Understanding Sustainable Development in the Voluntary Sector: a Complex Problem

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Abstract

Sustainable development, a concept that emerged as we began to understand the negative impacts of environmental challenges, such as pollution and climate change, on human prosperity and social equality, was seen as offering a way of preserving the natural systems that sustain human life on Earth whilst continuing to support economic and social development. As a concept, however, it presents many challenges, both in its interpretation and in its application and one of the challenges is the requirement for behaviour change from all sectors of society, including the voluntary sector. There is an assumption by the UK government that voluntary organisations, as trusted agents of change, are well placed to help the poorest cope with the disproportionate impacts of economic and environmental unsustainability and that the voluntary sector should be working with local stakeholders to promote behaviour change at a local level. This research identified that limited understanding of the concept of sustainable development and inappropriate communication and interaction with the UK government, both nationally and locally, acted to inhibit voluntary sector engagement in change. Part of the problem could be that traditional linear approaches to behaviour change, based on clear cause and effect relationships and pre-determined outcomes, are not appropriate when addressing complex problems like sustainable development, which involve multiple stakeholders, both human and non-human. The encouragement of behaviour change for sustainable development may require a new and different approach. This thesis concludes that Communities of Practice, a change approach that is sympathetic to the principles of complexity thinking, offers an alternative approach to behaviour change that could accommodate the complexity of sustainable development and additionally, has many features that would overcome the barriers to voluntary sector engagement. This type of non-hierarchical approach has the potential to encourage not only the voluntary sector but all stakeholders in a local community to work together to develop sustainability initiatives that are appropriate to the local circumstances.

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Gaia theory points to the fact that humankind's environmental sensitivity need not be altruistic. Although environmental debates are often couched in terms of 'saving the planet', research results from Gaia theorists make it clear that the planet can take care of it itself. What is threatened via ecological and social degradation is not the planet but humankind and its way of life. Thus, achieving sustainability will require balanced, complex interactions involving both co-operation and competition among all of the planet's subsystems, or the human condition will suffer as a result.

Lovelock 2000:28

Chapter 1 Introduction

'The fundamental challenge of sustainability goes far beyond that of environmentalism. The question is whether we can fulfil our unique potential as human beings, to understand our behaviour and its consequences.' (Clayton & Radcliffe 1996:ix)

The aim of this chapter is to introduce the topic of this research - the role of the voluntary sector in the promotion of local sustainability. It will discuss the rationale for undertaking this journey, explain the context, outline the research questions and provide an overview of the methodological approach adopted before summarising the findings and the contribution to knowledge and practice.

1.1 Introduction to the Field – rationale and context

The concept of sustainable development emerged on the world stage around 1987 as the negative impacts of environmental challenges, such as pollution and climate change, began to affect human prosperity and increase social inequality (WCED 1987, UN conferences 1972, 1987, 1992, 2009, IPCC 2007, Hawken 1993, Porritt 2005, Stern 2006, Waddock 2007). It was seen as a way of preserving the natural systems that sustain human life whilst continuing to support economic and social development. Sustainable development is however a complex and contestable problem (Gladwin et al 1995, Springett 2006) that will require changes in behaviour from all sectors of society: governments, businesses, public sector, voluntary and community organisations, communities and families (Stern 2006, UK Government 2005). Recognising the need for action, in 2005 the UK Government launched 'Securing the Future', a policy for sustainable development based on the three pillars of: environmental limits, a strong, healthy and just society and a sustainable economy (triple bottom line).

Since then climate change, often seen as purely an environmental problem, has also increasingly hit the headlines and in response to the growing issue of climate change, the UK Government: organised a 'Citizen's Summit' (Defra 2007), developed 'A Framework for Pro-environmental Behaviour' (Defra 2008) and launched the 'UK Low Carbon Transition Plan' (July 2009). These all highlight the contribution of community action in changing behaviour.

'The ultimate aim is to protect and improve the environment by increasing the contribution from individual and community action.' (Defra 2008:3)

The government believes that voluntary organisations working with the local community can be powerful agents for change at a local level and that they are well placed to help the poorest cope with the disproportionate social and economic impacts of environmental problems (Tandon and Mohanty 2002). The voluntary sector is therefore seen as an important stakeholder in the Government's approach to the creation of more sustainable communities:

'Voluntary and other non-profit organisations can mobilise millions of people in the fight against climate change to help create and safeguard a better future. When we act together, the scale of our achievements far outstrips what any of us could achieve alone. The thousands of organisations that make up the third sector are powerful forces for change in our society – and it's a force we need on our side in the fight against climate change. We know that climate change will hit the world's poorest and most vulnerable people first, both here and abroad. I believe this declaration will empower every voluntary organisation in the country, regardless of its size or location, to be part of the broader movement to tackle climate change with urgency and determination.' (Environment Secretary, launch of the Third Sector Declaration on Climate Change for Third Sector Organisations 2007).

(The term voluntary sector is used throughout this thesis to represent a diverse sector incorporating many different types of not-for-profit organisations that can be variously referred to as Civil Society, the Third Sector or Non Governmental Organisations.)

Considered an engine of progressive change and a voice for society's ambitions about the kind of world we want to live in, the voluntary sector, through organisations such as Friends of the Earth, the World Wildlife Fund for Nature and Greenpeace, has led the way in raising awareness and providing information about environmental issues (Stephens and Eden 1995).

'Civil society has often been ahead of other sectors in warning of new threats - like those from climate change - as well as embracing new opportunities.' (Mulgan 2007:252)

There has, however, been limited research into voluntary sector engagement in the promotion of behaviour change for sustainable development (Georg 1999, Church and Elster 2002, Seyfang 2006, Seyfang and Smith 2007, Middlemiss and Parrish 2009, Middlemiss 2009**,** Buchs et al 2011) and there is a suggestion that the sector is not as engaged as it could be, with urban non-environmental organisations the least likely to change (EAC/CAG Nov 2007c:33).

Sustainable development has been described as a multi-dimensional, dynamic concept that is difficult to describe in simple cause and effect relationships (Kemp and Loorbach 2006, Rip and Kemp 1998) and as indicated earlier it is a complex and controversial concept about which there is little clarity (Lozano 2008, Gladwin et al 1995). Other words and phrases, like climate change, environmentally friendly, green, eco-friendly, etc. are often linked with the concept of sustainable development and this plethora of similar but competing terms is said to diffuse the need for behaviour change (Hawken 1993). The lack of clarity surrounding sustainable development could therefore be one of the factors inhibiting voluntary sector engagement in the promotion of sustainable behaviour, especially in these challenging economic times, when the sector is facing difficult decisions to make about how best to utilise its scarce resources (NCVO 2011). This research will address the limited research into voluntary sector engagement in this area by exploring how urban non-environmental voluntary organisations, those least likely to engage in behaviour change (EAC 2007), understand and respond to the government's agenda to encourage their participation in local behaviour change to support sustainable development.

Climate change, as indicated above, is one of the phrases mentioned that overlaps with and confuses the concept of sustainable development. It is often seen as purely an environmental issue despite the fact that it has social and economic impacts that align it with the three pillars of sustainable development.

'Climate change is not simply an environmental issue – it threatens the struggle to defeat poverty and inequality in the UK and globally. It is an issue of social justice and a moral imperative'. (HM Government 2010)

Although climate change is the object of much Government policy, I have chosen to focus this research on sustainable development because sustainable development, unlike climate change, is more readily associated with interdependency between social, environmental and economic issues (Hale 2010, ESRC 2009, Guthrie, Ball and Farneti 2010). I feel that examining the concept of sustainable development, which incorporates climate change, will create a broader platform from which to explore the inter-relatedness of the social, economic and environmental issues facing us today.

The primary aim of this research was therefore, to explore the voluntary sector understanding of the narratives that constitute sustainable development and the response

to the government agenda around voluntary sector contribution to the creation of local sustainability. Narratives are versions of reality whose acceptability is governed by convention rather than by empirical verification (Bruner 1991) and because of the contested nature of sustainable development with its competing definitions and interpretations (narratives) this research took an emergent, inductive approach that acknowledges reality as a social construct open to multiple interpretations (Johnson and Duberley 2000).

At the heart of the sustainable development concept is the belief (narrative) that anthropogenic damage to the natural environment is creating social and economic problems that threaten the future sustainability of human society (McKibben 2007, Porritt 2005). Rather than explore the reality/truth, or not, of anthropogenic damage, I am considering it as one of the many narratives that contribute to and influence the responses of the voluntary sector to the sustainable development agenda (Bruner 1991). Closely linked to the narrative around anthropogenic damage, is another narrative that suggests sustainable development, requiring behaviour change at all levels of society, offers a way to address the social and economic problems resulting from anthropogenic damage to the natural environment. Developing a better understanding of how these two narratives influence voluntary sector thinking about sustainable development and the need for behaviour change are therefore important factors when exploring the government narrative/assumption that the voluntary sector can contribute to the promotion of sustainable development.

As already outlined, the complexity surrounding sustainable development may increase the difficulty of trying to encourage behaviour change. It involves many agents, human and non human, interacting on a global scale, and many of the multiple definitions explicitly acknowledge an inter-dependency between humans and natural systems as well as between environmental damage, human equality and economic development – a systemic perspective. This systemic perspective can be seen as challenging traditional approaches to behaviour change based on linear, reductionist thinking which try to reduce the complexity by breaking down the problems into single issues to be examined independently (Grey 2009, Darwin et al 2002). One outcome of trying to address complex, dynamic problems in a linear way is that changing any one element impacts on other elements in the system and this can create second order problems that can be more difficult to address than the original

one (Jahn and Wehling 1998). For example, the growing of bio-fuels as an alternative to fossil fuels in order to reduce CO2 emissions has been associated with increases in global food prices which have increased poverty and inequality (BBC World News 2012). The nature of sustainable development suggests therefore, that encouraging the necessary behaviour changes may require us to move away from traditional linear approaches to change, and find new and different approaches that recognise the interdependency of the issues and the differing needs of the multiple stakeholders (Voss et al 2006).

Complexity thinking is a non-linear, multidisciplinary, holistic, flexible and integrative framework that acknowledges interdependency and relationship rather than separation (reductionism) (Capra 1996, Spretnak 1999). As an emerging field that developed from systems thinking it offers the prospect of solving a wide range of important problems facing us as individuals and as a society (Johnson 2009) and could provide the theoretical basis for an approach to sustainable development. Communities of Practice (CoPs) (Lave and Wenger 1991, Wenger 2006) have been found to be an effective way of supporting behaviour change in organisations by bringing people together to encourage change through social learning. They acknowledge non-liner relationships, are sensitive to the needs of different stakeholders and encourage an understanding of the whole system, a systemic approach that mirrors the principles of complexity thinking (Dent 1999). CoPs therefore could provide a different way of supporting the behaviour changes needed to address sustainable development and as they exhibit features that could appeal to the voluntary sector ethos they could potentially be more effective in encouraging voluntary sector participation than traditional linear approaches.

The primary aim of this research was, as mentioned, to develop a better understanding of the voluntary sector's interpretation of and response to the government's expectations around their participation in the sustainable development agenda. The complex nature of sustainable development and the apparent need for a new and different approach led to the second aim of this research - to examine the potential of complexity thinking, enacted through CoPs, as a different way of addressing complex multi-dimensional problems like sustainable development and engaging the voluntary sector in the promotion of sustainable behaviour at a local level. The contribution to practice will be not only how the principles of complexity thinking enacted through CoPs could encourage voluntary sector participation in

the promotion of behaviour change, but also how this approach could be useful for policy makers and other organisations facing complex problems.

1.1.2 Research Aims and Objectives

1. to explore the government narrative that the voluntary sector, as a sector that is innovative and good at influencing change, can mobilise for behavioural change at local level and contribute to the creation of more sustainable communities.
2. to examine if or how complexity thinking could provide a different framework for addressing complex multi-dimensional problems like sustainable development, one that could overcome barriers to engagement and encourage voluntary sector participation in the promotion of sustainable behaviour at a local level.

As indicated earlier, I am taking a narrative approach, defining a narrative as a subjective account of an event or action that does not constitute a definitive truth (Bruner (1991). Accepting sustainable development as a narrative allows exploration of its interpretation and provides a basis for examining the associated concepts, beliefs or narratives that underpin it. Two key underlying concepts that contribute to sustainable development are:

- anthropogenic damage to the natural environment is creating social and economic problems that threaten the future sustainability of human society (McKibben 2007, Porritt 2005).
- sustainable development, requiring behaviour change at all levels of society, offers a way to address the social and economic problems resulting from anthropogenic damage.

As narratives can be powerful contributors to the construction of reality (Bruner 1991), how the voluntary sector interprets sustainable development will affect their response. If the sector doesn't understand the impact of anthropocentric damage, for example, it is unlikely to see a need for behaviour change. In other words, if sustainable development is not seen as a relevant narrative for the sector, it is unlikely that local voluntary organisations will be willing to contribute to the promotion of local sustainability in the way the Government hopes. Exploring how the voluntary sector understands the key narratives that constitute sustainable development is therefore, a key element of this research and the following research questions were developed to address the first research aim and develop an understanding of the potential voluntary sector response to the government's call for the sector to mobilise for behavioural change at local level:

1.1.3 Research Questions

- What do voluntary sector stakeholders understand about the current state of the natural environment and the effects of anthropogenic damage on society, including how it might affect their organisation, service users and community?
- How is the concept of sustainable development and the need for behaviour change understood in the sector?
- Do voluntary sector stakeholders consider that the sector has a role to play in the promotion of sustainable behaviour at a local level (including mitigating their own impact on the natural environment)? If so, how might they go about this and what support will they need?
- What are the barriers to the promotion of sustainable development?

This information will be useful for Government as it develops it strategies for community participation in the fight against climate change and the creation of a more sustainable society, but information alone will not bring about change. The Government will also need a way of utilising this information to encourage voluntary sector participation in the sustainability agenda. As highlighted earlier, the complex, multi-dimensional nature of sustainable development suggests it is not something that can be easily managed by classical, problem solving approaches that rely on linear analysis and planning to predict outcomes and eliminate uncertainty (Voss et al 2006). In a dynamic world, achieving sustainable development may require a different approach, an approach that changes the way we think about the natural world and recognises our embeddedness in the wider ecology (Borland 2009) and at the same time provides the flexibility to allow adaptation to ongoing environmental changes. This need for a different way of actioning sustainable development is explored in the second aim of this research – the potential of complexity thinking to provide a different way of addressing complex problems like sustainable development and encouraging voluntary sector participation in this agenda.

1.2 Structure of the Thesis

This thesis presents a critical overview of my research journey as I examined the potential of the voluntary sector to support the Government narrative and encourage the promotion of sustainable behaviour at a local level and the remainder of this chapter will give an outline

of the how the thesis is structured, identifying some of the main areas that are discussed in each chapter.

1.2.1 Chapter 2 Sustainable Development: a contemporary challenge

Chapter 2 is the literature review. It discusses the key themes that underpin this research: sustainable development, the role of the voluntary sector as local change agents, behaviour change, social learning and complexity thinking. It begins by highlighting the current narratives around the relationship between human behaviour and the environment, before discussing the contested nature of sustainable development and the need for behaviour change. It then focuses on different approaches to behaviour change and the importance of social learning. This is followed by a discussion of complexity thinking and the strengths and weaknesses of complexity thinking as a potentially new and different approach to behaviour change before examining the role of the voluntary sector as an enabler of behaviour change at a local level. To provide the context for this research I will now provide a brief overview of three main areas: sustainable development, behaviour change and complexity thinking, and the role of the voluntary sector.

1.2.1.1 Sustainable Development: a complex problem

Sustainable development is, as suggested, a controversial issue and one of the challenges I faced was trying to define it. It was first outlined in 1987, (WCED) in the Brundtland Report, 'Our Common Future', as a way to overcome the problems of anthropogenic damage.

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (WCED 1987)

Since then it has been variously defined as a concept for social modernisation on a global scale, that focuses on the triple bottom line of social equity, environmental quality and economic prosperity (Voss et al 2006, Gladwin et al 1995) but there are at least seventy different definitions (Lozano 2008). It can be seen as *'simply about the environment'*, or as *'too worthy an issue, without a clear business case'*, (EAC/CAG 2008:ii). Furthermore, its scale and scope mean that it is not easily translated into national or local issues, and it can be perceived as too big a problem for individuals or small organisations to address (Banerjee 2003, Weick 1984). Sustainable development therefore can appear as vague, confusing and almost meaningless - a messy, multi-dimensional concept that challenges dominant linear rational models of change (Porritt 2005, Lozano 2008, Gibson 2000, Daily et al 2008, Dresner

2002, Dobson 2007, Springett 2006, O'Riordan 1988, Gladwin et al 1995). Traditional linear problem solving approaches focussing on definitive answers, simple solutions and easily measurable outcomes have been criticised as insufficient to encourage the behaviour changes needed for sustainable development (Rammel et al 2003). Traditional, reductionist approaches to change have also been criticised for their acceptance of the anthropocentric worldview that separates humans from the natural systems on which they depend as this separation is seen by many as a contributing factor in the environmental damage sustainable development is seeking to address (Sterling 2003, Bartunek and Moch 1987). Voss et al (2006), aware of the challenges sustainable development presents for the governance of modern society, suggest that it requires new forms of problem handling that can overcome the problems associated with linear rationalism.

1.2.1.2 Behaviour change and complexity thinking

Complex problems are:

'value-laden, open-ended, multidimensional, ambiguous and unstable. Labelled 'wicked' and 'messy', they resist being tamed, bounded or managed by classical problem solving approaches.' (Klein J. 2004:4).

Sustainable development is, as discussed, a complex problem (Porritt 2005, Lozano 2008, Gibson 2000, Daily et al 2008, Dresner 2002, Smyth 2006, Dobson 2007, Springett 2006, O'Riordan 1988, Gladwin et al 1995) and classical problem solving approaches based on linear rationalism and simple cause and effect relationships with a focus on quick fixes and regulatory change (first order, structural change) may not be sufficient to bring about the changes needed for sustainable development (Klein J. 2004, Voss et al 2006). Dobson (2007) suggests sustainability requires a combination of first order and second order value change, but even this doesn't challenge the fundamental cognitive framework of linear rationalism that underpins the anthropocentric beliefs that separate humans from the natural environment. Sustainable development therefore, appears to require us to ask new questions and develop a different, more inclusive way of seeing the world, one that acknowledges our interdependency with the complex, adaptive system that is the Earth (Gaia theory, Lovelock 2000). Acknowledging the systemic nature of our lives and our role as co-creators of this system could be considered third order change - a move away from the linear rationalism associated with the modernist paradigm.

Complexity thinking is based on non-linear relationships and an understanding of the whole system and has been called third order thinking that transcends both first and second order change and challenges the dominant paradigm of linear rationalism (Dent 1999).

'Valid knowledge and meaningful understanding comes from building up whole pictures of phenomenon, not by breaking them into parts'. (Flood 2001:133).

Unlike linear rational approaches to change, in which powerful change agents attempt to manage the change process to achieve intended outcomes, in complex systems, change cannot be controlled and outcomes cannot be predicted (McMillan 2004). There is no master plan as change emerges as a product of the self-organisation of multiple agents acting independently within the system and power is dispersed to allow solutions and ideas to emerge from the interplay of different stakeholders (McMillan 2004). This kind of approach would allow local flexibility and could provide a framework to support the behaviour changes required for sustainable development in a way that is more palatable to the voluntary sector than traditional linear approaches. Communities of Practice (CoPs) that mirror the principles of complexity thinking and support social learning through social interaction (Lave and Wenger 1991) could be a way of enacting the principles of complexity thinking and the creation of local CoPs focussing on sustainable development and involving a variety of local stakeholders including the voluntary sector could therefore potentially provide a new and innovative way of supporting sustainable development and encouraging voluntary sector participation in behaviour change at a local level.

1.2.1.3 Sustainable Development and the voluntary sector

The public and voluntary sectors exist to mitigate negative externalities and market failures such as environmental damage, and to protect and enhance the life of citizens (Le Grand 2003). The UK Government sees sustainable development as a relevant issue for the voluntary sector because changes in the natural environment are likely to further increase social inequality for the poor and disadvantaged, those the voluntary sector works with. Aware of the strength of the sector as a change agent, either through campaigning or by contribution to policy (Mulgan 2007, Etherington 2008) the Government believes the sector can mobilise millions of people in the fight against climate change (Stern 2006, IPCC 2007, ESRC 2009, Guthrie et al 2010, Unerman and O'Dwyer 2010). Some in the sector understand

the relevance of the environmental agenda and see it as having the potential to re-invigorate civil society organisations and rebuild relationships with politics and politicians.

'The voluntary sector could be a key player in encouraging sustainable behaviour at community level that could lead to the creation a sustainable society encompassing ecological, social and economic security.' (Mulgan 2007:36)

There is evidence however, that this is not a view shared by all. Barings (2010) found some organisations were unconvinced that climate change was an issue for them and Porritt suggests that

'The vast majority of (voluntary) organisations address the social agenda; poverty, human rights, justice, health, but have little time for the environment – they think it is a nice thing for the affluent middle classes to do.' (Porritt 2005:29)

If the voluntary sector is to help mobilise for change therefore, it is important the sector is aware of the link between social sustainability and ecological sustainability and understands the need for behaviour change, but research suggests that the voluntary sector, and particularly urban non-environmental organisations, don't fully understand the concept of sustainable development or the need for behaviour change (EAC/CAG 2007c, Big Lottery). The apparent lack of understanding of the link between social justice and environmental issues could be a contributing factor in the apparent lack of willingness to engage and my personal experience supports this. I have been involved with the voluntary sector for many years, both as a volunteer, as a trustee, and I currently teach a Masters level module on Charity Resource Management at a UK university. Although sustainable development impacts on social justice and in theory, accords with the voluntary sector ethos, when I mention sustainability or sustainable development to students who are working in the sector, they assume I am talking about financial sustainability. Even after explaining that I am referring to environmental sustainability the attitude appears to be that if it is not part of the organisational mission it is not something on which limited resources can be spent. Organisations struggling to secure the funds and resources needed to support their core organisational mission (Klein K. 2004, NCVO 2011) will be unwilling to invest in non-core activities like sustainable development if they cannot see how it relates to their mission and their service users and the Big Lottery (2006) identified environmental considerations as one of the areas the voluntary sector needed more help and guidance on to enable them to make improvements.

The apparent mismatch between the Government rhetoric that suggests voluntary sector organisations should be active in the promotion of sustainable development at a local level and the understanding of this in the sector makes this a relevant and topical area to explore and based on CAG/EAC findings that urban non-environmental organisations were the least likely to engage in behaviour change to support sustainable development (2007c), this research focussed on non-environmental voluntary organisations in a city location with a city strategy that explicitly recognised the contribution of all sectors in their aim to become *'an attractive and sustainable low carbon city'*

'Reducing energy consumption and increasing energy efficiency can only be achieved by shift in attitudes and behaviour towards more sustainable life styles - everyone has to do their bit.'(City Strategy 2007)

1.2.2 Chapter 3 Methodological Choices – understanding different perspectives

This chapter presents some critical insights into the methodological choices made during the research process. When choosing a research strategy, it is important to consider the phenomena to be investigated as well as the philosophical underpinnings of the researcher and their understanding of the nature of knowledge.

'Choice and adequacy of a method embodies a variety of assumptions regarding the nature of knowledge and the methods through which knowledge can be obtained, as well as a set of root assumptions about the nature of the phenomena to be investigated.' (Morgan and Smircich 1980:88)

I chose an iterative, emergent, inductive approach based on a postmodern philosophy. Iteration involves repeating a sequence of tasks in the same manner each time, an emergent approach allowed me to follow the data, and induction is a process of theory building from the empirical data. I chose postmodernism because it focuses on the role of discourse in the social construction of what is taken to be real (Johnson and Duberley 2000) and appeared to offer an approach that would allow me to explore and acknowledge the multiple dialogues or narratives that contribute to sustainable development in a way that respects all voices and not just the dominant narratives of government or environmentalists (Smyth 2006).

