that were characteristic of a collective understanding of sustainability for each case. For Corcon the distinctive aspect was moral distance and the importance of framing change for sustainability in moral terms – "corporate values". For Carepoint the distinctive aspect was having to deal with multiple definitions of sustainability, some of which were conflicting. In relation to my research question the distinctive aspects for Corcon and Carepoint, moral distance and multiple definitions, may be considered factors that contribute to inertia for change for sustainability. A counter to these barriers which may be considered and an example of ways to overcome the inertia of change for sustainability is the distinctive aspect engaging individuals in Landcare: the emergence of a new narrative to collaborate and not compete with nature.

What Sustainability Means Across the Cases

At the start of each interview participants were asked to recall and relate their understanding of sustainability and their experiences of its practice in their workplace, home and wider community settings. Table 5.1 presents a selection of quotes from participants, which relate their understandings of the concept of sustainability.

Table 5.1: Interview quotes – conceptions of sustainability

Sustainability – understanding and applicability to participants
Corcon
It all ties into the Sustainability framework doesn't it and obviously what was Sustainable in terms of the economic situation around the world was just it wasn't Sustainable and it self corrected and blew up which in a lot of ways I think was a good thing I just hope the good bits come out of it and the good bits are then Sustainable that's all.   *We expect to be here for the next 50 years and expect to make a reasonable profit every year and to do that one of the things we need to do is also to be a Sustainable business both in an energy and economic sense so we need to obviously maintain our licence to operate from the society.*   *If it's true Sustainability it sells itself, because when you said, Okay well if this works that's the payback, it will make you, not only a Sustainable company, but also a more efficient and economical company.*
Carepoint
I think in terms of philosophy the Mission very much accepts the idea of reducing its carbon footprint … in terms of social, I mean you've got the three elements haven't you, you've got the environmental, you've got the economic and then you've got the social Sustainability, so the number one thing big change over the last year I'd say would be in the financial economic area, because that was, that was the really, the big thing that would have brought us unstuck.   *Well I mean if you are talking about social Sustainability and financial economic Sustainability and then environmental Sustainability in each of those areas I think there is more intelligent thinking going on good questioning going on in financial Sustainability and the organisation is learning that people need to be accountable.*
Landcare
Yes it's a tricky one because sustainability is one thing and to me sustainability is you know like being a producer on the land is about using your resources so that you're but you're still leaving enough behind so that your future generations can still use and you just use enough to sustain your production. So if somebody is described as living off the interest not the principle, which I thought, was a very good metaphor for sustainability. You know you live off the extra little bits not the basic stuff cause if you lose that like we see a tremendous loss of top soil, erosion in the Macadamia orchards and you know you lose that and you lose gosh you lose so much when you lose that soil biology,   *Well certainly the thought of the group believing in sustainable agriculture and encouraging biodiversity, encouraging profitable sustainable agriculture, I think those ideas are tossed around within the group.*   *You know people we need to support our community and need to be sustainable in every way, need to be sustainable economically, socially I guess I see the environment you know all this environmental work actually contributing to the whole sustainability of those communities cause it means that those activities are being done better, in the long run its going to be a more sustainable community because farmers are going to still be there.*

In Chapter Two I emphasised the absence of a unified or widely accepted definition of sustainability. I made the point that in "business/economic" circles the theory of sustainable development had been widely adopted and in many instances become the de facto definition for sustainability. Fundamental aspects of the sustainable development logic for sustainability are observable in the quotes selected for Table 5.1. These aspects include longevity, responsibility to future generations and the categorisations of actions and responsibilities into economic, social and environmental domains.

Despite being in very different industries the participants in all three cases appear to share a conceptual understanding, derived from the discourse of sustainable development, of what "sustainability" means. What is noticeable in the narratives from Corcon and Carepoint is the dominance and privileging of the economic category as the "master switch" for sustainability. This privileging of the economic in these texts is a validation of Taylor's (2004) identification of economic rationality as a key aspect of the modern social imaginary, which I have labelled the economic imaginary. What differs in the Landcare quotes is a tempering of the economic in favour of the ecological, a point I shall take up later in this chapter and the next.

This "economic" understanding of sustainability across all cases is further reiterated by many of the participants in their narratives. What is presented during the interviews is an experience of sustainability that is framed through the lens of the three dimensions of sustainable development, often using the language of TBL. The language of TBL is most dominant in Corcon narratives, the organisation that may be considered the most "business like" in conventional terms. However, Carepoint and Landcare narratives also take up the logic of the three "separated" dimensions of sustainability.

Narrative of the Three Dimensions of Sustainability

Analysing the interview texts the narrative of the three dimensions of sustainability that emerged comprised four main aspects:

1. It was a mechanism for reducing the definitional confusion of sustainability;

2. It was used to demonstrate an understanding of an emerging philosophy that may be considered different to the current organising philosophy framing the purpose and activities of the organisation;

3. It allows the organisation to respond to this philosophy whilst retaining its current purpose; and

4. It allows the organisation to retain the emphasis of the economic over the social and to a greater degree the environmental.

The label and concept of TBL was used to cut through the definitional confusion that is part of the discourse of sustainability. I have commented on the profusion of sustainability definitions above in the thesis and the interview texts demonstrated an awareness and appreciation of these definitional contestations.

> *Sustainability is about environmental sustainability or sustainability means be nice to everybody ... because we're triple bottom line it means that we have to peacefully coexist with everybody, which in my view just kind of misses the point because I guess the very reason why we are having this conversation is to try and define what sustainability is. (Corcon)*

> *I use the term sustainable development, yeah, absolutely. Sometimes people like to just say sustainability, which is fine but sustainable development – sustainability I think that could be used interchangeably ... it's basically around the triple bottom line. (Corcon)*

These two quotes highlight the difficulty in defining the practical implications of what sustainability means and the preference for the framework of the triple bottom line to provide clarity in doing this. The capability of categorising action into economic, social and environmental does make sense to these individuals. The need to clarify the contesting definitions of sustainability and make sense of its discourses was clearly understood as part of the processes involved in making sense of new demands on business emanating from wider society. Sustainability and more particularly its translation into the narrative of the three dimensions of sustainability was seen as a philosophical debate that was in progress and to which organisations needed to respond.

> *The concept of sustainability is such a broad church. I think environmental, social, just all those sort of things are but a contributor to a broader philosophical construct which is sustainability and then to go back to my single lens constructs, sustainability incorporates the you know the be profitable around here but then operate within some social licence. (Corcon)*

> *So there is the environment side, the economic side, and the social side, which is the triple bottom line from a philosophy point of view. (Corcon)*

Sustainable has lots of elements and at the end of the day we must produce a return to our share holders, therefore sustainability must be part of that equation, and it is not just in terms of triple bottom line reporting stuff, it is more about embedding it in your business, and it is making it part and parcel of the way in which you do this. (Corcon)

First exposure to the concept of Sustainability was probably six or seven years ago. We actually had someone on the then audit and improvement team whose responsibilities were to implement some sustainability measures for Carepoint's reporting on the triple bottom line, you know triple bottom line reporting. (Carepoint)

These perspectives not only demonstrate an understanding of the wider context of sustainability but also introduce the deconstruction of the three dimensions of sustainability in ways that are more "suitable" or "acceptable" to current business practices. What is articulated in these texts is the prioritising and privileging of the fiscal dimensions of TBL. The framework of TBL lends itself to easy disassembling and allows each dimension to be engaged with independently of the other dimensions. The concept of the three dimensions allows business to adapt the philosophy of sustainability to existing business practices and priorities. These priorities are clearly defined and hierarchically ordered with the economic dimension as the most important one, followed by the social dimension, with the environmental dimension seemingly an afterthought.

The challenge in Corcon and any contracting organisation is it's fine to talk about the triple bottom line and being socially responsible and dealing with the environment and community issues but the financial aspects and our competitor environments make it extremely difficult for us. So it was about clarifying what it really meant ... profitable and long-lasting as a business ... it wasn't just in the context of environment and community it was also about the health of the company so it was the sustainability of the company. (Corcon)

The fundamentals of what builds that is through good economic financial management, good social infrastructure management and environmental. The

triple bottom line gives you the keys to getting to ensuring that resources aren't exploited ... that you do have this ability to deliver the world in the same or if not better for future generations ... I think the triple bottom line is a very simplistic and logical way to do that. (Corcon)

It's not a balanced scorecard that we have in place it's a Carepoint scorecard so it's an approach that has been developed from within but it's not just focused on the fiscal... So there's actually a discrete part of the scorecard, which refers to sustainability. Each group is asked to identify its goals within the sustainability of social economic and environmental so it's much broader than just fiscal. (Carepoint)

What I am arguing is that the discourse of TBL does have narrative constructions that allow individuals and their collective action in organisations to readily identify with the concept of the three dimensions of sustainability in ways that are familiar to existing business practices. These linkages are explicit in the following quote:

I looked at the Daintree rainforest conflict and the road going through there so you know the whole concept of decision-making and conflict within the environmental arena and I've done financial I've done occupational health and safety, so I've pretty much got the triple bottom line down pat, I've got the environment the social and financial. (Corcon)

The TBL allows business, through the decisions of individuals, to compartmentalise legal and moral responsibilities in ways that are familiar and to use existing organisational structures to explore how they should respond to the wider issues raised by the "philosophy" of sustainability. In this sense TBL supports the balancing of business goals and compliance obligations to the wider society:

The triple bottom line is that there is the ethics and governments' aspects from a business that surround us. We need to be ethical in the way that we do our business and we need a set of governance to ensure that we comply to what we say we're going to do and to the necessary requirements of the environment, social and our financial obligations. (Corcon)

As Elkington (1999) intended, TBL has gained a foothold in business and is being meaningfully applied in the narratives cited above. Individuals have adapted the concept of TBL to business. However, I contend that even though this narrative of TBL has become widely adopted the extant narrative of business still continues to privilege the economic. The narrative of TBL has not altered the priorities in the way business relates to each of its dimensions. However, awareness of wider social issues does exist and in this sense the narratives of the three dimensions and sustainability more broadly have achieved a measure of success:

> *The cost is going to go up because there is not going to be the same drivers, so there is a whole lot of imperatives that affect the social regime at the same time the economic effect is, and it brings in a level of despair, and this is what I see within the community at the moment, and there is two sides to this. There is either the people that are still affluent and wasting at one extreme, and then the actual poverty. The divide is getting greater and I don't think that is healthy or sustainable for any long term social environment in which we operate, and I think that is just highlighted the differences there. (Corcon)*

> *These are the goals of the Tilligerry committee. An effective umbrella group is working in a sort of way now planning our second festival, which attempts to showcase social and environmental economic groups' projects. It's really a case of win some lose some. (Landcare)*

> *So we've put a sunset clause in there and that way we aren't being unfair. They can develop it, we are giving them an opportunity, five years is ample time to get your house in order to get a development application lodged and that they, we figure, would have considered the social, economic and the ecological aspects of that piece of land. Our council is very focused on Ecological Sustainable Development and I think all of local government is now. (Landcare)*

A dominant theme in all the recounts of sustainability experience is to maintain the known existing social/moral order well into the future. The ideal in each case implies that the existing system has flaws which, if corrected, will enable sustainability to be achieved. There is no radical reimagining of ways of living, ways of working or the

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organisation they are part of. Instead the application of sustainability is for maintenance and continuation of the status quo in a responsible manner.

This theme draws on the logic of the discourse of sustainable development with its categorisation of social and environmental aspects to balance the economic. The other key to sustainable development that is noticeable in the quotes is the moral obligation to others in the form of future generations and the maintenance of growth but in a responsible form.

These texts highlight a shared understanding of sustainability at a high level that spans all case organisations. The dominance of the economic still comes through the texts. Words such as profit, payback, financial, economic and reasonable profit are linkages to the economic sphere of the three dimensions of sustainability. There is also a metaphoric reference to the economic, living off the interest and not the principal as a different way of working and shifting to a sustainability life-world.

In this chapter I will take up several facets of the sustainability problematic that are evident in the sustainability discourses of each case organisation. Whilst collectively aspects of these facets were noticeable in all interview narratives the internal dynamics of each organisation privileged one facet more than the others:

> Carepoint highlights the profusion of sustainability views and positions that people have to balance for decision making and action – the lack of definition that characterises change for sustainability: polysemy of meaning.

> Corcon highlights the problem of moral inclusion through the mechanism of moral distance: moral responsibility to others.

> Landcare whilst still focused on production is an example of how and where a new discourse starts to change the actions and behaviours of people and organisation: cooperative dialogue with nature.

Carepoint – Making Sense of Sustainability: Multiple Constructions of Meaning

The question taken up in this section is how are individuals making sense of sustainability in their organisation? To explore this question, this section presents a detailed examination of one individual's understanding of sustainability in the context of a sustainability change project in her organisation. For this individual there was a difference of "sustainability behaviours" between personal and organisational settings. This difference raises interesting questions about individual and organisational approaches to change for sustainability and whether they differ or align. A factor influencing the apparent gap between individual and organisational responses to adoption of sustainability is that individuals at all levels in an organisation make the decisions on actions and behaviours, appropriate to them, to deal with and resolve sustainability problems. In making these decisions, individuals must make sense of the multiplicity of meanings, some of them conflicting, that characterise the concept of sustainability.

The sustainability project at Carepoint

During the period of research, undertaken over two years, the implementation of the Carepoint sustainability change strategy shifted from a project attempting to integrate with the organisation's business strategy to a more wide reaching project to also identify measures for assessing the organisation's operational performance. The impost of these changes to the sustainability project created heated discussion at many levels in the organisation concerning the effect this would have on the sustainability project's success. Carepoint, a large not-for-profit welfare group, had at senior management levels embraced what could be called orthodox commercial management philosophy on what constituted success and good organisational practice. Their measures of success were now privileging fiscal values. Whilst they still espoused equity and social justice values to describe their work, these deeply embedded social justice values were now dominated by values of cost constraint and efficiency. Carepoint's role models, or those of other organisations that the senior management took as exemplars for action, were not from the welfare and community services sector, they were commercial operations.

The change program to implement sustainability, at the time of these interviews, had been underway for twelve months and in that time its impact had made little progress from Head Office into the Operational Divisions.

> *Yes, they introduced personal recycling boxes and they introduced a coffee morning which was fair trade coffee, but that was just here [Head Office]. I don't see much happening out in other centres, it's as if the momentum is here in head office, but it doesn't have enough velocity to affect the rest of the organisation yet. I think it would be great when it does. It will be something powerful, but at the moment it's like a little storm in a teacup, it just doesn't have much in the way of momentum.*

Within Carepoint sustainability was not a term in general use amongst the participants. A minority understood the term to cover environmental and social change in both organisational and society contexts.

> *The price is, well the price is you know environmental. We are pumping all this stuff into the environment, we are creating all this garbage, but then we're locked in because people need jobs. So it's this cycle I guess. So I'd like to live a lot more simply, I'd like to get off the treadmill a bit.*

The environmental was the lesser concept or understanding of sustainability, while the more widely associated ideas were to do with consumerism "…*but it is a throwaway society…*" and strong positions about social justice and the need for greater equality throughout society.

> *I guess society in general is pretty self-centred and all about greed. And there are the haves and have-nots and I suppose people in between.*

Whilst sustainability was not a term that was in common use, the understanding of environmental and social justice issues were recognised as important goals for society at large. However, environmental sustainability was not considered a priority for Carepoint at this stage: the priority for management in Head Office was economic (see Table 5.1).

Two dominant organisational discourses emerged from the interviews. The first I have labelled "concern about waste" and the second I have labelled "dualities". Both these discourses are deeply ingrained in the history of Carepoint and with the introduction of the sustainability change programme have become closely associated with this initiative.

The organisational discourses associated with sustainability

Concern about waste

The metaphor of concern about waste encompasses everything that Carepoint does, from internal processes to external services, and from support of staff to consumer behaviour (reflected in their clients) in the broader society.

> *It [waste] was probably the first image that I was familiar with but now it's more, it's certainly broader than that now. Its about how we can work smarter and work better and with less ... that you use worklife balance and becoming an employer of choice.*

The concept of waste applies to organisational processes and practices, strategic decision making, employee utilisation and engagement, and the impact of the organisation's services on its clients.

An early initiative of the sustainability change programme was a quick wins project that sought to tackle the easily identifiable practices such as energy saving, double-sided printing, reuse of items where possible, car pooling and so on. Waste also extended to the excessive workload that staff were expected to perform, both real and self-imposed, and the repetitive time wasting requests for more information due to inefficient and ineffective internal systems.

> *I saw a lot of waste. I saw a waste in terms of time and duplication of effort. In one instance, in one area there were four different locations that information had to pass through before it ever got to here and there was no real necessity for that, it was just a control issue and to me that's wasteful its wasteful in terms of time that people are taking to handle it.*

Carepoint was also strongly criticised for burning out staff. There was a high turnover rate of people in the field due to the pressures and the nature of work. That Carepoint, as a corporate strategy, did little to change this turnover of staff was also considered to add to wasteful practices.

> *You burn out you lose people and if you're talking about an organisation that has some horrifically high attrition rate and keeps scratching its head as to why are we losing staff look at the way that we're operating.*

The waste here was related to business processes, and the efficiency and effectiveness of service delivery, and at a deeper level of apparent lack of concern by senior management about the welfare of their staff. This latter aspect, the lack of concern, was linked to observations or beliefs that the organisation, whilst espousing religious principles of honouring and supporting people, in reality was hard-nosed and disingenuous in practice. This scepticism in some quarters was balanced by an acknowledgement in other quarters that Carepoint did care for staff and spend significant amounts of money on staff training and development.

> *To work here is very pleasant so they are doing something right aren't they? Plus there is so much training, there is always help you know, they're always helping you so I think if big business could learn something from Carepoint in the way they treat their staff and the way that they do offer all the training that they do … I've done so many different day courses and it's very helpful.*

The motivation for staff in Carepoint was to tackle waste, reduce it and if possible, eliminate it.

Dualities

As a conglomerate, Carepoint has all the benefits and problems of similarly structured organisations where operationally there are very different semi-autonomous businesses controlled through a centralised administration function.

Another important part of sustainability for people was the tension in the organisation between Head Office and the service centres or delivery units, referred to colloquially as "Centreland".

> *That there is Head Office and there is an us – there can be an us and them which I think has a bit of history.*

There was a view that Head Office acted for itself and not as an important integrated component of the business, and that Head Office did not understand what actually happened at field level.

> *You know I think we in Head Office, and I count myself, are a bit sheltered from the real work of the organisation because we are so inwardly focused it has me wonder what do they do, what do they do in community services that has them perhaps be more sustainable than what we do, I'm theorising.*

Many of the practices within the organisation originating from Head Office were considered to be burdensome and of little relevance to those working in the centres. The examples given were the regularity with which Head Office did not seem to learn, year on year, from the information that they garnered and asked for. Head Office continually repeated information requests for items that the field considered they should already know, or requests for information that did not seem important, and they resented these requests because they caused them to do repetitive and needless work.

> *I've spent a lot of time looking at just what will sustain workers and programs and for me then, when the tension comes from head office with some of these requests, to be honest with you, I get annoyed because it really does challenge for me what is the priority here, what are we actually here for?*

"Dualities" is the term used to describe contradictory understanding of the role and performance of the various components of the organisation, principally the split between Head Office and centres. Dualities also describes a very different understanding of how Carepoint functions or should function, depending on where in the organisation you are situated. If you work in the service divisions then the organisation is a loosely coupled one that comprises a number of semi-autonomous businesses working locally and accountable to their primary funding bodies.

> *I find that I actually work for the government [funding body] more than I do for Carepoint, you know. I guess the Carepoint Head Office and the God-*

fearing church people there would think oooooh! Carepoint itself as an organisation is a huge organisation but what it is is a huge organisation of mixed businesses.

A consequence of Carepoint's structure is that a divide exists between Head Office and the Operational Centres that has both real and perceived impact across the organisation. Many of the interviewees commented on this separation of Head Office and Operations to highlight this structure as a source of the difficulties that they faced in performing many of their work functions. For example, the increasingly heavy reporting loads required of them by Head Office, both routine and ad hoc, were perceived to be of little practical value to them in their day-to-day work and resented because these imposts reduced what little spare capacity they had to deal with unexpected crises, or to take on new initiatives/projects, particularly whole-of-organisation projects such as the implementation of sustainability that my broader research project is investigating. This separation of Head Office and the field is an important aspect to be mindful of, the dissociated head and body, as the experiences of many in the interviews relate to these tensions.

Selecting the single interview

Whilst each interview presented unique views, certain themes emerged that were shared by all participants. For example, the historical and ongoing separation of head office and the operational groups in the field that has already been commented on, the structural tension between "religious" and "professional" standards influencing the provision of support services, the strong social justice ethic motivating staff, and the multiple interpretations of sustainability that are in use throughout Carepoint.

What follows is a single interview, selected from the Carepoint data. The selection of the interviewee for this chapter was based on her strong storylines, which distinguished her interview from the more fragmentary nature of the other conversations. Her interview also, in my estimation, captured the essential under-standing of sustainability shared by the majority of Carepoint participants that I interviewed.

Keisha's interview

I have called the participant Keisha; she is in her mid-40s and has worked in the community sector for most of her life. She is relatively new to Carepoint, having been there some 12 to 18 months, in an organisation-wide role that supports capacity building of staff across all the operating divisions.

Keisha selected two cards (Figure 5.1) from the set of images used to initiate the process of reflection and elicitation of sustainability experiences. The first was of a recent bushfire that depicted blackened ground, with the trunks of trees severely scorched although dotted throughout were new shoots emerging from the destruction. The second card was a scene of a city park with a group of youths playing on skateboards, and to one side, with his back facing the viewer, an old man stood watching them.

Figure 5.1: Keisha's selected pictures

The interview text that follows is a narrative of the conversation flow using language as close as practicable to the language of the participant whilst concentrating on the

key concepts, and their linkages, during the interview. This is to give a sense of Keisha's voice whilst retaining brevity in the retelling rather than providing a full transcript of the interview.

Keisha's narrative

My first job was with young people and this image reminds me of life. There is joy and community in the picture yet there is also the rest of the world looking on and a barrier between the onlookers and the youth. Interesting?

Sustainability equates to passion and energy. We as humans need to take responsibility for it! There is also curiosity and uncertainty there, linked to the onlooker in the picture, and provokes a sense of personal responsibility, what's my part in it, what can I do as a single player in this, can I do something, where do I put my labour where do I choose to work, are some of the questions this raises. All of this is a luxury at present.

The bushfire picture represents my internal landscape, my identity. Who am I, what work do I choose to do that aligns to my values and ethics? I need to allow time to nurture this. How does work nurture this? Sustainability is choosing work I am passionate about and this is part of my identity. What are all the things that sustain me? Here it is the metaphor of the bushfire, which is about cycles, potential endings and beginnings. My bushfire happened a few years ago and I am now in a renewal phase.

Bushfires are part of a constant balance and humans impact this. The physical landscape may be equated with the internal landscape, how do we maintain this, nurture this or deplete it? In work this means anything we can do to minimise impact, such as recycling, use of china mugs and those sorts of things. An example where I tried to make a difference was to change our work practices around training manuals that we use in our section. The practice was to print out a new set of manuals for each group session and this was wasteful and not needed. I tried to get everyone to agree to print out one set of manuals that we could reuse and this was rejected, the suggestion was met with huge resistance.

People don't logically attune to wastage and there is real inflexibility in our policies and their implementation. Environmental sustainability is not on the agenda in Carepoint.

Collaboration engages people's personal responsibility. Top down is not sustainable, it requires power, therefore the personal becomes my objective, and collaboration fosters engagement. Leadership can be collaborative, inclusive, etc. hard decisions can be accepted but not if I never get to have an input into it.

Carepoint's sustainability has recently had a quick wins programme, which was fantastic; one of the events was on fair-trading. This was done at head office so how can they support the centres?

Head Office is inwardly focused and my division is more sustainable than Head Office, therefore what is it that my division does differently? Carepoint isn't serious about sustainability; this applies to both the old guard and the new guard.

Yet there is good work happening. For example the work in my division and this is under the radar of Head Office. Carepoint burns people out and this leads to high attrition rates. It is dysfunctional and they should have better ways of retaining staff. The problem with this turnover is that there is no continuity at the sharp end.

My area is divorced from senior levels and given what we do and what I do I am disappointed by strategic thinking of how my area fits in to Carepoint. I have a strong sense of not being included, not listened to, not being a voice at the table, Like an ant at the bottom of the tree trying to get the attention of the magpie at the top.

Should I stay, I can't contribute? Carepoint is a bureaucracy with a lack of decision-making and no delegation; I have to get approval from my manager to buy a paperclip. There is a lack of transparency, I am always being white anted, undermined and looked over.

Carepoint is constantly restructuring and this is not a sustainable way of operating. The rhetoric of change is nonsense, restructure after restructure is like moving the deck chairs on the Titanic. There is no planning, decisions aren't communicated in a

timely and transparent fashion and decisions are made on the basis of personality and power relations. Carepoint is not living its values.

Happiness is finding the other lone voices, collaboration, working with people, improving the quality of what we do and making a big difference. Having fun, in Carepoint we have to be serious. People forgot that God has a sense of humour, joy is needed. Our group's meetings are as boring as dentists' waiting rooms, and the managers create this; it is counter productive.

Dreams. At the top enormous collaboration and transparency. Sense of genuine caring of staff and clients. Carepoint known for Corporate Social Responsibility and strong business links. No paper or Styrofoam cups; cars are fuel efficient, people working together. There is no fear and it is a genuine learning organisation, open and trusting. Employ really good staff and pay them well. Leaders in our field and the work speaks for itself. Warm, full of light, a sunny meadow in spring, lots of life lots of energy.

Keisha's sense-making

The starting point is the recollection of her first job, an experience that evokes pleasant memories, and also the insight that sustainability is associated with the qualities of youth, passion and energy. Yet this is not a rosy ideal. There is another possibility in the image as in life, where people are onlookers standing apart from the action, too afraid to be involved. Questions about Keisha as an onlooker are now raised, "what is my part in this [sustainability], how can I do anything? If I can where do I direct my efforts?" and a seemingly unsupported conclusion of the idea that sustainability is a "luxury at present", involvement in which would be irresponsible or indulgent.

Such decisions and actions superficially look like resistance to change. Yet, there is a willingness to change but the imperative to act is negated by a belief that she lacks power to influence others. For Keisha this has in part been validated by her inability to motivate others to change business processes relating to the production of manuals. Turning to the bushfire image Keisha is very clear that this relates to her identity: who she is, what sort of work she does and chooses to do, and how this should align with her values and ethics, something it does not do at the moment: "how does work

nurture this?" Here we see the personal narrative continued, the introduction of an organisational narrative and the extension of her exploration of her identity.

The bushfire for Keisha describes the cycles by which life is organised; there is an intimate relationship between beginnings and endings, a strong interdependence between destruction and renewal. This is a natural cycle and the need to maintain the constant balance of the natural cycles of nature is a universal law. She considers humans as being out of touch with natural cycles and pursuing behaviours that impact nature negatively. There is a sense here of "the crisis of the earth", the dissociation of nature and business (Foster 1997). The connections with work are examples of reducing waste and changing work practices to minimise waste. Her experience of trying to organise others to think and act in ways that were not wasteful is not a good one, and she is still upset that she was rejected by her peers.