'Human action arises out of the culturally derived meanings deployed during sense making.' (Johnson and Duberley 2000:78)

If we acknowledge that human action is, as Johnson and Duberley suggest, a social construct, responses to sustainable development will vary according to individual beliefs and understandings and there may be different solutions for the same problem, depending on the nature of the participants and the circumstances. Postmodernism offers a way of uncovering these different beliefs and assumptions.

Furthermore, because postmodern expresses *'incredulity towards metanarratives'* (Lyotard 1984:xxiv) it could also provide a way of asking fundamental questions about the relationships between humans, the natural environment, and how we live our lives (challenging the dominant meta-narratives). As already discussed, the complex and contested nature of sustainable development suggests that traditional approaches to behavior change may need to be challenged.

There was another reason for opting for a postmodern approach - postmodernism has many similarities with complexity thinking in that they both share an emphasis on localised change and discourse or interaction as an enabler of change, acknowledging that knowledge is a product of interaction between agents (Cilliers 1998).

Postmodernism and complexity thinking have something else in common - they regard the researcher as a co-creator of the knowledge generated, an active participant in the outcomes that influences the research process as much as the research process influences them (McMillan 2004, Morgan and Smircich 1980). The outcomes of this is that the researcher, as part of the system, cannot stand outside, investigating from the perspective of an objective observer and therefore the researcher must be transparent about their ontological and epistemological position (reflexivity) and their influence on the process.

'In order to understand the other the researcher needs to understand him/her self and their perspective of truth.' (McAuley et al 2007:334)

As I am a co-creator of the research I think it is appropriate and indeed necessary to provide a brief overview of how my ontological beliefs have contributed to the development of this research.

Ontology relates to the nature of truth. The researcher's ontology affects not only the research methods but the interpretation of the outcomes (Johnson and Duberley 2000, Morgan and Smircich 1980), thus *'a priori beliefs must be open to scrutiny as much as the*

empirical evidence' (Darwin et al 2002:326). Epistemology is concerned with how we ask particular questions and assess the relevance and value of the research findings. It is *'the study of the criteria by which we can know what does and does not constitute warranted or scientific knowledge'* (Johnson and Duberley 2000:3).

My a priori beliefs and understanding, (history in a complex system), differ from the modern, rational, anthropocentric world view that emerged from the Enlightenment and shaped our modern Western way of life. From an anthropocentric perspective, nature is a resource to be exploited for human convenience rather than a resource to be respected and valued as part of our life support system, and powerful industrial and technological expansion since the Enlightenment has reinforced the separation of humans from nature. (McKibben 2007, Peate 2005).

'The Western way of knowing has denied validity to every mind save its own. Rationalism demanded superiority to and separation from nature' (Griffiths 2006:14)

Although this approach has contributed to the affluent lifestyles experienced in the developed world today, the use of nature as a tool for economic development is also seen as the root of the current social and ecological problems (Giradot et al 2001). The scientific revolution of 17th century Enlightenment, based on objective empiricism, inductive reasoning and analysis and the separation of mind and body, subject and object, observer and observed, people and nature, has made us blind to the consequences of our actions Miller (1999). Recent developments in science, such as quantum physics, however are beginning to challenge our concept of the nature of matter, the separation of mind and matter and our ability for objective observation (Heisenberg 1962, Chopra 2007b, Berman 1989).

My personal ontology is eco-centric, similar to that of indigenous peoples, (Traditional Ecological Knowledge), which sees humans as part of nature and recognises that natural systems need to be safeguarded because they are intrinsic to human life (Peate 2005, Blewitt 2010). Several factors have contributed to my beliefs and understandings, not least living and working in Japan for 10 years, which exposed me to a different set of cultural values, and in particular, the concept of relativity inherent in Eastern philosophies such as, Daoism, Buddhism, and Confucianism (Batchelor 1998). My history therefore, as well as influencing the way I view nature, has challenged my understanding of the truth and the

absolute separation of mind and matter associated with scientific objectivity. For me, truth is not absolute but is located in history and changes as knowledge and understanding change. In other words, it is defined through our relationships with the world around us.

'Reality is socially constructed and our understanding of it is created not discovered.' (Schwabenland 2006:3)

This co-creative ontology lead me to be interested in the relationships between elements in the system (a holistic view) rather than the elements themselves (a reductionist view) and influenced my choice of research methodology towards an approach that can accommodate different truths – postmodernism, and acknowledge non-linearity, co-creation and relationship –complexity thinking. The inductive, emergent approach I have adopted will allow me to explore both individual understanding of the narratives surrounding sustainable development, and the relationships between the government, the voluntary sector and society, as all of these will influence behaviour change.

In terms of behaviour change, Mulgan, recognising the socially constructed nature of society and the importance of acknowledging different perspectives, suggests that

'there is not one future but multiple possible futures, dependent partly on how we choose to respond to or create change ... It is important to have conversations about the future in order to understand the present better and differently.' (Mulgan 2007:252)

He stresses the role of conversation in developing understanding and stimulating change and this led me to choose conversation as the data gathering approach because I felt conversation was consistent with the co-creative process I was trying to explore. Conversation removes the interviewer from a position of an expert and places them as an equal to create a situation where participants and the researcher learn together and this increases the potential for co-creativity (Kuhn and Woog 2005). I used an iterative three stage data gathering process, involving conversations with various local stakeholders including the local council, representatives from non-environmental voluntary organisations and coordinators of local voluntary groups.

1.2.3 Chapters 4 and 5: The Findings of stages 1 and 2

Chapter 4, 'Exploring the Terrain', presents the findings from the first round of conversations (Stage 1) with five key stakeholders in strategic positions of influence in the city or in the voluntary sector. The aim was to understand their perceptions of the role of

the voluntary sector in the promotion of sustainable development and identify significant local relationships. As well as confirming the relevance of sustainable development for the sector, it highlights how poor communication and a lack of networking in the city appeared to be a factor in the lack of engagement by non-environmental voluntary organisations.

In an iterative process, the findings from this first stage of the research informed the next stage of the process, Stage 2 - conversations with urban, non-environmental voluntary organisations in the city, the findings of which can be found in Chapter 5, 'The Potential for Change'. As individuals, participants expressed concern about environmental issues, but confusion around language and lack of understanding of the interdependency between the social, the economic and the environmental inherent in the concept of sustainable development left them unclear of its relevance to their organisation and their service users. Furthermore, bureaucracy, limited funding, lack of information and little or no networking around sustainable development were also identified as barriers to change.

A major theme that emerged from stages 1 and 2 of the research was that engaging in conversation about sustainable development appeared to create the space for participants to reflect on and develop their understanding of the issues, and this increased the relevance of sustainable development for their organisations and service users and led to small changes behaviours. The need for new understanding and how this can increase the potential for behaviour change (Weick 1995) contributed to the development of a complexity framework enacted through CoPs as a potentially new approach to behaviour change that would encourage voluntary sector participation.

1.2.4 Chapter 6 Voluntary sector and Sustainable Development: to engage or not

This chapter analyses the findings from Chapter 4 and 5 to address the first research aim: an exploration of the government narrative around the potential participation of urban non-environmental voluntary organisations in the promotion of local sustainable behaviour change. Themed around the research questions outlined in section 1.1.3.it looks at the interpretation of sustainable development by the participants and examines how their understanding of this agenda influences their contribution to the promotion of behaviour change at a local level. It highlights barriers to their engagement and illustrates the potential

of engaging in conversation as a way of stimulating new understanding and changing behaviour.

1.2.5 Chapter 7 Seeing the world anew – contribution to practice

'We can't make the earth sustainable: it is sustainable – but whether with us or without us, is our choice.' (Judge 2002:9)

Sustainable development, as highlighted earlier, is a complex problem and as human beings with agency we have a choice. We can choose sustainability or we can carry on with business as usual and deal with the consequences. This chapter explores the second aim of the research, an understanding of how the principles of complexity thinking, applied through Communities of Practice, could support the choices we need to make for the future.

Aware of the need for a new framework to encourage behaviour change, the realisation that conversation, or face to face engagement, supports social learning and could be an effective way of changing understanding and thus potentially changing behaviour (Weick 1995) led to the development of Communities of Practice, as a way of supporting behaviour change for sustainable development at a local level by encouraging voluntary sector participation. Communities of Practice (CoPs) bring together different stakeholders to share knowledge and develop solutions that work for them in their local situation (Lave and Wenger 1991). Based on the principles of collective learning where competences emerge from interaction between individuals in a non-linear way (Backstrom 2004) they exhibit many features that are consistent with complexity thinking. This systemic approach could help us understand the relevance of sustainability and the potential consequences of our actions on the wider system, and unlike traditional linear, reductionist approaches, criticised as being too rigid and static in the dynamic complex system that is the Earth, a CoP approach based on the principles of complexity thinking, would encourage local flexibility and enable us to recognise how the actions of each agent affect others in an interplay of co-dependency (Gibson 2000). Not only could this systemic approach encourage voluntary sector participants to recognise the value of supporting behaviour change in their local area but it could be an essential element that will help us to make sensible choices for the future.

'The fundamental challenge of sustainability goes far beyond that of environmentalism. The question is whether we can fulfil our unique potential as human beings, to understand our behaviour and its consequences. To do this, we must be prepared to discard our prejudices,

and to review every area of human life.' (Clayton and Radcliffe 1996 quoted in Sterling 2003:28)

Although this research was nominally about how voluntary organisations can contribute to changing behaviour in their local communities, the interconnected nature of our world suggests that it was essentially about how all sectors of society, businesses, government and the voluntary sector can work together to develop more sustainable patterns of behaviour. The creation of local CoPs that bring together participants from local government, the voluntary sector, community representatives and local businesses to consider what sustainable development means for the city and its communities could be a way of fulfilling the Government aspiration to encourage voluntary sector participation in the promotion of behaviour change and the creation of sustainable communities and in helping us all work together for a more sustainable future.

As an approach however, it challenges the dominant linear framework that government and the voluntary sector are used to operating under and is therefore not without its problems but as our future depends on the choices we make today, I believe that a framework that widens our perspective from that of a linear world of separation to a world of wholeness and interdependency would enrich our understanding and improve our decision making. In this new framework sustainable development could provide an inclusive vision for the kind of future we want (Springett 2006), one that acknowledges multiple perspectives and respects the diversity and differing values that contribute to the system. It would be sensitive to local conditions and provide the flexibility to adapt the ever changing world (Smil 1993, Stacey 2001).

Although it is not possible for the outcomes of this research to be replicated because it is system emergent and context dependent and can't be '*reduced to building blocks that can simply be re-assembled in a different context*', if the underlying principles are understood they can be adapted to new contexts (Mitleton-Kelly 2011b:15). The findings of this research could therefore provide useful information for policy makers tasked with encouraging sustainability at a local level and for other organisations facing complex problems.

1.2.6 Chapter 8 The Conclusion – but not the end

As Schwabenland (2006:25) reminds us, stories or narratives are always fragmentary forms of knowing and there is always a next chapter or sequel. This thesis is a small contribution to a dynamic, continually evolving dialogue about change, the environment, the voluntary sector and human sustainability. By examining how the concept of sustainable development is understood and interpreted by some in the voluntary sector I have illuminated the complexity of the current debates around the environment, climate change and human intervention and demonstrated how conversation can help people discover their own truths and those of others, and develop new understandings which can lead to behaviour change. I make no claim to have provided a solution or blueprint for behaviour change but am suggesting that increasing engagement stimulates learning and offers a way to reframe system dynamics in an inclusive way that meets the needs of the moment. This new understanding generates the possibility of change.

The knowledge generated in this research is the outcome of a process which, if it had been conducted last year instead of this year, or with different groups of people, would be different, because I would be different, the people and organisations that contributed to my research would be different and the external situation would be different. This final chapter highlights some of the changes that occurred in the external environment throughout the course of this journey, including, a change in government and the 2008 financial crisis. It also outlines my personal learning as a co-creator of the knowledge generated.

Endquote

'If there is a reason for hope, it lies in man's occasional binges of co-operation. To save our planet, we'll need that kind of heroic effort, in which all types of people join forces for the common good.'

George Meyer, writer for The Simpsons, quoted in Good Energy, 'Living Our Values (Annual Report 2009-2010)

Chapter 2 Sustainable Development: a contemporary challenge

'Sustainable development is a critical concern and one which will have significant impact on communities' future development and prosperity.' (ESRC 2009:59-60)

2.1 Introduction

The initial aim of this research was to explore the UK Government narrative that sees the voluntary sector as an important contributor to the creation of sustainable communities. This chapter examines the underlying issues that shaped the above research aim and discusses the development of the second aim – to examine complexity thinking and its potential to provide a different framework from which to tackle complex problems like sustainable development.

Sustainable development, a concept widely referred to by government as an important aspect of UK development (UK Gov 2005), identifies three pillars - a healthy economy, environmental protection and social well being, as the basis of a sustainable community. Sustainable development is however, a complex and contested issue with many definitions and interpretations, some of which challenge the current linear rational mindset that dominates much of government policy making (Lozano 2008, Gladwin et al 1995, Voss et al 2006, Gibson 2000, Daily et al 2008, Dresner 2002, Smyth 2006, Porritt 2005, O'Connor 1994 and 1998, Springett 2006). This has led to suggestions that the achievement of sustainable development requires new approaches to change and new ways of perceiving and visioning ourselves, others, nature and the world - whole society change or paradigm shift (Laszlo 1997, O'Riordan and Voisey 1998, Sterling 2003, Hawken 1993, Voss et al 1996, Rittel and Webber 1973).

Developing an understanding of sustainable development is therefore an important element of this research and because of its complex, multidimensional nature with multiple definitions and interpretations, it will be regarded as a narrative construct, a subjective account of an event or action that does not constitute a definitive truth (Bruner (1991). Positing it as a narrative will allow examination of the associated narratives that underpin it and two of the key underlying beliefs or assumptions that are relevant for this research are that: anthropogenic damage to the natural environment is creating social and economic

problems that threaten the future sustainability of human society (McKibben 2007, Porritt 2005) and that sustainable development, requiring behaviour change at all levels of society, offers a way to address the social and economic problems resulting from anthropogenic damage.

If we accept sustainable development as a narrative construct and recognise the role of narratives in the construction of reality, how the voluntary sector interprets sustainable development will affect their response and if sustainable development is not seen as a relevant narrative for the sector, local voluntary organisations may be unwilling to contribute to the promotion of sustainable communities in the way the Government hopes.

Research suggests that there is limited involvement by the voluntary sector in the promotion of sustainable behaviours (EAC/CAG 2007c, Church and Elster 2002, Middlemiss and Parrish 2009, Middlemiss 2009, Hale 2010, HM government 2010, Seyfang and Smith 2007, Buchs et al 2011 and 2012). To develop an understanding of how the voluntary sector interprets the narratives that constitute sustainable development and how this influences their behaviour is a key element of this research that will make a contribution to knowledge in this field, and the following four research questions were developed to explore the voluntary sector interpretation of sustainable development and its underlying narrative assumptions and the sector response to these narratives:

- What do voluntary sector stakeholders understand about the current state of the natural environment and the effects of anthropogenic damage on society, including how this might affect their organisation, service users and community?
- How is the concept of sustainable development and the need for behaviour change understood in the sector?
- Do voluntary sector stakeholders consider that the sector has a role to play in the promotion of sustainable behaviour at a local level (including mitigating their own impact on the natural environment)? If so, how might they go about this and what support will they need?
- What are the barriers to the promotion of sustainable development?

The answers to these questions will be useful for Government as it develops it strategies for community participation in the fight against climate change and the creation of local sustainability, but information alone will not bring about change. The Government needs a way of utilising this information if it wants to achieve its aim of encouraging voluntary sector participation in the sustainability agenda.

There is a suggestion that the complexity surrounding sustainable development inhibits behaviour change because complex problems are not amenable to classical, problem solving approaches that rely on linear analysis and planning to predict outcomes and eliminate uncertainty (Voss et al 2006). In a dynamic and changing world, achieving sustainable development may require third order change - changes in the way we think about the natural world and recognition of our embeddedness in the wider ecology (Borland 2009). The apparent need for a different way of encouraging behaviour change for sustainable development (third order change) led to the second aim of this research - to examine if or how complexity thinking could provide a different framework for addressing complex multi-dimensional problems like sustainable development, one that might overcome barriers to engagement and encourage voluntary sector participation in the promotion of sustainable behaviour at a local level. Complexity thinking has been called a new way of thinking and seeing the world (Johnson 2009) that challenges dominant linear thinking, and it could potentially offer a flexible and adaptable way to tackle complex problems like sustainable development.

2.1.1 Structure of the chapter

The first section discusses the concept of sustainable development and its associated narratives, starting with an examination of the relationship between humans and the natural environment. One of the theories in this area is Gaia theory, which suggests that the Earth is a complex adaptive system in which human beings are merely one of many interdependent, interacting agents (Lovelock 2000). This theory has been influential in challenging the dominant linear view of our relationship with the natural world and exploring differing worldviews in this area will make an important contribution to the discussion around the encouragement of behaviour change for sustainable development.

This section is followed by an examination of sustainable development and its core concept that socio-cultural wellbeing, economic wellbeing and environmental wellbeing cannot be achieved independently of each other, and that poverty, as well as excessive consumption, are causes of environmental stress (Hawken 1993, Porritt 2005). First outlined in 1987 as a concept for social modernisation on a global scale that requires wide spread behaviour change, it was seen as a way of addressing environmental stress, protecting economic development and supporting social equity (triple bottom line) (Porritt 2005) and providing

an inclusive way of addressing the on-going debates around the concept of continuous economic growth in a world of finite resources (Daly 2002, Meadows et al 1972, Stern 2006, Mckibben 2007). Although there is a degree of consensus among scientists and policy makers that unless we change our behaviour, anthropogenic environmental damage is likely to cause challenging economic and social problems in the future (Lafferty and Meadowcroft 2000, Stern 2006, IPCC 2007) there is little consensus around the definition of sustainable development or how it can be applied in practice. It has numerous interpretations and is often confused with other phrases, such as, environment, green, eco- friendly, climate change and global warming, which can diffuse the need for action (Lozano 2008, Gladwin et al 1995). The scale and scope of the issues can also make it appear too big to deal with (EAC/CAG 2007c:ii)and sustainable development is therefore presents a difficult challenge for society to address.

As mentioned above, sustainable development suggests there is a need for changes in behaviour by all sectors of society: government, business and individuals (Stern 2006) and the next section looks at how to encourage behaviour change. Dobson (2007) outlined two basic approaches: a structuralist or rational first order approach, based on self-interest which sees attitudes and behaviours as driven by structures, and a voluntarist/valuative or second order approach, which acknowledges that behaviour is affected by a complex web of causal influences, relatively independent of the structures that inform it. According to Dobson, a combination of structural changes initiated by government, and voluntarist approaches to influence attitudes could provide an effective way of bringing about the large scale behaviour change required by sustainable development (Dobson 2007). Some however (Voss et al 2006, Gustavsson and Harung 1994, Waddock 2007), believe that this will not be enough and that the complexity of sustainable development with its many variables and multiple independent actors, renders the possibility of such simplistic, universal solutions unlikely. Recognising the interconnected, systemic nature of the problem, they suggest that complex social problems like sustainable development require a new approach - a third order change, or paradigm shift, which transcends both first and second order change.

'The sheer scope of global activities combined with the interconnectedness and the diversity of the world's population and societies create an inter-connected, highly complex system

where what is done in one part of planet Earth affects what happens in other parts.' (Waddock 2007:546)

The next section, therefore, explores how complexity thinking, as a third order approach to behaviour change, could encourage behaviour change in a way that overcomes the weaknesses associated with linear first and second order approaches (Rittel and Webber 1973, Stacey 2007, McMillan 2004). Complexity thinking, drawing on Bohm's (1980) and Wilber's (2001) concept of wholeness, is a different way of thinking and understanding that looks at how, in a dynamic system, local changes can influence wider systemic change, as each agent although acting independently, affects and is affected by the other agents in the system (McMillan 2004).

'Complexity science looks not only at the parts, but at the whole in an effort to gain a deeper qualitatively different understanding of phenomena'. (McDaniel and Driebe 2005:4)

After discussing the development of complexity thinking and its links with systems theory, there is a short section around the role of social learning in complex systems and how complexity thinking supports non-linear learning and behaviour change.

As the focus of this research is on voluntary sector participation in behaviour change, the final section examines the role of the voluntary sector as agents of change at a local level. The voluntary sector works with those most likely to be adversely affected by unsustainable development, the poor and disadvantaged (Stern 2006, Barings 2010, Porritt 2005), and the Government believes that:

'voluntary and other non-profit organisations can mobilise millions of people in the fight against climate change to help create and safeguard a better future.' (Cabinet Office 2007)

However, research on the role of the third sector in environmentally oriented behaviour change is limited (EAC/CAG 2007c, Church and Elster 2002, Middlemiss and Parrish 2009, Middlemiss 2009, Hale 2010, HM government 2010, Seyfang and Smith 2007, Buchs et al 2011 and 2012) and there is little evidence of widespread action in the sector to support the government's agenda around behaviour change.

The conclusion highlights how, in a complex system like human society, the application of complexity principles can encourage social learning and this could have advantages when trying to support behaviour change. It suggests that the creation of opportunities for local

participation in learning spaces around sustainable development (CoPs) support social learning and could offer a way of encouraging the voluntary sector to engage in the promotion of sustainable behaviour by increasing their understanding of the relevance of sustainable development to its stakeholders. As changes in understanding increase the likelihood of behaviour change, CoPs based on the principles of complexity thinking could potentially offer a new and different approach to a complex problem like sustainable development that unlike one size fits all linear approaches, provide a flexible framework that enables the local ongoing adaptability needed to deal with a changing environment. The focus on locally initiated change would enable small voluntary organisations to tailor their activities to the needs of their service users and this could be more attractive to the sector than the top down hierarchical approaches often used by government.

However, consistent with the principles of complexity thinking, the outcomes of change in a complex system cannot be predicted (McMillan 2004) and the outcomes of this approach could have no effect, move the agenda in a completely different direction, or contribute to a large scale paradigm shift that redefines our relationship with the natural environment and moves society along the road to a more sustainable society.

2.2 Sustainable Development- a contemporary challenge

This section examines the narratives that constitute sustainable development and their implications for behaviour change.

2.2.1 The relationship between humans and the natural environment

'Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history.' (Porritt 2005:6)

The Age of Reason, inspired by Newtonian physics and the Enlightenment project, was founded on the belief that there was an external order to the universe that could be revealed by rational enquiry. Humans were not entirely at the will of the gods but could exert some control over their circumstances, and in this new world, nature was seen as an unpredictable force that needed to be subdued and conquered to enable mankind to progress and become civilised (Peate 2005). Powerful industrial and technological expansion since then has led to advances in human prosperity, but the increasing use of nature as a tool for economic development in the quest for continual economic growth is

regarded by many as the root of the current ecological crisis (Giradot et al 2001). Since the Industrial Revolution, the West has, until recently, seen the natural environment as an inexhaustible resource to be exploited, regardless of the consequences, and this modern, industrial worldview, based on linearity, reductionism and the machine metaphor of utility, rationality, determinism, objectivity and positivism, reinforced through our political, economic and educational institutions, has supported the anthropocentric view of separation between humans and nature (Metzner 1995, Sterling 2004, Hutchins 2012).

'Since the Enlightenment thinkers have progressively differentiated humanity from the rest of nature and have separated objective truth from subjective morality.' (Gladwin et al 1995:896)

Natural systems however, are not linear. They are interdependent. This means that changes in one area can incur unpredictable, widespread systemic consequences in other areas - climate change is a good example of this (Hutchins 2012). Current environmental problems have arisen in part, because of our tendency to examine the world in a linear way rather than recognise it as the complex interdependent system it is (Borland 2009, Hutchins 2012, Sterling 2003). In other words, there is a mismatch between the systemic world we inhabit and the fragmented way we think about it.

'The unhealthiness of our world today is in direct proportion to our inability to see it as a whole'. (Senge 1990:68)

Other cultures, for example, Native Americans, are more aware of the complexities and interdependencies of natural systems, and recognise that protection of the ecosystem is vital for human existence (Peate 2005, Blewitt 2008, Hutchins 2012). Their way of looking at the world prioritises living in balance with nature rather than exploiting it. This approach has many resonances with Lovelock's Gaia theory, which suggests that the Earth is a self-regulating, complex, adaptive system or web of interactions (Lovelock 2000, 2006). Human activity which degrades natural resource stocks and exceeds the capacity of the ecosystem to absorb the waste produced may eventually shift the balance out of homeostasis, with drastic consequences for human life.

'Significant changes in the natural environment may be the trigger that shifts the system out of one equilibrium into another.' (Stacey 2001:171)

This systemic, eco-centric understanding of the Earth as a complex system (Gaia Theory Lovelock 2000) has been linked to deep ecology, associated with Arne Naess. Deep ecology recognises the fundamental interdependence of all phenomena and sees human society as embedded in and dependent on the cyclical processes of nature (Devall and Sessions 1985, Capra 1996). This differs from shallow ecology, associated with the modern, linear rational perspective that is human centred or anthropocentric and puts humans as above or outside of nature in the belief that it is our fundamental superiority that enables us to understand and control nature for our benefit. These two fundamentally different interpretations of our relationship with the natural environment impact on the way we attempt to address environmental problems (Blewitt 2010, Sterling 2003, Clayton and Radcliffe 1996, Bell and Morse 1999, Hutchins 2012).

Deep ecology, based on systems theory (Bertalanaffy's General Systems Theory) suggests that in a system all agents interact together to co-create the system (Hatch 1997). It is therefore not possible to fully understand the system by analyzing its individual parts in the linear way associated with shallow ecology because subsystem interdependence produces features and characteristics that are unique to the system as a whole (Boulding 1956). Addressing sustainable development from a deep ecology perspective requires us to be aware of the

'balanced, complex interactions involving both co-operation and competition among all of the planet's subsystems.' (Lovelock 2000:28)

Latour's Actor Network Theory (2004) has similarities with deep ecology in that it challenges the concept of nature as an asocial, objective source of truth. According to Latour, nature is an unacknowledged silent partner in the development of human civilisation because nature and society are not separate but co-constitutive. Our reality is assembled from the practices of both human and non human actors, as subjects (people) and objects, such as nature, relate as equal participants in networks (Latour 1987, Haraway 1989). Latour's view reflects systems thinking in that it recognises relationality and interconnectedness and suggests that things can only be defined in relation to other things and become what they are and what they mean through relations. It bridges the divide between humans and the natural environment in a similar way to Gaia Theory and deep ecology and reinforces the need to

think systemically and examine the connections and relationships between objects and events as much as the objects and events themselves.

If we see the Earth as a complex, dynamic system (deep ecological view) and human society, as a similarly complex system nesting within this larger system, we have to recognise that the essential properties of the system arise from the relationships between the different parts of the system. From this perspective the encouragement of behaviour change to support sustainable development will require us to acknowledge our interconnectedness with the natural environment and develop a better understanding of the co-dependent relationship between environmental issues, social issues and economic outcomes (Lafferty and Meadowcroft 2000, Hutchins 2012). This is very different to the dominant, anthropocentric approach originating from the dualistic thinking of Descartes, based on linear analytical thinking that separates mind from matter and humans from nature (Capra 1996). This mechanistic perspective assumes that the behaviour of the whole can be understood by analysing the behaviour of the parts, and that problems can be solved by breaking down complex phenomena into their individual components (Smyth 2006, Voss et al 2006, Borland 2009).

As indicated in the Introduction, I see the Earth as a complex, dynamic system of which humans are an interdependent part and consequently believe that if we understand that we are part of the system, environmental sensitivity to protect the natural systems that support life will become more than an altruistic or economic activity. It will become an essential imperative for our future that influences the choices we have to make (Lovelock 2000, Judge 2002).

'*We can't make the earth sustainable: it is sustainable – but whether with us or without us, is our choice.*' (Judge 2002:9)

2.2.2 Sustainable Development – a complex problem

Having discussed differing views of our relationship with the natural environment, this next section examines the concept of sustainable development and how its interpretation can also influence the choices we have to make about changing our behaviour.

Sustainable development and sustainability are often used interchangeably but sustainability is the capacity to continue into the future (Blewitt 2010). The sustainability

paradigm, associated with the need to protect the environment to ensure human sustainability, emerged from the ecology movement of the 1970s when environmental problems first began to merit global attention (Dietz and Neumayer 2007). The first UN Conference on the Human Environment took place in 1972 with a focus on protecting natural resources and minimising pollution. It was underpinned by the belief that industrial expansion, unchecked consumption and economic growth would lead the Earth to 'overshoot' its carrying capacity and that eventually diminishing resources would slow down economic growth (Meadows et al 2004, Porritt 2005, WCED 1987). Environmental concerns have been the focus of many UN Conferences since then (UN Montreal Protocol 1987, WCED 1987, UNCED 1992) but since 1990s the agenda has moved on to Climate Change, a universally recognised environmental threat to human prosperity and well being (UNFCC 2009).

The sustainability paradigm, like ecology can be defined as weak or strong. Weak sustainability takes an anthropocentric approach based on the principles of shallow ecology and neoclassical economic theories of growth that consider natural resources as factors of production (Ayres et al 2001). Based on a linear assumption that natural capital can be replaced by manufactured capital, the composition of the capital is of secondary importance as long as the overall stock of capital is growing. Solutions from this perspective tend to focus on technological changes and have been criticised for not considering the wider effects of these changes on the system as a whole (Gladwin et al 1995).

Strong sustainability, on the other hand, based on the principles of deep ecology (eco-centric), believes that natural capital, because of its unique characteristics, cannot be easily replaced by man-made capital and once lost or damaged, is very difficult, costly and often impossible to replace (Ayres et al 2001). Ultimately ecosystems or natural assets can collapse entirely beyond a certain point e.g. fish stocks. This perspective does not privilege humans over nature, humans are part of the system, and the world, consisting of humans and nature, operates systemically through interdependent and interconnected relationships (Gladwin et al 1995). The system must be examined as a whole and cannot be understood using reductionist methods that break it down into its component parts. Strong sustainability, with its acknowledgement of nature as an equal partner in human

development and its emphasis on interdependency between economic, social and environmental aspects of society, however, has been criticised for being anti-human and not paying enough attention to the structure of human society (Bookchin 1987).

These different approaches to sustainability have generated fierce debate (Dietz and Neumayer 2007). Some environmentalists, Hediger (1999) for example, argue that the only way to bring both sides of the debate together is to consider the minimum requirements for sustainability - ecosystem resilience to meet basic human needs (an anthropocentric approach). Others however, Gladwin et al (1995) stress the need to acknowledge the systemic nature of our existence and challenge the long held belief that humans are separate from the rest of nature. They take an eco-centric approach, suggesting that we need to find a way of attaining a balance between, natural, social and economic capital. The differing perspectives of sustainability are important factors that influence how we address ongoing environmental and social challenges and how these narratives impact on behaviour change will be a significant element to consider in this research.

Having discussed sustainability I will now examine sustainable development, often used interchangeably with sustainability. Sustainable development arose as a way of moving human society towards a more sustainable path and reflecting the sustainability debate, it too can be associated with strong or weak definitions. It was first outlined in 1987 in the Bruntdland report as '*development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*' (WCED 1987). This definition is commonly associated with weak sustainability because of its anthropocentric ideal and its focus only on human development. There are however over 70 definitions of sustainable development, and many of these take a more eco-centric systemic approach (Lozano 2008, Gladwin et al 1995). The multiple and contrasting narratives that constitute sustainable development make it a complex issue, often described as fuzzy, elusive and contestable (Gladwin et al 1995).

However, sustainable development, whether strong or weak, has become the principal conceptual framework within which governments, businesses and non-governmental organisations have sought to reconcile the potentially conflicting imperatives of economic growth, social justice and environmental sustainability (Porritt 2005). The UK Government

recognised the importance of sustainable development and the need for behaviour change at all levels of society, from national government to the individual, when it published its Sustainable Development Strategy 'Securing the Future' in March 2005. As part of the continuing development towards a more sustainable future, the UK Climate Change Act of 2009 made the UK the first country in the world to have a legally binding long term framework to cut carbon emissions. Both these policies explicitly acknowledge the role of community action in supporting the behaviour changes needed to achieve the government's aim of sustainable development (Defra 2008).

National governments develop the strategies and policies, but local government is responsible for implementing them at a local level. Agenda 21 was a non-binding, voluntarily implemented action plan developed at the UN Conference on Environment and Development (1992) that also explicitly emphasised the role of citizens, communities and NGOs in bottom up processes to bring about sustainability. Acknowledging the crucial role of local authorities in supporting sustainable development, it provided a framework for the development of environmentally, socially and economically sustainable communities that acted as a catalyst for community action on environmental issues in England (Hand 2011, JRF 2003, Brown and Ritchie 2006).

Sustainable development is therefore an important element of government strategy, but as a complex issue that suffers from lack of clarity around language and definition it can be problematic to enact (Gibson 2000, Daily et al 2008, Dresner 2002, Smyth 2006, Dobson 2007, Porritt 2005, O'Connor 1994 and 1998, Springett 2006, Lozano 2008). Dietz and Neumayer (2007) claim that the lack of a single interpretation gives it broad appeal, but the lack of clarity has also been criticised as the reason for lack of action (Gladwin et al 1995). This confusion and multiple interpretations of sustainable development can inhibit behaviour change and the next section will examine this in more detail.

As mentioned earlier, language is one of the problems. Sustainability and sustainable development are used interchangeably, but sustainability, when applied to financial, economic or organisational sustainability, is often seen as relating merely to the capacity for continuance into the long term future. It is not necessarily associated with environmental or social issues (Dresner 2002). Prefixing sustainability with the word environmental

acknowledges the environmental aspect but this can place it in an environmental 'silo' which overlooks social or economic development (O' Riordan 1988). As well confusion associated with these two phrases, various other words and phrases, also often used to infer sustainability issues, for example, green, or eco-friendly, add to the confusion. The prominence of climate change in the public agenda, often seen as purely an environmental problem with little recognition of the likely social and economic implications (Stern 2006), further increases the lack of clarity and UK Government policy documents don't make comprehension any easier. They introduce words and phrases such as: sustainable consumption, sustainable communities, or low carbon transition. (There is a brief summary of the language used in official documents, including the Charity Commission, in Appendix 1.) This confusion and lack of clarity can diffuse the issue and lead to reluctance to act (Smyth 2006).

As well as confusion over the language, the competing narratives discussed earlier around weak and strong sustainability, create further problems when it comes to action (Porritt 2005, Gladwin et al 1995, Smyth 2006, Redclift 1987). The Brundtland definition (1987), one of the most commonly known, may have broad appeal but it is criticised not only for its anthropocentric focus but for being vague and meaninglessness (O'Riordan 1988, Dresner 2002), or for being too simplistic and overlooking the key elements of sustainable development Gladwin et al (1995) which are:

'*vision, expression, value change, moral development, social re–organisation, and transformational process toward a desired future or better world.*' (Gladwin et al 1995: 87)

Although the looseness of interpretation can add to its broad appeal, it can also act as a disincentive to change as lack of clarity can lead to lack of priority, making it easier for politicians and businesses to ignore (Smyth 2006, Morgan 2006). The scale and scope implied by Gladwin et al.'s interpretation makes it appear too big an issue to do anything about, or that it is too worthy an issue that lacks a clear business case (EAC/CAG 2008, Porritt 2005, Lozano 2008, Banerjee 2003, Weick 1984).

'*People often define social problems in ways that overwhelm their ability to do anything about them.*' (Weick 1984:40)

As confusion can inhibit change how sustainable development is interpreted is an important aspect to consider when to encourage behaviour change but there are other reasons for lack of action. One of these is the time scale. Environmental changes have long term effects but we, as humans, tend to react more readily to short term events. Another reason is that sustainable development is a contentious issue that poses serious questions about our current way of life (Porritt 2005, Gladwin et al 1995). Strong sustainability and the associated ethical approach that places the natural environment on an equal footing to humans is difficult for some to accept. Even from the economic perspective of weak sustainability, integrating the social, economic and environmental aspects of sustainable development can be seen as challenging the core ideology around unlimited growth fed by consumerism because it highlights social inequalities and how economic growth in some parts of society enlarges human choice but in other areas excludes, disconnects, increases inequality, and raises insecurity (Conrad 1997, Springett 2006).

'No serious definition of the word sustainable could allow for a continuation of the disparities in wealth that exist today' (Porritt 2005:19)

For Conrad (1997) environmental theory has fallen in line with capitalist hegemony and corporate elites, and he regards the form of sustainability promoted by governments as more about sustaining capitalism, growth and profits (weak sustainability) than sustaining living environments. Sustainability cannot he claims, be achieved by merely incorporating sustainable development into existing institutions, process and programmes and using current tools of regulation and economic instruments more effectively. It has to offer a way to reconcile the paradox between maintaining economic growth, controlling environmental degradation and tackling inequality (Redclift 1987, Springett 2006). If it does not do this it is, at best an empty phrase and at worst a Trojan horse that enables the redefinition of the public interest by the powerful few, that offers little in the way of a vision of a sustainable future built upon ecological and social justice (Smyth 2006, Springett 2006, Sunderlin 1995, Escobar 1996, Keil 2007, Kovel 2002). There is a danger that it will allow the organisational and technological arrangements of modern society to be reproduced with all its ambivalences under the banner of sustainability (Springett 2006, Voss et al 2006).

If sustainable development is to realise its potential for social modernisation, be a driver for emancipatory democracy and bring about a shift in attitudes and behaviour Conrad (1997)

suggests that we have to move away from linear thinking and begin to understand and accept the systemic nature of our world and acknowledge the interdependency between social, economic and environmental issues – an eco-centric view (strong sustainability). This may protect the natural environment and present counter hegemonic opportunities for groups to reshape the urban environment to make it more equitable for disadvantaged groups but it may also be a difficult message to get across in a liberal capitalist society (Kiel and Desfor 2003).

Another problematic issue when trying to encourage behaviour change to support sustainable development is climate change, a serious environmental problem, the economic and social impacts of which disproportionately affect the most vulnerable in society, those least able to afford to be able to adapt and change (Christian Aid 2007, ESRC 2009, Hale 2010, Abbott, Rogers and Sloboda 2006). The language of climate change has almost superseded sustainable development as a key issue for governments to address and despite the fact that it could threaten global economic growth and have significant social consequences (IPCC 2007, Stern 2006) it is often seen as purely an environmental problem.

'Climate change is the most severe problem that we are facing today, more serious even than the threat of terrorism' (King 2004:176).

The Intergovernmental Panel on Climate Change (IPCC) was established by UNEP in 1988 and the Kyoto protocols were launched at the UN Earth Summit in 1992 (Rio de Janeiro) - an international agreement based on the UN Framework Convention on Climate Change, (UNFCC 2009) with the aim of stabilising the concentration of greenhouse gases in the atmosphere to prevent *'dangerous anthropocentric interference with the climate system'.* (Porritt 2005:15). In response, the UK Government launched the Stern Review in 2006, which recognised that limiting the future costs of climate change, economically and socially, would require a combination of technological developments and behavioural change from all sectors of society (Stern 2006, IPCC 2007). Although Stern's reported highlighted how addressing climate change and achieving sustainable development share the same goals, the prominence of climate change in the headlines and in public debate, tends to overshadow other environmental problems as Black illustrates.

'The head of one large UK environment group told me last year, "If we want to talk about climate change we can get a meeting with the prime minister. If we want to talk about biodiversity we can't even get a meeting with the environment secretary."' (Black 2009)

Furthermore, the controversy surrounding climate change attracts negative publicity in the form of climate change deniers, and this can increase scepticism and deter action on other issues like sustainable development (Booker 2010).

Despite the increasing government focus on climate change, sustainable development is the topic of this research because sustainable development is more widely acknowledged as embracing the systemic interconnected nature of environmental, social and economic problems and although sustainable development is, as outlined above, a problematic and controversial issue, Smyth (2006) suggests it is not the issue that is the problem but how it is represented. He criticises the media for being over simplistic and peddling normative approaches that constrain the discussion of alternatives. Over simplification using easily absorbed titles such as, global warming or climate change, take a weak sustainability approach that supports the dominant narratives around change, based on linear models that rely on planning, prediction and the elimination of uncertainty and the belief that there are simplistic linear solutions, achievable through causal interpretations. This type of linear approach can be effective in stable systems where variables can be controlled, but the natural environment is a dynamic and changing system (Smyth 2006, Voss et al 2006).

'We are shaped and shape a continuously changing environment.' (Stacey 2001:250)

In the face of the constantly changing natural environment anthropocentric, linear, reductionist approaches to change, focussing on weak sustainability, break down the problem into discrete units and rely on regulatory reforms or technological fixes. They may not be flexible enough to encourage the behaviour changes needed to ensure a sustainable future (Haber 1992, Gladwell 2000, Voss et al 2006).

Sustainable development is a changing, multi-dimensional, global problem requiring action by numerous governments, organisations and individuals (uncontrollable variables) each of whom behave according to their own unique decision making process. It is not an issue that can be reduced to a limitable, decomposable problem that can be easily managed in a linear way (Voss et al 2006). The interdependent systemic nature of our lives and the multiple

interpretations that contribute to sustainable development suggest that trying to create a coherent, unifying, stable, dominant narrative – a pre-requisite for linear change, would suppress alternative narratives and blind us to the relationary nature of our lives and the continuous shifting of those relationships (Cilliers 1998, Agger 1991, Lyotard 1984).

'The linear progression of rationality suppresses the possibility of alternative voices'.
(Hassard 1993:13)

Another problem with traditional linear approaches to manage sustainable development is that of unintended consequences, externalities, or second order problems, which require further action in a continuous cycle, such that more time can be wasted trying to solve the second order problems than addressing the original issue (Voss et al 2006, Rittel and Webber 1973, McMillan 2004, Jahn and Wehling 1998).

Sustainable development is a complex, contestable concept, but like other political ideas such as, liberty, democracy and justice, even though it may not be possible to derive total agreement on the exact meaning, we should not disregard it as valueless (Jacobs 1991, Springett 2006, Kiel and Desfor 2003, Gladwin et al 1995) and if we are serious about preventing environmental degradation happening by default through our failure to recognise our embeddedness in the wider ecology, we need a new way to utilise the capacity of society to think differently about the choices that face us (Sterling 2003). This may require, as Smyth advocates, a new way of thinking about the world that helps us to realise the systemic nature of our lives and encourages alternative discourses about how we wish to live (Gladwin et al 1995, O'Connor 1998, Springett 2006, Smyth 2006). Rather than blame the complexity and confusion surrounding sustainable development as the reason for lack of action we should regard sustainable development as a way of introducing new ideas into debates and recognise that complex, value-laden, multi-dimensional, dynamic problems, like sustainable development, may require new forms of interdisciplinary and trans-disciplinary modes of enquiry and problem handling – a paradigm shift or third order change (Voss et al 2006, Rammel et al 2003).

Kuhn (1970:10) defines a paradigm as *'universally recognized scientific achievements that, for a time, provide model problems and solutions for a community of practitioners'.*

Kuhn's definition of a paradigm recognises the prospect of impermanence as one scientific theory is replaced by another, and it appears that in this moment of history, sustainable

development needs a new paradigm, one that is adaptable and able to work with the constantly changing natural environment and give value to the voices of the multiple actors in the system. The need for flexibility suggests that unlike the rigid blue print for change associated with linear approaches that focus on short term objectives, we need an approach that will guide human behaviour in a way that is better able to recognise our interconnectedness with the natural environment and understand the longer term systemic effects of environmental problems (Stacey 2007, Smyth 2006).

Complexity thinking may offer this new approach, guide or paradigm. Complexity thinking focuses on whole systems (it is not reductionist), recognises interconnectivity and interdependency and is accepting of uncertainty (McMillan 2004, Stacey 2007). With its focus on interdependence and co-creativity rather than separation, examining sustainable development from this perspective could transform our thinking about the natural environment and make it easier to understand the links between social, economic and environmental issues. It is an inclusive approach that would allow space for issues like class, gender and ethnic power struggles, the neglected social dynamics of sustainability, according to Buckingham (2007) and unlike linear approaches which make assumptions about homogeneity and the possibility of systematically controlling social and organisational relations, a complexity approach would recognise the complexity of human agency, which as Grey (2009) suggests is not always rational,

'*In a human system there is no guarantee that replicating the actions with a different set of people in a different place at a different time will yield the same results.*' (Grey 2009:101)

(The applicability of complexity thinking for this research is discussed more fully in section 2.4.)

Ultimately this perspective could challenge the current dominant approaches based on linear rationalism, reductionism, objectivity and control as the only way to address complex social problems and at a global level there are signs that a shift is beginning to happen. Although early approaches to sustainable development (WCED 1987) took an anthropocentric linear approach, recent UN projects, such as The Economics of Ecosystem and Biodiversity (TEEB 2010) appear to be more accepting of the strong sustainability approach that emphasise the non-substitutability of natural capital and the importance of

taking a broader approach to decision making that includes ethical considerations. This could be seen as a first step away from the traditional anthropocentric world view which separates humans from nature - a paradigm shift or third order change (Borland 2009).

I outlined in Chapter 1 how my views lean towards strong sustainability, based on Gaia theory (Lovelock 2000) and influenced by 'The Limits to Growth' (Meadows 1972). I regard the Earth as a complex adaptive system of which humans are a part and a further discussion about how my personal ontological and epistemological beliefs have influenced the research design can be found in Chapter 3. However, despite my belief that third order change and the encouragement of strong sustainability is likely to be needed to achieve the necessary changes to support sustainable development, I acknowledge that it is not essential for everyone to accept this perspective. Unlike Kuhn, I am not convinced in paradigm incommensurability - the inability to understand one paradigm through the lens of another, and feel that we need to acknowledge the co-existence of multi-paradigms when considering the complexities of behaviour change to support sustainable development. In a pluralist society therefore, I believe we can improve sustainability by recognising that anthropocentric views, focussing on technological innovation and first and second order change (linear), and eco-centric views that support radical changes in thinking (systemic) – third order change, can co-exist.

The next section discusses different types of change, first order, second order and third order change, and how they influence behaviour change.

2.3 First order, second order and third order change

The natural environment is '*characterised by turbulence and uncertainty*' and the problems posed by sustainable development can be seen as '*value-laden, open-ended, multi-dimensional, ambiguous and unstable.*' (Klein J. 2004:4). Complex problems like this often appear intractable and not easily managed by traditional linear problem solving approaches (Mitleton-Kelly 2011). They are thought to require whole society change (paradigm shift or third order change) involving new thinking and new ways of perceiving and visioning ourselves, others, nature and the world (Laszlo 1997, O'Riordan and Voisey 1998, Sterling 2003, Hawkins 1991, Voss et al 1996, Rittel and Webber 1973).

Traditional linear approaches to behaviour change can involve first order or second order change. First order change has been described as *'gradual modifications that make sense within an established framework.'* (Bartunek and Moch 1987:484). They are generally reactive, technological fixes focussing on solutions to individual problems rather than addressing the causes and can involve maintenance, adaptation or doing things better, for example, increasing efficiency or recycling (Sterling 2003, Orr 1992). They don't challenge the fundamental assumptions behind our consumerist lifestyle based on the premise of continual economic growth.

'As humans face an ecological crisis throughout the world, they realise increasingly that problems concerning environmental protection are not derived from industrial pollution or technological expansion alone. Rather they are also derived from people's world views, ideas of value or theories of knowledge.' (Giradot et al 2001:361)

As Giradot implies, sustainable development appears to require a change in values and in our world view. Value change is associated with second order change which questions assumptions and values within the existing paradigm (Sterling 2003, Ison and Russell 2000, Bartunek and Moch 1994, 1987) and involves *'a basic shift in attitudes, beliefs and cultural values'* (Bartunek and Moch 1987:486, Golembiewski et al 1979). Second order change however, although it questions values does not necessarily challenge our world view and the basic assumption about the separation of humans from nature.