We now have three distinct sustainability narrative streams laid out in the conversation, each proceeding at their own pace with their own logic, each at times interlinked, yet often seemingly dissociated: Keisha's understanding of sustainability in relation to her own life that centres on the nurturing of her identity; Keisha's perspective of Carepoint's sustainability that seeks to fix what is not working; and finally, Keisha's understanding of the ideal of sustainability as a transformative change process that corrects human environmental destructiveness. The following section explores these themes.

Keisha's sustainability

Identity construction is at the heart of Keisha's sense-making, and is the first of Weick's (1995) properties of sense-making (p. 17). The narrative she develops is peppered with questions both rhetorical and inquiring about how she fits into the plots of the events she describes. From, "what's my part in it, what can I do as a single player?" through, "how do we maintain this, nurture this, how do I influence the organisation to be more strategic and not just bandaid?" to, "should I stay, I can't contribute?" we see sense-making in action as it occurs in Keisha's response to the interview.

Sustainability here is what sustains her as a person, both internally and in the organisation where she works. The assessment is that things need to change for her

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wellbeing, that the present situation is simply not sustainable. Keisha does not use the term sustainability to refer to herself although she can and does envisage herself in the context of a future state of sustainability.

Keisha's Carepoint's sustainability

"Carepoint is not serious about sustainability." This assessment describes a complex view of organisational sustainability that combines viability with environmentalism and, more importantly, the HR practices of day-to-day operations. For her, Carepoint needs to focus on its people. The emphasis should be on treating staff well, and if the current HR practices continue then the organisation continues to maintain unsustainable practices that in her view will jeopardise its future.

Sustainability for Carepoint is strongly linked to good internal systems and good internal systems means no top-down management style. Her criticism extends to observations that Carepoint is continually reorganising but never changing. Her perception is that Carepoint continues to remain highly centralised in its decision making, highly fragmented in its service provision, and remains siloed despite Head Office attempts to change this.

Whilst all the above is negative, and the articulation of what is unsustainable about Carepoint, there is recognition that there is good work happening in the organisation, and that this is happening despite leadership, particularly Head Office leadership, rather than because of it.

For Keisha, the dominant theme relating to achieving a sustainable organisation is waste in all its forms, including wasted physical resources and wasted human resources. There is an implication in the narratives that to become a sustainable organisation Carepoint needs to fix its current flaws and that considerations for environmental sustainability in this process are discretionary.

Keisha's ideal of sustainability

Of the three sustainability narratives, Keisha's ideal is the least well developed when measured against the number of narrative fragments directly describing it. Yet there is a sense that Keisha has a much deeper understanding than she conveyed of what sustainability means and what may be involved in enacting this.

For Keisha "*sustainability is like a bushfire that roars through and burns everything but doesn't kill it*"; from the cinders a new more invigorated world emerges just like the bushfires in Australia where nature has adapted to fire as a life force not a death force. The implication of this interpretation is that the new order requires the destruction of the old order; the current paradigm needs to be transformed in order for us to accommodate new frames of thinking embodied in new narratives (Starkey & Crane 2003).

In the flow of Keisha's ideas no cohesive new narrative of sustainability was forthcoming, but throughout the interview snatches of ideas in the form of Boje's (1995, 2001, 2008) antenarratives are articulated. Whilst the ideal narrative is in a sense masked by the personal and the organisational narratives of sustainability, the picture of the ideal that emerges is a sophisticated understanding of sustainability and shows strong ethical foundations as important to framing sustainability (Fricker 1998). There is an understanding that sustainability involves change and that personal responsibility is key to this. However, "sustainability" is understood to be a future context requiring changes to the way we do things especially in regard to nature, even if our most effective ways of describing this are using examples of what is unsustainable (Fricker 1998).

The polysemy of sustainability flows from the multiple narratives that are developed, that each give different meanings to her understanding of sustainability, which is a strong feature of Keisha's conversation. There is a sustainability ideal to be reached reflexively (Beck 1997; Beck, Giddens & Lash 1994), an ideal that is very different in form to the way we live and work today. It is also an understanding of sustainability that is for the most part unstated in text, but implied in the spaces. Here the gaps in the narrative are filled in reflexively by both the teller and the listener (Boje 2008). Then there is the ideal of an organisation and her relationship to it and the wider society. The goal here is of perfecting the current broken ways, but no radical overhaul is envisioned. This is what should be, in her view, a sustainable organisation. Finally there is her aspiration of her own sustainability that positions her independent of the organisation and society and yet part of it, aspirations that assess her identity in relation to the identity of Carepoint.

Corcon – The Organisational Environmental Setting

Corbett Construction (Corcon)[15] is a large construction company that is a subsidiary of a construction consortium. The consortium comprises several companies, each operating independently and in fierce competition with each other. The cultivation of this fierce internal competition within the consortium is in part strategic design and in part a consequence of operating under the scrutiny of government regulatory bodies that have been set up to enforce fair-trading practices in the marketplace. A consequence is that the subsidiaries have strong differentiated cultures that inhibit collaboration and sharing of knowledge with each other. This "internal" competitiveness and its limitations was often commented on by participants:

> *...you know we'd rather go and talk to [Cryovac] or someone like that rather than talk to our sister company which is an absolute nonsense and yet we are wasting energy and effort where we could be simply learning from one another and really getting great runs on the board.*

Many of the participants had worked in the organisation for as long as 20 years or more. All identified with the profession of engineers and the tales and expectations of engineers as problem solvers and builders. The results of their labour are the monuments of our society, the very structures that support our way of life. This identification with designing, developing and supporting the structures of society extends to another large part of their business, which is contract mining done on behalf of the big multi-national miners. Here too there is pride in doing the work of providing the raw material of industry more efficiently than the large mining companies that contract them can do themselves. The General Manager of Plant and Equipment captured this sense of pride:

> *we only exist in business as a contractor because we theoretically are better than our clients doing it themselves which is particularly the case in the mining sector because our biggest competitor is always our client because they can do it themselves. They've got more money than we have so it's all about timescales and you know various things but for mining we are looking at ways of measuring our productivity and energy consumption in ways that*

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[15] Corbett Construction and the names of individuals, where they occur, are pseudonyms to maintain anonymity.

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are somewhat innovative but also can tell you hour by hour whether your operating efficiently or not.

This professional group has a lengthy experience of working with environmental regulation. Environmental assessment and protection regulation of construction and development projects has long been enshrined in law. The reaction of organisations such as Corcon has been one of compliance to laws and regulations plus improving the efficiency of their operations.

Sustainability and moral distance

Yeah in the context of the sustainability of the business but it is a full circle because it relates to the sustainability definition that has come to emerge in relation to environmental outcomes. Needing to be more considerate of the natural environment that we live in because owners; we respond to what owners want, we respond to legislation.

I suppose we would not be travelling this sustainability path with the framework we've generated if the framework wasn't firmly established around regulation as it changes and clients needs to respond to that regulation and then our need to impress upon clients that pick us because we're the ones who can make sure that you get an easy ride here, and we look after that for you.

If we were not moving with that debate as an organisation we would be getting left behind. Owners wouldn't be picking us to do their work and we would soon find our self like every other company that used to do work in the Victorian era, they don't exist, there isn't one of them still trading.

The logic being followed in this narrative, I suggest, combines two mechanisms (see Table 3.2) of Bandura's (2007) categories of moral distance, "diffusion of responsibility" and "displacement of responsibility". At first glance the above rationale appears as quite a reasonable conclusion to reach, which is that "I would love to integrate sustainability more fully into my day-to-day work practices but I am hampered in doing so because the source of my livelihood prevents me from undertaking this; I am prevented from doing so by forces outside my control". The

claim that "...*we respond to what owners want, we respond to legislation ...*" recalls an ends-rational ethic (Bauman 1989).

The rationale supporting sustainability that is presented in this view is a complex one. There is an acceptance that societal norms change and that business needs to reflect this in its operations. What is clear is the view that business responds and reacts to institutional pressures, in particular the dissonance of isomorphic pressures (Greenwood & Hinings 1996), in this case pressures for undertaking responsible environmental behaviours that are controlled by government regulation. What is implied is that the changes generated to implement sustainability are not voluntary, they are not initiated by this organisation and by inference other similar organisations. There is also a hierarchy of responsibility for change that starts with government regulation that defines client specifications to which "responsible" contractors respond.

For Corcon the environment is approached as one of a number of risk considerations for design and construction. There is an attitude that compromises have to be reached in any project and therefore there will always be some form of environmental compromise needed for engineering works. A road cannot be built without environmental destruction, and for Corcon the skill is to balance the public good of the engineering works and the damaging environmental impacts of those works. The "old" skill was to privilege the creation of the public good over its environmental impact.

> *We built the original pad for the Burrup[16] more 20 years ago in the 1970s and it was sport to see how far you could throw a rock when you blast. [Now] the pride is attached to the fact that you can't even send a rock more than 20 meters and controlling the actual impact you have (on the environment) is significantly different to what it was then.*

The "new" skill is to balance the public good and create a beneficial environmental impact.

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[16] The Burrup peninsula is in the northwest of Western Australia and is a major centre for gas exploration and export. Woodside Petroleum is one of the main companies operating here.

We did some great environmental work on Roe highway (Western Australia). We built a wetland. Didn't have to but it was beneficial for us to do it and we built some wetlands there so that was a good outcome. It was beneficial for us because you need fill material. So you go in and create a wetland and remove fill material to actually use for your road. So it's a little bit you know border line but anyway in terms of the area and you make it more than borderline you make it wet.

Whilst participants supported strong environmental laws and controls and the sustainability values supporting these, there were occasions where, in their view, regulations and enforcement were carried to extremes. Some of the conditions imposed on them for mitigating possibly detrimental environmental impacts arising from their projects were considered to be over the top, impractical and unnecessary. Their collective view of such regulation and its enforcement is that it is simply madness and bureaucratic overhead and whilst such regulation imposed inefficiencies on projects they were duty bound to comply with them.

Oh I think there are some environmental constraints put on us that are pretty stupid. We do a lot of earthworks and we do it in a very controlled and environmental way and we do a lot of sediment control and we don't allow you know sediments to discharge. When we do it's an enormous cost, it's just huge you know. On a contract worth say $500 million, $20 million might be just in maintaining sediment control, its huge. It's a cost. You know the money comes from our taxes, you know it's an impost, it's a cost, but I think some of these things are taken to the nth degree.

An example of "over"-regulation was the very strict controls in New Zealand placed on construction companies that set very high standards for the treatment of water run-off to ensure that it could be discharged into streams with no detrimental effect to the environment, standards that considerably increased project costs but if approached positively can generate significant advantages for construction companies.

New Zealand has got some very very solid rock solid rules because you have something like about 128 days a year of wet weather right. Now if you design and redesign your drainage systems and you put them into proper stormwater

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pits and actually then have a treatment plant, then actually it can be discharged out into local creeks and whatever else. You can actually get extra days so last year we got 90 extra workdays because of what we did.

Not all situations where Corcon was reacting to environmental constraints were seen in a negative light. Another experience from New Zealand related the opportunities that environmental regulations presented if one was prepared to think differently. On this occasion the road that they were constructing had to traverse a mountain and avoid protected flora that grew in the planned pathway. In this situation Corcon put forward a proposal to reroute the road through a tunnel that they would dig through the mountain. The client accepted this and was willing to pay the additional costs involved. The experience of the tunnel was framed as a win-win-win, with Corcon, the client and the environment all benefitting from this commercial arrangement:

And that was a decision they made that they wanted to do. Now that for us was you know. We did two things, we could stand a bit tall and say that we've done the right thing and the second thing is we made a bit more of a quid because boring a hole was a bit more expensive than going over the mountain so we had a commercial benefit from it. So there are examples where a really good strategic approach to environment and environmental management actually gives you breakthrough thinking and gets people into a different space and you can get a commercial outcome out of it, right?

All participants viewed Corcon as a responsible company. For them a responsible company was one that rose above the letter of the law and regulation and strove to work in ways that were "ethical". For these respondents of Corcon, this ethical foundation to their success in business was underpinned by their newly created organisational values.

Corcon values narratives – a responsible contractor

The importance of their values narratives is that they provide the moral foundation for Corcon's organisational identity, which is the basis from which moral judgment is made. This moral identity is the sense datum for determining moral distance.

The development of a "new" organisational discourse within Corcon has taken place over the last couple of years. This discourse is structured on a set of organisational values narratives that now govern decision making and behaviours at all levels of their operations. The initiative for this sustainability strategy is credited to the CEO, and participants often commented that without the CEO's leadership this sustainability initiative would not be happening.

The importance of the organisational values was evident in the interviews as these were often referred to when participants were reflecting on their experiences or trying to make a point. A measure of the importance of these core values to the organisation's sustainability change agenda was an imperative to study these values, as recounted by one of the senior executives:

> ....it's getting all the pieces of the puzzle to come together and to get common denominators in your business that work together and give you, you know, outcomes greater than the sum of their parts that give you a sustainable organisation and it's that concept. Which is why when Alfonse and I have talked to you we've said if you live in the five values of this business, and the five values have been designed very specifically, and more importantly, it pulls in every conceivable component that I've talked about this morning..... So what you should do if you should get the window of opportunity and have a think about what I've just said and then read those values and read those leadership behaviours behind that because that's what we've done it for........

The values discourse is at the heart of the changes for sustainability that the organisation is pursuing. The interviews revealed five core values that frame organisational practices and culture: organisational health and safety; responsibility to the community and environment; cultivation of long-term business relationships; valuing their people; collaboration through teamwork. Of these values the narrative on occupational health and safety (OH&S) was the strongest. Safety dominated every facet of operations and was strongly linked to the sustainability of the organisation.

An indicator of the importance of the core value safety and OH&S more generally was its formal inclusion in the agenda of senior management meetings and project meetings. As one participant put it, if you want the natural environment to have the

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same attention that safety has it needs to become an agenda item in the senior managers' meetings. Their reasoning for formalising the natural environment in the same manner as safety and OH&S was that as an agenda item in meetings it became a topic of discussion and measurement of progress in this area. As a formal agenda item the attention was both symbolic for the whole organisation and meant that management attention was needed to creatively embed the natural environment into business practices.

Corcon and sustainability

The concept of sustainability was for many of these managers a confusing one, and the preferred term was sustainable development. For these participants, the concept of sustainable development and its associated environmental discourse (Dryzek 2005) better aligned with the internal narratives of Corcon than did the concept of sustainability. Sustainability was considered to be a measure of the success of the change program and the ongoing operations of the business whereas sustainable development better suited the nature of engineering work, which is concerned with developing infrastructure. This logic is evident in the following quote from the National Manager for Health, Safety and the Environment in Corcon's Resources division:

> *Oh you know you can go and get one consultant give you a definition and three others and they'll all have a different definition because they've got to go and have their own take on it or they'll say that you know this is more important in this area because they've got a certain bent for this and it confuses the hell out of people ... that's why I like to stick to the Brundtland definition (World Commission on Environment and Development 1987) because you cannot go wrong ... if you're going to get people to buy in to this philosophy you need to keep it simple stupid and I think we are over complicating it. As I say to a lot of people if a business has been in business for the last 50 years they're sustainable companies otherwise they would have gone out of business because they would have broken the law, done something wrong legally, not had the governance in place, or they would have damaged something. They would have assessed their risks you know these are all aspects of sustainability. It is not that difficult but it's, it's about that continual*

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improvement process and being aware of risks and meeting governments'
requirements and all of that…

The implementation of the sustainability strategy is based on delivering incremental change delivered through continual improvement and measured by the adoption of the new core values. The interviews demonstrate a perception that the core values are viewed as critical to the success of Corcon's sustainability strategy and that they are strongly promoted by the senior management team.

Sustainability in Corcon is in part a response to three external pressures in the Australian context. The first is the health and safety of employees and the community. This involves putting practices in place that minimise or eliminate injury and death to anyone that may result from the services Corcon delivers. The second is compliance with environmental regulation and responding to changing community attitudes that increasingly holds organisations morally accountable for environmental damage. The third driver is the opportunities that adoption of eco-efficiency practices offer businesses such as Corcon: improved products and services delivered with less waste and pollution. The translation of these external pressures has been to identify ways in which they may be incorporated into business processes to improve competitiveness and profitability.

Corcon's sustainability objectives also resonate with the findings of Bansal and Roth (2000) on the major motivations for corporate ecological responsiveness, in particular the motivations of legitimation and competitiveness. Within Corcon, the term sustainability was universally applied to the longevity of the business facilitated through the adoption of the new corporate values. The sustainability ideal for Corcon is understood to mean that the company has longevity, is always profitable and is always responsible. These three criteria of a sustainable organisation were often paraphrased or directly quoted in the conversations with participants.

The critical requirement of sustainability is to enhance the brand, the corporate identity (Cornelissen et al. 2007) that is achieved through attaining a "licence to operate" (van Maarejwick 2003, p. 97). Traditionally localised environmental damage was not a problem for the engineers in Corcon. Now with the importance of sustainability to Corcon's success and an emphasis on environmentally responsible

practices Corcon's engineers are being presented with dilemmas that only a few years ago they could dismiss. This reflects a tightening in environmental controls in government regulation that organisations are responding to. Using the mechanisms of moral distancing, these dilemmas were then presented as irrational standards or requirements set in regulations and laws for the prevention of environmental damage, for example, retaining all run-off at all times during a road construction:

> *Oh, I think, I think there are, I think there are some environmental constraints put on us that are pretty stupid.*

> *We do a lot of earthworks and we do it in a very controlled and environmental way and we do a lot of sediment control and we don't allow you know sediments to discharge. If we do it's an enormous cost, it's just huge you know. On a contract worth say 500 million 20 million might be just in maintaining sediment control, its huge.*

> *The money comes from our taxes you know, it's an impost, it's a cost, but I think some of these things are taken to the nth degree. We had a an issue where a sedimentation pond, what happened, I think the float on a pump failed and the suction was at a lower level than it should have been and some water discharged into this gully that had been dry for the last 20 years. You know we get fined $150,000 for doing that. I think this is madness give me a break.*

The criticism of irrational standards and requirements enacts another of the moral distancing mechanisms: the disparagement of critics and victims. The victim of the pump failure is the creek bed, which is dismissed as not "really" suffering in any way as it has not been a proper creek for many years. A proper creek would have water in it and would therefore be rationally more acceptable to incurring the penalty. The critics are the regulators whose judgments in the form of rules and regulations are passive and pervasive as well as being extreme and irrational. The illogicality and rigidity of the regulators and their rules are the focus of disparagement and criticism measured against the more reasonable and responsible standards of Corcon.

Moral distance and meaning (re)construction in Corcon

Corcon's response to the dissonance initiated by sustainable development has been the initiation of a culture shift using their newly defined core values. The values are an attempt to move from the old established behaviours to a newer yet to be determined set of "sustainability" behaviours and practices. This indeterminacy of what these new behaviours and practices should be also raises difficulties for Corcon that reinforce the dissonance inherent in the change processes. In the process of trying to enact meaning in this new context, moral distance appears to be both an outcome of the sense-making processes that people engaged with and a stage in the transition from old to new meaning systems that people are navigating.

Table 5.2 presents a collection of quotes that illustrate the connection of sense-making and moral distance.

Examples of Moral Distance	Mechanism in use
Well they [clients] pay at least more lip service to the things like your environmental and safety plans and all that sort of stuff, but they still choose contractors based upon price. Its very rare for a client to actually be prepared to pay more money to get a first-tier	3, 4, 5
I think it's like a lot of what happens in society. Probably 90% of society sort of says well piss off we don't care about it but that 10% is really loud and get lots of press about it and it makes good press. You know people read it ultimately.	7
Its relatively easy to get and stimulate organisational thinking and leadership around transformational thinking when you've got community expectations and government regulation forcing a transformational change inside your business. Where there is none of those powers or tokenism around those powers your organisation just says well there's no consequence to do this why am I doing	4, 5, 6
That whole issue about how do we improve the environmental impact of construction projects. Clients have got to really take that on board because there's got to be a partnership.	4, 5, 7
Or you'll get a contractor that will go in and he won't price in the environmental, those environmental issues the way they should be done and gets the job and then he is fighting tooth and nail with the client from there on in. So I think somehow the industry including the clients have got to get some sort of handle on that, I suppose, so that everybody understands what has to be done.	4, 5
Well I think there is no doubt the younger generation are greener in the sense they have more awareness of the importance of environment in particular.	5, 6
(1) Moral and Social Justification (2) Euphemistic Labelling (3) Advantageous Comparison (4) Attribution of Blame (5) Displacement of Responsibility (6) Diffusion of Responsibility (7) Disparagement of Critics and Victims (8) Minimising, denying and discounting wellbeing consequences	

In the selection of quotes in Table 5.2 diffusion of responsibility and displacement of responsibility figure prominently as mechanisms used by the participants in dealing with change for sustainability. This supports the observation of White et al. (2009) that "in most social systems, diffusion and displacement of responsibility figure prominently in self exoneration for harm that is caused collectively. People do not feel personally responsible if they view their harmful actions as prescribed by authorities" (p. 65). There is also a sense that displacement of responsibility occurs within Corcon, senior management imposing on younger management the burden of "being both profitable and principled" (Roberts 2003, p. 257): "*Well I think there is no doubt the younger generation are greener in the sense they have more awareness of the importance of environment in particular.*"

Finally, the majority of participants used moral distance to shield their emotional attachment to the questions being asked. The language they used was formal, in the third person, and only changed to informal and first person on limited occasions. The dominant experiences of sustainability that participants chose to relate were those framed by the corporate discourse of Corcon, using the language and imagery contained in the organisational texts that supported the sustainability change strategy. The shifts to informal first person recollections of sustainability experience were overwhelmingly drawn from stories of personal experiences in settings outside of Corcon such as within their home lives or employment in other organisations prior to Corcon. This separation of personal and workplace storying of their sustainability experiences I suggest may also reflect the practice of moral distancing and warrants further research.

Such moral distancing behaviour, conversing formally in the third person, aligns with the findings of Crane (2000) that corporate discourse uses amoralisation to control and mitigate dissonance of meaning construction sense-making cues, such as sustainability, that challenge fundamental business assumptions.

The experiences of both Corcon and Carepoint provided illustrate actions that reinforce the continuation of the sustainability problematic. I have highlighted that both constructing and maintaining moral distance to the Other and confronting and

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inadequately dealing with the polysemy characterising interpretations of sustainability are important factors contributing to the inertia that inhibits the change for ecological sustainability in these organisations.

Not all interpretations of sustainability lead to the inertia distinguishing the sustainability problematic. In the next section I introduce an example from Landcare of experiences of sustainability that surmount the inertia of the sustainability problematic.

Landcare – Organising Narratives for Sustainability: A Narrative Construction for Ecological Repair

There is growing awareness in organisations of their relationship with nature and heightened interest in the environmentally responsible actions that facilitate change for ecological sustainability.

Yet many organisations are still not engaging with sustainability in day-to-day activities. Change is taking place but overall the scope of change and its rate of adoption indicate that there is still considerable inertia towards widespread organisational adoption of sustainability. A 2010 McKinsey survey of business executives ("How Companies Manage Sustainability") found that

> More than 50 per cent of executives consider sustainability – the management of environmental, social, and governance issues – "very" or "extremely" important in a wide range of areas, including new-product development, reputation building, and overall corporate strategy ... Yet companies are not taking a proactive approach to managing sustainability: only around 30 per cent of executives say their companies actively seek opportunities to invest in sustainability or embed it in their business practices, ... (McKinsey 2010, p. 1)

In the McKinsey survey for 2011. (Bonini & Gorner, 2011), in contrast to the 2010 findings, the noticeable shift that had taken place is that "more executives say companies are managing sustainability to improve processes and growth instead of focusing on reputation alone…" (p. 1). Despite this shift, the 2011 McKinsey "The Business of Sustainability Survey" found that across leadership criteria for sustainability adoption little change had taken place. Approximately 27% of CEOs

considered sustainability a top three item, and 45% considered it a priority but not in their top three list. Even though leadership attention was on sustainability initiatives saving energy, developing green products and aiming to capture value through growth and return on capital, there were still a greater number of informal sustainability activities (50%) taking place in their organisations compared to formal (40%) projects.

These findings raise many questions relating to the adoption of sustainability. For example, they point to a gap between espoused and actual values associated with a failure to understand what this means for integrating sustainability into organisational practice. It leads me to pursue the question in this case of what normative narratives in organisations underpin the generation of ecological solutions.

Investigating implicit narrative construction and explicit processes of knowledge acquisition, this section explores the organising processes associated with sense-making that lead to the generation and enactment of effective ecological solutions. The findings identify that deeper understanding of how ecological systems function leads to the creation of new sense-making narrative(s) and this process becomes a significant factor for overcoming inertia to enact change for ecological sustainability in organisations. The Landcare organisation is an Australia-wide approach to organising for sustainable agricultural practices through local and regional project-based structures. The research informing this section investigated the experiences of participants at the local level of Landcare and explores the gap between our tacit, everyday experience of the natural environment and the constructed meaning we assign to that environment.

Historical perspective of land management in Australia – narrative of ecological exploitation

The dominant land management narrative in Australia is based on an imported European anthropocentric view of nature. The strong shaping influence of the European view of the human-nature relationship assumes duality and difference. This view conceives of humans and nature as separate and constructs a limited reciprocal relationship for humans with nature; nature is there for the use and benefit of humans. It is a resource to be exploited, and there is an implicit assumption that its resources

are limitless. This duality is also accompanied by an imported conception of the built environment that defines what nature should look like (Lines 1991; Powell 1976). The approach to the landscapes (ecosystems) that Europeans encountered was that they could be transformed to fit the model of European landscapes (ecosystems) with which these immigrants were familiar; their sense-making narratives were their imported inherited cultural stories, which they imposed on the landscape they confronted.

The important guiding influences on European colonisation were set by the Enlightenment, the beginning of the industrial revolution and the rationale of the settlement itself (Lines 1991; Powell 1976). Settlement in Australia came with no prior European history, bar the occasional observations of a number of seafarers and explorers. There was

> No history of living with the land before industrialisation, no consciousness of making the land a home before the invention of technological civilisation. Instead, Australians are accustomed to a highly contrived, dynamic habitat and expanding settlement and relentless invasion of the bush. (Lines 1991, p. xvi)

To European sensibilities the Australian landscape was an alien one and above all a landscape that needed to be civilised. Importantly, Europeans had not evolved a narrative of the Australian landscape, a narrative through which they had naturalised (Bowker & Star 1999) their interrelationships and interdependencies with their Australian environment. I suggest that their narrative has always been at odds with their local ecology and it reinforced a sense of not belonging in the Australian environment.

The underlying assumption of colonisation was the exploitation of the resources that Australia had to offer, resources to be sent back to England, and into the machine of industrialisation. Coupled with this exploitative approach was the imposition of transplanted land management techniques upon the Australian landscape. The introduction of new animals and the intensity with which they were managed and farmed as well as the English system of land ownership itself changed the landscape. The result was a re-creation of English farming through land use that was very much at odds with the nature of Australian environments.

This pattern of farming and land use was further refined post-World War II with the industrialisation of agriculture. The goal here was the efficient maximisation of the extractive value from the land, a strategy that led to the emergence of large-scale monocultures. Broad acre farming now became the favoured approach to agriculture; it became highly mechanised, concentrating on one or two crops or animals. Australian primary industry, in general, may be characterised by this emphasis on efficiency and monocultures. The combined effect of these land management practices led to the impoverishment of soils, best seen in areas such as Western Australia where extensive clearing of land to grow crops has led to serious salinity problems in the wheat belt area (Australian Academy of Science 2004; Department of Agriculture and Food 2009; Lines 1991, pp. 262-263). It is in this context of ecological exploitation that the Landcare movement arose to repair the damage that was being done to agricultural lands.