Moving away from the dominant paradigm of first and second order linear rational change to a new relationary world view would constitute third order change (Bartunek and Moch 1994, Bartunek and Moch 1987, Golembiewski et al 1979). Third order change transcends human cognitive understanding and dissolves the distinction between the perceived and the perceived, the parts and the whole, the individual and the community (Bartunek and Moch 1994). Bartunek and Moch call it an enlarged world view and suggest that the achievement of this enlarged world view requires us to delve into our own cognitive assumptions in ways that allow diversity of perspectives to emerge. They believe it has the potential to lead to greater social concern, change the way participants act towards each other and enable novel and creative ways for the benefit of humanity (Bartunek and Moch 1994). Third order change, therefore, when applied to sustainable development would present a different way of understanding the world that transcends the reductionist split between humans and nature. Reflecting the principles of strong sustainability, in a way that Smyth (2006), Porritt

(2005), and Voss et al (2006) suggest is needed to bring about sustainable development, this enlarged or ecological worldview or paradigm (Sterling 2003) is based on systems thinking, which emphasises inclusivity and self-organisation rather than separation and control (Brown and Ritchie 2006, Bohm 1992, Capra 1996, Senge et al 2005, Harman 1988, Wilber 1996).

It must be acknowledged however, that as humans we prefer the familiar and tend to resist change. Memes or paradigms tend to be self-preserving, even when no longer appropriate (Price and Shaw 1998) and conventions, beliefs and systems, shared by many people and perpetrated throughout the society in the institutions, organisations, and family structures, can work to inhibit change (Bartunek and Moch 1994).

'*Culture, in the sense of collective mental programming, is often difficult to change: if it does so at all, it changes slowly.*' (Hofstede 1980:42-63)

Another difficulty when trying to encourage behaviour change for sustainable development is that the truth may be difficult to accept and the changes may not be palatable in our consumer society (Hawken 1993).

'We are not facing marginal adjustments manageable by simple technical fixes, some temporary tax and spending increases and a few changes in personal habit. We will need profound socio economic transformation which will demand not only new ways of doing things but also not a few genuine sacrifices.' (Hawken 1993:128)

Encouraging sustainable development therefore, will not be easy or instant. It appears to require a radical re-appraisal and re-evaluation of the influence of the dominant paradigms on our thinking - a new way of thinking that recognises the complex ,interdependent, systemic nature of our lives (third order change). This type of change cannot be easily planned and brought about in a predictable way, especially when the subject of change is human behaviour and I will now look at different approaches to behaviour change and their relevance for sustainable development.

2.3.1 Behavioural change

There are, as indicated, different ways of encouraging behaviour change. The current government is attracted by Thaler and Sunstein's (2008) nudge behaviour, where experts attempt to inform choices through the provision of architecture or structures that nudge

people to do or not do things. This is a first order, structuralist approach based on assumptions about how we respond to stimuli.

Another type of first order, structuralist approach is social marketing, which has been widely used to encourage environmental behavioural change, as in Defra's 'Framework for Pro Environmental Behaviours' (2008a), 'I will if you will, Towards Sustainable Consumption' (SDC/NCC 2006), and 'Changing Behaviour through policy making', (Defra 2008b) (Jackson 2005).

Social marketing can be described as

'*a systematic application of marketing concepts and techniques to achieve specific behavioural goals relevant to the social good' (Lazer and Kelley 1973 quoted* in Corner and Randall 2011:2)

This first order change approach uses market segmentation and short term tailored interventions to change behaviour in the belief that small behavioural changes will lead to more far reaching and environmentally significant changes in the future. It does not attempt to challenge existing value frameworks (Chiva et al 2008) and may be an attractive option in modern liberal democracies, which are reluctant to see state intervention in moral or value change (Dobson 2010, Corner and Randall 2011, Wagner-Tsukamoto 2008)

'*Governments and other organisations are often reluctant to openly attempt to influence people's values, preferring what appear to be more value neutral approaches like social marketing.*' (Corner and Randall 2011:6)

When applied to sustainable development, both social marketing and nudge behaviour take a weak view of sustainability and can be criticised because as the prevailing values of the dominant political rationality are embedded within them, they do not challenge the normative frameworks that are seen as contributing to unsustainable development (Corner and Randall 2011). First order structural approaches like social marketing and nudge behaviour might be good at solving concrete, behavioural problems, but as sustainable development is not a concrete problem, it seems unlikely that these approaches alone can bring about the changes deemed necessary to achieve sustainable development.

Wagner-Tsukamoto (2008) however, believes moral problems, like sustainable development, can be solved using first order change because they are in essence structural problems,

resulting from defective incentive infrastructures. First order change incentives that promote rational self -interested choice by allocating certain benefits and losses to the individual (new infrastructures) can change behaviour and for Wagner-Tsukamoto, this approach, based on rational self-interest, can increase social harmony *'through the ideal of realising mutual benefits for the agents involved.'* (Wagner-Tsukamoto 2008:840). He notes however, that if the benefits or penalties for non-compliance are removed the changed behaviour is unlikely to persist. Wagner-Tsukamoto feels that in pluralist societies this approach is ethically favourable because modern liberal democracies respect value pluralism and this approach does not attempt to change values. A values based approach (second order change) implies behavioural intervention in individual values, norms and beliefs and for Wagner-Tsukamoto any intervention by authorities to influence values threatens value pluralism and could potentially suppress moral disagreement to the extent that those holding different views come to be regarded as outsiders or outcasts who need re- educating (Wagner-Tsukamoto 2008). Normative values based approaches inhibit the expression of opposing values and can result in the homogeneity of values and the creation of strong social norms, or 'like-mindedness', which reduces the diversity that is an essential element of a pluralist society (Compton 2010, Wagner-Tsukamoto 2008).

Dobson (2007) takes a slightly different approach, outlining two approaches to behaviour change: a first order structuralist approach, and a second order voluntarist approach. As per Wagner-Tsukamoto, he believes the self-interested rational actor model of human motivation (first order change) that assumes people will respond to structures, either for personal gain or to avoid harm or penalty, can be effective as attitudes and behaviours are driven by structures, and changing the structures will change behaviour (Dobson and Bell 2006). He illustrates the relevance of this approach to environmental behaviour with an example from the Republic of Ireland. When it started charging for plastic bags, there was a resulting cut in plastic bag use of over 90%. Dobson (2007), like Wagner-Tsukamoto, acknowledges, however, that first order approaches can't bring about lasting changes in underlying attitudes and values because the changes are temporary, lasting only as long as the penalties or structures are in place or until ways of getting round them are devised. He therefore, doesn't believe that a self-interested rational approach (first order) is enough to sustain behaviour change for sustainable development because even if people understand

the social and economic implications of destroying the natural environment, the effects may be long term and not affect them directly, (i.e. there is no self-interest) and the penalties for not complying are not enough to sustain the changes.

'Self-interested behaviour will not always protect or sustain public goods, such as the environment'. (Dobson 2007:280)

For Dobson, behaviour is a result of a complex web of causal influences, and unlike Wagner-Tsukamoto, he suggests that a voluntarist approach, (second order change) where attitudes and behaviours are considered relatively independent of the structures that inform them, is needed for some problems like sustainable development. Individuals need to be encouraged to understand the value of the natural environment, not just to themselves but to those around them, and not because of its economic value or their own self-interest but because it is the 'right thing' to do – a moral or ethical issue. Dobson feels this would create a more permanent approach to change but he is however, aware that the relationship between environmental values and behaviour is not always a good predictor of behaviour change and suggests that both types of change should be encouraged simultaneously: structural changes initiated by government, coupled with educational and informational support to influence attitudes. He refers to this as environmental citizenship, a combination of self-interested rationalist approaches and a *'values based approach that seeks to draw out the latent values already harboured by an individual'*. (Dobson 2010:2)

Grey (2009) acknowledges that behaviour change is a complex arena, not least because humans don't always act rationally. Some may respond to valuative second order approaches whereas others will respond to structural instruments, but for Grey (2009) both approaches have an inherent problem. In the natural sciences the objects of study do not have agency making it possible to make predictions and control variables. Human beings however, have agency and in the social sciences, the act of making predictions and setting up schemes to change behaviour sets up the possibility that people will act differently precisely because of the predictions that have been made about them (Grey 2009, Stacey 2007). Furthermore, the actions of individual actors, acting in their own self-interest, can obstruct or subvert planned change outcomes, unintentionally or deliberately. Grey is therefore critical of all change management approaches that attempt to control social and organisational relations on the assumption that people are passive receivers of others'

actions rather than actors who can and do respond differentially to events. Any approach to behaviour change, must according to Grey, take into account the fact that human beings have agency and do not always act as intended. This highlights a weakness of linear rational approaches to behaviour change, both first or second order, which are based on assumptions about predictability, and supports the idea that a different approach may be needed.

The behaviour change approaches discussed so far have focussed primarily on individual behaviour as the unit of analysis, a reductionist approach which largely ignores our relationship with the wider context. Buchs et al (2011) suggest that the factors leading to behaviour change are multiple, inter-related and historically specific, and when considering environmentally responsible behaviour change, decisions involve social structures, context and practices. Social structures (discourses, social norms, rules and resources) are not independent from context, practices and actors but are constituted, reproduced and transformed by actors in ongoing relationships (Buchs et al 2011). Agency and structure are therefore inter-related as actors continually regenerate social structures through social practices embedded in social structures. In other words, both social structures and actors are constituted, reproduce and transformed in an ongoing, continual process (Buchs et all 2011, Blakie 2000, Southerton et al 2004) and although we may think we act independently, based on rational free choice, we are influenced by our surroundings, and are thus not completely free to act, but nor are our actions entirely determined by social structures.

This is relevant in terms of environmental behaviour change because the degree to which individuals see themselves as part of the natural environment (sensemaking) has been found to influence behaviour change (Schultz 2000, Corner and Randall 2011). However, it is not only our understanding of the natural environment that is important, the influence of social interaction, and the actions of those around us are also influential (Gladwell 2000, Corner and Randall 2011). Behaviour change is therefore, is a social, collective phenomenon, affected by social context, human understanding and social practices, and rather than focussing exclusively on how to influence individual behaviour through structural incentives or value propositions (first and second order linear approaches) we need to take into account the complex interactions between actors and the broader social, technological and environmental contexts that both constrain and enable practices (Buchs et al 2011,

Gatersleben and Vlek 1998). Helping individuals develop an awareness of the inter-dependency between individuals and the environment and the way in which elements in the system co-evolve, in other words, their role as co-creators of the system, might therefore be a more effective approach to behaviour change for sustainable development. This is a third order approach to change that supports the views of strong sustainability.

Building on the idea that behaviour change is a social, collective phenomenon and that sustainable development requires us to change our way of thinking about the natural environment and acknowledge the complex systemic interactions that influence us and that we in turn influence, increasing social interaction and networking have been found useful ways of transforming established beliefs and views (Earl 2007).

'*Evidence suggests discursive, elaborate processes are a vital element in behaviour change.*' (Jackson 2005:133)

Increasing opportunities for participation in local environmental decision making through CRAGS groups, Carbon Conversations and Carbon Clubs (discursive processes) can promote learning, provide support and encourage new thinking that can lead to behaviour change (Georg 1999, Hobson 2003, Hargreaves et al 2008, Buchs et al 2012). This suggests that participatory, community based, deliberative processes based on discourse and social engagement could be a way of supporting third order change and influencing behaviour (Corner and Randall 2011, Buchs et al 2011, Jackson 2005, Nye and Burgess 2008).

The next section will examine in more detail the role of discourse and how participation in social networks can bring about social learning that can, in turn influence behaviour change.

2.3.2. Social interaction, discourse and networking - social learning and behaviour change

Behaviour change is, as discussed, complex, affected by structures, values and the social contexts within which individuals are located. Linear approaches to change (first order and second order) are associated with reductionism and tend to target individual behaviour rather than examining the complex interactions between actors and the broader social, technological and environmental contexts that both constrain and enable practices. Engaging in social interaction however, a non-linear process, can transform established ways of understanding and lead to the co-creation of practices that are likely to result in

change (Buchs et al 2011). Social interaction can take many forms, from face to face conversation to electronic networking, but whatever form it takes, coming together to share the concepts, categories and ideas that provide a framework for making sense of situations offers the potential to transform knowledge and change behaviour (Buchs et al 2011). This approach acknowledges learning as a social activity and knowledge as the product of interaction and communication - what we know and the way we practice it emerges from the interplay between individuals (Tsoukas and Vladimirou 2001). Accepting knowledge as a social construct and that people learn from and with others suggests that the encouragement of social interaction and networking to create relational spaces in which knowledge can be shared disseminated and interchanged can be an effective vehicle for supporting behaviour change (Garcia-Lorenzo and Mitleton-Kelly 2003). The conversation that occurs in these spaces is a mutually constructive act in which information is clarified and understanding agreed in a mutual, often unaware process and as people shape what they say in response to the comments of others they transform their own understanding (social learning). Meaning emerges and changes through the interaction (Shaw 2002) and the resulting changes in understanding can inform changes in behaviour (Weick 2005).

Action learning, developed by Revans in 1940s, is a form of social learning that supports individuals to come up with creative solutions to problems without the need for experts (Bradbury et al 2008). The learning is done through mutual inquiry and exchange among colleagues, where one questions one's own experiences and learns through asking questions of others. This type of learning also develops confidence and skills in collective decision making, builds relationships and can facilitate the creation of shared repertoires of resources and tools, thus cementing the link between cognitive restructuring (learning) and action (Blewitt 2010).

Lewin's T groups were an early form of participative or action research/learning that supported social learning by bringing individuals together in a leaderless group. The underlying notion was that interacting and working together would help to expand awareness of taken for granted assumptions and that this would influence choices about behaviour and improve decision making (Bradbury et al 2008).

Acknowledging learning as a social activity and recognising that meaningful conversation can generate non-linear learning from which unexpected things can emerge (Garvey et al 2009), Lave and Wenger (1991) developed the idea of Communities of Practice (CoPs) based on the principles of action learning. A Community of Practice (CoP) creates a learning environment where participants engage *'in a process of collective learning in a shared domain of human endeavour.'* (Wenger 2006:1). The work is done in conversation with the belief that learning is a social process that emerges from the experience of participating in daily life (Lave and Wenger 1991), but unlike local community meetings, a CoP meets regularly over a period of time with a specific purpose.

CoPs, like action research groups, support egalitarian, collective, problem solving activities based on mutually supportive dialogue (Bradbury et al 2008) and encourage *'groups of people who share a concern or passion for something they do'* to learn how to do it better through regular interaction (Wenger 2006). The group takes collective responsibility for the learning they need and the problems addressed are real and relevant and are tackled in real time. Unlike traditional planned, management approaches, which can kill the spontaneity from which new meaning can emerge, CoPs encourage new thinking and ideas (Blewitt 2010). Unilever adopted a leadership model based on these principles that involved annual learning journeys and shared storytelling to help participants clarify issues and establish bonds of mutual understanding (Bradbury et al 2008).

Although the traditional model for CoPs involves discrete teams operating within an organisation, as in the Unilever example, as the world faces more complex problems this approach is expanding outside organisations (Bradbury 2008). Similar approaches based on group participation have already been found to be effective in generating socially embedded, pro-environmental changes in behaviour (Burgess et al 2003, Seyfang and Smith 2007). Carbon Conversations for example, encourage people to come together voluntarily to follow a six week programme of mutual learning supported by a trained facilitator. This type of community participation encourages social learning and supports behaviour change, by helping participants to develop their own ways to reduce their carbon footprints (Jackson 2005, Middlemiss 2008) and suggests that in terms of this research, CoPs, as a form of social interaction, could be a useful way of encouraging local sustainability.

Engaging with others to transform our understanding is not the only reason social interaction can stimulate behaviour change. Peer pressure also affects how we behave. Bandura (1971) was an early advocate of the social learning theory that suggests because we are powerfully influenced by our surroundings, our immediate context and the personalities of those around us, new patterns of behaviour can be acquired through direct experience or by observing the behaviour of others (Gladwell 2000, Corner and Randall 2011).

'There are few influences more powerful than an individual's social network'. (Corner and Randall 2011:7)

One of the reasons teenagers smoke, despite repeated health warnings, is because they want to appear cool in front of their peers. The emotional image portrayed by smoking is more important than the logical rational health risk (Gladwell 2000). This acknowledges the influence of those around us and the importance of feelings and emotion in shaping the way we construct ourselves - our actions therefore are the outcome of both sensemaking and emotion (Georg and Fussel 2000, Finemen 1993, Kuhn and Woog 2005).

Encouraging social engagement and networking through CoPs therefore could be an effective way to promote behaviour change to support sustainable development because it stimulates social learning and acknowledges the importance of emotional aspects such as peer pressure in influencing behaviour. Coming together to share knowledge in this way also builds relationships and helps participants understand that dissent, conflict, discussion and disagreement can co-exist (the existence of different narratives). Another potential advantage of this type of approach is that it creates the possibility of new ways of working to emerge without the need for highly formalised procedures (Garcia-Lorenzo and Mitleton-Kelly 2003).

Sustainable development, a complex problem involving uncertainty, multiple stakeholders and perspectives, competing values, lack of end points and ambiguous terminology (Morris and Martin 2009) will have no one solution and just as there are multiple possible futures dependent partly on how we choose to respond to the changing environment, there will be different approaches to sustainable development. Mulgan (2007) suggests we need to have conversations about the future in order to understand the present better and differently to

enable us to act with foresight rather than regret with hindsight. If increasing social networking can encourage conversations about the complex inter-relationships that influence our future and help us to challenge our current unsustainable way of behaving, it can only be a good thing.

As discussed earlier, the challenges posed by sustainable development are thought to be too complex to be adequately addressed by first and second order linear change. Some (Voss et al 2006) believe that there is a need for a new and different framework – third order change, associated with a systemic perspective (non-linear) and consideration of the whole system. Complexity thinking is a systemic approach that recognises non-linear interaction and supports the type of social learning found in CoPs and could provide a new framework to encourage voluntary sector participation in behaviour change for sustainable development. The next section will examine the relevance of complexity thinking for this research.

2.4 Complexity thinking

Complexity thinking or complexity science is a *'lively arena of competing and contested discourses'* (Ison 2008:146) that developed from Ludwig von Bertalanffy's general systems thinking in the 1950s (Hatch 1997). It is not a method or set of tools, but a conceptual framework that offers new ways of thinking and seeing the world that can provide *'fresh thoughts and insights for dealing with the complex world in which we live'* (Johnson 2009:xi). It has been credited with increasing the prospect of solving the important problems facing society today (McMillan 2004, Mitleton-Kelly 2003, McDaniel and Driebe 2005) and is widely used in the scientific community to examine phenomena such as quantum physics, cancer, pandemic viruses and financial market crashes (Johnson 2009). Increasingly it is being applied outside the scientific arena, in areas such as organisational management of the NHS (McMillan 2004, Stacey 2007, Mitleton-Kelly 2011, Stevens and Cox 2007). In social work, it has led to better understanding, more effective practice and reduced the stigma around diversity of behaviour by enabling social workers to see the possibility of alternative ways of achieving the same objectives (Stevens and Cox 2007, Payne 2005).

Before discussing the principles of complexity thinking it is however, necessary to give a brief explanation of systems thinking or systems theory that underpins complexity thinking.

Systems theory is an interdisciplinary study of systems in general, which grew out of various scientific disciplines: biology, psychology, ecology and the study of living systems, engineering, automation and cybernetics (Bertalanffy 1968, Capra 1996, Stacey 2007). There are different strands of systems thinking: first order, hard systems that are often self contained (closed systems) and second order, soft systems that are open to the environment (Stacey 2007). Ison (2008) however, rejects the hard/soft distinction as perpetuating an '*unhelpful dualism*', (Ison 2008:148), but whatever the nomenclature, there are key features common to all systems: a system is an integrated whole created by the interaction of the constituent elements that exhibits systemic non-linear properties that cannot be reduced to those of their intrinsic parts (Capra 1996).

'*The state of the system as a whole is irreducible to a linear supposition of the states of its constituent elements.*' (Cilliers 1998:4)

Bertalanffy (1968) developed his general systems theory as a '*useful tool*' (1968:33), applicable to different fields, with the central concept that systems exhibit homeostasis and a self-regulating tendency towards equilibrium. When studying systems the focus shifts from the study of objects as independent entities, towards an understanding of the features of the system as a whole and the relationships between the interacting, interdependent elements in the system. This, according to Bertalanffy, challenges mechanistic Cartesian science which assumes the behaviour of the whole can be analysed and predicted from studying the properties of its parts.

'*This scheme of isolable units acting in one way causality has proved to be insufficient.*' (Bertalanffy 1968:44).

Another aspect of systems thinking that challenges dominant ideology is that it moves away from hierarchical interaction to networking (Capra 1996). Although the phrase 'system hierarchies' is often used, this refers to systems nestling within systems. There is no implication of above or below, only networks nesting in and interacting with other networks and operating in non-hierarchical relationships.

As mentioned earlier, some differentiate between first order and second order systems. First order hard systems, which include system dynamics (Forrester 1969) and cybernetics (Wiener 1948, Beer 1959), are generally closed systems. They are goal seeking and, based on the assumption that systems can be engineered. The focus is on optimizing structure and

behaviour to solve problems (Ison 2008, Stacey 2007). Hard systems therefore, although departing from mechanistic, reductionist thinking in that they emphasise non-linear dynamic interaction between parts of a system and between systems, do not move away from rationalist assumptions around causality and the separation of the observer from the observed.

This type of hard system may be applicable for engineering problems but it has limitations when dealing with complex problems involving people - social systems. Checkland (1985), recognising the limitations of the rationalist perspective of the hard systems approach and the goal oriented behaviour that assumes the possibility of objectivity, put forward the view that when considering human behaviour, systems should not be seen as 'real' objects but as mental constructs or models that facilitate learning. He developed soft systems methodology (SSM) as a process of enquiry, meaning and intention that is oriented to learning. It assumes that because humans possess free will and are not the subjects of forces beyond their control, they should be involved in any changes to the system they co-create. This constructivist psychology acknowledges the role of humans in determining the world they experience and emphasises that understanding must involve awareness and acceptance of multiple points of view. Rather than using the language of problems and solutions, it focuses on issues and accommodation between autonomous individuals who are learning about the multiple possible options whilst reflecting on their own interactions with the system. It is therefore, not seeking 'the truth' but searching for alternative world views applicable to specific situations in a way that explicitly recognises the influence of human emotion on change (Ison 2008). Soft systems thinking therefore, moves away from understanding the world as systemic (a realist perspective) to inquiring about the world in a systemic way - the difference between describing how things are, which assumes real systems exist in the world, and interpreting how things appear to be (Sterling 2008). Although it can never produce definitive answers, as inquiry is never ending, it still retains a degree of causality, because it maintains the possibility of managing relationships or orchestrating systems perceived to be problematic (Checkland 1985).

Complexity thinking/complexity science, developed from systems theory is a multidisciplinary, holistic, flexible, and integrative framework from which to examine things in context and establish the nature of the relationships between them rather than

addressing the individual elements in isolation (Capra 1996, Spretnak 1999). Johnson describes it as *'the study of the phenomena which emerge from a collection of interacting objects.'* (2009:3) but there is little agreement, even among scientists, about the definition of complexity thinking (McDaniel 2007). It is generally seen as a way of describing the behaviour of *complex adaptive systems*, a term coined at the interdisciplinary Santa Fe Institute (SFI), by John H. Holland, Murray Gell-Mann. Systems are defined as *complex* because they are diverse and composed of multiple, interconnected, interdependent elements interacting in non-linear ways. They are *adaptive* because they have the capacity to change and learn from experience, which gives rise to self-organisation or self-regulation. Complex adaptive systems are therefore open, co-evolve with the environment through self-regulation using feedback and exhibit emergent properties, (as a result of self-organisation), that can create new order spontaneously without external direction (Stacey 2005, McDaniel 2007, Mitleton-Kelly 2011). The basic characteristics of complex adaptive systems therefore, include: self-organisation, co-evolution and emergence.

Self-regulating complex systems are found in nature, in the physiological systems of our body, in local and global ecosystems, and in the climate. Human society can also be regarded as an interdependent, complex adaptive subsystem within the larger system of the Earth (Lovelock 2000, Luhmann 1985, Cilliers 1998). Mitleton-Kelly (2011) describes human society as systemic, multi-dimensional and complex, with social, cultural, political, physical, technical, and economic elements interacting and influencing each other. The features of human society that exhibit properties of complex adaptive systems include (Luhman 1985, McDaniel 2007):

- diverse, inter-dependent, interacting elements or agents that exhibit self-organisation and co-evolve with their environment.

- non-linear interactions, affected by continuous feedback, in which the same piece of information has different effects on different individuals (associated with communication and learning. Bertalanffy (1968) linked systems theory with communication theory, likening the flow of information to the flow of energy in a system).

- short range interactions determined locally with no meta-level control of information

- emergent phenomena

Complex adaptive systems, like systems theory in general, move away from linear, reductionist science because they must be studied holistically, with a focus on understanding the relationships or patterns of interaction between organisations/agents and their environment as opposed to focusing on individual elements. Applying this thinking to behaviour change for sustainable development implies that the relationship between humans and the natural environment cannot be ignored as we are co-creators of our environment and our understanding of the living world will affect how we respond to changes in the natural environment. If we acknowledge the Earth as a complex adaptive system of which human society is an inter-related, co-creating sub-system, this blurs the distinction between object and subject, the perceived and perceiver, humans and nature, and removes the detachment of humans from their natural environment. The world becomes a complex adaptive system in which all elements interact with their surroundings in a way that enables the self-regulation that maintains the conditions for life on the planet (Lovelock 2000), (strong sustainability) and humans, as active agents in the system, are co-creators who cannot stand outside or apart from the system (Sterling 2003). This is a very different view of the value of the natural environment from those who take a weak sustainability approach and regard the natural environment as a resource to sustain human life with no recognition of the systemic interdependence (Capra 1996).

Thinking about how to encourage behaviour change to support sustainable development, the contested nature of sustainable development has led to calls for new and different approaches and adopting the principles of complexity thinking appears to have many advantages in this respect.

Understanding the Earth as a complex system would make it easier to recognise and understand the inter-dependency between the economic, the environmental and the social factors in our society – the three pillars of sustainable development, and unlike traditional linear approaches to change, the focus would not be on addressing the issues individually, but about considering the whole system and the systemic interactions. This would reduce the likelihood of second order problems arising elsewhere in the system.

Human irrationality which can be seen as problematic when trying to bring about change from a linear perspective would not be a problem from a complexity perspective as change

in a complex system emerges from the interplay of different stakeholders. It is a product of the self-organisation of multiple agents acting independently within the system (McMillan 2004). The focus on the non-linear interactions between all the agents in the system, human and non-human, would mean that the irrational behaviour of any one individual would pale into insignificance.

Diversity is another feature that is essential to the dynamism of a complex system, acting as a source of creativity (McDaniel 2007, Kroll 1987) whereas repetition, conformity and permanence can bring a complex system to a standstill (Berg 1989, Cilliers 1998, McDaniel and Driebe 2005). The need for diversity would create the space to acknowledge alternative world views and different perspectives, and could be particularly relevant for this research which is looking at the role of the voluntary sector in the promotion of local behaviour changes to meet the aspirations of government around sustainable development. This is because in human society change often emerges from micro-level niches outside the mainstream, and the transformation of established beliefs, values, discourses and norms has been attributed to the creation of sub-cultures that, over time, have had a profound impact on mainstream discourses and norms (Earl 2007). The voluntary sector often works with those that are outside the mainstream and excluded from the dominant narratives and the inclusion of these non-mainstream voices will increase the diversity in the system, thus increasing the potential for creative change. Furthermore, small groups, like local voluntary organisations, can be more effective at developing and promoting new ideas than mass campaigns because they find it easier to punctuate the existing equilibrium and break the mould (Gladwell 2000, Price and Shaw 1998, Seyfang and Smith 2007). This suggests that the inclusion of the often unheard, diverse voices in the voluntary sector have an important contribution to make to the development of local sustainability, and an approach to change based on the principles of complexity thinking would value the contribution of the sector. Furthermore, if small non-environmental organisations can see the value of their contribution they might be more inclined to participate.

Complex systems are dynamic and self-organising, continuously responding to feedback, and this provides the flexibility to adapt to the ongoing changes in the natural environment and removes the expectation of permanent, generalisable solutions because permanent outcomes would freeze the system (reduce the interactions between elements). The

outcomes of a complexity approach are always therefore a temporary accommodation, local in time and space, and responsive to local changes (Lyotard 1984) and this may better represent the nature of our reality as we face ongoing environmental challenges (Stacey 2001, Smil 1993).

The flexibility associated with a complexity approach should also, in theory, make it attractive in a liberal pluralist/postmodern society, which opposes central control, and prefers agreements to be locally negotiated and open to cancellation and change (Wagner-Tsukamoto 2008).

Complexity thinking therefore takes a different approach to change and how to manage it. Change is not seen as a problem to be solved or controlled, as in linear thinking, but as an opportunity for creativity that stimulates innovation (Stacey 2001, McMillan 2004, McDaniel and Driebe 2005) and although complexity thinking could be considered as a new way of supporting the behaviour changes needed for sustainable development, this understanding of change, as a dynamic on-going process, is not new. Heraclitus pointed out that you can't step into the same river twice (Macmillan 2004) and the Eastern philosophies of Buddhism and Taoism acknowledge that change is not something to be rejected or fought against but is a part of life as everything is in the process of changing and becoming something else (Batchelor 1998, Dalai Lama 1998).

Adopting the principles of complexity thinking to provide a framework to support the behaviour changes needed for sustainable development appears to have many strengths, not least because the obsession with control and prediction associated with linear rationalism (the dominant paradigm) and the need to control change have often been cited as inhibiters of the behaviour change needed (Springett 2006). Complexity thinking offers a flexible and adaptive way to respond to the constantly changing environment in a way that recognises the diversity and multiple perspectives in society and it has several features that could actively encourage voluntary sector participation.

For a values-based sector like the voluntary sector, where emotion is often the driving force, any change approach that acknowledges the role of emotion in behaviour change is likely to be appealing. As discussed earlier, humans are not totally rational beings and our actions are the outcome of both sensemaking and emotion (Georg and Fussell 2000, Grey 2009) and

complexity thinking recognises the value of emotion and intuition alongside rationality and logic as important influencers of behaviour (McMillan 2004).

The non-hierarchical nature of self-organising systems could also appeal to the voluntary sector. In a complex system, emergent properties, qualities, patterns or structures arise from the interaction of individual elements (Orlikowski 1996, Mitleton-Kelly 2003).

Emergence *'the process by which patterns or global level structures arise from interactive local level processes, cannot be understood or predicted from the behaviour or properties of the component units alone.'* (Mihata 1997:31)

Any decision or action by any individual, agent, group, organisation, community or institution affects all other related individuals and systems, but not in a uniform way. It varies according to the state of each individual at the time of the event, making prediction impossible (McDaniel 2007, Kauffman 1993). All outcomes are therefore locally specific and applicable to the situation at the time and all actors operate in their own interest, modulating the behaviour of the system through their actions and interactions, intentionally or unintentionally. It is therefore impossible for any agent to know or control everything that is happening, and removes the ability of any one actor to plan and control the system (Cilliers 1998).

'Decisions have to be made in a way that corresponds to the values of the environment in which they have to be effective.' (Cilliers 1998:4)

This represents a shift from a position that in principle everything can be known (linear rationalism) to a position where we can't know everything - a position of uncertainty, and unlike the current dominant paradigm of linear change, based on the premise that it is possible to intervene to create predictable, generalisable outcomes, the dynamics of complex systems mean that it is always going to be a moving feast (Kauffman 1995).

'*An uncertain future is a key reality of the human condition and forecasting the whole as opposed to the parts of civilisational development is far beyond our abilities.*' (Smil 1993:32)

This may better reflect our reality and provide opportunities for local voluntary organisations and their stakeholders to voice their needs in ways that may not be possible in top down approaches driven by centralised directives. It could however, be a double edged sword as there can be no oversight from a position of power (Cilliers 1998) and the inability to specify and predict clear outcomes may be challenging for the voluntary sector, operating

under tight funding regimes that demand accountability. Moving the focus of management away from central planning and control to participation and self-organisation (Smil 1993, Sterling 2003, Stacey 2007, Mitleton-Kelly 2003) and encouraging dispersed power relationships where no agent can be opposed by or subordinated by any other (McDaniel 2007) brings different responsibilities which could be uncomfortable for those not used to working in this way. Although the voluntary sector is a sector that values it independence (Schwabenland 2006), the lack of guidance from above and the lack of controlling structures could be seen as a recipe for anarchy, and create a fear that the free-for-all would encourage competition for individual advantage and ignore/disregard those less able to compete. Accepting that change in a complex system cannot be guaranteed, and the possibility that the outcome of the process may reinforce social inequality and increase environmental damage, the opposite of what sustainable development is aiming to achieve (Redclift 1987, Springett 2006, McDaniel 2007, McMillan 2004, Mitleton-Kelly 2003), could lead to questions about the usefulness of this approach in achieving anything (Johnson 2000).

The apparently random and uncontrollable nature of complexity thinking therefore, can be seen as problematic but although it is not possible to predict the changes it is possible to influence the direction of change (Mitelton-Kelly 2003, Johnson 2009, McDaniel 2007). Complex adaptive systems demonstrate a type of holistic order or coherence, as illustrated by the appearance of order in nature (Hutchins 2012). Order emerges as a consequence of self-organisation, the direction of which is a natural consequence of the interactions between the agents and although the process cannot be controlled by central management, the direction of change can be influenced, by a motivator or attractor (Griffin et al 1998, Hudson 2000). McMillan (2004) likens this to dropping a ball into a basin. The ball rolls around in the basin (the attractor) following similar but not exactly identical trajectories (patterns). The ball is sensitive to initial conditions so that repeating the same exercise will not reproduce identical patterns but they will be similar. In human systems too, therefore, behaviour could be organised around a few rules or guiding principles that act as an attractor (Johnson 2009, Pratt et al 2005) and like a ball in a basin, this could encourage patterns of change in a certain direction. From this perspective the encouragement of sustainable development will not be totally chaotic but it will require an overarching,

inclusive vision of a sustainable future (attractor), and the establishment of a few simple ground rules to unleash the power of self-organisation in the desired direction (Stacey 2007). To overcome the fear of anarchy Mitleton-Kelly (2011) suggests there is a need to help participants understand their role as co-creators of the system, and that they are responsible for influencing change, rather than passively responding to a dominant agent or relying on external control to lead the desired changes. All participants therefore, will need to learn about the nature of complex systems and their co-creative role in them. McDaniel (2007) suggests that in this changing and uncertain world we need to let go of our fixation with certainty and recognise that the old ways based on command, control and planning are no longer appropriate. Instead of trying to change those areas we think we can control, without understanding the consequences further down the line (second order changes) we need to learn about complex systemic interactions and acknowledge that there will be some things we can't control, the climate for example (Morgan 1996).

There is growing evidence of how the application of complexity thinking can lead to better solutions to complex problems (Pratt, Gordon and Plamping 2005, McDaniel 2007, Mitleton-Kelly 2011a) and despite the inability to predict and control change, I feel complexity thinking could be an appropriate way to encourage the behaviour changes needed for sustainable development because:

'From a macroscopic point of view the development of political, social or cultural order is not only the sum of single intentions but the collective result of non-linear interactions.'
(Mainzer 1996:272)

Complex systems adapt and evolve in a non-linear fashion, co-evolving and changing the world around them (McDaniel 2007) and Elias (2000) suggests that Western civilisation is not the result of any kind of calculated long term planning. Individuals did not form an intention to change civilisation and then gradually realise this intention through rational purposive measures, even though history tends to suggest that events proceed in a linear cause and effect fashion. Development and evolution emerge from the interaction between agents, and the interplay of intention and the actions of many people interacting with each other in their local situations can bring about long term population wide patterns (Orlikowski 1996, Elias 1939,2000). Economic or social trends are thought to accelerate or reverse themselves, not because of a single major event or a detailed planning process, but

because of many small interactions (Gladwell 2000) and we cannot ignore the cumulative effects of small local changes to bring about large scale systemic change (paradigm shift) where *'the whole system spontaneously shifts to a higher level of complexity'* (Reason 1988:10).

Mead (1934) refers to this emergent process as social generalising, as opposed to social determinism and this type of gradual change occurs in organisations, where small continuous adjustments or micro level changes enacted over time can create substantial change (Weick and Quinn 1999, Corner and Randall 2011) as seemingly chaotic behaviour gives rise to order (Capra 1996) as a result of the systemic properties of that system (Kauffman 1993).

In terms of sustainable development, changing behaviour will require negotiating a shared vision, increasing opportunities for interaction, removing expectations of control and certainty, and creating an environment that supports sensemaking, learning and improvisation (the ability to respond creatively to changing situations) (McDaniel 2007). In other words, we need to challenge to the dominant paradigm and learn how to understand our world differently – third order change (Voss et al 2006, Smil 1993, Smyth 2006).

Complex systems are, as discussed, dynamic, emergent, transcending, participative, relational and connective (Johnson 2009, McMillan 2004) and understanding the world as a complex system potentially offers a new way of addressing complex problems like sustainable development (third order change). Although third order change transcends traditional linear rational frameworks, it does not disregard them and structural first order approaches and valuative, second order approaches can operate simultaneously within and as part of the new paradigm.

'Humankind is now moving from the age of reductionist science to an age of synthesis or integrative science. This transition does not mean that reductionist science is no longer appropriate but rather that as levels of complexity in any system increase, new properties emerge that were not apparent at lower levels.' (Cairns 2003:3/4 in Blewitt p 43)

Another advantage of this approach is that small local level, changes may not be as overwhelming as trying to enact large scale social change (Weick 2005) and a better understanding of how small individual actions can contribute to larger change, might increase the propensity for action and help to overcome the anxiety and uncertainty caused

by global environmental problems such as climate change, which are seen as too big for most people and organisations to do anything about (Hale 2010, Weick 1984, Gladwell 2000).

However, we are culturally conditioned to see the world in a particular way and it is difficult to change our views (Ison and Russel 2000). Even in a liberal democracy, which supposedly values plurality, traditional linear rational approaches dominate and policy making is generally focussed on controllable outcomes where change is a manageable process that moves the situation to a preferred outcome (Grey 2009). We cannot therefore expect to suddenly move from linear rational approaches to complexity thinking without support to learn about and understand the nature of complex systems and the importance of relationships, connectivity and interdependence (Cairns 2003, Smyth 2006, Voss et al 2006, Rittel and Webber 1973). Learning involves reflecting on our actions. We do not learn about the world and then act rationally. Learning and action are concurrent and involve sensemaking, a social act that enables understanding of the surrounding circumstances in such a way that stimulates action (Taylor and Van Every 2000). Improving the sensemaking capacity of workers can lead to improved organisational performance as it is not lack of information that is the problem – we have too much information – it is a lack of time and ability to understand the conflicting information in a way that encourages action (McDaniel 2007). This suggests therefore that learning is an important element of change from a complexity perspective and to bring about a more sustainable future, we will have to help people learn about the complex, adaptive nature of the world. The next section will explore the role of learning in complex systems.

2.4.1 Social learning in complex systems

Sustainable development can appear as an intractable, overwhelming problem from a linear perspective because of its multi-dimensional nature involving social, cultural, physical, technical, economic and political aspects (Mitleton-Kelly 2011b). The reductive nature of linear rationalism, the dominant paradigm, struggles to manage multi-dimensional interdependencies and is more suited to addressing single issues such as, structure or finance. This is because knowledge from a linear perspective is seen as a factual, measureable commodity owned by the organisation or the individual involved that can be shaped and controlled through formulaic practices and rules to achieve predictable

outcomes (Morgan 1986, Garcia-Lorenzo et al 2003). Linear perspectives do not acknowledge the collective or social nature of learning but as suggested above, adopting complexity thinking, as a new framework to encourage behaviour change to support sustainable development could help us to learn about and understand the complex, systemic nature of our world and this learning can be facilitated by the creation of enabling learning environments that support social learning.

From a systemic perspective, knowledge is dynamic, generative, emergent, intrinsically social in nature and generated and shared though social interaction. Rather than trying to manage it in a linear way, there is a recognition that learning needs to be facilitated through the creation of enabling environments or knowledge spaces, from which new knowledge, structures and practices can emerge (Garcia-Lorenzo et al 2003, Alvesson and Karreman 2001). The product of interaction is more than the sum of the constituent parts and coming together to share information increases the capacity to generate new meaning and knowledge as the interactions and ideas flowing round the system stimulate creativity and innovation and increase the likelihood of new ideas emerging (Mihata 1997, Cilliers 1998, McMillan 2004, Stacey 2007, Johnson 2009, Mitleton-Kelly 2003). New patterns or structures arise from interactive local level processes and Macmillan (2004) suggests that this type of change is not surface level change but real change and renewal (third order change), where thinking and behaviours become significantly different.

In terms of this research, this supports the idea that the creation of shared spaces where individuals can interact and engage in non-linear ways (conversation) could be an effective way to encourage behaviour change. Conversation is a mutually constructive act that supports social learning and can lead to improvisational behaviour (McDaniel 2007, Brown and Duguid 1991) and engaging in this way would enable participating agents to learn and modify their behaviour in response to new information (McDaniel 2007). The creation of learning spaces based on the principles of complexity thinking therefore could be an effective way of encouraging the social learning needed to tackle complex problems like sustainable development (Capra 1996, McMillan 2004) and provide a new way of understanding the world that helps us to recognise the nature of the dynamic, ever-changing environment and the interdependencies between the various elements in the system (Voss et al 1996 Morgan 2006).

As '*different ways of working, thinking and relating*' (Mitleton-Kelly 2011b:17) they would provide an inclusive, non-hierarchical, distributed approach, applicable in local settings that could be attractive to the voluntary sector, encourage their participation and give them the confidence to explore different possible local solutions - innovate or improvise (Griffin et al 1998, Kallinikos 1998, Tsoukas and Vladimirou 2001). Improvisation involves responding to information without a formal plan, being willing to accept the uncertainty of not knowing the destination and being willing to experiment.

As discussed earlier, in section 2.3.2, networking and participatory, community based approaches have already been used to support environmental behaviour change and have been found useful in developing new knowledge, building trust, reducing exclusion and feelings of isolation, and allowing space to express emotion (Jackson 2005, Hale 2010 Corner and Randall 2011, Daily et al 2008). Although with modern technology networking does not need to be limited to face to face conversation, complex systems work better when operating over short distances (McMillan 2004) and encouraging face to face networking would also help us to better recognise how our actions are deeply embedded in the wider environment and the habits and social norms of those around us. Although we are often reluctant to act individually, if we see those around us acting differently we are more likely to follow (Smyth 2006, Hale 2010) and that is why I believe the creation of learning spaces (CoPs) based on the principles of complexity thinking could offer an effective way of encouraging voluntary sector engagement in the promotion of local sustainable behaviour changes.

So far, this Literature Review has discussed the relationship between humans and the natural environment, explored the complex problem that is sustainable development, examined different approaches to behaviour change and looked at how complexity thinking could provide an enabling framework that encourages social learning to support behaviour change. As the primary aim of this research was to examine the role of the voluntary sector in the promotion of sustainable behaviour at a local level, the final element to be explored is the role of the voluntary sector in the sustainability agenda.

2.5 The role of the voluntary sector

(The previous Labour Government used the term Third Sector to describe non-governmental organisations, including voluntary and community organisations, charities, social enterprises, cooperatives and mutuals. The current Coalition Government prefers the term Civil Society. This thesis uses the phrase voluntary sector to refer to all organisations in the sector.)

There is a belief that addressing sustainable development requires contributions from all sectors of society: government, businesses, individuals and communities (Stern 2006, Defra 2008a), and the voluntary sector already has a long history of campaigning and activism around environmental issues.

'*Civil society has often been ahead of other sectors in warning of new threats - like those from climate change - as well as embracing new opportunities.*' (Mulgan 2007)

Tony Juniper, Friends of the Earth executive director (2008) illustrates the success of voluntary sector activity in this area by pointing out that 25 years ago it was a lonely occupation being an environmentalist but now almost everybody wants to do their bit for a healthier planet.

The UK Government, aware of the effectiveness of community based approaches in supporting pro-environmental behaviour change (Jackson 2005, Middlemiss 2008), saw the potential of the voluntary sector, a sector that helps people change themselves and their communities, to encourage local action around climate change (Cabinet Office 2007, Defra 2005, SDC 2006).

'*Voluntary and other non-profit organisations can mobilise millions of people in the fight against climate change to help create and safeguard a better future,*' (the Environment Secretary at the launch of the Third Sector Declaration on Climate Change for Third Sector Organisations 2007).

Understanding the link between social deprivation and environmental justice, and the unique position of the voluntary sector working with the poor and disadvantaged, Defra launched Every Action Counts (EAC), a campaign to encourage behaviour change in the voluntary sector around climate change.

'to promote action on climate change in the voluntary sector, change the way the sector does business and support behavioural change at both the individual and organisational level.' (EAC 2007)

It was delivered through a consortium of voluntary and community sector organisations and a key element of the campaign was 'The Third Sector Declaration' (see Appendix 2).

(EAC was wound down at the end of 2009 and incorporated into a new body Just Act www.justact.org.uk/declaration see Appendix 2)

Before examining the role of the voluntary sector as an influencer of behaviour change for sustainable development, however, it is important to define the sector and its position in society. It is a diverse sector that carries out a range of activities intended to alleviate suffering and improve quality of life, including welfare, development, education, research and advocacy (Unerman and O'Dwyer 2010, Hale 2010). The resource base of the sector is pluralistic, comprising grant funding, limited commercial activity, voluntary input and mutual exchange (Seyfang and Smith 2007), and the organisations comprising the sector are generally small, low profile and with varying degrees of professionalism. They provide flexible, localised services in situations where the market cannot, specifically to socially and economical disadvantaged groups (Seyfang and Smith 2007).

Voluntary organisations can be defined as:

'formally constituted, independent of government, governed by a voluntary board, not profit making, with any surpluses re-invested in the organisation rather than distributed to shareholders, and established for the fulfilment of some social or community good.' (Schwabenland 2006:1)

They are driven by both values and social need (Seyfang and Smith 2007) and operate with a *'vision of service'* (Gann 1996:1). The values, summed up in organisational mission statements, underlie their conduct (Whitelaw 1995, Tandon and Mohanty 2002, Courtney 1996).

'Non profit organizations are grounded in their members' values and passions and sustained by the bonds of trust that develop within and between them. Organisational expression of their members' ethical stance toward the world conveys a public statement of what their members see as a better, more caring, more just world in contrast to business organisations that are fuelled by the profit motive.' (Schwabenland 2006:103).

The ideological commitment of the sector and the limited resource base often leads to alternative values and ways of doing things that are counter to the hegemony of the dominant regime (Seyfang and Smith 2007).

The NCVO (2007) estimated that there were around 865,000 third sector/civil society organisations in the UK, of which 169,299 were registered as charities on the Charity Commission register (Reichart et al 2008). These organisations range in size from local sports clubs and self help groups to international think tanks and campaigning organisations (Anheier 2005). The sector employed 611,000 paid employees (in 2007) and the total income of the sector was around £108.9 billion in 2006/7 (Hale 2010). Unlike mainstream organisations, in which approximately 40% of the workforce is female, 69% of the paid workforce in the voluntary sector is female (The UK Voluntary Sector Workforce Almanac 2007). Another difference is that 33% of the voluntary sector paid workforce has degrees, indicating a higher level of educational attainment than the private sector, in which around 16% have degrees. Despite the higher qualifications, the upper quartile pay of chief executives in the voluntary sector is lower than that of the private sector, suggesting that employees choose to work in the sector not because of salary but because of the ethical stance, which is generally seen as an incentive to workers (Schwabenland 2006, Oster 1995)

'Only in the non profit organisation is commitment to a substantive value a determinant of employment or volunteer service' (Oster 1995).

The sector also attracts large numbers of unpaid volunteers from communities and other groups with special interests, in areas as diverse as the environment and the arts (Gann 1996).