Origins of Landcare

As described, European colonisation has significantly altered the Australian landscape, leading to major soil and biodiversity losses, weed and animal pest infestations, greatly reduced water quality and inappropriate land management practices. Active organising to redress these problems at local and regional levels was initiated during the 1960s and gained momentum in the 1980s. This culminated in the formation of a national programme, the National Landcare Program (Youl, Marriott, & Nabben 2006) and the formation of the networked-based community organisation of Landcare that had its origins in an agreement between two radically opposed groups, the National Farmers Federation and The Australian Conservation Foundation. The aim was to foster sustainable land management and natural resource management practices in Australia. Landcare is now a national voluntary community movement of around 4,000 Landcare Groups operating largely in rural areas and involving 40 per cent of farmers. According to the most recently published statistics, considering that farmers manage 60 per cent of land and 70 per cent of the nation's

diverted water (Landcare sustainable farm practices 2012), this represents a significant organisational impact on land management practices.[17]

Typically Landcare groups are from the same local community, its members are often neighbours, and have come together voluntarily over a common environmental issue such as salinity, weed infestation or erosion. There is an ethos of helping one another out, sharing information and capacity building through networking in a number of ways. Collaboration ranges from individuals sharing new knowledge and experience, to organised field days and events that allow many Landcare groups and other stakeholders to come together to exchange ideas and build relationships (Benn & Onyx 2003).

The research site

The research centred on two broad regional Landcare areas of New South Wales where Landcare groups are actively involved in environmental restoration, the Hunter and the Northern Rivers Landcare Groups. The choice of these two Landcare areas was influenced by their relative ease of access for the research tasks, by the fact that they are acknowledged as responsible for the development of a number of ecological solutions that were able to be transferred to a wider audience and by the fact that although these Landcare regions are neighbours, their differences in agricultural practices and population demographics (Youl et al. 2006) are significant enough for the two regions to act as distinct cases (Yin 2003) within the overall case of Landcare.

Despite their differences these regions share the fact they were settled early in the European colonisation of Australia, with subsequent substantial alteration of the pre-colonial landscape. Northern Rivers has experienced resurgence in population growth, particularly through people consciously looking for alternate lifestyles to modern high-pressure professional city occupations. The agriculture of the Northern Rivers includes orchards (banana, macadamia, stone fruit, tropical fruits) and beef production. The Hunter is less alternative than Northern Rivers and is now dominated by viticulture, horse studs, meat production (cattle and sheep), mining, particularly for coal, and industrialisation; although it too has accommodated an influx of people

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[17] These membership figures for Landcare are based on 2007 analyses, and in 2012 government information still quotes these figures. Since that time the Australian Government has incorporated Landcare under its new program Caring for Our Country.

seeking relief from high pressure city jobs. In recent years it is the mining activities that have framed the strategies of a number of the Hunter Landcare groups, particularly the expansion of open cut mining to meet export demands for coal.

In the next section, I undertake a discussion of my findings concerning the knowledge acquisition processes that contributed to the sense-making underpinning the emergence of a new narrative that I have labelled "ecological repair".

Micro-narratives of knowledge transfer and creation

A key feature of the Landcare groups studied was that they appeared to be engaged in a virtuous cycle of learning occurring through both knowledge transfer and creation and that this cycle of learning acted as a process of organising.

Knowledge transfer – learning from different sources

Borrowed knowledge is "characteristically held in libraries (or equivalent), in books or other media, via formulas, calculations, texts and other recordings, and is commonly brought into organisations by consultants, or via staff (agents) returning from conferences or from educational institutions" (Kuhn et al. 2003, p. 756). Our data analysis shows that the transfer of "borrowed knowledge", and in particular techno-scientific knowledge, plays an important role in the functioning of the Landcare groups. The search for borrowed knowledge by Landcare groups is a response to the recognition by landcarers of the need to tap expertise external to their networks in order to make improved and effective interventions in the environment. To do this they also need to share expertise and skills within their networks, and the following quotation highlights the importance of establishing effective local structures to facilitate sharing and learning:

> *I suppose the starting point is that, when we set up the Landcare group, a lot of our activities would simply revolve around learning experiences, having people who were expert in particular areas such as people who could show us how to identify plants, especially weeds.*

Respondents commented that access to borrowed knowledge through the collective of the Landcare group enabled them to access information otherwise unavailable to them individually:

You need that educational basis to get Landcare groups going in the first place and the good news is that very frequently people will go off and be inspired to learn independently and then bring that knowledge back to the group. That's been my experience with a lot of these groups.

This highlights the way in which the capacity of the individual is increased through the collective agency of the Landcare group and demonstrates that there are clear advantages in collaboration when building expertise and skills and undertaking informed decision making.

Respondents reported that in the early period of the development of the Landcare groups in this study landcarers were particularly reliant on academic or bureaucratic assistance and research to understand the local ecology and the practices needed to regenerate degraded environments. Borrowed knowledge was and is sourced from "experts" and this remains a conscious strategy for capacity building and increasing the sustainability of agricultural practices in both the Hunter and Northern Rivers areas. Respondents recalled that when Landcare was formed in the late 1980s, the experts drawn on tended to come from universities and other institutions recognised as having bodies of scientific or specialist knowledge. My data analysis shows that over time the definition of "expert" has changed and broadened, as landcarers have come to recognise that the bush regenerators and landholders themselves have a particular form of knowledge. This is local knowledge (Wynne 1996). In other words, it is expertise developed from observation that can augment, illuminate and correct borrowed knowledge from scientific and academic sources:

People like [...] have been in the area for 50 years and he, for example, could say that in the [...] area he'd taken out the round leaf gum. He could also tell us that by the time he'd got there all of the cedar and turpentine had been cut out by earlier timber-getters, and that the reason that they cut out the sandpaper fig is because in that area they had orchards, particularly peach orchards, and the sandpaper fig attracted bats, probably the grey spectacle bat. They believed that the bats would be harmful to the fruit so they cut it out ... That local knowledge particularly from old people, is enormously valuable. It becomes elusive with time.

Knowledge creation – developing new local knowledge

The findings highlight that generated knowledge, or new knowledge, exists within the context of the local group or organisation. It may derive from extending or adding to borrowed knowledge or applying it in new ways, or alternately from radical new conceptions and understandings of problem situations (Kuhn et al. 2003). Generated knowledge emerges from individual and collective experience and is usually embodied in stories (for example Boje 2001; Boyce 1996; Bruner 1991; Czarniawska 1998, 2004; Phillips 1995; Starkey & Crane 2003). The Landcare data shows that generated knowledge in the Hunter and Northern Rivers Landcare operations tends to be practical and built on the application of borrowed knowledge reworked by practical experience acquired in its application, and is recognised as an important process in local capacity building:

> *Here it seems that one of the things that's really unusual is the way in which scientific knowledge has been brought together with local knowledge in practical projects.*

In effect, what has developed over time in the case of Landcare is a tight coupling of generated knowledge to practical ecological solutions. In the Northern Rivers, rainforest knowledge was captured in the Weed and Rainforest Regeneration Manuals that are now classic reference texts used by many groups throughout the eastern seaboard of Australia:

> *The university helped us with the layout of those things. So one of them was to decide what's the most cost effective way of doing your re-vegetation, establishing rainforest in cleared areas or areas where its been removed. The other one was looking at plants and fertilisation because we were getting big losses in our plantings and we didn't know what the reason was and we discovered that it was a fertilisation issue. So we did that and we also did some trials on the most effective way of killing camphors [camphor laurel trees]. We accumulated some information and then we set about producing a rainforest restoration manual and a rainforest weed manual. Tomorrow I'm going to look at the pre-production view of the second edition of the*

restoration manual; we've already done the second edition of the weed manual. Now those manuals get sold from southern New South Wales to you know central Queensland because now they're sort of the definitive data sources (in reference to the manuals).

In the Hunter, innovation took forms that I consider to be characteristic of practical knowledge creation and exchange (Nonaka 2004), where knowledge is embedded in action and involvement in specific contexts. Two examples of practical knowledge creation and exchange identified in the interviews were the development of long-stemmed tube stocks, a technique that enables plants to be established deep in the soil in a way that maximises their chance of survival and mitigates their vulnerability to flood and wind. This is practical knowledge understood and transmitted through practice. The second example was the development of a Project Monitoring and Evaluation Tool for use in the management of waterways, soil and farm practices. These Hunter innovations have, like the Rainforest and Weed Manuals developed in the Northern Rivers, been widely adopted beyond their originating Landcare communities.

The new knowledge developed in each region reflects the interaction between the land and its stakeholders. In the Northern Rivers, a process of experimentation between the lush tropical landscape and "life-style" landcarers resulted in new knowledge concerning bush regeneration. In the Hunter, a harsher landscape and a Landcare community more concerned with implementing sustainable farm practices resulted in new knowledge geared to ensuring ongoing support for soil management and farm prosperity.

Sense-making – the emergence of the narrative of ecological repair

Working on and in the landscape, or the physical environment that bounds the decision making and actions of people engaging with the land, is both an individual and a social process that is essential to embodying generated and borrowed ecological knowledge. The landscape provides the context for "the social production of culturally valued skills" (Hardy, Lawrence & Phillips 1998, p. 71) that are shared and validated within the community of Landcare at all levels of the organisation, local, regional and national. These are the processes of enactment that are essential to sense-

making (Foreman-Wernet 2003; Weick 1995), and without this collaborative action, I argue, that borrowed and generated knowledge would not be integrated into the constructed narrative(s) of Landcare.

Drawing on analysis of interviews, changed ways of knowing what constitutes good land management practices and changed behaviours that embody this new knowledge underpinned ecologically focused action and change. The change in awareness happened in small ways and at first often led to unforeseen developments. The process itself became exciting and important to land carers.

The process of sense-making I describe here is subtle and takes place in small increments often characterised by temporal distance between the initial observation and the moment of awareness. The Landcare case presents a different but no less important model of sense-making from the dramatic model that Weick characterises in his cases, such as Mann Gulch (Weick 1993) and Bhopal (Weick 2010), and the US Federal Reserve's policy making that Abolafia (2010) analyses in that these views of sense-making usually assume a short temporal distance between the cue event and the enactment that follows. In contrast, in this case study of Landcare, we can identify cues that are characterised by long periods of time between the cue and the enactment that follows. While this temporal lag is noted in the literature (see Weick's 1995 description of the cue on child abuse), this case highlights that the cues acting on the landcarers were able to be ignored as individual instances. On the other hand, when the cues were recognised collectively, they then constituted the disruption to the narrative of the landcarer(s) that generated the cognitive dissonance characterising a cue. In Table 5.3 I give examples of micro-narratives that constitute incremental processes of sense-making. These responses show that subtle cues can act over time to develop awareness and understanding of the ecological needs and responses to the landscape. They highlight the importance of collaborative sense-making to enact new knowledge.

Table 5.3: Examples of subtle cues that stimulate sense-making

Source of Cues	Sense-making Reflections
Micro-narratives of temporal lag due to dialogues with nature.	*And the local knowledge even was like with us we had no idea so we learnt through fortunately people like [...] and other rain forest regenerators who lived here and were able to instruct us on how important our property was. We didn't know, we bought it because it looked beautiful and then the problem was how to rid our property of weeds and then re-plant.*
	I'm a farmer and I work land with my 5 brothers on the escarpment. My interest in trees started about 14 years ago when I was just curious as to what trees I had on my property. I didn't know the names of them so got [an expert] down to have a look. I remember that day as if it was yesterday. He got us all excited, my brother and I, about what species were in this gully. We learned a lot that day and we've continued to learn since.
Micro-narratives of temporal lag due to the knowledge acquisition and sharing practices within Landcare groups.	*You get a call from someone and they've just moved to the area, they've heard about Landcare and think they've got some native vegetation. The best place to start with is just to give them that little taste of information and encourage them to ring round, go to field days, and not to do anything with their farm until they've probably spent six months talking to people. I mean you could inundate someone with too much information.*
	I wouldn't have known about it except for the (local) Landcare network and I've been in a position where because of the network I'm out there showing people from, for example, (Local Landcare group) how to use the water lance, how to use long-stem tube stock and know the advantages of it. There's no way in the world that I would have known about that or learned about those techniques if it were not for the existence of the network.

Noticing and bracketing (Weick et al. 2005) of micro-narratives is taking place over months and years and leads to the enactment of a new sense-making environment that I label the narrative of "ecological repair".

The narrative of ecological repair emerging from the data has its foundations in the narrative of ecological exploitation but has developed its own plot with new interpretations to both guide and reinforce its retelling and enactment. For example, each of these narratives views the natural bushland in dramatically different ways. From the perspective of ecological exploitation, the natural bushland is a wasted resource and a potential harbour for agricultural pests, mammals and insects alike. For example, in the late nineteenth century when European settlement was expanding in the Northern Rivers area, originally known as the Big Scrub rainforest, all government sponsored farms had to be cleared. Failure to clear your land led to revocation of land title. Whilst the clearing in the region was generally thorough, many patches of remnant forest remained. In the Hunter similar practices were

followed and the land was also comprehensively cleared by European farming practices.

In contrast, ecological repair views the natural bushland as a productive resource to be integrated into farming practices. An example of this integrated approach from the Northern Rivers was the use of separation areas between macadamia trees and bushland that were kept trimmed close to the ground, an integrated ecological solution that had the effect of protecting macadamia nut crops from rats by creating open space that provided advantage to the rats' predators.

Reflection on these Organisational Experiences

Whilst each organisation operated under the influence of similar societal level environmental discourse regarding ecological sustainability, sustainable development and therefore shared similarities in the enactment of ecological sustainability, there were also distinct differences characterising the sustainability approaches in each organisation. I have selected a particular experience from each that highlight factors that contribute to both the inertia and progress towards organising for ecological sustainability. For Carepoint the experience highlights the complex sense-making that individuals engage in when dealing with ecological sustainability. For Corcon it is the rationalisation of maintaining accepted work practices and claiming that their capacity to be ecologically sustainable is constrained by other organisations. Finally, for Landcare it is the preparedness to listen to the voice of nature as a necessary step in adoption of ecological sustainability in organisations.

I presumed that broad acceptance of ecological repair would be a foundation of Landcare culture, which turned out to be the case. Whilst in the Landcare regions that informed this research I did not come across deniers or anyone antagonistic towards the Landcare movement, I assumed there would have been such individuals and group(s) that did not accept Landcare's aims or were not motivated enough to do anything about it. The research participants did mention opposition in the early stages of Landcare and stated that over time this had dissipated.

Carepoint I thought would be an organisation that would rapidly embrace the principles and then the practice of ecological sustainability. This turned out to be a false assumption. The level of organisational resistance to new ways of organising

and operating were surprisingly high. Key barriers were the senior leadership group, the organisation's structure and a history of poorly executed change programs. My presumption had been based on the high levels of support for social justice and human rights that underpinned the culture of Carepoint and the delivery of Carepoint services. I thought that members of such an organisation would be able to empathise with nature, extending their social justice principles to embracing this new set of stakeholders. I expected that they would be aware of ecological injustice long before mainstream society. This was not the case and participants had a great deal of difficulty engaging with environmental inclusion in day-to-day business practices.

I expected Corcon to be highly resistant to ecological sustainability. However, Corcon participants were all well informed and all espoused the need to change practices to become more ecologically sustainable. Their experience in the construction industry meant they had already had a long engagement with environmental compliance and more recently the issues to do with the importance of community consultation to get projects completed successfully. My presumption was based on preconceptions of organisational responses to ecological sustainability reflected in the media reports on the building and construction industry. What I found was a more nuanced view and understanding of how business affects nature.

The approach to the cases is an attempt to highlight facets of the sustainability problematic. The identified scripts that emerged from each organisation highlight a quality that needs to be addressed when engaging with the problematic. I will argue in Chapter Six that to overcome the inertia of the sustainability problematic requires the construction of a new ecological imaginary and I identify a possible exemplar in the form of the Australian Indigenous concept of Country that may be investigated to understand its logic model. Finally, in Chapter Seven I propose a new framework to act as a scaffolding for the creation of new narratives to privilege ecological sustainability.

Chapter Six

Assessing Experiences of Sustainability

In Chapter One I introduced the focus of research as being the sustainability problematic concerning organisations, which was explained to be a range of behaviours and activities that reverses the damage being done to ecosystems on which humans depend and could be interpreted as the apparent inability to organise action across all scales, from individuals through to wider society. The sustainability problematic describes a complex of problems and questions that I argue characterise inertia of societies' institutions and organisations to action responsible ecological practices to redress human induced environmental problems.

I proposed that the sustainability problematic may be connected to the social construction of nature, especially such constructions emanating from industrialisation and consumer capitalism. This construction of nature, I argued, is framed by the social imaginaries within which we live out our lives and I introduced the term ecological imaginary as a new system of meanings through which we construct our human-nature relationships to replace the current system of meanings encapsulated by the current economic imaginary.

This setting provided the context for my research on organisational change for sustainability. I argued that overcoming the inertia inhibiting the take-up of ecological sustainability in organisations required a structural change to organisational discourses to reflect a privileging of nature instead of humanity. To better understand how organisations are attempting to redress human induced ecological problems I am looking at organisational sustainability through the experiences of individuals as they undertake organisational change for sustainability.

In Chapter Five each of the case studies presented different facets of the sustainability problematic. Carepoint demonstrated the problems for individuals with the multiplicity of meanings that sustainability evokes in practice and in conception. Corcon highlighted the role of moral distancing and the importance of values embedded in the moral order of social imaginaries and Landcare gave a perspective of the maturing of the relationship with nature and how this showed that a shift in the imaginary was possible through a dialogue with nature.

These three facets of polysemy of meaning, moral responsibility to others and cooperative dialogue with nature seem to be important factors in influencing the interpretation of the ecological within the existing social imaginary that results in the current inertia characterising sustainability adoption.

This chapter takes up a discussion of these three facets and their role in meaning construction of sustainability and how they impact the organisational implementation of sustainability. I argue that the implementation of ecological sustainability requires a different underlying set of assumptions and values than those that are available through the current social imaginary and I put forward an example of a social imaginary that may be labelled ecological. This ecological imaginary is the Australian Aboriginal concept of Country and I argue that its structure and dominating principle are good models to follow. I am not claiming nor advocating that Country should be co-opted and applied to modern social institutions. I am arguing that it is an example of a successful social imaginary that privileges the ecological and that therefore the aim of creating an ecological imaginary that works for organising modern society and workplaces is possible. It is not a utopian dream.

From the Carepoint Experience – Polysemy of Meaning

Weick's (1995) properties of sense-making (p. 17) are readily discernable in Keisha's narration of her experience of sustainability. Yet Weick's sense-making framework seems to have something lacking in its explanatory powers for Keisha's attempt to make meaning of her sustainability experiences. This suggests that Weick's framework is too neat; it leads to an expectation of a clear resolution to episodes of sense-making that do not really appear to happen.

There is no apparent single logic to Keisha's narrative. It jumps from one idea to another, at times in seemingly disconnected ways. Yet there are discernible narratives and their plotlines that Keisha develops and moves comfortably between. Boje's (1995, 2001, 2008) Tamara is the sense-making quality that defines this process of meaning making and exploration. In a moment, only one narrative and its plotline can be tackled and this disrupts the continuity of the other plotlines. There is also a sense that other narratives and stories are missed, that choices have been made about which plotlines to follow during the conversation. This is Tamara at work within the

individual, what I call the "inner Tamara", and operates in a similar fashion to the "outer Tamara", where an individual's sense-making in an organisation is restricted to the choices they make about whom they associate with, where, when and for how long. The "inner Tamara" is recognition that polyphonous chatter following multiple discontinuous narratives is also a process of individual cognition that is inter-subjectively related to the "outer Tamara". Both inner and outer Tamara represent constraints about what may be acted on in the moment. In both cases a cognitive choice is made about which narrative/narrative performance to follow. For the outer Tamara, there are physical constraints in addition to cognitive ones: an individual cannot be in two places at once. For the inner Tamara, the construction of meaning is undertaken through discrimination of existing narrative and narrative fragments to select and (re)create new meaning; the process is driven by the individual's selective preference, implicit or explicit, of their existing collection of narratives/texts. Identification of the inner Tamara invites further research to complement and extend Boje's work on Tamara in organisational storytelling and Weick's work on sense-making.

This case highlights that enactment of sustainability for individuals and organisations presents as a complex process of meaning construction that involves identity validation and reduction of polysemy. The complexity of meaning construction leads me to propose that both processes must be engaged with simultaneously when undertaking change for sustainability.

Identity validation – narrative of identity (re)creation

The discourse of dualities in Carepoint reflects an organisational identity struggle most noticeable in the divide between Head Office and the Centres. Although there are other discourses of dualities, such as the hegemonic tussle between religious values and professional values as the measure for designing and assessing the efficacy of service provision, the Head Office – Centre duality is the most impactful and the discourse that is in most need of resolution in the minds of all the participants including Keisha. On this view a sustainable Carepoint is an organisation that has resolved this struggle. At issue here is that there is no agreed positive organisational identity to which individuals can attach themselves and so their attention is focused on resolving for themselves the question of "where they belong with respect to the

organisation", as these competing meaning systems have still to arrive at an agreed resolution (Humphreys & Brown 2002). These are powerful entrenched discursive and operational identity battles that are being waged and this struggle of identity at the organisational level impacts on individuals in ways that defer engaging with environmental sustainability. The prioritisation of identity over ecological sustainability is evident in Keisha's sense-making and is also replicated in the actions of the other research participants. With the exception of explicit reference to Styrofoam cups, references to ecology and the natural environment are absent from Keisha's text. There is an acknowledgement that sustainability is important, "*Sustainability equates to passion and energy. We as humans need to take responsibility for it!... all of this is a luxury at present.*" but this topic is never developed during the conversation. What is more pronounced is her searching for personal relevance and recognition within Carepoint: "*Who am I, what work do I choose to do that aligns to my values and ethics? I need to allow time to nurture this. How does work nurture this?... I have a strong sense of not being included, not listened to, not being a voice at the table... Carepoint is not living its values.*" This observation supports Porter's (2005) analysis that sustainability is held captive to this discursive struggle to resolve the agreement on organisational identity and that this needs to be resolved before progress in adoption of sustainability may be made:

> Actors make environmental decisions out of a need to establish a positive identity, to think well of themselves in relations to their peers, and to provide order to their worldviews. Identity interests precede and supersede the actual content of any environmental decision or action taken. (p. 111)

An implication is that the identity narrative needs to be stable if a new sense-making cue such as sustainability is to be productively engaged with. If the identity is in flux then the additional stimulus of a potentially dissonant idea increases equivocality and for discourses/narratives that challenge accepted views the likelihood is that they will be rejected in similar fashion to the rejection of sustainability narratives within Carepoint.

To support the creation of new sustainability narratives in the organisation the establishment of discursive space (Cunliffe, Luhman & Boje 2004; Humphreys & Brown 2002, 2008) to facilitate and explore new ideas was an important process for

Carepoint to undertake. The finding of this research was that in Carepoint no discursive space for sustainability emerged despite the intentions of a range of agents attempting to stimulate this. An indicator of the absence of discursive space for sustainability narratives was the self-editing out, by the participants, of sustainability discussions within Carepoint. For example, Keisha's understanding of the breadth and depth of sustainability and its applicability to Carepoint was considered to be not worthy of discussion. Carepoint was not ready to engage with sustainability and therefore it was of little benefit to raise this. Her attempts to initiate action and discussion within her local workplace and its rejection by her colleagues reinforced this judgement; sustainability for Keisha, and the other participants, had yet to shift from a discretionary to an embedded organisational discourse. This editing out I suggest is a sense-making response to lack of discursive space, which inhibits the generation of new discourses and their enactment. Organisationally the lack of discursive space privileges the extant discourses, for example, in Carepoint, protecting the important extant discourse of waste. The idea of waste dominates all facets of the organisation and its operations; there is a deep and long lasting tradition grounded in their history of Protestantism of celebrating the values and virtues of thrift.

The discourse of waste promotes efficiency and economy and Carepoint deliberately linked their sustainability platform to this well-grounded narrative, an approach that Keisha aligned with and attempted to promote. This was a sensible strategy to identify common ground in existing narratives that can act as boundary spanning (Star & Griesemer 1989) artefacts to facilitate the adoption of sustainability throughout Carepoint. Despite the soundness of this strategy the consequence has been that adoption of sustainability has only had partial success. To gain a foothold, new narratives need to establish a balance between difference with the existing narratives and familiarity with those narratives to allow a discourse to develop, to evolve into a new narrative or to extend existing narratives. Where establishment does not happen one of the possibilities is that the new ideas become co-opted into the extant hegemonic narrative(s), which is the case with Carepoint's narrative of sustainability. I have also argued that the utilisation of the three dimensions of sustainability has confronted this problem and whilst it has had success and is widely recognised and used in organisations it has also become a co-opted discourse and failed in its attempt

to implement ecological sustainability. Co-optation in this context is not the amoralisation that Crane (2000) discusses where the dissonant aspect of the new idea is watered down and its efficacy neutralised by restructuring the idea under the rules of the co-opting hegemonic discourse. In Carepoint's case, I would argue, the co-optation has occurred because there was a lack of dissonance between the new and the existing ideas such that sustainability was equated with their discourse of concern about waste and therefore no reframing of Carepoint's narratives of waste was necessary.

"*Sustainability is not a term I use, but ....*" was a phrase often used by all participants during the interviews and captures the lack of explicit awareness of the differences that were encompassed by the "new" sustainability narrative within Carepoint and highlights the lack of differentiation to the hegemonic narratives of waste.

The observation here is that the strategy for the new narrative was flawed because it contained no novel aspects that could not be resolved by the existing narratives' logics. Such novel aspects would allow the hegemonic narratives of concern about waste to be recreated to align and support sustainability concepts and meaning construction. Without alterations to support sustainability the result is that people being introduced to these new narratives did not need to engage in generative thinking and solution building because the existing models sufficed.

The polysemy of sustainability and equivocality

I suggest that the use of the term "sustainability" is problematic where it is applied to initiating or stimulating transformational change, especially change involving a paradigm shift and the rewriting of narratives of meaning (Starkey & Crane 2008).

Sustainability is a Tamara discourse in that it has many interwoven narratives in play. These act at the level of the individual and the organisation, stimulating each other.

There is no room here for new narratives to gain a foothold. New narratives are seen as adding to the problem of equivocality that Weick (1995) suggests is fundamental to sense-making – a function of too many choices rather than too few.

On its own, this research highlights that the term sustainability is ambiguous, as it does not describe a paradigm or frame of reference. This ambiguity can be seen in

Keisha's narratives where sustainability is applied to three different contexts, has three different possible trajectories of enactment, and there is a conflation of the terms sustain, sustainable and sustainability. Only in her "ideal" is there an explicit inclusion of environmental (green) awareness.

In Chapter Two I discussed the multiple definitions in use for sustainability discourses, and in studying Keisha's sense-making of sustainability a key problem was her juggling of multiple narratives of sustainability, some of them at odds with each other. This ambiguity of definition and their associated understandings provides a barrier to shared meaning construction and decision making and subsequent actions based on this. The term sustainability needs to be linked to a context and if that context is not prescribed then the sense-maker is free to ascribe it to any context they choose, not necessarily the intended context around which a dialogue develops or is intended to develop. In Carepoint's case the intention was to develop a dialogue on ecological sustainability.

This problem with making sense of sustainability has been long identified in the literature. Gale and Cordray (1994), exploring the categories of meaning that sustainability had in natural resources debates, raised the concerns that sustainability was too loose a term and that its definition and meaning needed tightening and constraining. At least the frame of natural resources bound Gale and Cordray's identified meanings, whereas Keisha's meanings of sustainability are less constrained.

The act of making sense of sustainability presents too much choice. "The problem is that there are too many meanings, not too few. The problem faced by the sensemaker is one of equivocality, not one of uncertainty" (Weick 1995, p. 27). Therefore the term sustainability on its own can be perceived as inhibiting change readiness because it presents the sense-maker with polysemy, with competing priorities, not only from multiple contexts to which the term is applied, but also from the paradoxical imperatives inherent in its definitions and understandings that sets a tension between maintenance of existing frames of thinking and acting and the need to transform those same frames to enact positive ecological outcomes.

A resolution to this problem of equivocality in the usage of sustainability is to qualify the term. Put more strongly, to deal with the polysemy inherent in the term

sustainability requires a speaker to be clear which meaning they would like the listener to follow, for example, being explicit about what is expected from ecological sustainability.

From the Corcon Experience – Moral Responsibility to Others

At the heart of ecological sustainability is an imperative to re-create our engagement with nature that is shaped by new and different moral responsibilities to nature. The findings from this research suggest that moral dissonance is an important influence on the way in which individuals in organisations approach the adoption of sustainability. As part of the sustainability adoption process, Corcon initiated the creation of a new organising narrative structured on a new set of corporate values in order to create a new moral compass for the organisational change project. Moral dissonance came when participants needed to reconcile their personal values and established work practices with the values and norms associated with the new organising narrative. This moral dissonance initiated retrospective meaning construction for sense-making (Weick 1995) and stimulated the creation of moral distance.

Moral distance arises in sense-making situations that trigger tension between what is being observed and taken as an implied need to change compared with the individuals' unifying narratives (Ellos 1994). Moral dissonance applies a value judgement of right and wrong against the new criteria, which compares the new criteria against a background of complex factors. The adoption of sustainability is a complex change phenomenon to replace extant discourses through the introduction of new ideas about engaging with nature. More particularly these new ideas reflect our moral obligations and moral responsibilities of undertaking a new relationship with nature or in other words a new relationship with the Other.

The argument developed is that organisational member responses to CS and CSR implicitly recognise the dissonant ethical nature of this engagement. Members have developed discursive strategies to mitigate this moral tension, for example, the actions of moral disengagement presented in Table 5.2. This would seem to indicate that organisational members recognise the imperative of conforming to the logic of ecological sustainability but it does not necessarily indicate whether organisational members feel in the wrong or have been made to feel in the wrong for their intended

or actual actions. Exploration of this distinction of "the wrong" for organisational responses to ecological sustainability invites further investigation.

The organisational discursive practices toward CS and CSR are structured on mechanisms of moral distance to neutralise the possibility of moral dissonance occurring or to provide a means of prescribing resolution of moral dissonance should responsibility for the Other arise. Examples of such structural responses to CS and CSR that intentionally set up moral distance by objectifying the Other lying beyond the normative moral boundaries of the organisation have been described in the processes of amoralisation (Crane 2000) and the adiaphoric actions of organisations (Jensen 2010). Adiaphoric actions for Jensen (2010) are those organisational actions "declared as exempt from moral judgment and moral significance" (p. 432). He notes that the term comes from the Church where it originally meant that a belief or custom had neither merit nor sin and therefore the Church was indifferent towards it. Jensen asserts that in companies the very processes of organising are best described as "demoralising" (p. 427). These demoralising processes are characterised by discontinuous episodic reassembly, diffuse yet pervasive power structures that encourage conformity often via covert fear and objectification of functions, tasks and roles that depersonify people (inside and outside the organisation): "this context makes it hard for individuals to take increased moral responsibility" (p. 431). Crane's (2000) amoralisation extends Jensen's structural depersonalisation to encompass the appropriation of discourse to amplify moral distance to the Other. For example, in the Corcon interviews, participants acknowledged that behaving in environmentally responsible ways was important for them, their organisation and society. These espoused personal values were set in the context of organisational and institutional values that were not always aligned to positively support ecologically responsible actions. This gap between the espoused personal values of the participants and the day-to-day organisational practices I suggest created a dissonance leading to practices of moral distance.

Mechanisms of moral distance (Bandura 2007) are derived from intentional actions to justify the continuation of business services and products that are known to cause harm to the Other. These situations form one end of a moral action continuum bounded by explicit and implicit reactions to situations that initiate responsibility to

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the Other. The claim made by Corcon participants that "we are hostage to our clients" captures the views of the participants that they and their organisation were practically and morally ready to act in ecologically responsible ways but what was preventing them from doing so was the lack of environmental responsibility of their clients or those organisations that actually commission their projects. Organisationally, they considered Corcon to be ahead of the institutions within which they operated and therefore Corcon was acting responsibly even though they were frustrated by not always being able to act in the best ecological ways. By setting up a comparison with the Other, their clients, that shows the Other in a bad light, "We are hostage to our clients" is one form by which we enact moral distancing.

On this perspective the Brundtland definition of sustainable development (World Commission of Environment and Development 1987) tackled the problem of moral distance in its dictum of considering future generations. This definition is asking us to overcome the temporal, spatial and relational distance that enables us, through mechanisms of moral disengagement, to disown an Other. I suggest that this request generates two challenges to meaning systems in organisations and individuals. To focus on the Other is the first challenge. The second challenge is to change existing practices in ways that change production and consumption cycles such that they no longer have a negative impact on the environment and society. These two challenges to meaning systems generate sense-making that stimulates re-evaluation of those meaning systems.

There is a paradox that organisations face when attempting to confront these two challenges to undertake change for sustainability. This paradox is defined by the ways in which we both embrace and reject dissonance. Dissonance in the sense that has been discussed in this chapter is a meaning making event through which learning and potentially new actions take place (Hendry 1996; Latour 2005; Rogers 1995; Tsoukas 2009). If we look at the broader concept of cognitive dissonance, then for practices that require innovation and creativity cognitive dissonance is approached as a positive and desirable attribute that prompts double or triple loop learning, which lies at the heart of transformational change. The counter to this positive support for dissonance as an important mechanism for creativity is that the reaction to dissonance (Jermias

2001; Thomas & Lamm 2012) may instead stimulate resistance to change and affirm a preference to remain with the established meaning systems.

The moral dissonance triggered by ecological sustainability also raises ethical questions about responsibility to the Other. The Other lying beyond organisational boundaries raises practical questions about strategies for how we respond to pressures that demand re-creation of our organising narratives. This is very much a problem of meaning construction and how we make choices about who and what is inclusded and excluded in new constructions to our organising narratives. Ecological sustainability poses significant challenges to meaning systems of individuals and organisations. It not only demands that they question their underlying assumptions and values but also requires them to take responsibility for the Other.

When enacted, moral distance is subtle, it is accepted as a natural way of speaking, thinking and acting. Organisational language and categorisation reinforces the boundary defence mechanisms that underpin moral distance through explicit categorisation of the exclusion of nature. Crane's (2000) exploration of the device of amoralisation demonstrates how organisational discourses privilege exclusion when dealing with "the environment" by denying it moral status or by avoiding moral reflection. As Kearins et al. (2010) have argued, "business and academics are at risk of conflating environment and nature" (p. 3). Environment, they argue, is something that business thinks it can manage in contrast to nature, which is unmanageable. In this sense amoralisation can be extended to the use and application of the label "the environment" in organisational discourse. Choosing "the environment" over "nature" now highlights another example of moral distancing. This raises an interesting question for further research: is moral distance toward nature a defensive mechanism inherent in organisational discourses, and are the devices of moral distance entrained in the language and logic of organisational narratives?

This section has presented moral distancing as one of many factors influencing the inertia constraining adoption of ecological sustainability. I have shown how narratives developed within organisations can distance concerns for nature. The argument developed advocates the creation of frameworks of meaning that incorporate the Other, in particular, the natural environment. This call for inclusion of the natural environment (the Other) reawakens the advocacy of calls by Starik (1995) and

Shrivastava and Hart (1994) to recognise the natural environment as a legitimate stakeholder in organisational affairs or as an important voice in human activities. Starik and Rands (1995) strongly advocated giving ecosystems higher priority than organisations. I contend this situation of marginalising of nature remains unchanged and what is needed is a radical overhaul of the value we place on our relationship with ecosystems and a new moral responsibility to Nature (the Other).

From the Landcare Experience – Cooperative Dialogue with Nature

The sense-making in Landcare that led to the generation of ecological solutions was enabled by discursive processes, both implicit and explicit, that were created to resolve the environmental problems facing each landholder. I have grouped these discursive processes into three categories and will discuss these more fully in the following sections: the influence of organising narratives, the dialogic engagement with nature, and the socially interactive processes of sense-making that led to resolutions to the environmental problems faced by the landcarers".

Influence of organising narratives

I follow two organising narratives (Harper 2001) that influence the engagement of landholders with their physical environment and the way in which they approach their day-to-day activities supporting their livelihood. These two narratives I have categorised as "a naturalised narrative" and "an emergent narrative". The naturalised narrative is the imported colonial narrative I call "ecological exploitation" that in my view continues to be the dominant narrative influencing communities and organisations[18]. The other narrative that I follow I have called "ecological repair". I argue it is an emergent narrative in response to the environmental shortcomings inherent in the narrative "ecological exploitation". The narrative of "ecological repair" is both a response to the actions and changes of the community as they interact in new ways to their landscape, and an enabler of looking at that landscape with a different lens, thereby facilitating further change and the development of new initiatives in the community.

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[18] A detailed evolution of the naturalised narrative is developed in Lines (1991) in relating the history of European settlement in Australia and the attitudes to the natural resources they brought with them.

As organising narratives, ecological repair and ecological exploitation frame our worldviews and impose boundaries on the opportunities and constraints that govern our activities and that restrict our understanding of what is real. I have suggested that the emergent narrative of ecological repair is a creative response by landcarers to resolve the problems that are inherent in the dominant narrative of ecological exploitation and that the resolution of these problems cannot come about until there is some form of shift in the organising narrative. The research in Landcare points to a relationship between change and narrative (re)construction that has broad application for organisational and social change. I propose that change in social systems comes about with the rewriting of the organising narrative and that minor changes require incremental adjustments within the existing narrative whereas major change requires replacement of important parts of the existing narrative to form an emergent new narrative. I argue that the emergence of a new organising narrative is necessary to resolve unresolvable problems inherent in the established, more dominant narrative. In this sense, the change in the human-nature relationship from an exploitative to a cooperative one is a necessary paradigm shift (Kuhn 1970), where new paradigms are created to answer the unresolvable problems inherent in a previously established set of scientific understandings.

Dialogic engagement with nature

My findings add support to the view that the landscape has its own narrative and is also an active stakeholder (Starik 1995) whose visibility and importance becomes more prominent with time. The landscape is not passive; it is an actor in a complex network of relationships (Callon 1986) that requires landcarers to learn new ways of communicating and interacting with it. As a stakeholder the landscape is not homogeneous, but is localised and engages in a dialogue with the Landcare groups that is observable through knowledge creation and action focused on creating sustainable land management practices that are locally attuned and appropriate. I argue therefore that landscape itself enacts its narrative. I suggest that the Landcare narrative is characterised by such a reflexive response (Hardy & Clegg 1997; Rhodes & Brown 2005), stimulated by a conscious learning process (Kim 2004) engaged in over time by Landcare members as they respond to their landscape. Through micro-narratives the landcarers converse with the narrative of their landscape in a dialogue that contributes to the reconstruction of their ecological narrative. Reflexivity is the

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means by which the landscape engages with landholders' narrative(s), often following this pattern:

> *When we bought this property it was the beauty of the area that captivated us and it was some time later that we realised that the remnant rainforest on our block needed looking after.*

This stimulates a cycle of engaging experts in local vegetation, bush regenerators, that leads to increased understanding of what an ecologically sustainable environment should or could be.

I argue that the process that landholders undertake when engaging with the landscape may be better described as reworking their narrative and adjusting it in ways that fit into the wider sense-making of ecologically sound land management practices of their Landcare community. The steps of knowledge acquisition and sharing described above are the mechanisms of narrating the world, of adding to and retelling the story of your land, how it relates to the land of your neighbours as an integrated system. For the Hunter such changes in narratives included the story behind long-stemmed root stock as a strategy to prevent erosion by water and wind. In the Northern Rivers, such changes in narratives included the story behind linking the isolated remnants of the big scrub to counter-intuitively improve productivity of farmlands.

This dialogue with the landscape takes many forms. Traditionally the colonial narrative has been about controlling the environment rather than collaborating with it. The Landcare lesson is twofold. The first is to provide the space for new meaning construction to take place and this is what the creation of Landcare did. The second is to engage in collaborative dialogue to perceive the environment differently, to understand its diverse and unique character and needs and to act responsively and responsibly in relation to it. These new ways resulted in a different approach to land management and valuing the land; the aesthetics of good farmland changed, it now needed large patches of native forest to break up the farmland and this reforestation improved the beauty of the landscape and also increased the fertility of the land.

Farmers now relied more on working with nature rather than against nature or more particularly over nature. Whilst the livelihood from a productive farm was still important it was also balanced with a recognition that the landscape needed looking

after as well; there was a reciprocal arrangement needed between landholder and the land that benefited both[19]. I suggest that this change in practice and approach to farming was enabled by a new (re)construction of the land supported by a new narrative: "ecological repair".

The relevance to narrative creation and in particular the dialogue of the landscape is that landcarers have pursued a deliberate reflective process to better understand what is needed to restore their lands. My argument is that the natural environment communicates in indirect ways that need interpretation and that this interpretation is fashioned by our narrative constructions influenced by our worldviews. For example, the focus of land management practices in the Northern Rivers area has, over the last hundred odd years, shifted from the primacy of production to the primacy of regeneration. In the Hunter, production is still a primary force, but production has incorporated the lessons of unsustainable farming and its associated erosion and salination to create a changed form of farming and a regeneration of the land in what we might call sustainable farming practices.

There is shared recognition across both case regions that an imported/exotic model of land management has debilitated the environment and that this model needs to be re-imagined. The resulting shift to regeneration and sustainable farming practices is the result of this re-imagining and is in my view only possible because the narrative of "our" engagement with the land has been recreated to provide a new map to guide local action.

The Landcare experiences of working *with* rather than *on* or *over* nature provides an example of successful change to correcting environmental problems at a systemic level that may be adopted by other organisations. The success of the Landcare relationship with nature addresses the problematic of the wider research question of how the narratives of business may be rewritten to dialogue with nature on an equal footing.

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[19] I need to make the point here that not all farmers adopted Landcare approaches. The Landcare discourse, because it challenged farming practices, is a contested one and there are individuals and groups that did not take up ecologically sustainable practices advocated by Landcare and who claim Landcare has not been successful.

The discursive process of sense-making

The research described in this section adds to our understanding of the relationship between sense-making, narrative and the processes of organisational change. It supports the argument that new narrative happens through sense-making as an iterative process. The narrative of "ecological repair" that is followed in this case is not a story told and retold in its entirety by the communities that were researched. "Ecological repair" is a narrative that emerges through fragmented telling both in exploratory ways that are consistent with Boje's (2001) concept of antenarrative as prospective storying and meaning construction and in reflective ways such that the narrative comes together when assembling each of the fragmented texts (Czarniawska 1998).

My research has revealed a dynamic connection between the micro-narratives used to describe and define the landscape and the way people engaged and identified with that landscape. The act of developing an implicit narrative frames our understanding of the environment, governs our relationship with our environment and allows change to take place through sense-making processes of knowledge acquisition and enactment. I also argue that the landscape itself communicated to the landholders and in so doing contributed to the emergence of the narrative of "ecological repair". This dialogue between the landscape and landholders was (is) a slow process that I characterise as a collective cue(s).

Collective cues are different catalysts to the currently dominant understanding of sense-making cues as being dramatic and clear instances of pattern disruption (Hemms Mills & Weatherbee 2006; Maitlis 2010; Weick 1995). The cues in the Landcare case study were subtle and each could be ignored or glossed over when considered independently. These individual cues were characterised by two temporal aspects. Firstly, they acted subtly on the sense-maker over considerable periods of time. Secondly, the subtlety of these cues meant that their recognition, by Landcarers, as disruptive cues to existing patterns needed reflective and questioning minds, which are processes that generally delay sense-making. In addition to their two temporal aspects, these cues required another quality before they became an acknowledged disruption that needed attention: they needed to be aggregated. To make an impact the

cues needed to be brought together to collectively initiate the search for ecological solutions.

My argument is that this engagement with the land is a process of enactment (Ford 2002), a creative process of action-perception-sense-making, occurring at the level of micro-narratives, that uses knowledge of past experiences to build new knowledge through a process of narration (Boyce 1996; Cunliffe et al. 2004; Hardy et al. 2000; Luhman 2005; Rhodes & Brown 2005; Tsoukas & Hatch 2001).

The construct of micro-narratives (Perey et al. 2007) embraces reflective and exploratory utterances and texts that are used in the discourses of everyday communication. This interdependency of past, future and present, in these everyday discourses, is in my view essential to understanding sense-making, a view I share with Boje (2008). Importantly this research indicates that the recognition of the impoverishment of the land is a cue that is similar to but more subtle than the cue of the changes in the behaviour of the fire in Mann Gulch that confronted the fire-fighters there (Weick 1993). The impoverishment of the land may lack the drama and immediacy of the Mann Gulch fire but it is no less significant for enacting sense-making within Landcare.

By examining the micro processes of change, captured in the micro-narratives, as they occur through the locally situated dialogue of both human and non-human actors (Callon & Latour 1992; Newton 2002; Starik 1995) in the two Landcare regions, I was able to understand some of the ways in which knowledge of sustainable land management techniques had been translated through the Landcare regional organisation networks. My analysis tells me that micro-narratives of change emerged as a direct result of the overarching organisational aims of Landcare yet the ways in which this has been shaped by the physical environment and the purpose of the land management activity reflect regional differences.

The primary enabling structure of these micro-narratives is the organising narrative of ecological repair that emerges from the creation and interconnectedness of the micro-narratives in everyday use. I argue that the emerging narrative is implicit and created simultaneously (Boje 2004, 2008) with the explicit knowledge processes described above, and yet, we can only know this constructed narrative retrospectively (Weick

1995) through processes of reflection as we consciously make sense of our actions. Key to my argument here in relation to organisational change is that the enactment of this implicit emerging narrative is the process of organising. My findings here concur with the observation of Abolafia (2010) that, "the emerging narrative is a text that is the basis for action" (p. 360). As Boje (2008) points out, the performance of stories is important to sense-making and interweaves individual and institutional memories that result in organisational actions, processes and behaviours. My work also supports another of Boje's (2008) observations, namely that there is no single linear cohesive organisational narrative; instead, there are multiple narrative streams and a mixture of antenarratives that are continually being revised and it is this process of co-construction that influences organisational change.

Ecological solutions need ecological narratives

In this case, Landcare groups from two regions of Australia, I found the development of ecological solutions was facilitated by four characteristics of narrative construction:

1. Knowledge was treated as a shared resource for collective not private gain;

2. Sense-making as I observed it did not fit the leading model whereby dramatic cues initiate enactment; the sense-making was characterised by subtle incremental cues that collectively stimulated enactment through reflexivity;

3. Nature played (plays) an active role in creating the narrative of ecological repair; and

4. Change came about through an active iterative process involving a rewriting of the narrative that contributes to the schema of the sense-maker (Harris 1994).

Hence this case makes an empirical contribution to our understanding of how sense-making occurs as a continual reflective process. My finding that narrative enactment and the process of organising are interconnected builds on the understanding of sense-making as an iterative process of observation, categorising and action guided by mental models as outlined by Weick et al. (2005). I have offered examples from Landcare in which significant change occurs through the aggregation of small subtle cues and suggest that these patterns of sense-making, which make explicit the relationships between narratives in organisational settings and the nature of their

ongoing influences on individual and organisational actions, are able to be found in all processes of organising.

In the Landcare case, knowledge acquisition and sharing was critical to the success of sense-making that created ecological solutions which overcame the inertia characterising the ecological problematic I set out in Chapter One. The role of knowledge allowed the disruption of the cue to be resolved. In the process knowledge was never considered to be the property of an individual, it was always considered to be common property. This allowed innovation through experimentation and adaptation to local requirements to be made. The goal was to repair the land and this could only be done collectively through the aggregated action of individual properties in a different context set by the landscape.

In this case, I have also shown how relationships between Landcare stakeholders has led to the creation of a new narrative that enables local communities to improve the viability of their ecological environment. My observation was that stable patterns of meaning are slow to change and my research findings have led me to conclude that for organisational change toward sustainability to take place, there must be an active rewriting of the story within which we situate ourselves in relation to our environment. This is a position also strongly supported by Starkey and Crane (2003, p. 232) in their contention that sensitising management to green issues requires active construction and dissemination of a narrative presenting a new environmental paradigm that can stimulate change through sense-making. This suggests opportunities to investigate the relationship of narrative stability with the concept of change readiness and what this means for adopting sense-making approaches to organisational change for sustainability.

Whilst this case study investigated two organising narratives, ecological exploitation and ecological repair, there was a third narrative in the margins of the interviews of the Landcare project: the suppressed pre-colonial Indigenous environmental narrative. I comment on this narrative now for what I suggest may be a hierarchy of power relations in representational voice between these three organising narratives, the naturalised, the emerging and the suppressed.

In the Australian environment the colonisation by Europeans pushed aside the Indigenous narratives and supplanted them with an imported one derived from experience with European ecology (Sveiby & Skuthorpe 2006). However, Indigenous pre-colonial narratives did not disappear. Indigenous populations and their cultures and narratives did not die out but continued, albeit dominated by the introduced colonial culture and its narratives. With the coming of Europeans there is a shift in the power relations of extant narratives where the Indigenous voice has been relegated to the background. The consequences for narrative and discourse studies of such a shift in representational voice has attracted increasing attention from organisational researchers (for example Boje et al. 2004; Buchanan & Dawson 2007; Grant & Iedema 2005; Rhodes & Brown 2005; Starkey & Crane 2003). An area of interest for me is the question of how suppressed narratives influence dominant narratives, and what changes to both the suppressed and dominant narratives result from this influence. For example, in this case study is the emerging narrative an outcome of the interaction of the suppressed and naturalised organising narratives? Did the more holistic approach to engaging with nature, found in the suppressed Indigenous pre-colonial narrative, influence the emerging Landcare narrative of "ecological repair"? If so, how? I suggest further investigation of the interaction of competing organising narratives has application to understanding and working with organisational change and particularly what this may mean for change for sustainability.

The pre-colonial Indigenous environmental narrative is also important to my argument that a new ecological imaginary needs to be created to replace the existing economic imaginary. This indigenous narrative I will suggest in the next section is grounded in an extant ecological imaginary: the Australian Aboriginal concept of Country.

Responding to the Success and Failure of TBL Sustainability

I have presented ecological sustainability as contested discourse with no dominant preferred definition, although I have suggested that it is interpreted through economic discourses and I have argued that a recognition of redressing environmental damage is a loose unifying aim. The environmental discourses that Dryzek (2005) identified have categorised particular systems of meaning that have organised the understanding of environmental problems that individuals and their organisations face and the

solutions that they support for correcting those problems. I have also argued that, with the exception of selected radical green discourses, the majority of ecological sustainability discourse accepts the ecological imaginary of industrialism and consumer capitalism. This acceptance of the ecological imaginary of consumer capitalism contributes to failures to find solutions to the ecological problems facing humans because it does not address transformative/radical change to the human-nature relationship. It accepts the principles of what exists and attempts incremental repair to consumer capitalism's social imaginary: the economic imaginary. This multiplicity of meanings creates a context where individuals must resolve polysemy in order to take action; for ecological sustainability, individuals simply confront too many meanings, which hinders them taking effective ecological action. What I propose is that if polysemy is too great then decision-making will be difficult and what will be favoured is retention of the status quo. I raise the interesting question of where and when polysemy shifts from productive to counterproductive multiplicity of meanings.

Whilst the issues of multiple meanings and the need for inclusiveness are not new to the sustainability literature I am introducing new insights into their effects and perhaps causes. I argue that ecological sustainability also calls for a change in moral obligations between actors in ways that are more inclusive and democratic than those that define existing relationships. This challenging of moral order to move from exclusive to more inclusive relationships with others, including nature, I propose to be essential if resolution to the ecological problematic is to be achieved. The implications for such moral order have been described as important to solutions for climate change, inequality repair in development projects and more equitable sharing of wealth in social and business settings. The mechanism of moral distancing was introduced to describe moral choices and the foundational moral order that individuals operate in.

This is especially true of human-nature relationships where greater equality of actors has been advocated (see Starik 1995). The argument being made for a changing relationship with nature suggests that a different appreciation of subjectivity is needed for the emergence of new ecological imaginaries. Landcare provided an example of how tacit awareness of nature's communication contributed to the creation of a

narrative of ecological repair. This narrative of ecological repair is, I suggest, an indicator of mechanisms influencing the creation of new imaginaries through discursive practice.

In the next section I use the discourse of TBL Sustainability as both a straw man for sustainability and as a label for the discourse surrounding the three dimensions of sustainability: economic, social and environmental. TBL originated as a device to help individuals and organisations understand the breadth and depth of sustainable development implementation and as the basis for creation of comprehensive sustainable development performance measures (Elkington 1999). TBL Sustainability in business, I have argued, may also be forming into a discourse that is separate to sustainable development. The reason I suggest that TBL may be emerging as a separate discourse to sustainable development is based on its widespread use to describe sustainability action in organisations and literature that is starting to identify it as a distinct focus of attention for research and comment (examples include Darcy, Cameron & Pegg 2010; Maxwell, Sheate & van der Vorst 2006; Smith & Sharicz 2011).

The discourse of the three dimensions creates a powerful set of narratives, including TBL, that are shared and reinforced as individuals and organisations explore issues and implications for adopting sustainability practices. TBL owes its success and its failure to its inability to break free of the ecological imaginary of consumer capitalism. I contend that to create an ecological imaginary capable of redressing the sustainability problematic requires the injection of different ways of conceiving the human-nature relationship for modern societies. I propose one source for such ideas: the Aboriginal concept of Country[20]. Country presents a logic of engaging with nature that is for the most part incommensurable with Western thinking associated with industrialisation and our modern lifestyles. The different logic of Country has much to offer a re-imagining of the human-nature relationships that lie behind the sustainability problematic as I see it. I acknowledge that this is not the only source

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[20] In comparing the concept of Country with TBL Sustainability I am aware that the inceptions of these narratives are grounded in different contexts, culturally and therefore economically. Country represents a pre-industrial social system that is now engaging with capitalism and TBL Sustainability represents the current capitalist system. I make the point below that I am not advocating the normative adoption of the concept of Country for creation of the ecological imaginary I am arguing for. I am advocating that the concept of Country has principles that are relevant to modern societies which can help shape the creation of an ecological imaginary.

available and that it too can fall captive to a hegemonic discourse in the same manner that TBL has.