Focussing on the needs of their customers/service users, the strengths of the sector have traditionally been related to its ability to attract highly skilled, multi-skilled staff (Gann 1996:11), its responsiveness and reactiveness, and its individuality and freedom from bureaucracy (Leat 1993). The less hierarchical and more democratic workplace structures are said to encourage creativity and inventiveness (Rothschild 2000, Leat 1993). The sector is also regarded as good at working cooperatively, networking across boundaries and across sectors (Whitelaw 1995) and the campaigning work and the contribution to public policy

debate have contributed to the image of the sector as a powerful agent of change (Tandon and Mohanty 2002).

'From the very moment of founding voluntary organisations are engaged in social change.' (Schwabenland 2006:27)

One of the reasons voluntary organisations are regarded as effective change agents is their proximity to their users and the local community. They understand the needs of diverse and disadvantaged communities and provide a space to explore difference and develop a regard for others. Consequently, the sector is often better trusted by citizens than business or government organisations (HM Treasury 2005, 2010, Seyfang and Smith 2007, Buchs et al 2012, Middlemiss 2009, Etherington 2008). The Government sees the voluntary sector as being able to re-invigorate public life and transform communities by highlighting new issues and different perspectives (HM Treasury 2002 2005 2006) and their trusted role in communities makes voluntary sector organisations ideally placed to support behaviour change in ways that link to their stakeholders (Green Alliance 2010).

'Many VCOs have a greater ability to engage with and understand the needs of users and communities than statutory agencies are able to do.....As a result, there are many VCOs that have a strong track record in generating innovative learning about people's real needs and in creatively designing and delivering services that reflect those needs.' (NCVO 2006:3)

As mentioned, the voluntary sector already has a good track record in mobilising public concern around environmental issues and is widely credited for bringing environmental problems to our attention. It has been at the forefront of promoting awareness and confronting policies that damage the environment (Stephens and Eden 1995, Mulgan 2007, Jackson 2005) and lobbying and campaigning organisations, such as Greenpeace, FOE, and the World Wildlife Fund, were among the first organisations to highlight the consequences of human actions on the ecosystem (Earl 2007). The sector continues to provide environmental information, advice and access to community resources, such as garden share projects, (Stephens and Eden 1995, Buchs et al 2011) and is vocal in highlighting the social consequences of environmental changes, especially on poorer communities (Christian Aid 2007).

There is little disagreement about the campaigning ability of the sector, however, as the sector is increasingly encouraged to take on work that has traditionally been delivered by

the public sector, there are growing doubts about its ability to deliver (Macmillan 2010). In 2010 the Public Administration Select Committee noted that there was very little evidence of the added or distinctive value of third sector organisations in providing services over and above public or private sector provision (Macmillan 2010) and the sector has also been criticised for being amateurish and paternalistic (Garton 2009). The boards are comprised of volunteers who donate their skills and time to a cause or causes they believe in and this can result in paternalistic responses and the imposition of the agendas of the trustees which can decrease the self worth of the participants and create dependency rather than facilitate autonomy and empowerment (Crane and Matten 2010, Ashton 2010).

Despite the doubts about the ability to deliver, the links between poverty and environmental degradation suggest that the voluntary sector, a values-based sector working for social justice, should support sustainable development because the poorest in society are likely to suffer disproportionately from the effects of environmental degradation (ESRC 2009). In the UK the poorest often live in areas prone to flooding where house prices are cheaper, but they are less likely to have insurance against flood damage. Furthermore, the poor spend a higher percentage of their household income on food and energy. Porritt (2005) estimated that there are 3.7 million living in fuel poverty in the UK and this is likely to increase as a result of energy price rises.

'*More people die from cold in Britain than in any other European country and car ownership and frequent flying are still traceable to the most affluent in society*'. (Porritt 2005:59)

Poverty also makes it more difficult for people to adapt and change their behaviour, for example, to buy the latest energy efficient appliances, which would save them money in the longer term.

As a sector that is neither commercial nor part of the public sector, one that employs significantly more women than mainstream organisations, operates from a values based ethic, as opposed to a commercial ethic, and works with those outside the mainstream, the poor, the disadvantaged and marginalised, it is a sector that, despite the apparent limitations on its ability to innovate and deliver, is still an important agent that can bring diversity and new voices into public policy debates.

Voluntary organisations are *'working at the periphery, with people who are marginalised because of poverty, disability, social standing (or lack of), attitudes, lifestyle, perspectives.'* (Schwabenland 2006:11)

The policy focus on the social economy as a source of sustainability transformation suggests the voluntary sector should be included in discussions about the choices for the future around the creation of a more sustainable society and the strengths of the sector still make it an ideal partner to support behaviour change at a local level (Seyfang 2006).

However, a key area of concern for this research is that, in a time of rising income inequalities and increased competition for restricted funds, voluntary sector organisations with a primarily social mission (non-environmental organisations) may struggle to address 'sustainable development'. There has been limited research into voluntary sector engagement in this area (EAC/CAG 2007c, Church and Elster 2002, Middlemiss and Parrish 2009, Middlemiss 2009, Hale 2010, HM Government 2010, Seyfang and Smith 2007, Buchs et al 2011 and 2012, Georg 1999) but a Big Lottery report on sustainable development (2006) recognised that environmental considerations were one of the areas voluntary organisations needed more help and guidance on. EAC/CAG (2007) found that only a relatively small number of professionals in the voluntary sector understood sustainable development and although many organisations understood that their activities could have harmful effects on the environment and thought it was important to reduce the harmful effects, they found it hard to identify the ways in which their activities were damaging the environment. Porritt (2005) thinks that lack of understanding sustainable development and its effect on service users is one of the key drivers of lack of engagement, as non-environmental organisations don't see the relevance of the concept for their stakeholders.

'The vast majority of (voluntary) organisations address the social agenda: poverty, human rights, justice, health, but have little time for the environment – they think it is a nice thing for the affluent middle classes to do.' (Porritt 2005:29)

Guthrie et al (2010) suggest that a lack of reporting requirements in the sector around sustainability could be another contributing factor in the lack of engagement.

Other limiting factors could be funding frameworks which tend to be bureaucratic, short term and linked to constraining targets, leaving little room for core development, let alone extra activities like sustainable development (Seyfang and Smith 2007). Many voluntary

organisations, struggling to survive on a day to day basis have to devote expensive staff time to raising money due to the short term focus of funding regimes and the changing relationship between the Government and the sector with an increasing emphasis on modernisation and performance management could also divert the sector away from sustainable development. The growing need for monitoring, evaluation, staff appraisal and strategic planning, a reduction in the amount of untied funds available, and a move towards project or programme based funding and competitive tendering is putting increasing pressure on voluntary organisations and making it more difficult for them to maintain their strengths whilst competing for scarce resources (McCabe 2010). These changes in government policy also increase staff turnover due to burn out resulting in a loss of information and knowledge (Seyfang and Smith 2007). The focus on accountability has also been criticised as challenging the independence of the sector, and the prioritisation of 'delivery' over 'voice', as decreasing the innovative and representational strengths of the sector in supporting the disadvantaged (McLaughlin 2004, Macmillan 2010). Increasing demands to conform to public sector management performance criteria, adopt rational, bureaucratic approaches and replicate business models therefore, have been blamed for reducing the flexibility to act (Wood 1992, McCabe 2010). DiMaggio and Powell (1988) use the term 'organisational isomorphism' to describe how efficiency can crowd out devotion to substantive purpose, as organisations follow the fashions of institutional fields, rather than the logical dictates of their mission and core values (DiMaggio and Powell 1988).

'In a world of resource scarcity, non profit organisations are becoming more bureaucratic and adopting practices and goals indistinguishable from those in the environment.' (Wood 1992 in Rothschild and Milofsky 2006:138)

The current economic crisis and spending cuts, as a result of the austerity measures enacted by the Coalition Government since 2010, are likely to further increase the pressure for efficiency and reduce the ability for organisations in the sector to work differently and innovatively, meaning that it will be easier to overlook and ignore non core issues like sustainable development. Furthermore, EAC research found that many organisations in the sector felt they were so small they could not justify using their limited resources to reduce their negligible environmental impact. Urban non-environmental organisations were found to be the least likely to change their behaviour (EAC/CAG 2007 and 2008).

2.6 Conclusion

Sustainable development has become the principal conceptual framework within which governments, businesses and non-governmental organisations are seeking to reconcile the potentially conflicting imperatives of economic growth, social justice and environmental sustainability (Porritt 2005). It was devised to ensure protection of the natural environment and at the same time support social equality and economic development (triple bottom line), but it is a complex issue with many interpretations. On the one hand, it can be seen as a business-as-usual approach (weak sustainability) that requires minor adjustments in behaviour and technological intervention (first and second order change), or on the other hand, as an emancipatory vision of a sustainable future built upon ecological and social justice (strong sustainability). These two views of sustainable development derive from the different ways we understand our relationship with nature: weak sustainability is based on the modern, industrial, linear, anthropocentric view that separates humans from nature, or strong sustainability, an eco-centric systemic view, that sees the Earth (natural environment) as a self-regulating, complex, adaptive system or web of interactions of which humans are a part.

'The Earth is an animate living system in which humans play a constructive, not destructive, part.' (Hutchins 2102:8)

The primary aim of this research was to explore the government narrative that the voluntary sector, as a sector that is innovative and good at influencing change, can mobilise for behavioural change at local level and contribute to the creation of more sustainable communities. The world view is important because from a linear perspective sustainability, as a limitable compostable problem, can be solved through technical solutions (first and second order change) (weak sustainability). If however, the Earth is seen as a complex adaptive system (strong sustainability) we need to find a way of attaining a balance between, natural, social and economic capital and challenging the dominant norms that not only inhibit change but are thought to be the cause of many of the problems sustainable development is trying to address (third order change).

To take into account the competing definitions of sustainable development, it is necessary to posit it as a narrative construct, open to multiple interpretations. This allows me to examine the interpretations of sustainable development by the voluntary sector

participants because if it is not understood or seen as a relevant concept the sector is unlikely to devote time and resources to support behaviour change.

Personally, I take an eco-centric approach, believing that sustainable development requires a shift in our thinking (a paradigm shift or third order change) and a move away from the dominant reductionist paradigm that separates humans from nature. (My personal ontology is outlined in more detail in Chapter 3.) As Hutchins suggests I think that (2012:9) *'in order to live differently we must think differently'* (quoting Matthew Taylor, RSA Director). However, I am aware that this is not the dominant view and it is important to acknowledge that I don't see third order change as an exclusive approach that denies the existence of other approaches - first and second order change. I therefore, retain the possibility for individual interpretations of sustainable development and accept that first order and second order approaches can also make valuable contributors to the overall changes required for sustainable development. This is because behaviour change, like sustainable development, is a complex problem and we respond differently based on our personal understanding. The self-interested rational actor model (first order structural change) assumes people respond to structures, either for personal gain or to avoid harm or penalty. The valuative, second order approach sees behaviour as a result of a complex web of causal influences where people act differently not because of economic value or self-interest but because it is the 'right thing' to do – a moral or ethical issue. Although acknowledging that both first and second order change can bring about changes in behaviour, they operate from within the dominant linear paradigm that focuses on individual behaviour and I believe that new forms of interdisciplinary and transdisciplinary enquiry and problem handling would be better able to recognise the complex, shifting, systemic nature of our lives and cope with the uncertainty of the future - third order change (Voss et al 2006, Rammel et al 2003).

'The complex interactions of biology, ecology, economics and technological and social factors must be understood and coped with in an ethical sustainable way to save both human systems and humankind.' (Cairns 2004:2)

It is because of my belief that current frameworks, although having some utility, are not enough to secure sustainable development, that I developed the second aim of this research: to explore the potential of complexity thinking as a different way of understanding and addressing a complex problem like sustainable development and offering an approach

that might be more appropriate and attractive to the voluntary sector and encourage their engagement in the promotion of local behaviour changes. Complexity thinking can be called third order change because it shifts the focus from the linear rational view of separation towards interdependency and interaction. It is a systemic perspective that could provide an enabling framework to encourage behaviour change for sustainable development and help us to utilise the capacity of society to think differently about the choices ahead. It counters the dominant linear rational paradigm based on predictability, control and planning, which Handy (1990) and Morgan (1993) suggest is no longer an effective tool for delivering the future in an unpredictable world and could help us to understand our interdependency as co-creators of the system that is the Earth. This would foster a better understanding of the intimate connection between the natural environment and our economic and social conditions – the three pillars of sustainable development (Smyth 2006, Voss et al 2006, Borland 2009).

Complexity thinking therefore appears to have many advantages when addressing the complex problem that is sustainable development and one of the key areas for me was that it encourages social learning. Social engagement has been found to be an effective way of encouraging environmental behaviour change (Jackson 2005), not only because sharing ideas and knowledge can help people see things differently (double loop learning) but also because we are powerfully influenced by those around us (Healey 1993, Stacey 2007). Complexity thinking is systemic, regarding knowledge as dynamic, generative, emergent and social in nature - generated and shared though social interaction (Garcia-Lorenzo et al 2003). Applying complexity thinking to the problem of sustainable development through the creation of learning spaces that encourage social learning has the potential to encourage new understanding, build trust, stimulate innovation, and provide the flexibility needed to support local adaption to our constantly changing environment. Working in this way could therefore, not only help voluntary sector organisations develop an understanding of the relevance of sustainable development for their service users but as an inclusive approach, based on cooperation and trust, rather than the top down command and control associated with linear change, it could also provide an opportunity for collective local learning about the longer term needs of society and encourage joint working on innovative solutions to support local sustainability.

Complexity thinking, therefore, is a powerful social theory that encourages depth of thinking and opens up human possibility. As well as having relevance for this research it could potentially be usefully applied in many areas and in many organisations because although the outcomes cannot be copied, the underlying principles can be adapted to new contexts. The value is not in copying the process but in understanding the transferable principles and how to apply them in differing contexts (Mitleton-Kelly 2011b) and the knowledge gained from this research about the nature of complex social problems and the use of complexity thinking as a framework from which address these problems could therefore be useful for the government or any other organisations facing this type of challenge.

The next chapter will look at the methodological approach I have taken to explore the research questions. It is an approach that recognises complex, multi-dimensional nature of sustainable development and acknowledges the vagaries of human behaviour, and I hope it offers some useful insights into how to encourage local sustainability.

Chapter 3 Methodological choices: understanding different perspectives

"A human being is a part of the whole called by us universe, a part limited in time and space. He experiences himself, his thoughts and feeling as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty."
— Albert Einstein

3.1 Introduction

This chapter provides a critical discussion of the methodological approach taken to address the aims of the research, including why I made the choices I did and how my role as a co-creator of the knowledge generated influenced the research process and outcomes.

As outlined in Chapter 1, the research was prompted by the increasing awareness of how environmental problems are having social and economic impacts on society, and by the growing need for changes in behaviour to overcome or reduce these problems (WCED 1987, UN conferences 1972, 1987, 1992, 2009, IPCC 2007, Hawken 1993, Porritt 2005, Stern 2006, Waddock 2007). The UK government sees the voluntary sector, a sector embedded in local communities that works to change lives, as being a useful ally in the encouragement local behaviour change and the promotion of sustainable development (Cabinet Office 2007). However, research suggests that environmental considerations were one of the areas about which voluntary organisations needed more help and guidance (The Big Lottery 2006) and that only a relatively small number of professionals in the voluntary sector understand sustainable development (EAC/CAG 2008:ii). Although there have been several studies into the promotion of pro-environmental behaviour change in the voluntary sector there has been limited research into contribution of the sector to sustainable development (Buchs et al 2011, 2012, Georg 1999, Seyfang and Smith 2007, Middlemiss 2009, Middlemiss and Parrish 2010). This could be to do with semantics as sustainable development is, as highlighted in the previous chapter, often seen as synonymous with environmental issues, but in light of the limited research into the contribution of the voluntary sector in the promotion of sustainable behaviour and the Government's belief that the sector has an

important role to play in this agenda, the first aim of this research was to explore the government narrative that suggests:

- the voluntary sector, as a sector that is innovative and good at influencing change, can mobilise for behavioural change at local level and contribute to the creation of more sustainable communities.

As highlighted in Chapter 2 sustainable development is a complex, multidimensional issue with various definitions and interpretations and because of this I have posited it as a narrative construct, a subjective account of an event or action that does not constitute a definitive truth (Bruner (1991). This allowed me to examine the various interpretations and associated concepts that underpin it and develop an understanding of the voluntary sector response to these narratives. Two key underlying narratives are:

- anthropogenic damage to the natural environment is creating social and economic problems that threaten the future sustainability of human society (McKibben 2007, Porritt 2005).
- sustainable development, requiring behaviour change at all levels of society, offers a way to address the social and economic problems resulting from anthropogenic damage.

Narratives can be powerful contributors to the construction of reality (Bruner 1991), and how the voluntary sector interprets the narratives surrounding sustainable development will affect their responses. If the sector doesn't understand the impact of anthropocentric damage, for example, it is unlikely to support behaviour change. In other words, if sustainable development is not seen as a relevant narrative for the sector, local voluntary organisations may not be willing to work with the Government to support and promote sustainable behaviour in their communities. Exploring how actors in the sector understood the key narratives that constitute sustainable development was therefore, an important element of this research and to understand the potential of the voluntary sector to support sustainable development and encourage local behaviour change, I developed the following research questions:

- What do voluntary sector stakeholders understand about the current state of the natural environment and the effects of anthropogenic damage on society, including how it might affect their organisation, service users and community?
- How is the concept of sustainable development and the need for behaviour change understood in the sector?

- Do voluntary sector stakeholders consider that the sector has a role to play in the promotion of sustainable behaviour at a local level (including mitigating their own impact on the natural environment)? If so, how might they go about this and what support will they need?
- What are the barriers to the promotion of sustainable development?

This information will be useful for Government as it develops it strategies for community participation in the fight against climate change and the creation of a more sustainable society. However, it is unlikely that information alone will be sufficient to bring about behaviour change and the Government will also need a way of utilising this information to encourage voluntary sector participation in the sustainability agenda. The complex, multi-dimensional nature of sustainable development suggests it is not something that can be easily managed by classical, problem solving approaches that rely on linear analysis and planning to predict outcomes and eliminate uncertainty (Voss et al 2006). In a dynamic world facing ongoing environmental challenges, achieving sustainable development may require changes in the way we think about the natural world to recognise our embeddedness in the wider ecology (Borland 2009). This means that the encouragement of behaviour change will need to be flexible and adaptable to change and it may also need to be able to challenge dominant perspectives whilst at the same time, encouraging voluntary sector participation in the sustainability agenda. The need for a new and different approach led to the second aim of this research:

- to examine if or how complexity thinking could provide a different framework for addressing complex multi-dimensional problems like sustainable development, one that might overcome barriers to engagement and encourage voluntary sector participation in the promotion of sustainable behaviour at a local level.

The outcomes of this research therefore, could be useful for Government, local and national, when developing policies to encourage local sustainability but they also provide insights into how to address other complex social problems.

3.1.1 Structure of the chapter

Personal ontology influences the choice of research approach, and the first section discusses my personal ontology and its influence on the research process. The next section, The Nature of the Enquiry, outlines how the complexity surrounding sustainable development, and the diverse nature of organisations in the voluntary sector, led to the choice of a

qualitative method of enquiry that could capture the multiplicity of discourses and different perspectives around sustainable development, both within the voluntary sector and in society as a whole.

Postmodernism, as the chosen philosophical basis of the research, is discussed next. Postmodernism is not a unified system of beliefs but a shifting framework or perspective which emphasises *'positionalities, complications, tenuousness, instabilities, irregularities, contradictions, heterogeneities, situatedness and fragmentation – complexity'* (Clarke 2005:xxiv). It regards all knowledge as socially and culturally produced and provides a way of examining the role of narratives and discourse in actively creating and constituting a situation – social construction (Johnson et al 2006). According to Clarke (2005) postmodernism can address complex, interrelated and interactive situations and allow us to appreciate the complexities of individual and collective situations and discourses. It was therefore felt to be an appropriate framework for this research because it accords with my personal ontology, supports the narrative approach I am taking and is inherently sensitive to complexity thinking (Cilliers 1998), something that is discussed at the end of this section.

As postmodernism highlights how discourses and narratives are created and sustained, the next section, 3.5, looks at the role of discourse and narrative in this research and why conversation, as a form of co-creative discourse, was chosen as the primary data collection method. Conversation can be likened to open-ended, non-directive or in-depth interviews where the interviewee is given the opportunity to talk about the topic and what ever else it triggers. As the researcher in this process becomes a co-creator of the knowledge generated, the credibility of the findings requires reflexivity on the part of the researcher to acknowledge their influence on the outcomes.

Section 3.6 provides an overview of the research process, including how the data was gathered and analysed, and this section also includes a discussion about how I attempted to demonstrate the credibility of my research by referring back to the original participants and drawing comparisons with other similar initiatives that were happening in the city.

The final section discusses the contribution of the findings to the development of an approach to behaviour change based on complexity thinking – the second aim of this research.

3.2 Personal ontology

Ontology is a philosophical assumption about the nature of reality. An objective ontology sees the world as existing independently of human beings.

'Social and natural reality have an independent existence prior to human cognition.' (Johnson and Duberley 2000:180).

A subjective ontology however, assumes that *'what we take to be reality is an output of human cognitive processes.'* (Johnson and Duberley 2000:180).

Morgan and Smirchich (1980:88) suggest that personal ontology – *'root assumptions about the nature of the phenomena to be investigated'*, is not the only aspect to be considered when choosing a research strategy, epistemology or the nature of the enquiry is also important.

'Choice and adequacy of a method embodies a variety of assumptions regarding the nature of knowledge and the methods through which knowledge can be obtained, as well as a set of root assumptions about the nature of the phenomena to be investigated'. (Morgan and Smirchich 1980:88)

Epistemology is concerned with the relationship between the researcher and that being researched, the nature of knowledge and how we know the things we know (Gill and Johnson 2010).

Researchers with an objective ontology and epistemology tend to take a positivist approach to research, regarding human actions as deterministic and in response to external stimuli. They believe it is possible to observe the world in a neutral manner using quantitative research methods (nomothetic) which attempt to eliminate the effect of the researcher on the process. Researchers with a subjective ontological and epistemological stance however, tend to favour postmodern qualitative approaches which attempt to uncover the internal logic that underpins human action (ideographic), believing that human action arises out of the culturally derived meanings deployed during sense making and that it is not possible to observe the world in a neutral manner because all observation is value laden (Johnson and Duberley 2000).

'Knowledge occurs in social relations that are established among people when they democratically negotiate their socially constructed definitions of reality'. (Johnson and Duberley 2000:186).

For me, the objective absolutism of 'truth' or 'reality' existing independently of human beings conflicts with how I understand the world and although I cannot deny or confirm the existence of an independent reality, I believe it is unknowable to the human mind, because it is not possible to step out of reality to objectively understand it. Rejecting the Cartesian split between mind and matter, I see mind and matter as co-existing and co-defining each other and relationship or interrelatedness as a fundamental aspect of our lives.

'Nature cannot be reduced to fundamental entities – the universe is a dynamic web of interrelated events. None of the properties of any part of this web are fundamental. They follow on from the properties of the other parts. This means that the basic structures of the material world are determined ultimately by the way we look at the world - that the observed patterns of matter are reflections of patterns of the mind.' (Capra 1982: 83-85)

My ontology accords with Gaia theory (Lovelock 2000, Capra 1996), that the world is an interconnected, adaptive organism, a complex system, in which humans are a co-dependent part. In this dynamic system meaning is constantly created and recreated through relationships and interaction and as the self and the subject are intertwined, so understanding is never independent, innocent or neutral and multiple truths are always possible (Richardson and St Pierre 2008). Heisenberg's (1962) uncertainty principle describes this process, suggesting that measurements of certain systems cannot be made without affecting the systems or that

'the outcome of scientific observation is the outcome of the scientist's methodological interaction with the process and the scientist's conceptual constitution of the knowledge.'(Heisenberg 1962:10)

Postmodernism is a subjective research approach that focuses on the role of discourse in the social construction of what is taken to be real (Johnson and Duberley 2000) and as such, appeared to offer an appropriate way of exploring a complex concept like sustainable development – a concept that encompasses multiple narratives and inter-dependent relationships. The subjective co-creative ontology of postmodernism also accords with my personal ontology as it sees the self and the knowledge produced as intertwined. As the researcher is being produced by the context as much as the context is produced by the researcher, postmodern enquiry not only demands that we understand ourselves reflexively but also that as researchers we are open about our personal ontological stance and its

influence of the research (Richardson and St Pierre 2008, Reason 1988, Bettany and Woodruffe-Burton 2009, Gill and Johnson 2005).