From the Indigenous Experience – Concept of Country

Any discussion of Aboriginal philosophies and knowledges quickly confronts problems of translation and inadequate language in English to convey new and often very different ideas. English words such as "country" or "dreaming", which are in common use in Aboriginal communities, do not convey to non-Aboriginal thinkers the richness of the meaning systems that are in use in those communities. These English words are inadequate boundary objects[21] (Star & Griesemer 1989) and whilst they operate as an interface between the Aboriginal and the European cultural understandings, they relate more closely to Oswick and Robertson's (2009) notion of boundary objects as barricades and mazes to the exchange of knowledge between these different worldviews. Given this constraint I will use these terms as they are in common use throughout society in Australia, but propose that there is an important project here for identifying new words that better convey, to the Western mind, the ideas that construct the concepts of Country.

Country is the term applied to the Aboriginal narrative(s) of identity. Country is a system defined by a physical place that links actors to their history, their future and their obligations to other actors in the network that defines their Country; Country is a pattern of intersubjectivity. In practice there are many Countries in the Australian landscape, each Country representing a specific cultural group.

The idea of Country has also taken hold in the imagination of Australian approaches to the land and a visible measure of this is the incorporation of the term Country into the title of the nationwide strategy for environmental management "Caring for Our Country" (Caring for Our Country 2010) initiated in 2008. Under the "Caring for Our Country" programme is the Indigenous programme "Caring for Country" (Caring for Country 2010) that is working with Aboriginal and Torres Strait Islander communities to build on Indigenous environmental knowledge to promote capacity building and

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[21] Boundary Object as defined by Star and Griesemer (1989) is an analytic concept inhabiting multiple social worlds that may be conceptual or physical. In each social world the object carries a different meaning but its structure remains recognisable across them and provides a means of translation across these intersecting social worlds.

employment throughout these communities. This chapter is not exploring these projects nor commenting on these projects beyond noting two points. The first that I have already introduced is the power of the concept of Country in the Australian context that is reaching out far beyond the Indigenous communities where it originated. In stating this claim I note that there is also a possibility that the concept of Country may, like the concept of TBL, be co-opted. The potential for capturing Country and changing its meaning and purpose is recognised particularly in Australian Indigenous communities where there is an active move to prevent this occurring[22]. The second point, which I shall explore more deeply in the following sections, is the principle of inclusiveness and relational obligation to the Other in Aboriginal thinking, which results in radically different personal narrative performances (Langellier 1999).

What is Country?

In Aboriginal Australia there are many Countries; each Country is surrounded by other Countries, their boundaries are fuzzy but known and respected. Country is particular to clearly identifiable geographic locations, it is anchored to unique aspects of the landscape and Country is also precisely situated in relation to the heavens (Mowaljarlai & Malnic 2001). Country is place and place is a storied creation where human agency is needed to continually recreate it through retelling the stories associated with that place, that Country.

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[22] This concern for the co-optation of Country by non-indigenous Australians was conveyed to me by several Indigenous interviewees participating in interviews and a workshop that I facilitated in a separate research project: Incorporating Australian Indigenous Perspectives in Education for Sustainability. The interviews and workshop for this project were undertaken in 2009.
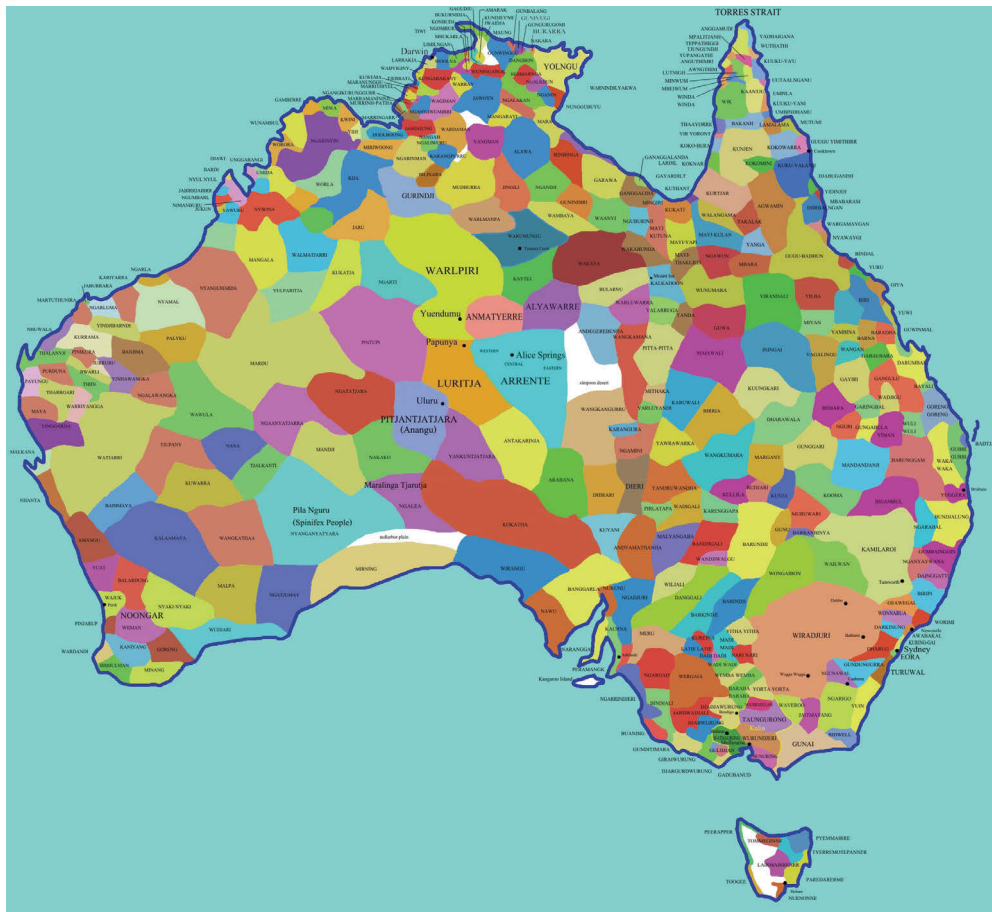
Figure 6.1: Cultural Map of Pre-European Aboriginal Australia

The first point and an important point to make, indeed emphasise, is that Country is living, Country is alive, Country is not something out there and it is not something wholly within, Country is life. Rose (1996) describes Country as a "nourishing terrain"; Country gives and receives life, it is lived "in" and "with". To be human is to be part of Country just as Country is part of every human. Within Country everything is alive and no one thing knows or can know everything. Country defines a system of interdependency amongst all "living" and "non-living" things where all relationships carry obligations on each actor to each other. For Aborigines the good of nature is paramount and this priority then cascades down through community and finally to the individual (Bolton 1981).

The second important point about Country is that the world was not created specifically for human beings although humans have a responsibility to care for Country. Caring for Country is an obligation on each individual to maintain the ecological, cosmological, spiritual and social stability of the system defined by their

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Country. However, in caring for Country the relationship between humans and other actors in Country is one of equality, not one of hierarchy. This principle of equality is scalable and extends to neighbouring Countries and beyond, to the neighbours of neighbours. The result is a complex pattern of interrelationships that map the "nourishing terrain" (Rose 1996) and that are continually in the process of creation and recreation. Country is particular to a place, it is specific and localised, and the Aboriginal knowledge system does not claim to universalise the knowledge and lessons belonging to their place onto other places, other Countries that are nearby, either adjacent or much further afield.

Country is not just land. It encompasses the heavens, plants, animals, geographical features, past, present and future, ancestors, creator beings, future ancestors, all of which are alive, all of which are inseparable (Weir, Stacey & Youngetob 2011). To know Country is to know the stories of how it came into being and to retell the stories so that life continues. It is also to know the many related stories that are particular to places, creatures and events, the actors that combine to make Country.

In the Aboriginal worldview Country that is "wild" is Country that has lost its story or is in the process of losing its story. In Australia examples of wild Country abound. They can be seen in landscapes that have been altered in visible shape and form by industrial agriculture, which literally wipes the story from the land, or landscape that has been altered by stock such as cattle trails that have caused erosion (Rose 2003).

Categorisation of Country does occur; I have referred to one categorisation of Country already: the categorisation of wild. Three other categorisations are in broad use: sacred, good and rubbish (Muecke 2003; Rose 2003). Sacred Country is spiritually and philosophically significant and is linked closely to ancestral life and creation. Sacred Country is saturated with stories of law and the moral and ethical guidelines and responsibilities by which society and individuals must operate (Stockton 1995). In a pragmatic sense, Sacred Country was also recognised as providing sanctuaries for life. This was Country that was not hunted in nor desecrated. Sacred Country in practical ways became refugia for all living things (Rose 2003) during hard times.

Good Country was similarly imbued with story, and had similar obligations to Sacred Country for its maintenance and wellbeing. Good Country may in many ways be conceptualised as the cultivated garden, the food bowl, of Aboriginal Australia.

Rubbish Country[23] stood alone. It was Country that was not relevant to the creation cycles, the life-cycles and the mundane day-to-day activities. Rubbish Country has no power because it has no story that is recognised as important, yet it still has a story. Rubbish Country whilst outside the realm of the living, in other words socially excluded, is nevertheless recognised as having potential to be integrated. Rubbish Country is recognised as being alive, but that life was outside the responsibilities and obligations of the society. It was alive for itself (Muecke 2003). That Country is a different way of thinking is identified in two metaphors used by Mowaljarlai, a traditional lawman from the Kimberley region of north-eastern Australia (Bell 1998; Stockton 1995). Mowaljarlai defined Aboriginal thinking as Pattern Thinking and labelled Western thinking as Triangle Thinking.

Patterns are about belonging, nothing is separate from anything else; everything belongs in a pattern. Triangle Thinking, however, separates everything from each other and creates hierarchies of categorisation and administration governed by money and power. Triangle Thinking cultivates ideals of "ownership" and "rulership" by the owner and operates through layers of management from a "big boss" down. Pattern thinking has no "big boss" (adapted from Stockton 1995, pp. 42-43).

To the Aboriginal understanding Triangle Thinking represents "the system of relationships for all patriarchal civilizations [and] reflects the power of the masculine One and its authority to own, control, and hold dominion over all else … Without a fully recognised and incorporated feminine, Triangle Thinking is inherently non-regenerative and therefore decadent" (Bell 1998, p. 127).

"To enter the thought world of the Aborigine is to enter a maze of networks overlaying networks" (Stockton 1995, p. 40). Whilst Country is place-specific it is always interrelated to other Countries through complex networked patterns.

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[23] The term "rubbish country" was also sourced from conversations in the workshop with Indigenous participants referred to earlier. It is a term they used to describe Country that had no place in their cosmology and schemas. Rubbish Country had also lost its regenerative capacity, it was considered to be wasteland yet paradoxically it was also considered to be capable of being valued and therefore reclaimed.

Imagine a pattern. This pattern is stable, but not fixed. Think of it in as many dimensions as you like – but it has more than three. This pattern has many threads of many colours, and every thread is connected to, and has a relationship with, all of the others. The individual threads are every shape of life. Some – like human, kangaroo, paperbark – are known to western science as "alive"; others, like rock, would be called "non-living". But rock is there, just the same. Human is there, too, though it is neither the most nor the least important thread – it is one among many; equal with the others. The pattern made by the whole is in each thread, and all the threads together make the whole. Stand close to the pattern and you can focus on a single thread; stand a little further back and you can see how that thread connects to others; stand further back still and you can see it all – and it is only once you see it all that you can recognise the pattern of the whole in every individual thread. The whole is more than its parts, and the whole is in all its parts. This is the pattern that the Ancestors made. It is life, creation, spirit, and it exists in Country. (Kwaymullina 2005, p. 13)

Whilst each Country shares similar structures they are defined by local differences that are particular to their landscape, and in this sense each Country, and actors within Country, is treated as a singularity. At a higher level there is also a recognition that each Country is not complete within itself and that whilst it presents unique knowledge it does not contain all knowledge, all knowledge being a property, an emergent property of the collective interrelatedness of all Countries[24]. This rich connectedness at multiple scales describes a fractal[25] relationship between the actors

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[24] Czarniawska's (1997) "action nets" and "organisation fields", introduced in Chapter Three, are useful ways of understanding and engaging with Country. These constructs allow us to recognise Country as constituted by shared meanings and that it is both a representation of the identity of an actor and the institutions through which the actor operates.

[25] Fractals are geometric structures that display self-similarity regardless of scale, and in mathematics the equations that produce fractals have an iterative quality where feedback is an important aspect of generating a new structure at a different level of observation and analysis (Mandelbrot 1982). Each fractal structure represents a whole within a whole and whilst we talk of scale in a linear sense with a linear logic, fractals are anything but linear. Fractals are coexistent, and all scales manifest at the same time and it is only the position of the observer in relation to the "fractal network" that changes – fractals are paradoxical. The problem that intrigued Mandelbrot (2006) and led to his creation of the concept of fractal was the "elusive notion of roughness" (p. 13), which fractals measure. The problem of roughness is that we have difficulty in specifying such geometries yet we can often readily recognise them when we come across them. Examples of fractal forms in nature include the branching structure of trees observable within a leaf, their branches and their root system. Mandelbrot (2006) also noted that culture has many aspects of roughness that may be described through fractals.

in the system of Country, where each actor's pattern of interconnectedness is recognised as both unique and similar to those of other actors and the whole irrespective of scale.

Ecological narrative performance

"Our understanding of nature and of human relationships with the environment are really cultural expressions used to define who *we* were, who *we* are, and who *we* hope to be at this place and in this space" (Greider & Garkovich 1994, p. 2; italics in original).

The two narrative environments discussed in this thesis, Country and TBL Sustainability, represent two radically different ontologies for human interaction with ecosystems. I am using TBL Sustainability as a straw man for the sustainability discourses (Dryzek 2005) that dominate organisational practices. In each of the case studies of this research project I have identified references to the sustainability discourses, particularly the discourse of sustainable development, that are used in day-to-day work. The narrative of TBL Sustainability deals with nature instrumentally. On this interpretation good stewardship will ensure that nature's resources are managed efficiently to meet human needs in perpetuity. The narrative of Country views humans as an intrinsic part of nature. On this view, using nature's resources to meet human needs in perpetuity carries strict obligations that are enshrined in law (Stockton 1995, pp. 60-61).

This intrinsic/instrumental divide between Country and TBL Sustainability reflects differing constructions of identity (Porter 2005) for actors in each of these narrative environments. Identity in Country is anchored to a specific location in the landscape, a known place that has a history, a present and a future. Related to this place are the social obligations that the actor has to all living things that are connected to their place. There are explicit moral obligations to support the Other and these obligations further reinforce the sense of belonging to place, to Country, an innate understanding that Aboriginals have of belonging "with". Belonging "with" means that an actor is part of every Other and every Other is part of that actor; all actors know the same thing(s) but from different perspectives. All actors have viewpoints that are in constant communication (Stockton 1995) from which emerges the storied landscape

that is Country. In turn Country forms the perspectives of actors in a constant performance of creation-recreation.

In contrast to the Pattern Thinking of Country identity, the Triangle Thinking of TBL Sustainability is located with the individual actor and is independent of place. Identity is the construction of the individual as a "free autonomous and rational being" (Mansfield 2000, p. 13). Belonging is defined by the individual's possession "of" or "over" other actors that in the process become objectified. Relationships with objects are categorised hierarchically and governed by temporal and spatial distance to the subject; the creation/existence of moral distance allows moral obligation to the Other to be ignored (Abelson 2005). The objectification and atomisation of the natural and social worlds in TBL Sustainability narrative(s) facilitates the justification of social and ecological destructive performances.

Within narrative environments "personal narrative performance constitutes identities and experience, producing and reproducing that to which it refers. Here, personal narrative is a site where the social is articulated, structured and struggled over" (Langellier 1999, p. 128). The social settings of Country and TBL Sustainability seem to polarise the narrative performances of their actors. Country is consciously performative: people sing to, talk to, converse with, and walk with Country (Perey et al. 2009). There is a dialogue with and within Country and the actors are conscious of the constitutiveness of their "real" performances to maintain their connection.

For TBL Sustainability, performativity of the narrative is not consciously enacted by individuals. Even with the extension of the economic to include environmental and social domains of action and responsibility, the worldview of TBL Sustainability remains in step with the performance needs of capitalist consumerism. Economic growth is linked to the rise of capitalist individualism where the "free market economy needed the autonomous individual" (Mansfield 2000, p. 174). The performativity of TBL Sustainability continues to privilege the economic over the social and environmental governed by the logic of setting moral boundaries (Chatterjee 2003) that define identity through social inclusion/exclusion. In their analysis of marketing as a boundary spanning process, Desmond and Crane (2004) comment on the dominance of "egoism" in business practices arising from the pursuit of self-interest in individuals, organisations and institutions defined by "moral

communities which constitute 'us' and 'them'" (p. 1227). The potential for excessive rule following in TBL Sustainability can also become an end in itself that "closes one to the face of the other" (Mansell 2008, p. 568) and that can lead to inhumane practices (Bauman 1989), depending on "whom [one] excludes from the category of humanity" (Bandura 2007, p. 9). I suggest that adoption of TBL Sustainability does little to change the boundaries of the moral communities to which it is applied; these communities remain inwardly focused and defined by exclusion of the Other, not inclusion.

This distinction between the boundaries of exclusion in TBL Sustainability and connections of inclusion in Country is an important one for the creation of ecological narratives to displace TBL Sustainability. The ecological success of Country is through connection to place and the subjective experience that all actors associated with that place share. One can never be alienated from place and this is what makes the understanding of Country to a Western-trained mind incommensurable.

For Indigenous systems everything is connected to something, and this logic is different to everything is interconnected. Connected to something entails specific obligations that are bounded by that relationship. For Indigenous systems meaning comes about through the patterns of interaction and these patterns are dynamic and need constant cultivation. Ecology has developed a similar proposition that has strong parallels and similarity to the interrelatedness of all beings in Country and of all Countries to each other: connectivity in ecology equates to a subjective experience for all species (Weir 2008).

Table 6.1 lists the distinctive characteristics of the narrative environments of Country and TBL Sustainability that have been introduced in this chapter. The characteristics of TBL Sustainability in Table 6.1 summarise the findings of my research discussed in the previous chapters. When paired with the characteristics of Country, the distinction between them, I contend, highlights the differences between an economic imaginary (Triangle Thinking) and an ecological imaginary (Pattern Thinking). The next section will discuss the possible direction that a new narrative based on the concept of Country may take.

Table 6.1:   Ecological narrative environments (modified from Bell 2010; Mowaljarlai & Malnic 2001; Stockton 1995)

Country – Pattern Thinking	TBL Sustainability – Triangle Thinking
Nature – Belonging "with" – intrinsic value	Nature – Possession "over" (belongs "to") – instrumental value
Place is fixed in the landscape – identity is linked to this place and its interdependencies	Place is abstract & ephemeral – identity is linked to the individual and their interrelationships with many places
Networked – interdependency of all actors	Hierarchical – scaled ranking of all actors
Holistic – Integrative – Moral obligation to others	Reductionist – Categorical – Moral separation (distance) to others
Ecological Conservation – how do I protect and maintain the environment (physical and social) of which I am part?	Ecological Exploitation – for how long can the environment (physical and social) support me?

Creating new ecological narratives

Exploring the social construction of nature and the environment Greider and Garkovich (1994) comment on how groups negotiate change to their worldviews:

> If the proposed change can be incorporated into their ongoing self-definitions and taken for granted symbols and meanings with minimal conflict, then renegotiation of their definitions of themselves will not be needed and socio-cultural impacts will not occur from the change. (p. 15)

This is the situation that characterises TBL Sustainability, which I maintain has not challenged the dominant narratives framing organisational ecological practices and behaviours. This lack of conflict has resulted in the integration and absorption of the narrative of TBL Sustainability into mainstream economic discourses.

The introduction of TBL posed three aspirations: economic prosperity, ecological equality and social justice (Elkington 1999, p. 2). I have argued it did so with the logic of Mowaljarlai's Triangle Thinking (Bell 1998; Stockton 1998).

For the aspirations of social justice and environmental equality to succeed the proposition of this chapter is that they require a different narrative environment to that occupied by TBL Sustainability. The impetus for the creation of TBL was to propose a framework to measure the "sustainable development" performance of institutions, organisations and individuals. The logic of TBL was to appeal to accounting methods, which would favour quantitative evaluation in the form of a ratio or numerical indicator that is expected from a "bottom line". The criticisms of TBL Sustainability

(cf. Bendell & Kearins 2005; Milne et al. 2008; Norman & MacDonald 2004; Springett 2003) point to its failure as a measure of sustainable development performance and in the process these critics have attempted to answer the question, how should we account for our ecological and social relationships, how should we account for sustainability?

Taking account of situations, systems or actions using accounting frameworks is a particular form of narrative (Gray 2010) that follows strict rules and conventions that lend themselves to linear logic. Accounting narratives as linear storylines exclude information in order to make sense of the situation within the boundaries of an accounting framework. This boundary of what is legitimate to include within an accounting narrative and what is not provides the debating points for many of the critiques of TBL Sustainability. Given that conventions for the economic are largely in place, what entails an "account of sustainability"?

Gray (2010) uses the term "accounts of sustainability" (p. 48) in a number of ways. At one level "accounts" are taken to mean the set of financial statements that support sustainability. At another level, it is an interpretation of the espoused intention of an organisation's sustainability aspirations, not necessarily their actual performance. Gray's development of the concept of accounts as narratives points to a deeper influence that narratives have over us. They allow us to account for and to give account of our actions or our narrative performances. I suggest that there is a third level of account that needs to be acknowledged and has been the underlying focus of this chapter, It concerns the explicit moral accountability of actors that is absent from accounting frameworks and also absent from TBL Sustainability.

I suggest to displace TBL Sustainability the new narrative(s) needs two qualities to facilitate change: moral dissonance and generativity. Moral dissonance promotes sense-making (Weick 1995) and the capacity for generativity stimulates new lines of thinking on the boundaries of existing paradigms that can lead to new paradigms. For example, a problem often associated with environmental discourses of change is the claim that environmentalists stimulate change through fear (Gourevitch 2010). Fear does meet the first quality of creating dissonance but often results in resistance to change for ecological sustainability instead of stimulating the second quality, generativity. Successful change promotes generative dialogue "that encourages

conflicts of meanings and creates opportunities to articulate alternative organizing practices beyond the existing discourses guiding organizational life" (McClellan 2011, p. 471). In creating dissonance, fear stimulates sense-making but without support for generativity the action of resolving the dissonance created through fear is often to remain within established patterns of behaviour. The complexity of this sense-making process stimulated by moral dissonance and generativity is noticeable in the actions and discourse of Corcon. Their ecological sustainability project challenged established patterns of working and relating to clients, staff and the environment, and whilst I argued that relationships with and obligations to those external to the firm have not changed, relationships and obligations to staff have altered and this is most notable in their concern for the safety of mine and construction workers reflected in the organisation's values and management actions.

The Pattern Thinking of Country outlined in Table 6.1 provides different symbolism, values and assumptions to support moral dissonance and stimulate generativity. In proposing the narrative environment of Country I am not advocating the adoption of Country as an ideal or as a normative replacement for TBL Sustainability. My proposition is that there are principles in its structure that are of value for organising the creation of a new ecological performativity and suggest that the new account(s) borrow ideas from Country and other sources upon which to model new narratives of sustainability. As a minimum, the values of place, connectivity and moral obligation that are foundations of Country should be adopted.

Place, connectivity and moral obligation are tightly interconnected. The discussion of Country has introduced the importance of these concepts within the Aboriginal worldview and each of these concepts has antecedents in scholarly research on sustainability in the social sciences. Place Identity Theory (Bonaiuto, Breakwell & Cano 1996) shows how people develop a sense of connectedness and self-efficacy in relation to their environment and will resist physical environmental changes that threaten their place identity. The role of "place identity" and "sense of place" has been investigated by Rooney et al. (2010) in the management of organisational change and in exploring the relationship of subjectivity and place to change individual patterns of consumption that are hindering progress towards sustainability (Hay 2010). Secondly, the role of connectivity as a way of being has been applied to a re-

examination of water management practices (Weir 2008) "to bring to the foreground our relationships with nature" (p. 153). The concept has also emerged in studies on the social networks embedded in Social Capital to highlight what support may be needed to "help translate the 'I' mentality to the 'we' mentality… so necessary in moving toward sustainability" (Stead & Stead 2009, p. 144). Finally, radical changes in our moral obligations to the Other have been linked to ethical decision making and personal responsibility to counter the moral distance inherent in bureaucracy (Muhr 2008), and to the extension of stakeholder theory to grant equal status to nature (Starik 1995).

In Country place is the keystone of Aboriginal identity; it provides a permanent reference point for all temporal and spatial performativity. The moral obligation of Country is "keep all alive" (Sveiby & Skuthorp 2007, p. 170), which presents a radical challenge to the dominant organisational and institutional worldviews and their narratives of account. Rose and Robin (2004) succinctly summarise this challenge:

> Ecosystems have their own integrity, their will to flourish. Living things other than humans have their own reasons, their own sentience, and their own will to flourish. Our challenge in engaging in new ways of thinking and doing connectivity is to embed the human and non-human, and to enlarge human conversations so that we may find ways to engage with, learn from and communicate our embeddedness in the world's own expressivity and will to flourish. (p. 6)

Chapter Seven

Creating New Ecological Narratives and the Conceptual Model of Metabolic Organisation

In the earlier chapters I have argued that whilst the three dimensions of sustainability is a narrative that has become broadly accepted by organisations and the wider society, as a narrative of change it has actually failed its intent of enacting sustainability through the implementation of sustainable development. I am using TBL Sustainability as a representative label for the sustainability discourses in the economic imaginary and it is the ecological interpretation of these discourses that I argue has substantively failed. This privileging of the economic whilst attempting to promote environmental and social dimensions is reflected in the strategy of the Brundtland (1987) interpretation of sustainable development, which was deliberately couched in language and symbols that were familiar to business and, more importantly, supportive of the economic rationality and logic of growth underpinning consumer capitalism. The result is that TBL Sustainability remains tied to economic realities defined by extant "economic" discourses that dominate current organisational practices rather than opening up potential for ecological realities. The continuation of the economic rationale of TBL Sustainability is, I claim, one factor contributing to the inertia to enact change for ecological sustainability in organisations.

I argue that there remains a gap for an alternate narrative(s) to take on the role of progressing the adoption of sustainability in organisations and wider society. If we are to progress to living in a society framed by an ecological imaginary then this narrative(s) needs to challenge the economic imaginary and to do this needs to work from different conceptual foundations to those of TBL Sustainability. To facilitate the creation of such a narrative to challenge the economic imaginary I propose a conceptual model to fill this gap; I term this model metabolic organisation.

I shall start with an overview of the sustainability problematic, then present the concept of metabolic organisation and follow on with an introduction to the current research field that provides context and a foundation to develop the model.

The Sustainability Problematic – its Narrative Setting

I started my exploration of change for sustainability with an outline of the Anthropocene, a term increasingly being used by scientists and others, that is currently under review for formalisation as a new geological epoch classification. As a geological period the Anthropocene validates claims made over the last century by environmentalists of the imprint of humanity on its global ecosystem(s). It is to redress the detrimental systemic impact that humans are having on ecosystems that the discourses on environmentalism are focused on. I have drawn on Dryzek's (2005) categorisation of environmental discourses to identify the nature of the arguments being developed and applied by individuals, organisations and wider society to engage with environmental problems and issues.

The environmental discourses all focus on change, and their arguments range from philosophies and beliefs advocating a continuation of existing practices of natural resource exploitation, claiming that human ingenuity will overcome any problems that arise, through to concern about the finite limits of the planet and its ecosystems being incapable of supporting growing human demand and advocating radical curtailment of human ecological activities through restructuring of societal values and behaviours. Dryzek (2005) identifies two environmental discourses that he groups together as sustainability discourses: sustainable development and ecological modernisation. I extend this grouping of sustainability discourses to include the problem solving and limits discourses in organisational and societal approaches to ecological sustainability.

Even though my focus is on changes to organisational sustainability I link this to change for sustainability in societal settings; my argument is that organisations do not stand apart from their societal settings, that there is a close interdependence between the two. This understanding has a long history in management and theorising and is captured in the discourse(s) exploring CR or CSR, which examine the obligations organisations have to the society (societies) within which they operate. The resurgence of societal awareness of environmental concerns following Rachel Carson's *Silent Spring* led to the creation of the most widely accepted definition of sustainability, sustainable development, the Brundtland definition (World Commission of Environment and Development 1987). I suggested that the Brundtland definition is a watershed marking the application of sustainability in its modern usage.

Sustainable development is now widely considered a process of activities to progress human wellbeing in all communities and sustainability is taken to be its goal. I noted that sustainable development is the environmental discourse most widely adopted by organisations across all settings, government, not-for-profit and profit driven organisations.

Sustainable development has a number of aspects that are important to understanding its widespread adoption. The first is its continued support for the logic of growth that is a defining feature of capitalism. Growth under the umbrella of sustainable development must be tempered such that organisational actions do not degrade or damage the environment in ways that would inhibit future generations being able to share those same environmental resources. This moral imperative to consider others is an important contribution of the sustainable development narrative and is reflected in the debates in CR and CSR discourse. Sustainable development is also framed using a number of dimensions for evaluating and relating to others, the most widely applied are the social, ecological and environmental. There is also a fourth dimension that is identified by the United Nations (UNESCO Teaching and Learning for a Sustainable Future 2010), the political, which for convenience in this thesis I incorporate with the social.

The expectations of organisational responsibility to wider society have since the Brundtland definition expanded to incorporate environmental issues into CSR discourse. The literature now identifies two discursive streams within the body of corporate responsibility literature, CSR and CS that I treat collectively as CS/CSR discourse. Whilst both CSR and CS incorporate environmental responsibility into their remit they do emphasise different dimensions of sustainability. CSR tends to privilege the social dimension whereas CS tends to privilege the environmental and both generally frame and couch responses in terms of the economic dimension. For example, the business case for sustainability attempts to provide a rationale for supporting ecological sustainability that can be accepted using economic measures (Ambec & Lanoie 2008; Dyllick & Hockerts 2002; Salzmann, Ionescu-Somers & Steger 2005).

The context for sustainability that I am describing reflects a growing awareness of ecological problems that humanity faces and a growing acceptance that human

intervention is needed to prevent an ecological crisis from developing or from worsening. This context is marked by numerous sustainability discourses and a plethora of sustainability definitions that individuals and organisations must reconcile before undertaking an appropriate course of action. This profusion of claims highlights another key finding that I argue significantly increases inertia for change for sustainability: the polysemy of meanings that individuals must navigate in order to make sense of sustainability.

Research presented in this thesis highlights that polysemy of meaning is a key factor affecting the inertia of adoption of sustainability. The research question I have presented explicitly focuses on ecological sustainability to make it clear that the environmental dimension of the sustainability discourse is important to what I understand sustainability to mean: an environmental discourse. Drawing from my research, my claim is that had the widely accepted meaning and definition of sustainability been understood to not only include all three dimensions but that these dimensions could not be deconstructed and treated separately, I would have no need to qualify sustainability with the label ecological. Such qualification of the intended meaning of sustainability is a point I raised when discussing the sense-making of Keisha and her attempts to reconcile the various interpretations and meanings of competing and seemingly contradictory sustainability discourses in her workplace.

The dimension that does not seem to need qualification when using the term sustainability is the economic. I have noted above that the business case for sustainability attempts to rationalise the social and environmental dimensions in ways that will make economic or fiscal sense. There is a body of work that challenges the dominance of accounting language (Gray 2010; Roberts 2003) and argues that new language and symbols are needed for sustainability adoption. The language of accounting and economic responsibility across organisations in society reflects the pervasive influence of the economic reality of Taylor's (2004) modern social imaginary.

I have claimed that Taylor's modern social imaginary may be best described as an economic imaginary. As an economic imaginary it privileges an environment, "a world", that wider society understands and accepts as an economic reality. The unquestioned economic reality governs and rules all decision making and frames all

meaning making that people derive from their experiences. If one accepts the economic imaginary as the frame that shapes sustainability thinking then the conclusion that may be drawn is that for sustainable development and the sustainability discourses more broadly, the economic dimension will be privileged and will influence all attempts to make meaning of new or different situations.

My argument has been that sustainability discourses rarely challenge the economic imaginary and therefore attempts to adopt and to implement ecological sustainability either fail or encounter some form of resistance. It is such a situation I have labelled the sustainability problematic that includes not only resistance to the implementation of ecological sustainability but also the difficulties in understanding what ecological sustainability means and therefore how to progress towards it. This I suggest highlights another key factor contributing to the inertia to engage in change for ecological sustainability, the modern social imaginary.

The Sustainability Problematic – its Enactment

I am not claiming that there has been no attempt to organise action to resolve the ecological crisis. I am claiming that what action has been organised to date has failed to create sufficient momentum to effect change needed at all levels of society to reverse the deterioration of the natural environment caused by humans. It is this lack of momentum, the inertia that characterises the inadequacy and inability of appropriate social responses at all levels of society to resolve the current ecological crisis, that I have termed the sustainability problematic.

Drawing on Taylor's (2004) concept of the social imaginary, I introduced the concept of the ecological imaginary and have argued throughout this thesis that a change in the social imaginary (ies) is needed if the ecological crisis is to overcome the inertia that characterises the sustainability problematic. The proposition supporting my claim is that the imaginary presents constraints and barriers to problem solving and actions, in similar fashion to the constraints and barriers that Kuhn (1970) identifies amongst scientists negotiating change in paradigms. I have argued that Taylor's social imaginary of modernity may be better labelled an economic imaginary, grounded in the post-mediaeval changes in Western thinking and socialising emerging from the Renaissance and the Enlightenment. Taylor (2004) makes the claim that a strong

defining characteristic of modernity is the unquestioning support for the logic of economics as representative of reality, "our coming to see society as an economy, an interlocking set of activities of production, exchange, and consumption, which form a system with its own laws and its own dynamic" (p. 76).

The power of the economic imaginary to influence and constrain sustainability solutions is best captured in the concept of TBL Sustainability discussed in Chapter Six. It is the ecological imaginary that I am claiming is the counter to the economic imaginary and the enabler needed to "fix" the sustainability problematic.

The imaginary is the context for our social constructions of reality and encompasses our relationship with nature (Castree 2001). The majority of environmental discourses that Dryzek (2005) identified I have suggested reflect our interpretation and enactment of our current economic imaginary. However, each discourse does reflect aspects of ecological imagination in action at present that do challenge the privileging of economic rationality.

This research project commenced with an exploration of individual experiences of sustainability in the organisations where they worked and the wider society within which they and their organisations were located. The research found that limitations on enacting ecological sustainability within the existing social imaginary include polysemy and moral distancing. The preceding chapters have discussed a variety of issues related to the sustainability problematic. These range from the broad spectrum of definitions for sustainability in its many forms, the often contradictory meanings of sustainability that are juggled by people when confronting decision making involving ecological actions and the general lack of consensus that we are facing an ecological crisis of humanity's making. A key finding of the research is that whilst these individuals draw on a common social imaginary, they privileged different aspects of this imaginary in their sustainability narratives. The narratives from Landcare acknowledged the importance of a dialogue with nature to resolve ecological problems. The narratives from Corcon were strongly influenced by moral obligations to stakeholders and the narratives from Carepoint, in stark contrast to Landcare's marginalised nature, were dominated by the organisation's political struggles:

Carepoint – The findings suggest that the complex processes of meaning construction that underpin the enactment of sustainability involves processes of identity validation, narrative support and reduction of polysemy that must be engaged with simultaneously to boost the chances of success for change for sustainability and that organisations need to establish discursive space to support these processes of sense-making.

Corcon – The findings are that moral distance is more than a form of change resistance; it may also be viewed as a sense-making process that allows individuals to create meaning in morally complex situations.

Landcare – Sense-making here was also associated with the emergence of the narrative I labelled "ecological repair" and its relationship to the development of sustainable land management practices. I argue that nature played an active role in the creation of the narrative of "ecological repair" and that the act of developing a narrative frames our understanding of, and governs our relationship with, the environment.

What I am labelling the sustainability problematic presents barriers to organising effective responses to systemically redress ecological problems. The sustainability problematic is not simply a contestation between discourses that fundamentally agree on underlying assumptions and are therefore contesting how to organise responses to ecological sustainability, as, for example, the contestations involving advocacy of democracy, and which it is claimed to be necessary to effect sustainability. Interpretations include inclusive democracy as a precondition for a degrowth society and economy (Fotopolous 2010), and variations of Habermas's theory of democracy, for example, Scherer and Palazzo (2007) arguing for a CSR approach based on deliberative democracy or Baker (2008) exploring managerial capture through the lens of participatory democracy. I am arguing that sustainability, unlike contestations over processes such as democracy, comprises discourses that are opposed to each other because their underlying assumptions are not shared. Sustainability as a terrain of oppositional meanings may be seen in the narratives of individual experiences in Carepoint and to a lesser degree in Corcon. The competing meaning constructions of sustainability in these narratives involved a polarity where sustainability in one set of narratives meant ongoing maintenance of the existing ways of working and

organising. This is an interpretation of sustainability in the workplace as an idealised "business as usual" with inconsistencies ironed out, problems corrected and operating in this fashion well into the future. The other node of the polarity was the ecological understanding that sustainability represented a requirement to fundamentally change organisational and social behaviours to counter the ecological harm done by humans to their environment. This contestation of competing meanings is reflected in the research finding that the polysemy of meanings that individuals face when enacting change for sustainability presents a barrier inhibiting the generation of effective ecological action. Such a contestation would in my mind be better likened to contestation between democracy and totalitarianism, for example, a contestation between different worldviews. Indicators of changing the imaginary were also observed in the narratives of ecological repair and the literature challenging accepted norms and identifying possible solutions. In the literature and in Dryzek's (2005) environmental discourses, the boundaries of the economic imaginary were and are being challenged by green radical discourses and scholars arguing for changing the boundaries of inclusion and exclusion to others, including nature.

This research revealed resistance to a radical reorganising of individual and collective engagement with nature. In conversations and reflection on conversations with the participants of this project I found that at a deep level the adoption of ecological sustainability is a moral action. The participants recognised that moral action was a driver of change for sustainability but they were unable to create or identify a new framework, a new moral code upon which to base their decisions and actions. Their narratives, those that framed their ecological meaning construction and decision making, were all firmly rooted in values that proved resistant to any accommodation of nature as an equal in their systems of relationships and obligations to others. The responses of participants I suggest support the proposition that changes to our environmental narratives require change to our social imaginary.

A contestation of worldviews will more likely involve moral dissonance, a point that was explored in Chapter Five. Moral dissonance comes about when there are conflicting assumptions in underlying mental models and some form of ethical privileging takes place to rationalise the final decision and actions of individuals and organisations. Finally, I have also argued that despite the intentions of the TBL

Sustainability discourse it has not succeeded in displacing the discourses that reinforce existing, ecologically damaging behaviours. The instigation for the TBL Sustainability discourse was for it to be a disrupting discourse that would appeal to the sensibilities of business and society and facilitate change to ecologically responsible practices. Instead, TBL Sustainability has become a captured discourse(s) that maintains the logic of the "economic" rather than stimulate change through the creation of the "ecological" in our social imaginary.

Sustainability Problematic – its Resolution

My critique of the current sustainability discourse(s), TBL Sustainability, is that as a narrative(s) attempting to resolve the ecological crisis it will not facilitate the change needed to overcome the ecological crisis. It is this seeming inability of the sustainability discourse to move modern societies and organisations beyond this ecological crisis that I have labelled the sustainability problematic. My reasoning has been that the sustainability discourse is grounded in a logic system that is defined by economic assumptions and values and in order to overcome the ecological crisis it needs to be grounded in a logic system that is defined by ecological values and principles. In contrast to the sustainability discourse this is the approach that the radical green discourses have attempted to model. In order to overcome the inertia of the sustainability problematic I am arguing that the ecological assumptions of the sustainability discourse need to draw on a different value system and a different set of beliefs that frame the human-nature relationship. This new human-nature relationship, I have argued, is underpinned by an ecological imaginary, a new social imaginary that replaces the current economic imaginary.

I do not claim that the ecological imaginary can be preformed and predetermined as a coherent, fully formed narrative. I envisage the ecological imaginary emerging in much the same way that the economic imaginary emerged during the Renaissance and the Enlightenment in Western Europe, as a generative product of discursive practices. However, to create an ecological imaginary what will be needed are tools, models and structures which challenge the logic of the current economic imaginary. The existing tools that are pitched at attempting to do this, such as TBL, have proved ineffective in challenging the economic imaginary and have therefore contributed to the inertia that characterises the sustainability problematic. These new tools, I suggest, are for the

most part new narratives, which provide both meaning and logic for privileging ecological decision making rather than economic decision making when judging individual and organisational behaviours and performance. The implication of what I am arguing is that new economic behaviours will be governed by an ecological reality and a new ecological moral order. The ecological imaginary is therefore an emergent property of discourses, based on new narratives and new tools that challenge the economic imaginary.

There are many sources of new narratives, some known, others yet to emerge. In the Chapter Six I introduced one such narrative, the Aboriginal concept of Country, which I argue reflects a society defined by an ecological imaginary. I am not suggesting that we should adopt or adapt the concept of Country. I am claiming that the concept of Country contains certain principles that may be borrowed and applied to new narratives, which we construct in order to challenge and replace the current economic imaginary. A comparison of a selection of principles between the concept of Country and the economic realities that define our current ecological sustainability decision making is presented in Table 6.1. An important principle that challenges the current economic privileging in sustainability is the phrase "keep all alive", (Gammage 2011; Sveiby 2007; Sveiby & Skuthorp 2006) which if used as a performance measure for all our decision making would radically change organisational and societal ecological behaviour in both the short and long-term. So the concept of Country is both an example of an existing narrative derived from an ecological imaginary and also a source of new ideas that may be adopted and applied to our new ecological narrative(s).

I also introduced a second narrative that is challenging the economic imaginary, the emerging discourse of degrowth (Jackson 2009a, 2009b; Latouche 2009). Whilst the participants in my research did not refer to the discourse of degrowth, they did comment on some of its concepts as important to them in their understanding of sustainability. Degrowth challenges the very foundation of unlimited growth that underpins consumer capitalism and that the sustainability discourses maintain. Concepts of degrowth that participants referred to were the concept of efficiency in Corcon's case, which was linked to responsible use of resources, and the concern for waste in Carepoint's case, which again reflects responsible use of resources.

Degrowth is an example of a narrative that challenges the current economic imaginary by challenging the need for perpetual growth, arguing that this is physically impossible and therefore a society beyond the pursuit of growth needs to be imagined and enacted.

I have also presented a third example, drawn from the practice in Landcare of engaging collaboratively with nature, of a narrative that challenges the current economic imaginary: ecological repair. The Landcare example highlights the generative capacity available to us for creating new relationships with nature that can overcome the inertia that characterises the sustainability problematic.

Our meaning systems still value economic measures and until our meaning systems value ecological measures, I contend, we will still remain caught in the inertia of the sustainability problematic. The three dimensions do not create a different narrative of a human-nature relationship although they do attempt to reframe it by promoting the environmental and the social to play an equal role to the economic in our decision making. I have argued that the three dimensions model does not alter the underlying dominance of the logic of an economic reality. The three dimensions model has not proved to be a successful tool to challenge our modern social imaginary and the competing attempts of the sustainability discourses need a different framework upon which to recreate such an imaginary. My assessment is that there is a need for new models and frameworks to facilitate development and creation of multiple narratives that challenge the privileging of an economic reality. I have introduced three such narratives to highlight possible trajectories for the emergence of an ecological imaginary: the Aboriginal concept of Country, Landcare's ecological repair, and degrowth.

I offer a different tool, the framework of metabolic organisation, that draws on the narratives of Country, ecological repair and degrowth, and the criticisms of key environmental discourses that dominate organisational decision making, such as sustainable development and the problem solving discourses (Dryzek 2005). Metabolic organisation, I argue, will facilitate the generation of an ecological imaginary because it challenges the logic of the current economic models with their emphasis on fiscal performance as a universal measure for good human practices. The remainder of this chapter introduces this framework.

Metabolic Organisation – Organising Ecological Sustainability

This section provides an introduction to the concept of metabolic organisation represented in the model presented in Figure 7.1.

I propose metabolic organisation as a multi-scalar conceptual model that may be used at any level of analysis, from individual to global. The concept of metabolism to define and describe organisational and societal activity has been adopted by a number of researchers. As a process and a metaphor the concept of metabolism has been used in the context of social metabolism (Fischer-Kowalski & Haberl 2007), industrial metabolism (Anderberg 1998) and anthropogenic metabolism (Brunner & Rechberger 2002). Metabolism has also been used socio-politically by Marx (1978), who critiqued capitalism's relation to soil fertility, and Moore (2000) to describe the severing of local interdependencies between rural and urban communities for industrial and post-medieval European societies. The application and use of metabolism by these authors focuses heavily on raw material flows and the conversion of raw materials for the functioning of human society. The focus on material flow analysis central to ecological economics and industrial ecology is primarily concerned with technological innovation and quantitative analysis and does not adequately integrate with social systems (Hoffman 2003). The boundaries of their use and interpretation of metabolism is too narrow and I argue that their boundaries need to include considerations of social and moral systems, and particularly aesthetics, explicitly applied to the concept of metabolism. To confine metabolism simply to material flows and the environmental/ecological dimensions associated with allocating and managing these flows does not progress our understanding of how individuals, organisations and societies take and enact ecological sustainability decisions. Metabolism restricted to the material sense is only one part of a comprehensive system of meaning and action that I am proposing.

The concept of metabolic organisation

The aim of this conceptual model is to draw on my research to provide a framework through which a new socio-political narrative of ecological sustainability may form. The intention of creating a framework of metabolic organisation is to provide a tool to overcome the inertia to enact change for ecological sustainability in organisations. I have argued that successful adoption of ecological sustainability requires approaches

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that challenge the thinking framed by the economic imaginary through presenting and stimulating a different understanding of organisation and organising for ecological sustainability that leads to identification of different criteria for measuring success and effectiveness.

Three integrated aspects comprise the model of Metabolic Organisation: interdependence, metabolism and appreciation. These aspects represent ongoing dynamic processes of organising rather than static structures of analysis at particular moments in time. In the following paragraphs I provide an outline of the model of metabolic organisation and in the next section introduce the bodies of ideas that metabolic organisation draws on.

> *Metabolism* – involves metabolic processes concern nutrient consumption. They involve conversion of raw material to useful purpose for actors with energy and waste as outcomes. Metabolism is further categorised into endo-metabolism and exometabolism where endometabolism concerns the internal needs of an actor and exometabolism its external needs. Metabolism involves both biological/physical and social processes.

> *Appreciation* – involves the application of subjective preferences that actors have derived from their worldviews, drawing on their cultural contexts for determining their actions. Our moral frameworks define obligations to others, who and what is included or excluded from our moral order, and this includes nature. The appreciative process defines our preferences for actions and objects, including the processes of metabolism, and is strongly influenced by aesthetic sensibilities.

> *Interdependence* – describes the inter-relatedness, both socially and physically, that an actor has with others. Where appreciation may be considered the ideals or espoused activities and relationships, interdependence represents the actuals, what is both essential and already in place or needing to be in place. Interdependence maps the actor in their environment – maps them in their world.

These three component processes are interdependent. For example, metabolism is a fundamental biological process that is dependent on location, which determines the

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availability and mix of resources available to societies. Different locations may provide different combinations of resources to meet the same metabolic requirements. Satisfying the metabolic requirements of an actor is understood to always involve a restricted set of raw materials constrained by location and "taste". At a physical level metabolism is constrained by geography, which determines what nutrients/raw materials are locally possible, and at a social level metabolism is determined by aesthetic preferences defined by social mores that further restrict what raw materials are exploited from the local environment, due to likes and dislikes, to meet metabolic requirements[26].

The final aspect of the model is its application at all scales: individual, organisational and the wider society. As a multi-scalar model it is flexible and addresses the need to be able to drill down to specific individuals and then stand back and view ever increasing groups using the same tools to understand systemically the dynamics of interaction.

Metabolism is a key dimension of the model as it provides both a familiar and sensible entry point to the proposed systemic frame. Metabolism encourages systems thinking as it describes the functioning of biological/ecological systems and, importantly for organisational application, metabolic processes can be measured or are capable of being measured. The reciprocal relationships may be summarised as environmental constraints which limit possible resource use, our socialisation to exploit and utilise these resources which determines what we value and therefore how we prioritise and assign significance to these resources, and finally the consumption to meet the ecological needs of nutrients to maintain lifestyle and life. It is a model heavily based on social constructionist views of reality and supports multiple perspectives for tackling the same problems in the same or similar contexts.

To attempt to reduce these processes in the model to determine a principal causality, I argue, does not make sense because of the influence each process has on the others. Each process in the model is moderated by the others and all processes are strongly

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[26] For example, in human cultural terms this may be seen in the dominance of rice as a fundamental staple in Asia and wheat as the equivalent staple in Europe. Rice and wheat metabolically serve the same purpose, the provision of carbohydrate. Yet an Asian in Europe or a European in Asia, whilst eating the local staple and satisfying their metabolic needs will often be heard to reminisce along the lines of "wheat is acceptable but I really miss rice it is so much nicer to eat and more satisfying", if they were originally from Asia, and vice versa for Europeans.

influenced by humanity's complex cultural settings. What I mean here is that cultural settings strongly influence which raw materials we choose and how we apply them to our metabolic needs. There is usually more than one choice available therefore the selection process in most situations involves discrimination.

Figure 7.1 presents the basic structural concepts of metabolic organisation in the processes of interdependence, metabolism and appreciation.
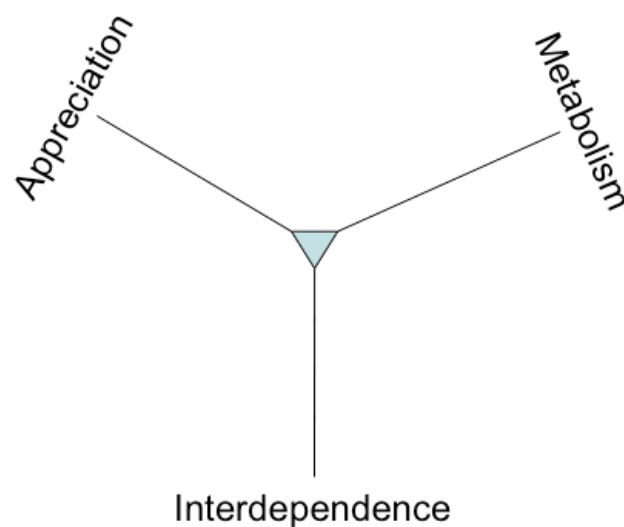

Figure 7.1: Metabolic organisation

In the next section I will discuss in detail each of the components of metabolic organisation and situate these components in their respective theoretical traditions. The first contribution of this model is to bring together multidisciplinary perspectives of sustainability that are usually treated independently of each other. The second contribution of this model is to elevate the importance of aesthetics in shaping and reinforcing our worldviews and day-to-day decision making, a role whose importance is discounted and under-theorised (Johnson 2007).

The intention of metabolic organisation

In addition to stimulating a new ecological discourse a key aim for the application of this model is to create meaningful measures of organisational ecological performance and in so doing replace measurement attempts that draw on the three dimensions of the sustainability narrative. Examples of attempts to stimulate such three dimensions of sustainability performance measurements include TBL (Elkington 1997) and the Global Reporting Initiative (GRI 2010). My claim here is that the three dimensions do not break free of the fiscal boundaries defined by our economic imaginary.

Metabolic organisation focuses on very different measures and does not attempt to co-opt existing accounting and fiscal logic but does challenge the privileging of the latter. The goal is for metabolic organisation to be privileged as the primary measure of organisational performance and to operate in conjunction with current accounting and fiscal measures. Development of the model is able to draw on existing work to measure individual and collective biological metabolisms (Metabolic Theory of Ecology – Brown et al. 2004) and national and regional social metabolisms (Social Metabolism – Fischer-Kowalski & Haberl 2007; Fischer-Kowalski et al. 2007) to facilitate the creation of metabolic measures of organisations.

This interdisciplinary design of metabolic organisation I argue is both a strength of the model and an important extension to the fields of ecological economics and industrial ecology, which focus on physical systems and technology to address ecological problems caused by humanity. Metabolic organisation fills a gap in our understanding by providing a framework for how the holistic analysis of organisational ecological performance can be conducted.

The Rationale for Metabolic Organisation

In this section I link each of the processes of the model to additional bodies of literature that I have drawn on to develop the concept of metabolic organisation. These antecedents to metabolic organisation fall into three categories of research and inquiry: aesthetics and values, systems thinking, and social and biological metabolism. The additional bodies of work that I draw on that were not discussed in the early chapters concern the importance of aesthetic sensibilities in shaping our ecological decision making, a more detailed discussion of complexity theory and its

application to sustainability thinking, and the importance of the role and concept of metabolism for creating a new profile (see Table 7.1) of organisations to better enable the assessment of their ecological performance.

Appreciation

Judgements and decisions that are performed by an actor are filtered through a variety of subjective structures. This thesis has argued that a key structure is narrative and that the narratives in use are constructed experientially. These narratives are, I contend, constituted through moral and aesthetic lenses. The importance of the influence of the moral order created by the social imaginary, introduced in Chapter One, is a point made by Taylor (2004). The moral lenses define the degree of obligation an actor has to others and the aesthetic lenses influence the degree of sensory resonance to their "moral order" that an actor experiences. The proposition put forward here is that whilst moral influences have received considerable attention at the organisational level the action of aesthetic influences on decision-making and judgment has been understudied and under-researched.

Moral decision making is strongly affected by aesthetic sensibilities. I argue that aesthetics is embedded in our meaning systems and forms an important criterion for judgement and sense-making. The aesthetic is I am arguing a powerful influence on an actor's decision making. In this claim I am drawing on the work of Bourdieu's (1984) theory of class distinctions where he describes the role of aesthetics in shaping the behaviours of members of social classes and argues that aesthetics is a far stronger influence and predictor of behaviour than rational cognitive decisions or inter-class movement due to wealth or other later social adjustments.

Aesthetics and values

Values comprise processes dealing with creation, application and maintenance of ethical frameworks that govern decision making and actions, together with the aesthetic sensibilities that are socially ascribed (Bourdieu 1984) and govern our choices. I am using aesthetics to mean "the study of sensory and sensori-emotional values [which includes] critical reflection on art, culture and nature" (White 2009, p. 1). I am also using aesthetics as a term for how we make meaning in and of our lives.