'In order to understand the other the researcher needs to understand him/her self and their perspective of truth.' (McAuley et al 2007:334)

As a co-creator of knowledge in a continuous process of changing and being changed, I cannot help but be part of the research process, bringing my own interests and background with me. I have influenced the research process, knowingly or unknowingly, through the methodology I have chosen, the data I have selected and my interpretation of the outcomes and I have therefore included this brief overview of my personal ontology to help the reader understand my perspective and realise that I am not attempting to provide objective purity.

3.3 The nature of the enquiry

The Literature Review outlined the complex and disputable nature of sustainable development and how some see its potential to bring new ideas into debates and encourage alternative discourses about how we wish to live, whereas others see it as business as usual (Springett 2006). The multiple and conflicting interpretations can create confusion and reduce the willingness to act and the lack of action can be compounded by the complexity and uncertainty that appear to be challenging the current dominant paradigm of linear, rational analysis, based on linear management and planning (Voss et al 2006). The promotion of sustainable development may therefore require new forms of interdisciplinary and trans-disciplinary modes of enquiry and problem handling that are flexible and responsive to the uncertainty and change surrounding it (Voss et al 2006).

In order to acknowledge the complexity surrounding sustainable development this research posits it as a narrative with multiple interpretations and makes no attempt to try and define the essential truth about sustainable development. Rather, it aims to develop an understanding how this complex phenomenon is interpreted by the voluntary sector, a diverse sector that works with the marginalised, the poor and the disadvantaged, those most likely to suffer disproportionately from environmental damage but the least likely to have their voices heard (ESRC 2009, Unerman and O'Dwyer 2010, Hale 2010). The voices of those who are likely to suffer the worst effects of environmental damage should be included in any debates about a sustainable future (Mulgan 2007, Smyth 2006) and postmodernism

was chosen because it appeared to provide a way of uncovering theses often unheard voices, and challenging dominant, linear meta-narratives that suppress the possibility of change.

'Fundamental to postmodern research is the desire to challenge the content and form of dominant models of knowledge and also to produce new forms of knowledge through breaking down disciplinary boundaries and giving voice to those not represented in the dominant discourses' (McAuley et al 2007:250)

3.4 Postmodernism – a research framework

As indicated above, I wanted a research framework that could reflect the messy, interconnected nature of our world, the complexities of our social systems and the multiplicity of locally determined discourses, something postmodernism appeared able to accommodate as it

'enhances our capacities to do incisive studies of differences of perspective, of highly complex situations of action and positionality, of the heterogeneous discourses in which we are all constantly awash, and of the situated knowledge of life itself thereby produced.' (Clarke 2005:xxiii)

It has been called a different way of writing, theorizing, practice, structuring, and organizing that opens up realities rather than shutting them down (Hearn and Parkin 1993). Johnson et al (2006:143) place postmodernism on the extreme end of the interpretive paradigm, describing it as *'a label used to refer a range of heterogeneous approaches to management research'*. Others describe it as an eclectic mix and match of various research styles, open to multiple interpretations with no unified theory or coherent set of positions (Cilliers 1998, Kilduff and Mehra 1997, Best and Kellner 1991, Agger 1991). Postmodernism is therefore, not easily defined and the very act of defining could be seen as undermining its core principles. Consequently there are different interpretations: 'hard' or 'soft', 'skeptical'or 'affirmative' postmodernism.

Skeptical or hard postmodernism focuses on deconstruction and critique, seeing the world as fragmented and disrupted, but affirmative or soft postmodernism focuses less on deconstruction and more on decentring or destabilising (McAuley et al 2014). Common to all forms however, is rejection of the meta-narrative of modernity (linear rationalism) and a focus on the role of discourse in the social construction of what is taken to be real (Parker

1992). From a postmodern perspective social phenomena can't be isolated from historical and situational perspectives and reality becomes a product of historically and culturally located discourses, where different aspects of culture co-determine each other (Johnson and Duberley 2000). The underlying assertion is that there can be no single, discoverable true meaning (meta-narrative) only various interpretations, and all knowledge claims must be set within the conditions of the world as it is, temporary and local (Kilduff and Mehra 1997). Accepting knowledge as a social construct, an outcome of interaction, therefore, renders our experience of reality as discursive and Berg (1989) suggests that postmodern discourse can help us to question taken-for-granted assumptions by opening up the individual narratives to understand how they are produced and reproduced. Opening up the hidden enables us to uncover new possibilities and challenge conventional ways of thinking as we question the familiar and the taken for granted (Kilduff and Mehra 1997).

Postmodernism, hard or soft, skeptical or affirmative, however, has many critics. One often cited criticism is its denial of the possibility of objective truth (Richardson and St Pierre 2008). This is an aspect of postmodernism that could be challenging for this research. Most people do not consider the Earth as a concept that is open to multiple interpretations, but as an objective reality. I leave the reader to determine their own views, but my personal ontology does not accept the absolute separation of mind and matter. Personally, I am willing to accept the Earth as a relative concept, a complex adaptive system comprised of multiple competing narratives that co-create the system that appears real to us. However, as postmodernism is primarily a social theory, and in this research, I am examining a social phenomenon, it is not necessary to engage in an extensive argument about the reality or not of the Earth.

Considering the differing approaches to postmodernism I will now highlight what I see as the main differences between them and how affirmative postmodernism appeared to be the most appropriate methodology for this research.

Skeptical postmodernism can be seen as nothing more than an endless cycle of deconstruction, (nihilistic) (Parker 1992, Hassard 1993), but affirmative postmodernism offers up the possibility of a co-created whole, a dynamic, fluctuating reality comprised of multiple narratives. In this research for example, from a skeptical perspective, it would not be possible to legitimize the concept of sustainable development or the voluntary sector

because they would constitute merely a disparate collection of differing views and have no more value than any other concept. Unlike this fragmented, individualistic collection of unrelated discourses associated with skeptical postmodernism, the possibility of a co-created whole implied by affirmative postmodernism overcomes one of the criticisms of postmodernism: that if all discourses have equal value how can any one discourse be prioritized or legitimized (Burrell 1993)?

'If many meanings are possible, how can one choose between them and by what criteria can legitimacy be determined, as the criteria themselves must, by default, also be value laden'. Johnson and Duberley 2003:111)

With affirmative postmodernism, legitimacy is the product of discourse and discourses actively contribute to the creation of that which we perceive as real. This creates the possibility of the co-creation of rules or norms through which certain concepts or structures, like the voluntary sector or sustainable development, become legitimized or accepted within society. It is important to acknowledge of course, that these constructs will always be temporary, context dependent and open to renegotiation because if they were accepted as a fixed reality or truth this would constitute the creation of meta-narrative, something postmodernism rejects. Affirmative postmodernism therefore, removes the relativistic paralysis and suppression of choice commonly associated with skeptical postmodernism and means that environmental damage or sustainable development could be legitimized through discourse as issues worthy of consideration (Richardson and St Pierre 2008). Another common criticism of postmodernism is its lack of a moral or ethical stance (Sterling 2003). Although it opens up a space for different world views, it also denies their possibility, leaving a vacuum regarding ethics and direction - moral relativism (Jencks 1992). The validity of categories of people and the shared knowledge of groups of people, such as the disabled and disadvantaged, become fragmented and thus denied any claim to legitimacy (Barry 1997). Affirmative postmodernism however, overcomes this by acknowledging the role of individual agents and their contribution to the essential unity and connectivity of the whole system. The wellbeing of the individual depends on the wellbeing of the whole and the focus on interdependency rather than hierarchy creates a balance between integration and self- assertion. An appropriate metaphor would be letters in a book. Each individual letter contributes to a word, each word contributes to a sentence, and each sentence contributes to the whole book. Every letter is distinct but essential to creating a word and thus to the

creation of the whole book. The book couldn't be created without the individual letters and in order to read and understand the book you need to understand all the individual letters and the relationships between them (Cilliers 1998). In terms of sustainable development this would legitimize the different views of diverse stakeholders, and reinforce the need to include all voices in the debate about the future direction of our world. It would also make it easier to understand the interdependency between nature (as a contributor to the whole) and humans and the integration between the social, economic and environmental aspects of our society.

A further common criticism of postmodernism is an apparent lack of validity. If all knowledge is regarded as local and specific, there can be no external checks as each individual only has him/herself as a point of reference (Cilliers 1998).

'Postmodernism can be seen to create the possibility of escape from the strictures of modernism, or conversely, can be seen as a framework of relativity under which anything goes.' (Cilliers 1998:viii)

The aim of this research is to explore voluntary sector understanding of sustainable development, and using affirmative postmodernism acknowledges that the understanding of sustainable development is unique to each individual - always precarious and local. There is no requirement for external checks on validity as the process is not about producing the 'truth' about sustainable development in the voluntary sector. It is merely aiming to highlight the different perspectives that exist and understand their contribution to the whole.

The eclectic, ambivalent, tenuous nature of a postmodern framework may have many detractors because it will never produce the clear, verfiable outcomes preferred by some, but the advantage of adopting an affirmative postmodern framework for this research is that it retains the possibility of understanding competing interpretations whilst at the same time holding itself open to account (Kilduff and Mehra 1997, Sterling 2003, Cilliers 1998). Exploring the co-existence of a multiplicity of heterogeneous discourses, seen by some as fragmented, anarchic and meaningless, becomes challenging, exciting and full of possibility (Kilduff and Mehra 1997, Cilliers 1998) and opens up the possibility of challenging dominant frameworks and creating the potential for the emergence of new ways of encouraging behaviour change and promoting local sustainability.

It can be seen as particularly relevant for this research because postmodernism is linked to the rise of new social movements, such as 'the Green Movement', (White (1987/1988) that operate outside of existing frameworks. My hope for this research is that it will emphasise the fluidity of interpretation and transgress the established boundaries and that by giving voice to those not represented in the dominant discourses I can provide new understanding that can contribute to policy and changing practices (McAuley et al 2007). It is important to stress that I am not trying to create generalisable outcomes or new meta-narratives, but to highlight new and diverse discourses around individual understandings of sustainable development in the hope that this contributes to cognitive restructuring or sensemaking that can stimulate change (Darwin et al 2002, Duveen and Lloyd 1986, Kilduff and Mehra 1997).

As I indicated earlier, another reason a postmodern research approach, and in particular affirmative postmodernism which acknowledges the possibility of a co-created whole, was felt to be appropriate for this research was that that many features of affirmative postmodernism are inherently sensitive to complexity thinking (Cilliers 1998).

3.4.1 Similarities between postmodernism and complexity thinking

Complexity thinking has been described as a multidisciplinary, holistic, flexible, integrative systemic approach that is increasingly being applied to organisational management (Macmillan 2004, Mitleton-Kelly 2003, Capra 1996, Johnson 2009:xi). In a complex adaptive system '*agents both make and are made by the environment and are thus actors in their own evolutionary history*' (Harman 1994:385). In other words, as in affirmative postmodernism, agents are actively involved in co-creating the system of which they are a part. Both perspectives acknowledge that all agents in the situation both constitute and affect everything else in the situation in some way, such that we exist in a fabric of relationships from which we cannot be isolated (Clarke 2005, Luhman 1985). This shared co-evolutionary ontology suggests that what we perceive as reality cannot be seen as an independently existing reference point, as the self, the environment and knowledge are mutually constructed, in a constant state of being in which it is not possible to separate the known from the observed (Darwin et al 2002).

'*If epistemology is about what know and how we know what we know (what is inside) and ontology is about what there is to know (what is outside) then the most fundamental*

challenge that complexity science makes is that these can no longer be considered as separable'. (Allen and Varga 2007:19)

Applied to this research, humans, as active participants in the system become co-creators of the natural environment, as Gaia theory suggests (Lovelock 2000). This is very different from the linear rational approach which sees nature and society as separate and discrete (Metzner 1995). The recognition that humans and non humans are equal participants, interacting in networks, means that concepts like nature and science become human constructs, open to interpretation (Latour 2004). Latour describes social as

'networks of connections between human agents, technologies and objects.' (Couldry 2004:1)

Significantly for this research, this suggests that the natural environment is a post hoc justification, our understanding of which is shaped by discourse. Approaching sustainable development from this perspective and moving away from seeing nature as an asocial, objective source of truth, shifts our focus away from examining facts to exploring the relationships between the agents, structures and policies that influence behaviour. This means that matters of concern, like sustainable development, climate change, poverty or injustice could be explored as discourses rather than as truth or reality (Blewitt 2010). Postmodern research methods therefore, will help us to uncover the various narratives and discourses that co-create the system (letters of the alphabet) and complexity thinking will provide a framework from which to explore the patterns or relationships that give meaning to our lives.

Another significant similarity between postmodernism and complexity thinking is the inability for prediction. A complex system is a collection of interdependent, interacting agents that both influence their environment and are influenced by it. The system is co-created without deliberate intent (Stacey 2001, Cilliers 1998) as each agent responds differentially to feedback, making prediction impossible. Postmodern also denies the possibility of cause and effect relationships, acknowledging that the multiplicity of narratives make the world

'so complicated that concepts such as prediction and causality are irrelevant.' (Kilduff and Mehra 1997:455)

The acceptance of diversity is another area that postmodernism and complexity thinking have in common. Postmodernism exposes the different perspectives that constitute a situation and acknowledges the diversity of views that contribute to our perceptions of reality (Clarke 2005:xxiii). The underlying principle is that revealing the diverse narratives that are hidden beneath dominant meta-narratives opens up the possibility of change. Complexity thinking similarly, acknowledges the role of diversity in a system as emergence is a product of interacting agents and lack of diversity can bring the system to a standstill (McDaniel 2007, Macmillan 2004). Diversity is particularly relevant in the context of this research which is attempting to capture the diverse voices in the voluntary sector in order to uncover what sustainable development means for the sector and how they respond to the call for behaviour change.

A final similarity between complexity thinking and postmodernism is the acknowledgement that that all knowledge is partial and value laden and that knowledge claims must be set within the conditions of the world as it is today (Johnson and Duberley 2000). A complex system, like human society, is dynamic and constantly changing in response to feedback. It is not possible to re-create any situation as all outcomes are constantly being renegotiated and open to change through discussion and participation (Cilliers 1998). Postmodernism, like complexity thinking, denies the possibility of meta-narratives, preferring to see reality as a product of historically and culturally located discourses.

To sum up therefore, postmodernism can be seen as a useful tool for uncovering the diverse narratives that co-create the complex world in which we live, and complexity thinking can provide a framework for examining the relationship between these narratives and how they influence the construction of the system. It has been suggested that sustainable development, a complex, multi-dimensional problem, cannot be easily managed by classical, problem solving approaches (Voss et al 2006) and the application of a complexity framework would not only challenge the current dominant linear approaches to change (meta-narrative), but it would also challenge how we understand the natural environment and recognise our embeddedness in the wider ecology (Borland 2009). Exploring the role of the voluntary sector in the promotion of behaviour change for sustainable development in this way would encourage voluntary sector participants consider the role of sustainable development, not from the linear perspective of right or wrong or good or bad, but by

focussing on what is more or less useful, important and acceptable to the them at the time. It must be noted that this approach will not provide prescriptive solutions as with first or second order change, but it will create the possibility of doing things differently in a way that is re-affirmative, oppositional and critical, alternative and innovative (Cilliers 1988). It could, in other words, offer a *'restructuring of modernist assumptions with something larger, fuller, more true.'* (Jenks 1992:11) and counter the modern ideological flight from body, nature and place, and the separation between humans and nature (Spretnak 1997).

However this will only happen, if sustainable development is seen as a narrative that is important enough to require action (legitimized). Morgan (2006) acknowledges that environmental problems require shared understandings and an ability to reframe system dynamics. The value of this research therefore, is that by encouraging an inclusive debate around the relationship between humans and the natural environment (shared understanding) and opening up the discourses around the interdependency between economic development, environmental development and social development inherent in the concept of sustainable development, this could reframe the system dynamics and support new behaviours.

3.5 Discourse, narratives and conversation

The use of a postmodern methodology encourages the exploration of the narratives that constitute sustainable development and how the interpretation of these narratives by the voluntary sector can influence behaviour change. This section examines the relevance of discourse and narratives to this research and why conversation, a co-creative discourse, was chosen as the primary data collection method.

Discourse is at the heart of human interaction and narrative is a form of discourse. Other forms of discourse - ways of sharing knowledge and communication and meaning, include stories, non-human objects, symbols, media reports and organisational practices (Clarke 2005, Bruner 1990). Discourses are relativist phenomena that are created by and create the systems and practices in which they operate (Foucault 1972). They are not neutral but are shaped by social, cultural, and historical conventions that conceal power relationships and can silence other discourses (Clarke 2005, Foucault 1972). Thus dominant discourses, as modes of ordering the chaos of the world, reflect forms of control, and bind together to

create particular ways of being, reinforced through dominant institutions (Layder 1994, Johnson and Duberley 2000, Agger 1991). Foucault (1977) talks about how the history of management is one of how particular discourses have come to dominate particular socio historical contexts and how those in power control the discourses that are heard. Smyth (2006) and Lewis (2000) claim that the way sustainable development is often portrayed in the media, as a simplistic problem that can be solved through economic growth and technology, is an example of how powerful discourses or narratives can constrain the discussion of alternatives.

The aim of this research was to understand how the voluntary sector participants interpreted the narratives around sustainable development and how this influenced their responses to it. It is hoped that this new understanding will be helpful for policy makers tasked with tackling urgent environmental problems like climate change and improving local sustainability.

How individuals make sense of a situation is dependent on the discourses they engage in, and creating opportunities to question the reality they unconsciously subscribe to (opening up narratives to challenge through discourse) can lead to new understandings, or cognitive restructuring which can increase the potential for changes in behaviour (Mills 1993, Stacey 2007).

'Sense making is a diagnostic process directed at constructing plausible interpretations of ambiguous clues sufficient to sustain action'. (Weick 2005:57)

Individuals (social actors) are constantly renegotiating the meanings they give to things and as we are *'not merely the subjects of power but play a part in its operations.'*(Clarke 2005:52), recognising that we are constituted through discourses and the organisational practises that we co-create, may help us to understand that we are not powerless but active participants that can challenge dominant discourses and contribute to change. Creating opportunities to examine the different discourses and narratives that constitute our world through dialogue could therefore help us recognise our role in co-creating this world and encourage changes in behaviour (Schwabenland 2006, Stacey 2007, Rose and Miller 1992).

'Dialogue can challenge contradictions, help to shift patterns and offer the opportunity for a different exchange.'(Mulgan 2007:3)

Conversation, a form of dialogue, is a dialectic process of knowledge sharing, a subjective, cooperative venture that involves speaking listening, reflecting and responding (Feldman 1999). Engaging in conversation can help people recognise differing perspectives (cognitive restructuring) and challenge assumptions, power and meta-narratives (Kuhn and Woog 2005).

Conversation differs from an interview where the interviewer, generally attempting to be an objective data gatherer standing outside the knowledge being produced, asks a question and expects the interviewee to formulate a response (McAuley et al 2007, Johnson and Duberley 2000, Berg 1989, Bryman and Bell 2007, Blakie 2000). All participants are active participants in a conversation, contributing to the process, and because conversations do not function in a perfect manner, the same message can call forth a variety of responses in different people with different life histories/experiences and can lead in directions not thought of (Feldman 1999). Searle (1992) refers to conversations as paradigms of collective behaviour, a joint activity where ideas collide and mingle and are *'diluted and complicated in the process'* (Buchmann 1983:21).

Although conversation is an informal exchange it is not a casual exchange. It has direction and encourages free expression with a specific purpose (Silverman 2011). Like an unstructured or non-directive interview it can allow in-depth exploration, discover new insights and enable deep mutual understanding (Saunders et al 1997, Burgess 1980), but unlike an interview there is no fixed sequence of questions. Respondents are encouraged to talk about the topic and whatever else it triggers in a non-directive way and both parties respond to each other and shape what they say in the process of conversing. This cooperative reflection enables individuals and groups to form new understandings and insights as they question themselves and the reality they unconsciously subscribe to (Mills 1993, Feldman 1998). This can be likened to the hermeneutical circle as participants move between the conversational situation, their immediate understanding and a more global understanding (Feldman 1998).

'What was previously unconscious is made conscious in a manner rich in consequences.' (Habermass 1974:23).

Collaborative conversations have been widely used in education research (Hollingsworth 1994) and Feldman (1998) suggests conversation is a legitimate form of research because it promotes the exchange of knowledge and the generation of understanding. Not only can conversation help us to learn from each other, reflect on our own assumptions and change our understanding, the rapport that is developed creates an atmosphere that allows access to the subject behind the interview (Gubrium and Holstein 1997). It allows space for values, emotions, lifestyle and identity, feelings and subjectivity (Wisker 2008), all of which influence behaviour by increasing the possibility of the emergence of new ideas and different understandings (Gubrium and Holstein 2003). It was felt therefore, that conversation would be an appropriate data gathering tool for this research that would reduce the barrier between the researcher and participants and help me research with participants, not on them.

For conversation to be considered as research, however, it is necessary that the participants are aware that they are engaged in research, and to comply with ethical guidelines all participants were given an information sheets and consent form before I engaged them in conversation - full details of the data gathering process are given in section 3.6.

Conversation has many advantages when trying to explore the diverse voices in the voluntary sector and their understanding of sustainable development, as highlighted above, but another factor that influenced my choice of conversation was that discursive processes, like conversation, have been found to be effective in addressing environmental challenges and encouraging behaviour change (Jackson 2005, Buchs et al 2011, Middlemiss 2009). Change is unlikely to occur when conversational life remains stuck in repetitive themes (Stacey 2007, Cilliers 1998) and the creation of opportunities to change the conversation can lead to the transformation of ideas and concepts as one theme triggers another in an apparently random way (Shaw 2002). Rosemary Randall's Carbon Conversations (Clark 2009, Buchs et al 2011) use conversation as a way of raising awareness of climate change issues and supporting practical solutions to help people live more sustainably.

There are of course weaknesses with this approach: lack of focus and direction of the conversation and perhaps more significantly, the subjective involvement of the researcher

in the process, potentially comprising the credibility of the research. This is the subject of the next section.

3.5.1 The role of the researcher and the credibility of the outcomes

Qualitative research has been described as an ongoing and intense grappling with competing demands and that involves continual self-reflection (Silverman 2011). The researcher has to meet the demands of academia and gain the trust of the participants who may be suspicious of academia. Although Silverman (2011) rejects attempts to determine accurate validity as a positivist problem he acknowledges that because of the subjective epistemology of qualitative research the accounts produced are not simply representations of the world, they are part of the world they describe (social constructs) and credibility of qualitative research cannot be achieved by attempting to confirm the 'truth' status of the data. Thus, as well as confirm that their accounts accord with those of the participants, the researcher has to be open about their own values and how they impact on the research outcomes (Reason and Bradbury 2008).

Some may dismiss this research because of its failure to deliver an objective generalisable solution to the research questions, but it was not my aim to provide an illusion of unmediated objective representation and I am attempting to demystify the mediation by detailing my involvement (Alvesson et al 2008, Kilduff and Mehra 1997). The conversational approach I used to gather the data helped me gain the trust of the participants but it placed me as an active agent in the production of knowledge, intervening in the process of representation (Geertz 1988). I was not a neutral observer/knower, and as I also chose who to speak to and what questions to ask, I cannot portray the knowledge generated as prestigious, objective or true. I can however, support its validity through reflexivity (Creswell 2007, Bettany and Woodruffe-Burton 2009, Reason 1988).