In relation to "social nature" Castree (2001) raises the question "what sort of nature do we want?" However, I suggest that this question needs to be rephrased. The question I think should be "what sort of experiences of nature do we want?" This question more directly acknowledges the importance of aesthetics in our decision making and meaning construction.

Our constructions of nature are aesthetic and transforming these constructions necessitates active intervention that stimulates discussion and emotion in order for a new vision of nature to emerge (Halsey 2004). Mansueto (1997) captures this meaning making synthesis, linking the spiritual and the cosmological grounded in values of aesthetics: "throughout most of human history our ideas about value – about the Beautiful, the True, the Good, and the One – have been intimately bound up with our ideas about the nature of the universe itself" (p. 68). This cosmological grounding is also a foundation of the Aboriginal concept of Country introduced earlier in this thesis[27]. The proposition of this thesis is that the context for ecological sustainability is the ecological imaginary and I contend that it is from the imaginary that aesthetic sensibility derives. To change the aesthetic sensibility from economic to ecological necessitates a change to the imaginary, a re-storying and a re-imagining of our relationship with nature.

Aesthetics as a meaning-making process encompasses our experiences and our perceptions of these experiences. As a form of knowing, perceptions are pre-reflective (White 2009, 4), operating outside of awareness and occurring before sense-making (Foreman-Wernet 2003; Weick 1995). Perceptions involve feelings, emotions and bodily processes that make meaning possible where "meaning is not just a matter of concepts and propositions, but also reaches down into the images, sensorimotor schemas, feelings, qualities, and emotions that constitute our meaningful encounter with our world" (Johnson 2007, p. x).

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[27] An example of linking the spiritual to the day-to-day ecological experiences of individuals may be seen in the Aboriginal practice of Dadirri. Dadirri (Brearley et al. 2008) is a practice in Aboriginal societies that links the individual to their experience of and obligations to the other. Dadirri is an aesthetic experiencing of organisation and is grounded in multiple ways of knowing. "Dadirri asks us to pay attention to stories and to silence and to the spaces that lie between" (p. 158). It places importance on reciprocity and co-creative relationships. For organisations, Brearley et al. (2008, p. 161) summarise the principles of Dadirri as follows: "We need a collaborative and collective way of working and decision making. The holistic way of doing things is about the environment, the people and the business. Shared values and respect, that's the way we see things."

This view of knowing is oppositional to the dualistic understanding of mind and body as separate and distinct, and treats mind and body as an organic process where meaning emerges from aesthetic, embodied experiences. It is through this lens of aesthetic awareness that Strati (1992) analyses organisational life. He investigates how the feeling of beauty pervades roles, relationships, functions, interactions, language, workspaces and other related structures that constitute the activities of organisation. Like Johnson (2007), Strati argues that aesthetic awareness is an essential complement to cognitive analytical approaches to understanding processes of organisation. Pre-empting Boje's Tamara and antenarrative, Strati notes that "the aesthetic is restricted to fragments of the organisation and not the organisation as a whole [and that] these fragments are a crucial aspect of the organisation's life" (p. 578).

Aesthetic inquiry provides a new epistemology to deepen our understanding of organisations (Taylor & Hansen 2005). Taylor and Hansen's review of the application of aesthetics in organisation studies identified instrumental and artistic approaches that included analysis of organisations, using metaphors of artistic processes such as storytelling (Boje 2008), narrative (Czarniawska 1998), jazz and improvisation (Hatch 1999; Weick 1998) and Strati's (1992) argument for using aesthetics as a way to get a feel of an organisation. They also noted the use of aesthetic methods such as art therapy (Rubin 2001), narrative therapy (White & Epston 1990) and combinations of fiction and non-fiction to develop intellectual argument (Jermier 1985; Taylor 2000).

More explicit instrumental applications of aesthetics relate to marketing practices where ethics and aesthetics are used to promote consumption. Aesthetics is an important aspect of green or eco-marketing to capture/promote green consumerism, "in trying to attract new consumers, environmentally minded businesses attach an aesthetic quality to environmental goods" (Todd 2004, p. 86). Green consumer goods represent an ethics-based market and aesthetic tactics attempt to portray corporations as ethically responsible in their social and environmental impacts through appealing to the feelings of potential purchasers of their products. The strategy pursued

understands that feelings will prove a more powerful rationale to motivate purchasing[28].

Aesthetic values such as beauty affect our emotions and our ecological practices (Kovacs et al. 2006). Kovacs et al. (2006) argue that aesthetic values, such as sustainable, beautiful, functioning, threatened, have a strong impact on design and public perceptions of ecological processes and aesthetic sensibilities strongly influence scientists and researchers. They also argue that aesthetic values are pervasive in ecological research and practice and yet are understated and under-studied in ecology. The importance and influence of aesthetics has been identified as a key transcending process essential to managing market and non-market capital in societies pursuing sustainability (Barrett, Farina & Barrett 2009). Barrett et al. (2009) argue that aesthetic appreciation of landscapes, workspaces, urban spaces, concepts such as "economy", "energy efficiency" and the like, casts aesthetics as a transcending process that merges/combines our constructions of cultural and ecological systems. The function of a transcending process also suggests that its context is important to its outcome.

Interdependence

The term interdependence refers to the inseparability of an actor from its network of relationships (Deleuze & Guattari 1988; Latour 2005). A fundamental proposition of metabolic organisation is that actors do not exist as separate autonomous entities; they are always connected to other actors. For example, Hoffman (2003) makes the point that organisations are open systems that both influence and are influenced in their interactions with society. Interdependence has an additional usage; it also applies to the conceptual inseparability of the aspects/processes of metabolic organisation and their methodological application.

Systems thinking – different ways of knowing

Systems may be understood as providing the context in which an actor's activities may be understood. The importance of systems thinking is a keystone for sustainability action (Doppelt 2003, 2009; Ison 2010). The challenge presented by

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[28] Perhaps the best example of this is the cosmetic/personal hygiene market where a link between consumption and responsibility to nature is actively constructed.

sustainability is in large measure due to the complexity of the problems involved and the uncertainty of success associated with any potential solutions to these problems. The complexity of sustainability issues and, I claim, a major contributing factor to the sustainability problematic, is the number of actors involved in any problem being investigated and the indeterminacy of predicting the impact that any intended change will have on the interrelationships of these actors. Systems are a way of knowing and systems thinking is well suited to map and understand such dynamic networks of actors representative of sustainability.

Systems involve change, they are always doing something and this has implications for understanding and engaging with the variety of situations we confront daily. Others will perceive the same situation differently and were we to map each perception as a system they would each be defined by different boundaries. The importance of boundary definitions is that changing systems boundaries can lead to different conclusions. Ison (2010) draws attention to three important points about engaging in systems thinking:

1. We are always in situations never outside them.

2. We have choices that can be made about how we see and relate to situations.

3. There are implications, which follow from the choices we make. (p. 37)

I will discuss two intersecting concepts, introduced in Chapter Three, of systems thinking that scholars are investigating to better understand social situations of sustainability: co-evolution and complexity. Each of these concepts is drawn from the biological and physical sciences and adapted to organisational settings in ways that attempt to create/maintain connections between social systems and biophysical systems. Benn and Baker (2009), investigating the suitability of models and approaches for organisational change and development to progressing ecological sustainability, argue that the intertwined nature of humans and ecological systems need different and newer systems-based approaches to intentional change programs. They suggest co-evolutionary models and complex adaptive systems models as better suited to both understand change and design change interventions for sustainability due to the tight interdependency between social and ecological systems.

Actors (organisations) coevolve in relation to their environments and the reverse is also true (Porter 2006). This mutual interaction may be better understood as a continual process of co-creation and Porter suggests that drawing on the concept of co-evolution explains this interdependency well. Porter also mounts a claim that co-evolution has the potential to transform the field of organisation studies and identifies three key points. to support its role as a conceptual bridge to help explain the interactions of organisations and their environments and the consequences of these interactions:

1. To combine and juxtapose disparate theoretical perspectives whilst maintaining the integrity of each,

2. Organisational coevolution differs from biological coevolution in its incorporation of human meaning making systems, and

3. Traditional distinctions of scale (micro and macro levels) tend to blur because co-evolutionary systems are characterised by interdependence, circular causality, and iterative feedback, and changes in any one level may be caused endogenously by changes in others, the micro-level activities of situated actors are frequently analysed in terms of macro-level community effects and vice versa. (p. 486)

Research in innovation and eco-change in organisations also support co-evolutionary approaches to understanding adoption of eco-innovation as better able to capture the complexity of these processes than more conventional economic frameworks can (Blum-Kusterer & Hussain 2001). Co-evolutionary theory has also been applied to organisational practices of boundary setting. Santos and Eisenhardt (2005) investigated the co-evolutionary relationships in the construction and maintenance of organisational boundaries. They identified four boundary conceptions, efficiency, power, competence and identity, through which to understand the processes involved in creating and maintaining organisational boundaries in "business ecosystems".

A cautionary note in using co-evolutionary models to explain the interdependency of social and biophysical systems is raised by Carolan (2005). Social systems cannot exist without the biophysical. However, the biophysical can exist without the social system and this imbalance defines an asymmetry in the interdependency /

interrelationship between social and biophysical systems which social (organisational) co-evolution does not address.

Complexity, the second concept, applies a range of ideas from the body of complexity theories to social systems and recent literature specifically draws on the field of complex adaptive systems/complex adaptive processes (Benn & Baker 2009; Houchin & MacLean 2005; Kuhn & Woog 2006, 2007; Luhman 2005; Plowman et al. 2007; Porter & Cordoba 2006; Stacey 1996, 2001; Stacey, Griffin & Shaw 2000) in contrast to earlier applications of complexity which focused on chaos theories (Wheatley 2006). The complexity concepts commonly applied to social systems are emergence, self-organisation, densely connected networks and feedback loops or recursion.

Studies that view organisations as complex adaptive systems investigate processes of change (Falconer 2002) in the relationships between actors. Social systems are understood to be structures of complementary relationships/interactions and the exchanges between actors in these social networks (Ng 2003) affects performance and behaviour at all levels of these systems. These studies pay more attention to the patterns of interaction rather than examining in detail each discrete interaction in order to understand how social systems maintain existing patterns or create new patterns of interaction.

The creation of new patterns of interaction is the process of emergence, which stems from disequilibrium to the system and the attendant "need" of the system to recreate order (stability). For example, Houchin and MacLean (2005) undertook an ethnographic study of a large public sector organisation in the UK using four complexity concepts in their investigation: sensitivity to initial conditions, positive and negative feedback loops, disequilibrium, and emergent order. They observed that the disruptions to organisational systems that come about through change initiatives stimulate interaction between the legitimate and the shadow systems of the organisation that results in new order emerging at the boundaries of these internal systems. This new emergent order is often an unexpected outcome of intended change interventions. Innovation is also approached as an emergent phenomenon of organisational change (Benn & Baker 2009; Luhman 2005) associated with the ambiguities and equivocality of a problem, often resulting in the need to resolve paradoxes initiated by the change (Luscher, Lewis & Ingram 2008) where

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understanding the paradox does not resolve it but does lead to new options and new alternatives.

Metabolism

Metabolism describes the biological processes that sustain life (Rose & Mileusnic 1999). When these processes cease, the life of an organism stops, or more correctly the biological processes change from self-regulating to decay, a different set of processes that transform the once self-regulating organism into "food" for other metabolic activities.

Social metabolism

Metabolism, as a process of social organisation, draws on concepts from biology, particularly the literature on metabolic theory of ecology, and from economics, especially literature in ecological economics. In ecological economics, the application of the biological concept of metabolism to social processes of organising has a long history, stretching back as early as the latter half of the nineteenth century when Marx presented a socio-political construction of metabolism in his critique of capitalism (1978). Marx recognised a change in relationship between nature and the economy caused by the agency of capital that he described as a break in the ecological relationship between Town and Country. This break in the ecological relationship between Town and Country, the metabolic rift, "illuminates the rupture in nutrient recycling between the country and the city in historical capitalism" (Moore 2000, p. 124) and marks changes in the division of labour between Town and Country in the transition to capitalist economies from feudalist economies (Moore 2000, 2002). Moore in his analysis of the transition from feudalism to capitalism observes that the emergence of capitalism constitutes a qualitative shift in nature-society relations through a fundamental reorganisation of society from a "closed-cycle system" to a system dependent on external nutrient supplies, a dependence on external resources that rises over time given capitalism's "imperative of ceaseless growth" (2000, p. 138).

Marx's understanding of the metabolic rift[29] as formative to modern capitalist society is reflected in modern socio-ecological scholarship. Environmental sociology recognises the complex relationship between society and nature and has extended the concept of metabolism to explain social relationships and interdependencies between human and environmental systems (Dunlap 1997; Foster 1999). Major theoretical development in environmental sociology has evolved several influential bodies of theory to stimulate societal change in environmental practices: Dunlap's New Ecological Paradigm (Dunlap, Van Liere, Mertig & Jones 2000), Schnaiberg's Treadmill of Production (2002), Ecological Modernisation (Mol 2006; Mol & Spaargaren 2005), Beck's Reflexive Modernisation (Beck, Giddens & Lash 1994), and Dryzek's Environmental Discourses (2005). These bodies of work and their subsequent evolution all comment on the environmental degradation caused by human industry and, I argue, implicitly recognise the metabolic rift between societies and nature that Marx identified.

In parallel with environmental sociology's theoretical progress of socio-ecological change, ecological economics has taken a more empirical approach to applying the concept of metabolism to society-nature interactions. In relation to metabolism, ecological economics' focus is on materials flow and energy consumption and conversion. Detailed study of energy and materials processes is undertaken at national and regional levels, conceptualised as socio-ecological regimes (Fischer-Kowalski & Haberl 2007), with assumptions that the patterns of human and natural systems behaviour observed at this level reflect the collective metabolic interactions of organisations and individuals at lower scales in these socio-ecological systems (Anderberg 1998; Brunner & Rechberger 2002; Fischer-Kowalski & Haberl 2007; Schandl & Krausmann 2007). The socio-economic-metabolic analysis of materials and energy flows concerns a detailed assessment of what I categorise as exometabolic, and Georgescu-Roegen (1981) defined as exosomatic processes. Georgescu-Roegen promoted the terms endosomatic and exosomatic metabolism to identify a nuanced understanding of human metabolism involving internal and external bodily functions and argued that external metabolism, the exosomatic, was the significant metabolic function of humans. Georgescu-Roegen's argument was that

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[29] Marx did not use the term metabolic rift although he does critique the rift in the interdependent processes of social metabolism caused by capitalism. The term metabolic rift was coined by John Bellamy Foster (1999).

humans should actively pursue strategies supporting conservation of energy through balancing their metabolic processes to meet the constraints of their ecological systems.

Biological metabolism

Endo-metabolism may be explained and measured by tools from an emerging area of inquiry in the biological sciences: the Metabolic Theory of Ecology (Brown et al. 2004). Metabolic Theory of Ecology is concerned with the metabolic characteristics of organisms and the resource demands this places on their environment and conversely the environment's constraints on resources that are available to organisms. Metabolic Theory of Ecology is scalable and "links the performance of individual organisms to the ecology of populations, communities and ecosystems" (p. 1772). Metabolic Theory of Ecology is concerned with metabolic rate, the rate of energy transformation and allocation that sets the pace of life, the factors for which include body size and shape, temperature and chemical composition. There are two key claims of Metabolic Theory of Ecology that are of interest to this chapter. The first is the capacity of the theory to show "how the metabolism of individual organisms affects the structure and dynamics of ecological systems" (p. 1786) and conversely how energy and materials processing are linked to metabolic constraints. Secondly, based on understanding the metabolic rate of individual organisms, Metabolic Theory of Ecology offers quantitative predictive capability of metabolic demands of individual organisms and communities on ecological systems. Application of "metabolic tools" to human systems have been applied to urbanisation in order to understand and predict changes in social organisation of cities and the interactions these generate between nature and society (Bethencourt et al. 2007) and the study of human fertility which paradoxically declines as energy consumption increases (Moses & Brown 2003).

Metabolic organisation – expanded framework

Whilst the concept of metabolism as a social construct has appeared in the literature over many decades I argue it to be underdeveloped in both research and application and I present the model of metabolic organisation to stimulate renewed interest in this concept. Table 7.1 summarises the model and also presents selected sources of information that provide the foundations for the creation and development of an

associated framework of measurement: a metabolic profile, able to assess the ecological performance of actors at any scale.

I have suggested that metabolic processes, which define nutrient conversion into useful energy and substances and the associated wastes that are by-products of this nutrient transformation, are fundamental to social and biological systems. The organisation of metabolic processes, metabolism, both shapes and is constituted by the interdependency of the social and biological systems within which individuals and collections of individuals exist. Figure 7.2 presents an expanded model of the dimensions of metabolic organisation to better understand the structures that influence what is valued, how nutrients are identified and categorised, and how an actor depends on and engages with the natural environment.

Presenting the concept of metabolic organisation comes with a caveat: that the model is a conceptual framework that will need further development. It has been designed to be applicable at all scales of investigation, from individual through to global human organising. Whilst detail may change with each level of analysis of the logic model remains the same.
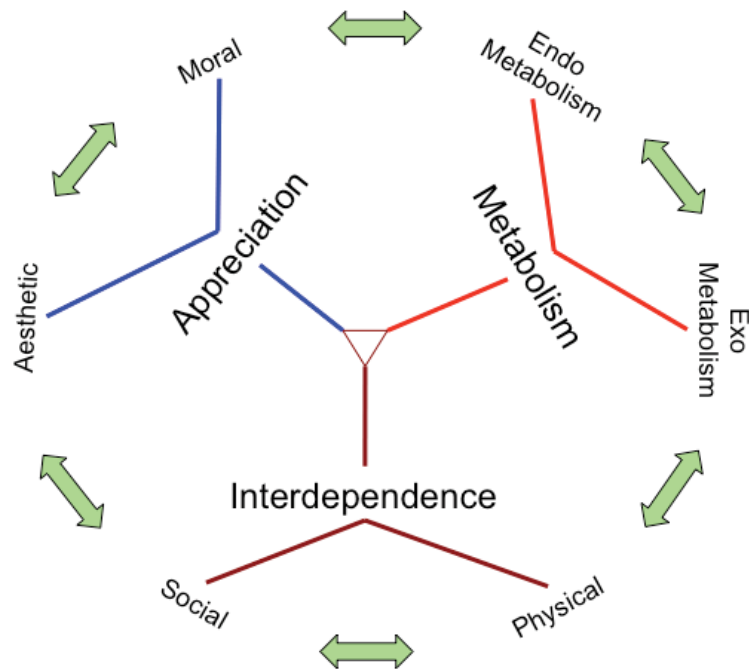

Figure 7.2: Expanded structure of metabolic organisation

Table 7.1: Metabolic organisation – information sources for creating a metabolic profile to assess the ecological performance of actors (individuals, organisations, societies)

Metabolic Organisation Processes	Nature of Available Information
Metabolism	
Describes the process supporting the conversion of nutrients (raw material) that allows an actor to grow, maintain their functions and interact with their environment. Metabolism comprises endo (internal) functions and exo (external) functions of an actor.	Resource demands on natural environment: Biological chemical transformations for functioning of individuals and groups, Social industrial/material transformations for functioning of society – material and energy flow analysis.
Appreciation	
Describes the social structures (ethical and aesthetic) that frame the social imaginary of an actor and influences their selection and choice of obligations to/with their physical and social environments.	Narratives that influence moral order Values that define social cohesion and obligations/relationships to others Aesthetic preferences across all facets of life and work
Interdependence	
Describes the inseparability of an actor from their support network of social and physical relationships.	Ecological Footprint Social Network Analysis Systems Mapping – patterns of interaction and important relationships

Metabolic Organisation – a Conclusion and Emergent Opportunities, Creating New Ecological Narrative(s)

The tool of TBL was aimed at encouraging organisations to create or adopt new measurements for two new areas of capital: social and environmental, that would co-exist in language and practice with economic capital. I have argued against this strategy of attempting to frame social and environmental measures in terms drawn from the economic dimension. This aim of attempting to frame language and measurement in terms of the economic dimension has also been criticised as a weakness of the TBL model, which inhibits change for sustainability in organisations (Bendell & Kearins 2005; Gray 2010; Milne et al. 2008; Norman & Macdonald 2004). What participants emphasise is the need for measurement and the need for effective or efficient use of the raw materials of work, assessment of which at present is derived from accounting models. Carepoint attempted to create sustainability measures in their balanced scorecard and Corcon's approach to sustainability measurement related to contractual requirements for projects, for example, constructing a tunnel to avoid environmental damage to an ecosystem. Corcon also tried to alter organisational culture by changing the value system through which

behaviours, interpersonal and operational, should be judged. In both the Corcon and Carepoint cases cost drivers were important considerations shaping their organisational sustainability behaviours. In both cases, I argue, the three dimensions have not provided a different measurement system to better support improved ecological sustainability practices.

My proposition is that the analysis and assessment of metabolism provides a new measurement system for the effective functioning of organisations and societies in relation to the ecological systems they are dependent on. The research gap for such a measurement system is what I am responding to. What the model of metabolic organisation is well placed to offer to redress this gap is a framework that allows development of a metabolic profile of individuals, organisations and societies to be created and in turn integrated into organisational practices at all scales. A metabolic profile can become a new measurement system for judging ecological performance.

Metabolic organisation – a synthesis

What metabolic organisation offers is a coherent alternative framework for understanding the ecological consequences for making concrete, social judgments and decisions. If we need to evaluate the right of everyone in society to own a car now and into the future then metabolic calculations could provide useful criteria regarding how this might be achieved. They offer a new way of balancing the potential consequences of the resultant greenhouse gases and their potential to cause the deaths of millions of people with other options, by making constraints known in a metabolic calculation which provides a basis for more informed judgements. Metabolic calculations offer new measurement boundaries, which provide a basis for a new understanding of the impacts of our choices and decisions on the ecological systems we are part of and dependent on. In contrast, examples of the reductionism of using three dimensions can be seen in the quotes taken from the cases in Table 5.1.

Metabolism describes the processes necessary for the "healthy" functioning of an actor's social and biophysical aspects. Industrial Ecology applies the concept of metabolism to the design of production systems. McDonaugh and Braungart (2002) talk about biological metabolism and industrial metabolism or technological metabolism and have adapted a metaphor from biology, "waste equals food", which

they have popularised in business and society. The corollary to "waste equals food" is "food equals waste" and combined these phrases provide a rich picture of the nutrient system of metabolism.

The metabolism of an actor involves tight coupling of internal and external processes that I have labelled endometabolism and exometabolism. Endometabolism is understood as the biological processes necessary for the maintenance of an actor's "life". Exometabolism is an extension of the boundary of endometabolism to include material consumption to support an actor's actions to regulate their external environment. Exometabolism in the sense I am using it acknowledges the biological understanding of the term and extends this to the actor's direct intervention in their environment to regulate their supportive system. For example, in humans these are the tools and artefacts such as clothing, transportation and accommodation that are derived from a variety of ecosystems and complement endometabolism by regulating the actor's environment to fit within an optimal range.

The issue for ecological sustainability is that exometabolism of individuals and society is the target for consumer capitalism and our dominant economic models. The focus on exometabolism by our dominant economic models has resulted in the pursuit of growth without restraint and led to the ecological crisis that faces humanity today. Examples of privileging exometabolism are the trend to building and owning bigger family homes ("McMansions") to accommodate smaller nuclear families and the rise of consumption as a social demand ("shop until you drop") and as a palliative to social stress ("retail therapy"). These examples also highlight the role of aesthetics in our pursuit of growth. Aesthetics, I argue, is foundational to privileging reactions to experiences and perceptions. McMansions and consumerism represent subjective evaluations of what are considered essential commodities and behaviours for day-to-day living in Western societies. The needs and wants framed by these commodities and behaviours I suggest are expressions of "taste" that are discernible in the discursive practices in society and highlight some of the aesthetic sensibilities that frame and influence our judgements.

Related to "taste" for McMansions, a more widely applied understanding of aesthetics may be seen in the narratives of Landcare participants. Here, in many cases, the beauty of the landscape was an important consideration for people starting their re-

engagement with nature. For these Landcare people, their initial delight in the beauty of their environment facilitated the evolution of ecologically responsible agricultural practices that maintained and even enhanced the beauty of their properties.

The argument I am making is that aesthetics is an integral part of our selection processes and determines/influences what texts are included in or excluded from our discourses. Aesthetics forms an important aspect of our processes of categorisation (Bowker & Star 1999) and as such aesthetic sensibilities fulfil an important role in metabolic organisation. The concept "right relationship" (Brown & Garver 2009), which has many similarities to the practice of Dadirri introduced above, best captures the pivotal role of aesthetic values in our lives and the need to reappraise the values we hold dear in consumer capitalism if we are to succeed in overcoming the inertia of the sustainability problematic.

The privileging of exometabolism is not only strongly influenced by our aesthetic sensibilities but also by our moral codes. The moral values of actors strongly influence the nature of the relationships and the composition of the relationships that they have with others in our ecological systems. Their values are used to rationalise these interdependencies, categorising them into hierarchies of obligations, and are used to justify inclusion and exclusion of others in/from an actor's network and moral order. Values are an essential part of meaning making; we value something because it fits into our schemas of how the world works. In Chapter Five I argued that ecological sustainability needed individuals and organisations to adopt a different relationship to others, one that privileged others over the individual. The "others" in this category also included the natural environment, which necessitated a changed relationship with nature. The natural environment for both Carepoint and Corcon was understood as an important resource with which they directly or indirectly, interacted and on which they so depended. Their relationship with the natural environment reflected the use value accorded to nature by enactment of the modern social imaginary, which rationalises nature on economic grounds and in so doing relates to nature as an excluded other. Landcare, however, did change their relationship with the natural environment through creating a new narrative that accorded it intrinsic value, restructuring their relationship with nature as a partnership in agricultural production. Degrowth (Latouche 2009, 2010), in similar fashion to Landcare, is an attempt to

counter this imbalanced privileging of exometabolism. An important question here is what are basic and optimum levels that satisfy the exometabolic needs of an actor in our modern societies?

Metabolic organisation is a synthesis of the biological understanding of metabolism of organisms and collections of organisms, and the concepts and constructs of social metabolism that have been used to describe the transformation of resources and raw material that human society depends on for its survival and luxury (discretionary consumption). Metabolic organisation needs to apply both these aspects if it is to be useful in practice and as a potential replacement for TBL Sustainability, which I argued in Chapter Six is necessary if the ideals of ecological sustainability are to progress. These understandings are based on knowledge of how systems function and what is needed for systems to remain dynamically stable, i.e. interdependence.

Interdependence applies systems thinking to understanding and studying actors, and recognises human systems as being constituted through the interaction of social and biophysical systems. This systemic approach differs from the framework of TBL Sustainability, where despite a claim to taking a systems approach through providing balancing dimensions to the economic, the practice of TBL Sustainability treats the application of dimensions as distinct and discretionary, each facet able to be treated independently. TBL Sustainability is open to reductionism, and individuals and organisations can and do make a choice about which dimension they will engage, for example, my focusing on the social and not the environmental or economic in my project describes an approach to sustainability that is often taken.

Metabolic organisation – evolution and possibilities

The investigation of the research for this thesis sought to understand what factors contributed to the inertia to enact change for sustainability in organisations. The case findings highlighted difficulties individuals confronted when trying to make sense of sustainability, and more particularly ecological sustainability, within their organisation. Responses of individuals included difficulty selecting versions of sustainability that were meaningful to them in their situations, mechanisms such as moral distancing to enable individuals to work with conflicting value systems and discursive structures such as TBL that reinforced existing patterns of ecological

behaviours. What is reflected in these observations are three key factors that contribute to the inertia of the sustainability problematic: polysemy of meaning, moral responsibility to others and the influence of the modern social imaginary that I have labelled the economic imaginary.

I have also ranked these three factors and argued that polysemy of meaning and moral responsibility to others are strongly influenced by the modern social imaginary which provides a meta-narrative defining our private and public lives and human-nature relationships that privileges an economic reality. I have also argued that existing sustainability narratives continue to accommodate the economic and what is needed to move beyond the inertia of the sustainability problematic are new narratives that challenge the economic and privilege the ecological. The proposition of this chapter is that metabolic organisation provides an alternate integrating framework that challenges the economic and facilitates the creation of a new narrative that privileges the ecological.

I argue that to better facilitate the emergence of ecological narratives requires models and tools that do not draw on categorisations such as the three dimensions that can be co-opted because they were couched in terms acceptable to economic sensibilities and economic logic. Metabolic organisation is couched in terms acceptable to ecological sensibilities, which include biology and systems thinking. I claim that metabolic organisation encourages a narrative that is different yet able to be widely understood and engaged with.

The conceptual model of metabolic organisation offers explanatory power to better understand processes of organising and a framework to facilitate the emergence of a new organising narrative that embodies a different engagement with nature to the dominant narratives underpinning consumer capitalism. In reframing the processes of organising of social actors, metabolic organisation promotes creation of different measurement tools, such as those used in the Metabolic Theory of Ecology (Brown et al. 2004), to those of TBL Sustainability to evaluate and understand the ecological sustainability performance of social systems.

What is metabolised by an actor is determined ecologically and axiologically. The environment sets bounds on what resources are physically available and with time, I

have argued, these resources become aesthetically endorsed. This means what we metabolise is in large measure determined by aesthetic and moral boundaries as well as physical availability. For example, the strict rules on acceptable and forbidden foods in Hindu, Muslim and Jewish cultures and the rise of vegetarianism in the Western world are bounded physically, cognitively and imaginatively. These prohibitions affect the ecology within which an actor is immersed by modifying food production choices and the associated nature-society outlook.

The application of metabolic organisation can be used to analyse and understand the impact of a dynamic system that can run in overshoot locally. For example, the issue of overconsumption that is targeted by the measurement system of the ecological footprint (Wackernagel & Rees 1996) highlights that Western societies have "over-metabolised" and were able to do so for many years because other societies "under-metabolised". Ecological footprint calculators are now available at individual and organisational levels to enable macro-environmental impact analyses to be undertaken and to identify broad areas of action where excessive overshoot is being practised. The contribution of metabolic organisation is that it makes explicit the interdependencies of actors in the nutrient cycle of "waste equals food".

I have argued that TBL Sustainability is a narrative that has failed its original intention of creating organisational change for sustainability. A design intention in the construction of metabolic organisation is to be able to create a metabolic profile (Fischer-Kowalski & Haberl 1998; Haberl et al. 2011; Schandl et al. 2009) of an actor at any scale or dimension. The expanded structure of metabolic organisation shown in Figure 7.2 is both a more detailed presentation of the constructs of the model and also the template for creating an ecological measurement of an actor, a metabolic profile, able to be applied to individuals, groups, organisations and societal levels and also to all scales in ecological systems.

Metabolic organisation, I claim, provides a framework that offers different measures for organisational success that determine and provide the context for measuring fiscal performance, in other words, it provides a superordinate goal against which organisations may be judged that is not economic. Where TBL had and I suggest still has difficulties in addressing the social and environmental measurement systems of a bottom line, metabolic organisation does not impose such a constraint and is able to

start with a range of existing measurement systems, for example, the ecological footprint of Wackernagel and Rees (1996), the allometric measure of biology to measure metabolism (Brown et al. 2004) and the measurement of industries and nations through social metabolism (Fischer-Kowalski & Haberl 2007). Metabolic organisation also proposes the adoption of multiple symbolic systems to measure progress, particularly symbolic systems able to deal with ambiguity and polysemy. To privilege metabolism as a key understanding and measure of organisational performance requires further research and development to integrate methods available in metabolic ecology, social metabolism and ecological economics.

The argument of this thesis has been that to affect change for ecological sustainability a new ecological imaginary needs to be created to replace the existing economic imaginary. To facilitate such a transformative shift in the social imaginary, I argue, requires application of different conceptual frameworks to those commonly applied today. Two approaches that may be used to overcome the inertia of the sustainability problematic have been presented. The first was the generation of narratives that privilege ecological values over economic ones and I offered several examples: the Australian Aboriginal concept of Country, which I claim is an example of an ecological imaginary that may be studied for its logic and principles, the emerging discourse of degrowth that is challenging the foundations of consumer capitalism and the narrative of ecological repair, which is a narrative reflecting change to human-nature relationships at a local level. The second was the presentation of the conceptual model of metabolic organising, which takes a social-biophysical approach to analysing social systems as opposed to the economic approach that currently dominates organisational practices. Together, I argue, these and similar approaches will facilitate the creation of new ecological sustainability narratives and new systems of ecological performance measurement at organisational and societal levels.

Appendix

Appendix 1 – Interview Questions and Set-up Script

Interview Script

Research questions

Introduction

This research project is part of my PhD and I am interested in personal experiences and organisational responses to sustainability. Sustainability is about changing our behaviours, actions and systems, at home and at work, to ensure that our environmental and social impacts are not harmful to us, and future generations. Sustainability covers a wide area that includes terms and ideas that you may be familiar with such as climate change, peak oil, fair trade, carbon credits, end poverty, social justice, slave labour, extinction, work-life balance, employer of choice, etc. In a business sense sustainability is often referred to as corporate social and environmental responsibility.

You may have formed a strong view on these issues; you may strongly support sustainability, or be opposed to it. Your view may be more complex than this. It is your view and experiences of sustainability that I am interested in hearing about, your stories.

Questions

Can you pick a card(s) that says something about the way you experience sustainability. Do this quickly, don't take time to consider each picture, trust your gut feel.

Now take time to reflect on this experience or the experiences of sustainability that are evoked by your images.

- I would you tell me about this experience of sustainability and how it came about?

- How does this experience of sustainability relate to how you work in your current job at Carepoint and the ways in which Carepoint responds to sustainability?

- What evokes sadness for you in your experiences of sustainability?

- What evokes happiness for you in your experiences of sustainability?

- I would like you to create a different image to those you selected earlier. I would like you to tell me a fanciful tale about your ideal picture of how you and Carepoint experience sustainability. You can be as imaginative as you like, remember this is describing your wildest dreams, your unconstrained hopes, your ideal.

Outline of process

For both interviews and focus groups, participants will be invited to select a picture(s) that speaks to them about their experience of sustainability. Once selected they will be asked to reflect on their picture(s) and its associations for them. They will then be asked to tell their experience(s) that the image evokes.

The same questions will be asked of individuals and focus groups. The difference will be that focus groups will have the opportunity to comment and build on each person's experience and in so doing will more explicitly develop a collective story during the session, or at least go some way towards this.

Appendix 2 – Image Set

Images used in the interviews to elicit the participant's experiences of sustainability.
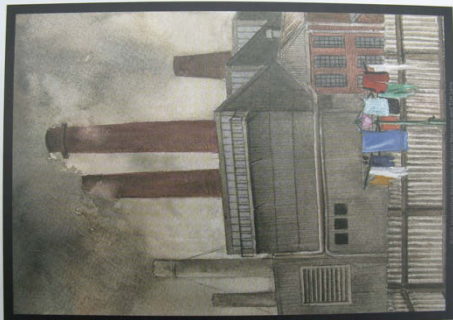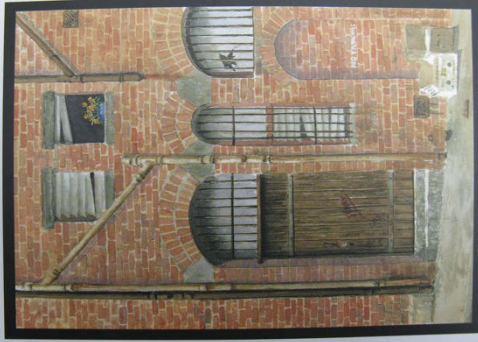
Shadows cards reproduced with the permission of St Lukes Innovative Resources © Innovative Resources, Carolyn Marrone & Tim Lane 2005
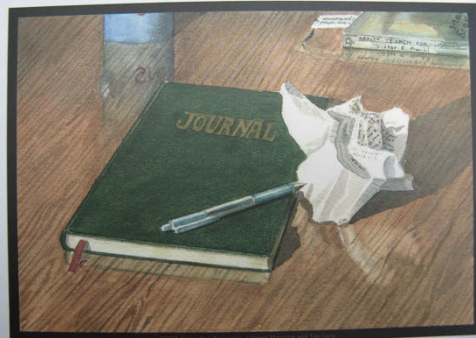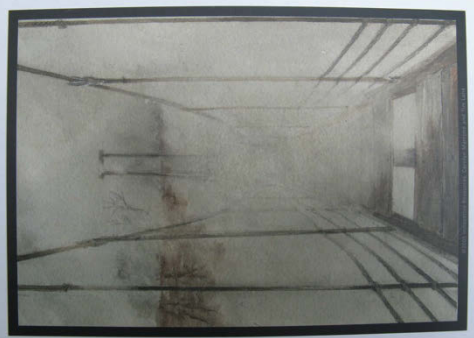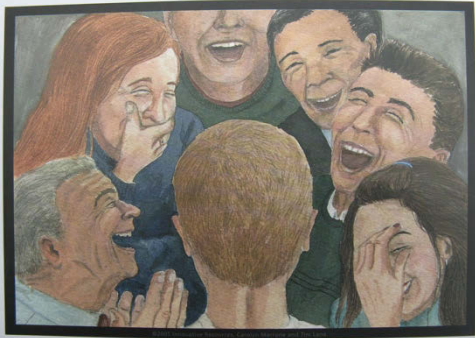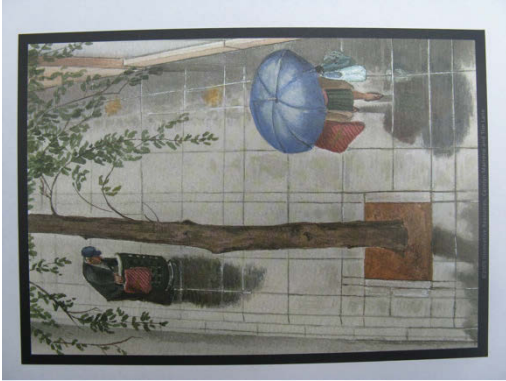
Appendix 3 – Summary of Conference Papers and Workshops

The following lists abstracts for both conference papers I have presented and conference workshops I have participated in either as the organiser or as a facilitator.

Conference Papers

ANZAM 2007

Landcare and the Livelihood of Knowledge

Authors: Robert Perey; Dexter Dunphy; Melissa Edwards; Suzanne Benn

Abstract

This paper explores how communities generate effective ecological solutions using both implicit narrative construction and explicit processes of knowledge creation and knowledge application. We argue that the act of developing a narrative frames our understanding of the environment and governs our relationship with our environment. We identify micro-narratives extracted from the interviews with members of Australian Landcare organisations and link these micro-narratives to knowledge creation and dissemination processes. We conclude that social change toward sustainability comes about through the rewriting of the environmental story within which we situate ourselves.

LANDCARE: a narrative construction for ecological sustainability

Authors: Robert Perey; Suzanne Benn; Dexter Dunphy; Melissa Edwards

Abstract

This paper explores how communities generate effective ecological solutions using both implicit narrative construction and explicit processes of knowledge creation and knowledge application. We argue that the act of developing a narrative frames our understanding of the environment and governs our relationship with our environment. We identify micro-narratives extracted from the interviews with members of Australian Landcare organisations and link these micro-narratives to knowledge creation and dissemination processes. We conclude that social change toward sustainability comes about through the rewriting of the environmental story within which we situate ourselves.

Sustainability for the Individual:

Multiple Constructions and Resistance to Change

Author: Robert Perey

Abstract

Sustainability continues to be a problematic concept and practice in organisations, particularly where the intention is to implement ecological/environmental sustainability. This paper links environmental discourses to the adoption of sustainability in the workplace. Taking a sense-making approach it looks at one interview to understand how that person is responding to sustainability initiatives in their organisation. The findings are that this person uses multiple meanings of sustainability, and that these meanings are used concurrently. I conclude that increased resistance to change is stimulated when the term "sustainability" is used on its own.

TBL – an endothermic failure to and exothermic problem

Author: Robert Perey

Abstract

The concept of the "triple bottom line" (TBL) was introduced into the organisational lexicon during the 1990s and its landmark reference is John Elkington's *Cannibals with Forks* (1999). The strategy at the time appeared to be a sound one, to introduce and have accepted a balanced measurement and reporting system that facilitated the adoption of sustainable development throughout the business world. The adoption of TBL into the discourse of business has been rapid. Within ten years of its introduction, the troika of economic, environmental and social performance framed the implementation of sustainable development in organisations (see Bansal 2002; Gauthier 2008).

This logic of a more balanced approach to organisational measurement was intended to appeal to an accounting and finance mindset that was turning its attention to the sticky problems associated with intangible assets and their measurement and integration with performance management of organisations; the most recognisable example is the balanced scorecard (Kaplan & Norton 1993). TBL, like the balanced scorecard, was designed to provide a categorical system that allowed a "balanced" view of sustainable development to be introduced and accepted within the orthodox frameworks of organisational performance assessment.

TBL also attempts to conflate the economic, social and environmental perspectives into a new synthesis grounded in systemic thinking. The reality is that categorisation imposed by financial accounting's conventions (Roberts 2003) is so deeply embedded in the business psyche that these three categories are inevitably approached singly rather than holistically using either/or logic rather than and/both logic.

TBL has attracted its fair share of criticism, much of which, relates to the manner or the mechanism by which it is implemented or undertaken (for example Milne, Ball and Gray 2008), There has been very little criticism about its underlying logic that is criticism of its strategy to integrate into mainstream organisational discourses. These critiques of TBL point to an irony inherent in its adoption strategy, TBL the coloniser

instead became the colonised; TBL has become captive of the hegemonic narrative(s) that it set out to change.

The primary goal of TBL (sustainable development) that it shares with environmentalism is to change institutional behaviours that underpin our way of life. There is recognition here that at present our economic practices are exothermic. For example, energy reduction is now a major socio-political concern for which endothermic solutions need to be found and human induced climate change is but one indicator of our exothermic lifestyles.

The impact of TBL then is negligible when related to its intention of providing an endothermic solution to an exothermic problem. This I argue is due to the inability of the TBL discourse to colonise organisational discourses dominated by accounting categorisation. The narratives and metaphors embodied in TBL do not offer a significant challenge to these discourses, quite the opposite; they were designed to appeal to accounting categorisation. What is needed in my view is a new narrative, one that is able to shift our current patterns of thinking to more holistic models better suited to decision-making for endothermic solutions.

What would such a narrative look like, what would such a narrative sound like, what metaphors would be suitable?

This new narrative I suggest needs two qualities that I think are missing from TBL, moral dissonance and generativity. Moral dissonance promotes sense-making (Weick 1995) and generativity stimulates new lines of thinking either within the existing paradigms or on the edges of new paradigms. These two qualities remove one of the problems associated with environmental discourses of change, the claim that environmentalists stimulate change through fear. Fear does meet the first quality of creating dissonance but often does not proceed to the second quality of stimulating generativity.

Perhaps what is needed is an insight from Indigenous Knowledges, specifically the concept of Country that is the core of Australian Aboriginal knowledge systems. Country is an extant philosophy of living holistically and in balance ecologically. Within Country there is a way of thinking called "pattern thinking":

Imagine a pattern, this pattern is stable, but not fixed. Think of it in as many dimensions as you like – but it has more than three. This pattern has many threads of many colours, and every thread is connected to, and has a relationship with, all of the others. The individual threads are every shape of life….The pattern made by the whole is in each thread, and all the threads together make the whole….The whole is more than its parts, and the whole is in all its parts. This is the pattern that the Ancestors made. It is life, creation, spirit, and it exists in country. (Kwaymullina, A. 2005, p. 13)

The proposition of this paper is that the visible success of TBL in the day-to-day discourse of business is a chimera, which camouflages organisational failure to achieve change in behaviours, particularly ecological behaviours, that reverse our destructive impact on nature and our environment. What is needed is a new narrative, one that will promote endothermic behaviours; the suggestion is that this new narrative is shaped by the Aboriginal concept of Country.

David Mowaljarlai, a Kimberly lawman, identified pattern thinking as important Aboriginal knowledge that could benefit the Western mind that he characterised as using triangle thinking. Now if we took up his offer that would be cool.

Local organising and sustainability? It has to be Fractal!

Author: Robert Perey

Abstract

Organising for sustainability seeks systems change at a global level. This objective is captured in the phrase "Think global, act local"; an assumption is that global change will happen through summative local action. This paper argues that local action will not necessarily produce systems change and that a new categorisation for interacting with systems, a fractal, is needed to compliment conventional categorisations of local and global. The paper introduces the concept of fractal narrative as a useful tool for identifying fractals in organisational settings and argues that change for sustainability needs to be framed as a fractal narrative in order to facilitate implementation success.

Conference Workshops

Academy of Management 2010

Creating Sustainability Theory for Organisations

Session Participants/Discussants

Professor Gordon P Rands, Professor Bobby Banerjee; Professor John Jermier; Professor Carolyn Egri; Professor Kate Kearins; Professor Suzanne Benn; Professor Mark Starik

Abstract

This PDW is a thought experiment. Building on workshops that ran in 2008 and 2009, that explored how existing management theories inform sustainability and vice versa, we will explore the proposition that "in contrast to orthodox organisational theories that organise around the primacy of the self, organisational sustainability theory organises around the primacy of the other".

Scholars in corporate sustainability have called for the development of sustainability theory for organisations arguing that there is a gap that existing theories do not fill. "O&E researchers have an opportunity to really push the theoretical and methodological frontiers based on insights that are unique to the natural environment" (Bansal & Gao 2006, p. 474). We also examine the proposition that existing theories have sufficient explanatory power to handle problems that sustainability raises.

The workshop will run café style to facilitate participation and interaction. A novel technique will be used for generating themes, which will be explored in relation to potential sustainability theory for organisations. The ideas generated and recorded during discussions will be captured and made available to participants.

As a thought experiment, this PDW should interest both the theoretically curious and the theoretically entrenched.

Beyond traditional perspectives on economic growth:
Green growth, steady state, and degrowth

Session Organiser: André Reichel, John Jermier

Session Participants: Paul Adler, Bobby Banerjee, Anita Burke, Brian Czech, Carolyn Egri, Robert Perey

Abstract

This PDW is aimed at moving the discussion on corporate and organisational sustainability beyond the traditional paradigm of economic growth. To accomplish this, we introduce the emerging field of "décroissance" (or "egrowth"; Latouche, 2004, 2010) and discuss it in relation to traditional models of organisational growth, steady state economics, and the movement to generate green growth. Although there is a long history of research on organisational growth undertaken by Academy of Management scholars, it tends to emanate from a taken-for-granted paradigm that naturalises unbridled economic growth, unlimited technological development, and strong anthropocentrism (cf. Jermier, 2008). Panelists in this workshop come from different continents and different organisation and management studies traditions.

They hold different views on organisational growth but tend to see the limits of the traditional paradigm of economic growth. They will invite workshop participants to consider alternative perspectives on growth and degrowth. Using a highly interactive format (including World Café roundtables, short content presentations, and open discussion), participants will be encouraged to discuss the possibilities of moving organisational research and organisational practice beyond conventional perspectives on growth. It is important to systematically consider critical perspectives on growth as this theme is fundamental to advancing the theory and practice of sustainable business. Main issues addressed in the workshop are: (1) paradigmatic foundations of growth and degrowth frameworks; (2) relation of corporate financial performance and shareholder returns to growth/degrowth; (3) key theoretical concepts and research questions necessary to guide new business models and structures beyond traditional approaches to growth; (4) methodological challenges and issues facing researchers interested in new approaches to growth; and (5) government regulatory frameworks

and arrangements with NGOs capable of contributing to the development of innovative approaches to growth.

Degrowth – stimulating discourses of change

Session Organisers: Robert Perey, Rd. André Reichel

**Session Facilitators:** Professor Thomas Clarke, Associate Professor Cathy Rusinko

Abstract

Degrowth is an emerging discourse(s) beneath the umbrella of sustainability discourses that draws on a variety of sources to argue for a new imaginary. It draws on limits discourses to acknowledge the finite capacities of the ecologies within which humans live. It draws on the pragmatic discourses to recognise the creativity to navigate through complex problems inherent in the human condition. It draws on radical environmental and social discourses to challenge entrained patterns of seeing. Degrowth is a call for a radical break from traditional growth-based models.

The outcomes of this caucus will be questions that may be used by researchers, practitioners and teachers to further develop the discourse and enactment of degrowth, and identification of a controversial standpoints paper(s) in management science and practice.

Appendix 4 – Carepoint and Corcon Concept Maps

Carepoint Concept Summary Map
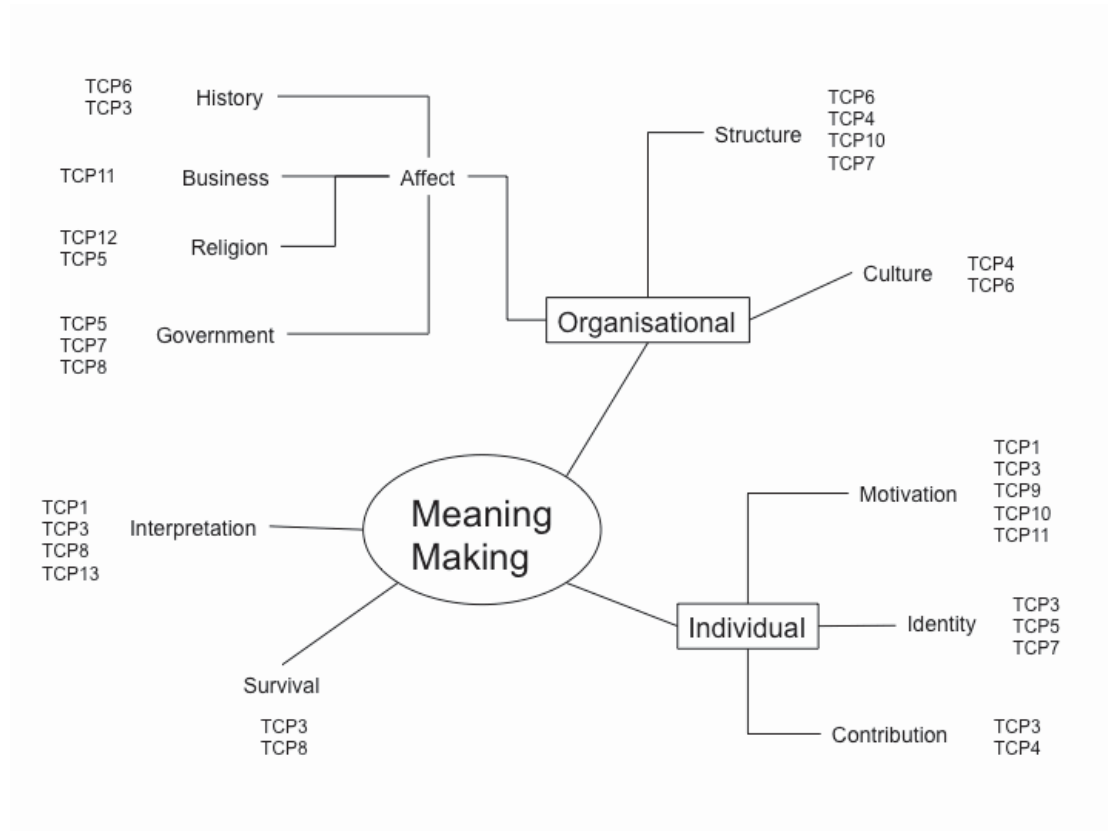
Corcon Concept Summary Map
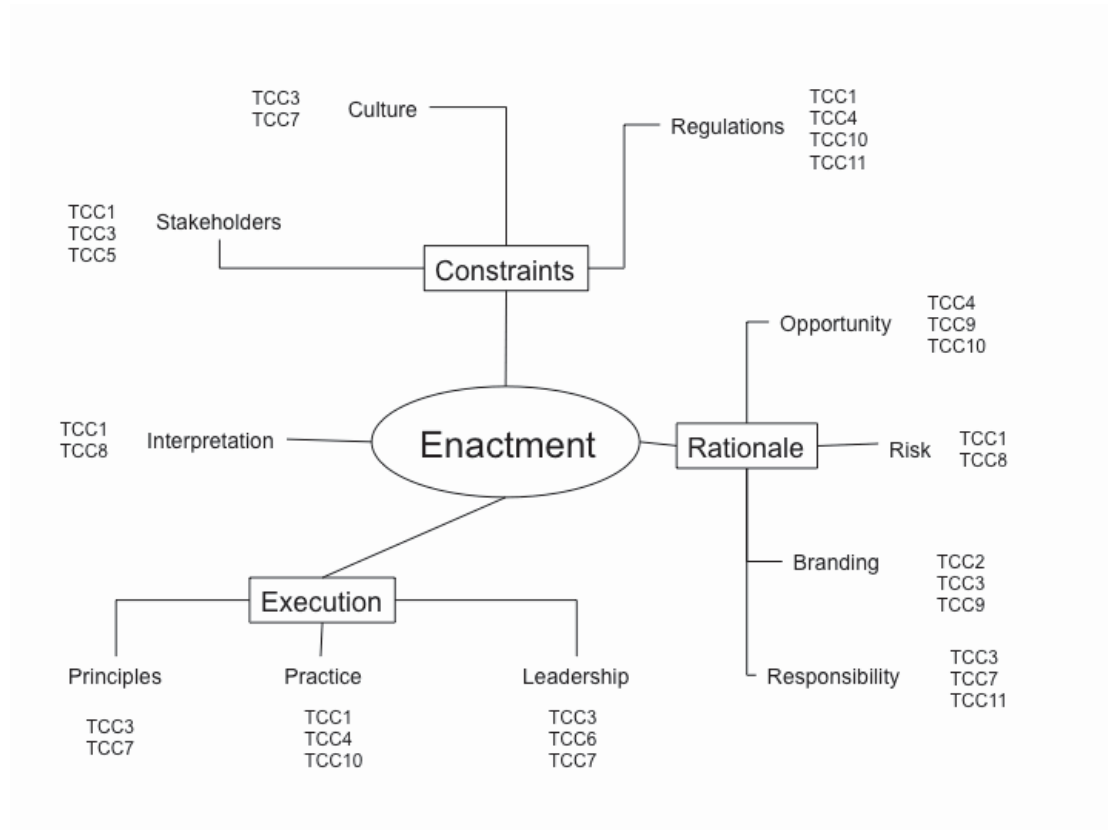
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