Reflexivity is a way of attempting to make explicit the power relations in the research and acknowledging that the knowledge created is self knowledge, generated through self reflection by the researcher (Reid and Frisby 2008, Clarke 2005). This is particularly important for postmodern research, where coherence, both logical coherence and contextual coherence, can only be achieved by critical awareness on the part of the researcher of their role in the co-creation of the knowledge (Sterling 2003, McAuley et al

2007). I have been open about my personal ontological and epistemological understandings at the start of the chapter (section 3.2), clarifying my own perspective of truth, and acknowledging my role in the co-creation of the knowledge produced (Kendall and Wickham 1999, McAuley et al 2007, Alvesson et al 2008).

The credibility of the research also demands that the account accurately represents the phenomena to which it refers and that my account accords with those of the participants.

'The veracity of an account or theory is determinable only through agreement between the researcher and his or her peers or between the researcher and the subjects of the research' (Gill and Johnson 2005:225)

Details of how I attempted to do this can be found in section 3.8 and as suggested above I am making no grand claims to have found the 'truth', but hope that by exposing the differing narratives that constitute sustainable development in the voluntary sector I have provided a credible outcome that could be useful in encouraging local voluntary sector engagement in behaviour change for sustainable development.

3.6 Carrying out the research

Research generally starts with reviewing the literature to establish the various discourses relevant to the situation (Bull 2007). The literature suggested that sustainable development was a complex problem with multiple interpretations and that this could be problematic when considering change from a linear perspective. The literature also identified that urban, non-environmental organisations were the least likely to change their behaviour (EAC/CAG 2007a), leading me to focus on non-environmental organisations in a major UK city.

After reviewing the literature, Bull suggests the next stage is to meet with key stakeholders to build knowledge of the issues. I used a three stage, emergent, data collection method based on conversation. The initial round of conversation was, as Bull suggests, to scope out the understanding and relevance of sustainable development at the local level, including government aspirations, national and local, around voluntary sector involvement in behaviour change. The second stage involved follow up conversations with non-environmental voluntary organisations in the city. The final stage involved testing the credibility of my findings and analysis by gathering feedback from the original participants and carrying out two mini case studies of environmental voluntary organisations in the city

that were trying to encourage behaviour change in ways that were similar to my suggested approach.

3.6.1 Stage 1 conversations

I met with five key stakeholders, identified using strategic or purposeful sampling to determine those who could provide me with the most useful background information about the voluntary sector and sustainable development in the city (Creswell 2007). A snowballing process occurred whereby initial participants identified other potential participants.

The five stakeholders were:

The Chief Officer of Every Action Counts, (EAC) a national campaigning organisation launched in 2006 with £4 million funding from DEFRA to encourage behaviour change in the voluntary sector to tackle climate change (The Third Sector Declaration was launched as part of this project –**Appendix 2).** This project ended in 2010 but carried on under the auspices of CDF (Community Development Foundation), a non-departmental government body.

EAC was chosen for my first conversation because it was a nationwide project around behaviour change and the promotion of sustainable behaviour in the voluntary sector. It would help me clarify government expectations around voluntary sector participation in the behaviour change agenda.

EAC employed consultants (CAG – who accompanied the CEO when he met me) to evaluate the effectiveness of the campaign and I was given access to the consultant's reports, including a large scale survey of environmental activities in the sector which identified urban, non-environmental organisations *as the 'least likely to change.' (EAC/CAG* Nov 2007a).

Representative from the City Council (CC) - Environmental Partnership Board. The Environmental Partnership is one arm of the Local Strategic Partnership that includes representatives from all sectors, public, private and voluntary. The LSP is responsible for setting a shared vision for economic, social and environmental well being and the Environmental Partnership for developing 'The Environment Strategy' for the city. This was launched in 2007 with the stated the aim of creating 'an attractive and sustainable low carbon city, based on a vision of environmental excellence'. At the time of my meeting the

Carbon Reduction Strategy (2009) was waiting to go to the Environmental Partnership Board for approval. As local government is the driver of much public sector investment in the voluntary sector, it was important to understand the city council's (CC) approach to sustainable development and their engagement with the voluntary sector around sustainable development.

CC put me in touch with two voluntary sector support organisations (X and Y) that represented the sector on the Environmental Partnership Board. These organisations do not work directly with service users. Their clients are other voluntary organisations.

Organisation X works with over 900 voluntary and community organisations in the city to provide training and support around volunteering and finance. It operates from newly built offices, which exceed the city's planning requirements in terms of environmental specification and it rents out office space to other voluntary organisations.

Organisation Y was funded by CC to promote partnership and networking in the voluntary and community sector.

'..to help our sector network. Our bit/interest is purely around voice, influence and networking in order to have voice and influence.....A few people from our sector have the opportunity to bring the experience of wider than just their own organisation, and to contribute to areas like the City Strategic Partnership which is setting the overall strategy for the city. That means our sector can have a voice at those tables, those decision making, those strategy setting places'.

Organisation Y had engaged local **consultants (N)** to examine the possibility of setting up a Low Carbon Network in the city. I was given a copy of N's report and access to the consultants who wrote it. N had suggested that the report be taken the Environmental Partnership Board, but had received no response from CC about this.

(Quotes from Y who commissioned N)

'We were just aware that the environment agenda is getting stronger and stronger and thought well, we need to have a go at trying to reinvigorate that network to see if organisations are interested in doing it, because we just thought the environmental agenda is strengthening so much.'

'There is chance if organisations don't network around it we are going to miss a trick, so we put some money into it last year and tendered out a piece of work for people to do some work around it.'

(The Low Carbon Network was never established as Y was closed down shortly after my interview. The Environmental Partnership Board was also disbanded in 2011 due to restructuring).

The final conversation was with **consultants (N),** employed by Y to examine the setting up of a network of voluntary organisations in the city around the promotion of carbon reduction.

EAC came to my university, accompanied by the consultant from CAG. The conversation was not recorded. The conversations with X and Y took place in their offices and were recorded. I met CC and N in coffee shops and this made recording the conversations difficult but detailed notes were taken which were written up immediately after the conversation.

All the conversations were of varying lengths and primarily unstructured, as I developed questions in response to the answers of participants, but I started with some general questions about the organisation, size, number of staff, etc., to build rapport. The main aim of the conversation was to understand their views about the role of the voluntary sector in supporting sustainable development and I initiated the discussion by asking them about this. There were different degrees of understanding amongst the stage 1 participants: the CEO of organisation X had previously worked for FOE so was very familiar with the issues, whereas Y had no prior knowledge but was aware that sustainable development was an important area to consider, especially in terms of carbon reduction. As voluntary sector consultants, N were well informed about the size and scope of the sector at a local level and because of the research they had done for Y they had some basic knowledge of voluntary sector activity in the city around sustainability.

The conversations helped me to develop an understanding of the approach to sustainable development in the voluntary sector, at both an organisational and sectoral level, and how this was supported or not by the city council. In an iterative process, these initial conversations provided good background information from which to develop the more in depth conversations with non-environmental voluntary sector service provider organisations in the next stage.

After writing up my notes of the conversations, to check that my notes accurately represented the view of the participants (Silverman 2011) I provided the respondents with a

brief report via e-mail and asked for their feedback (respondent validation). My initial communication with the participants had been via e-mail so I knew that this was a mode of communication they were comfortable with. There are drawbacks with this approach to gathering feedback: respondents may not be able to follow a report written for an academic project or they may not be interested in doing so (Bloor 1978) and although I tried to make the report accessible and easy to respond to by using e-mail which removes the need to make a telephone call or post a letter, I only received one response, from the Community Development Foundation (CDF) who succeeded EAC. They liked my research and asked if I would take part in a task force 'Supporting Community Action on Sustainable Development and Climate Change'. After attending several meetings in London I was cited as a contributor in the final report (Hand 2011).

The findings from the Stage 1 Conversations are outlined in Chapter 4.

3.6.2 Stage 2 conversations

As indicated earlier I used an iterative process whereby information from Stage 1 was used to inform the stage 2 conversations with urban, non-environmental organisations. Details of the sampling process are included in the next section 3.6.2.1. My initial intention had been to carry out an in-depth study of one or two organisations by gathering the heterogeneous discourses in each organisation from the different perspectives of managers, employees, trustees, volunteers, and service users to provide a rich understanding of the research context (Yin 1994). However, the responses to my requests for participation did not provide a varied enough sample of participants from each organisation. Of the ten organisations initially contacted, five responded positively, but each only offered me one or two participants, not enough for the initial approach I had considered. I therefore arranged to meet all the participants who replied to my request and because my initial approach did not identify a representative from the black and ethnic minority community, at a later date, to improve the diversity of the sample, I arranged one other meeting with a volunteer from an organisation supporting the black and ethnic minority community. In total I met with nine participants from six organisations

3.6.2.1. Choosing the sample

Qualitative research does not aim to produce generalisable data. It is about elucidating the particular and the specific (Creswell 2007) and therefore, does not need to involve a large

sample size. Information from the EAC/CAG report (2007a) led me to focus on urban, non-environmental organisations and I used strategic sampling, based upon judgement about the population of interest with a specific purpose in mind, to identify relevant organisations (Gill and Johnson 2005). Although not fully representative of the population, strategic sampling can provide useful data and interesting insights into the wider population. It is similar to purposeful sampling where the sample is hand picked and deliberately selected because they are seen as likely to produce the most valuable data (Creswell 2007).

As the research was about exploring the different narratives and viewpoints in non-environmental voluntary organisations in order to develop a rich understanding of their response to sustainable development, it was therefore important to select organisations with differing missions and that served different populations. I used the city wide database of voluntary organisations, containing over 5,000 entries, ranging from local sports club with under 20 members to large service providers. It covers all service areas from bridge clubs to Samaritans and can be searched using selected headings. I used headings that were roughly aligned with the themes of the City's Strategic Partnership Boards: Health and Wellbeing, Strong Economy, Children and Young People, Safe and Sustainable Communities to ensure variety of purpose (diversity). The initial results were sifted to eliminate duplications, and all public sector organisations, such as, Sexual Health Drop In were removed. Religious organisations and private businesses like hypnotherapists, were also disregarded, as were small membership only organisations like sports clubs. The remaining organisations in the final sample were all charities registered with the Charity Commission, the governing body which registers and regulates charities in England and Wales. The advantage of using organisations registered with the Charity Commission was that, as a requirement of registration all organisations have to demonstrate their aims are for the public benefit and their mission statement is available on the Charity Commission website, along with information about their size and turnover. More importantly for my research, the names of the Chief Officer and the Chair of the Board are also publically accessible, and this meant I could write to both of them personally asking them to participate in my research.

Number of charities identified from the city wide database:

City Partnership Board	Number of eligible organisations (after elimination as above)
Health and Wellbeing	*226*
Safer and Sustainable Communities	*121*
Strong Economy	*5*
Children and Young People	*211*

The next step involved randomly contact ten organisations from the above sample, including at least one from each category. I sent a letter of request to both the manager and the Chair of the Trustee Board and as I had been made aware, from the initial round of conversations that voluntary organisations were resource poor in terms of time, I was careful to point out that I anticipated each meeting to take no longer than one hour.

Positive responses were received from eight participants, representing a variety of stakeholders from five organisations. In the interest of confidentiality the names of the organisation and the respondents are not disclosed but the nature of the organisations and role of the respondents is:

Type of organisation	**City Partnership Board**	**No. of respondents**
Advice centre focussing on poverty and debt (A)	Safe and Sustainable Communities	2-manager and trustee who also volunteered in the organisation
Mental health charity (M)	Health and Well Being	2-manager and ex-service user who also volunteered.
Supporting low income groups (S)	Strong Economy	2-manager and ex-service user who also volunteered.
Transport organisation, supporting the elderly (T)	Health and Well Being	1-paid employee.
Support organisation for disabled families and carers (C)	Children and Young People	1-trustee (chair of board)

Qualitative research does not require a large number of participants because it is aiming for depth rather than quantity and I felt that after speaking to the above respondents and doing a brief initial analysis I had reached data saturation and had enough data for my study (Silverman 2005). However, I had not received a response from any organisations in the black and ethnic minority sector, and in order to try and increase the diversity of the participants, I later arranged to meet a volunteer who worked with an organisation supporting refugees and asylum seekers (RV).

3.6.2.2 Engaging in conversation

Ethical considerations were taken into account and research protocol was followed regarding confidentiality. All participants were given an information sheet explaining the purpose of the research, a guarantee that they would not be identifiable from any information available in the public domain, and the option of withdrawing from the study at any time (see Appendix 4). Conversations were conducted on a one to one basis in the offices of the participating organisations and varied in length from fifty five minutes to one and a half hours. All conversations were recorded and if participants requested that parts of the conversation were 'off the record', the recorder was turned off and notes were made.

As discussed earlier, the approach was not intended to provide empirical evidence to support a truth claim, but to develop a qualitative, contextual overview that could contribute to the debate about how to develop a more sustainable society, with particular emphasis on how urban, non-environmental voluntary sector organisations could contribute to this goal. It was not designed as action research with clear aims and objectives to bring about change (Reason and Bradbury 2008), but to expose the attitudes to sustainable development in the voluntary sector in a way that could support policy makers trying to encourage change at a local level.

Conversation was the chosen data gathering method because of its non-directive approach that creates an opportunity to talk about the issue and whatever else is triggered. Conversations, however, work better when participants are of roughly equal status and are comfortable with each other (Owen 2008). In this research I was entering the organisations as external, unknown academic, perhaps seen as an expert with knowledge of the subject area, and I recognised that this could be a barrier to the development of the good relationships that support genuine conversation. Asymmetrical power distribution can affect

the authenticity of the responses and inhibit respondents in such a way that they say what they think the interviewer wants to hear (Gubrium and Holstein 2003, Creswell 2007). I tried to put participants at ease by arranging visits at a time and location of their choosing and throughout the conversations I made sure to recognise the capacity of the participants to give meaning to their experience, and acknowledge their authentic expertise and in a way that did not undermine their self-determination (Gubrium and Holstein 2003, Haraway 1989, Bettany and Woodruffe-Burton 2009).

It was important to develop a rapport with the respondents and at the same time avoid manipulating them. As I wanted to create an atmosphere conducive to open and undistorted exchanges (Reason and Rowan 1981) my first task was to try and gain the trust of the participants who may have been suspicious of academia (Ospina et al 2008). Feldman (1999) suggests that anecdotes can help participants feel more at ease and after initial introductions and an explanation of my research, I spoke openly about myself, my feelings, and why I was interested in the research, including anecdotes about my life. I stressed that I wasn't coming as academic expert but as someone with an interest who was eager to learn from them.

Although the conversations were generally unscripted, I did have a prompt sheet, based on the findings from Stage 1, to guide the questions and ensure the issues identified in the first round of conversations were captured and expanded. The prompts included:

- understanding of sustainable development – what is it, relevance for the sector and why behaviour change is needed
- awareness of government, local and national, initiatives around climate change, sustainable development, including familiarity with the EAC programme.
- the organisation's environment policy.
- barriers to becoming more sustainable

As with the stage 1 conversations, after the initial relationship building, to further develop the rapport, I asked general questions about the organisation, its mission and their role – areas the participants were confident about. I stimulated the in-depth discussion of sustainable development by asking participants what sustainable development meant for them. Many found this difficult and I had to adapt the question using other words and

phrases, such 'climate change' or 'eco- friendly, words they were more familiar with. I noted that when replying to me many preferred the word 'green'.

Throughout the conversations I encouraged participants to talk freely about their ideas, often relating my own experiences to give them confidence. I noticed that participants became more engaged with the conversation when the topic elicited an emotional response in them. Both CT and MM, for example, in response to my question about what they thought constituted sustainable behaviour, became engaged in an interesting discussion with me of the pros and cons of alternative energy. As with any conversation, many things were talked about that were not relevant to this research.

I used my first conversation, with the representative from the transport organisation (TW), as a pilot by asking for feedback to help me refine my technique. Her suggestions included:

- rather than just asking participants if they are aware of the council policies, bring copies of the actual documents.
- be careful when asking for opinions - did I want her opinion or the views of the organisation? She felt it wasn't appropriate for her to comment on the views and opinions of the organisation or her fellow staff. She could only give her own opinions.

As a result of this feedback, in subsequent conversation I brought along appropriate materials and was careful when asking for opinions.

Further details of the conversations and the responses of participants, including the role of emotion in stimulating conversation and changing opinions, can be found in Chapter 5.2 Overview of Participants.

As discussed in Stage 1, Silverman (2011) stresses the importance of verifying the accuracy of the field notes and transcripts to make the research process transparent. I sent a transcript of the conversation to each participant, including a stamped address envelope and a tear off sheet for comments. Only two responses were received, both indicating the transcript was fine.

Full details of the findings from the Stage 2 conversations are outlined in Chapter 5 and a discussion of how I analysed the data can be found later in section 3.6.4. but before that I

want to outline the final process of my research – Stage 3 – the credibility of the findings, because although the transcript may provide an accurate representation of the conversation it does not say anything about the acceptability of my analysis to the participants (Alvesson et al 2008).

3.6.3 Stage 3 - The credibility of the findings

My research was not seeking to create the 'truth' about voluntary sector engagement in the sustainability agenda, merely to highlight the varying interpretations of sustainable development by non-environmental voluntary organisations in the city and how this influenced behaviour. I used these interpretations to developed an approach to encourage voluntary sector participation in this agenda, and it is good practice to check back with participants to get their reflections on the interpretation of their comments and to understand if the outcomes of the analysis resonate with their understanding (Reason and Rowan 1981). Therefore, after analysing the stage 2 conversations, I prepared a short report in non-academic language highlighting the key findings and my ideas around the creation of Communities of Practice as a way of encouraging voluntary sector participation in the promotion of sustainable behaviour at a local level. Unfortunately, as a few years had elapsed since the initial meeting, many participants were no longer contactable: CT had retired, MM had moved on and organisation A had closed down. I was only able to meet two of the original participants: TW and SM.

Another way of improving the credibility of the research outcomes is an approach Silverman (2011) calls Analytic Induction - generating a provisional hypothesis and comparing it with other data. Because of the lack of availability of stage 2 participants I did this by carrying out two mini case studies of environmental voluntary organisations in the city that appeared to be using a similar approach to stakeholder engagement that I had developed. The organisations were Carbon Conversations and the Transition Towns Movement. Both these organisations operate as part of a larger national network and are primarily volunteer-led at a local level. I explored the websites and literature available before meeting the local group leaders to find out more about how they operated.

3.6.4 Analysing the findings

Conversation is an emergent approach to data gathering that lets the data lead the process, and I used an hermeneutic type, inductive approach to analyse or interpret the collected

discourses. Discourse analysis is a heterogeneous concept that is difficult to define clearly, but it can help to illuminate the way versions of the world, of society, events and inner psychological worlds are produced and reproduced through discourse and throw light on what people do and why (Silverman 2011). Fairclough (1999) asserts that discourses are an important form of social action that can support claims about social structures, relations and processes and that analysing discourses can be a good indicator of social change that can identify new ways to construct social reality.

Discourses include organisational documents, crafted to present themselves in a particular way to a particular audience, and spoken data, which is more spontaneous and can be more revealing. Discourse analysis can take different forms but it is primarily a way of examining the social contexts in which discourse is embedded and seeking out relevant features that are often not evident to participants (Clarke 2005). Postmodern research uses narrative or discourse analysis to deconstruct the narratives of individual participants in an attempt to understand how they interpret the language that gives meanings to actions and motivations (Silverman 2011). As well as analysing the spoken data gathered through the conversations I also examined various documents produced by the government, local and national, primarily to develop a better understanding of the language that was used to represent sustainable development – this can be found in Appendix 1.

One of the limitations of discourse analysis is that it can group together individual discourses in ways which mask contradictions and present a picture that appears unified when it is in fact a composite of many individual views. This is particularly relevant for my research which was trying to uncover the various discourses that exist around sustainable development in the voluntary sector and therefore, it was important for me to identify who was producing the discourse and under what circumstances.

Stage 1

No specific analysis tools were used to analyse the data and I didn't use a coding approach. I read through the data many times (immersion) to understand the individual perspectives and identify themes, patterns or assumptions, for example, the differing assumptions about sustainable development. These stage 1 conversations confirmed that sustainable development was seen as a relevant issue for voluntary organisations to consider and that

voluntary sector participation was something the local authority wanted to encourage, but they also highlighted several problematic areas that needed further exploration with the local organisations involved in the stage 2 conversations:

- Understanding the concept and language around sustainable development – meaning and relevance for the sector, including the need for behaviour change.
- Barriers – what prevents the sector from engaging in activities that support sustainable development.

Other areas of interest from the Stage 1 conversations to be followed up in Stage 2 included awareness of the Government's (local and national) agenda for sustainable development by non-environmental organisations and whether or not they had or had considered developing an environmental policy.

An unexpected pattern that began to emerge was how the act of engaging in conversation about sustainable development, created the potential for small changes in behaviour. N talked about the importance of conversation in clarifying thought processes and deepening understanding, and both X and Y during the course of their conversations with me, were reminded of activities they had intended to do (X - a travel audit) or had forgotten to do (Y - put the environment back on the monthly agenda). N informed me later that as a result of my conversation with CC, CC had called N to ask for a copy of the report they had prepared. I will refer to these small changes in understanding and awareness as emergences - examples of small changes in thinking or behaviour as a result of engaging in conversation.

Stage 2

After carrying out eight conversations I felt I had reached a point of data saturation and was not noticing any new ideas emerging so I did not initially try to identify further participants. Later on, realising there was no representation from the black and ethnic minority community I was able to locate a volunteer from an organisation that supported refugees and asylum seekers.

The stage 2 conversations were all recorded and transcribed and I read through each transcript highlighting the areas (in coloured pen) outlined from the Stage 1 conversations and any other themes or patterns that emerged. It is important to note that when I refer to themes or patterns I am not looking for similarities but for common themes or issues that

one or more participants raised. They may or may not have interpreted these themes in the same way.

Initially as a way of ordering my thoughts I input the identified themes into NVIVO. NVIVO is an organised storage system and data analysis tool that makes it easy to locate data and to organise it into trees or sub categories without the need for cutting and pasting. However, I realised that as I was not carrying out an objective study or attempting to categorise data by similarities in order to generalise the findings and ascertain definitive outcomes to create a universal theory, it was not necessary to engage extensively in detailed coding, for example, recording the frequency of occurrence. NVIVO had appeared helpful at first, and it certainly made it easy to move data around, but it made it difficult to capture the individual context around the quotes and I reverted to pen and paper so I could look at the whole document and understand how the identified themes or patterns related to the rest of the text – context and relationships.

Presenting the findings was a challenge – should I do it by participant, outlining the key themes in each narrative, or by themes? I eventually decided it was more illuminating to develop a thematic description of the data by merging the findings from both Stage 1 and Stage 2, and cross linking the interdependencies and relationships to gain fresh insight into how sustainable development was understood and acted upon by the participants in this research. I had to be careful to present the individual differences and not to present the findings as a unified picture and tried to develop a rich narrative around the multiple elements that interact and influence each other in terms of sustainable development. This addressed the first aim of this research, and could provide useful information for policy makers trying to develop policies to encourage sustainable development. I could have ended my research there with some recommendations, but in an hermeneutic process, I realised that a key finding that emerged from my data was the potential of conversation to stimulate changes in behaviour and how this could provide the basis of an approach to encourage voluntary sector engagement in the promotion of sustainable development at a local level. Developing this idea, I linked the importance of non-linear, social learning with the principles of complexity thinking to address the second aim of this research: to understand how a complexity approach could offer a new and different way of encouraging voluntary sector engagement in behaviour change.

It was then necessary to explore the strengths and weaknesses of my approach and to assess its relevance to the subject group –the voluntary sector. Stage 3 was designed to assess the credibility of my analysis by gathering feedback from the original stage 2 participants and comparing my outline approach with other similar approaches operating in the city.

3.7 Behaviour change, complexity thinking and CoPs

The initial aim of this research was to understand the various discourses around sustainable development in and around the voluntary sector at a local level and to explore how this information could be useful for government and others when trying to encourage voluntary sector participation in behaviour change at a local level. The second aim, that emerged from the analysis process and the ability of conversation to change understanding and potentially behaviour, was to develop an understanding of how the principles of complexity thinking could be utilised to develop an approach to behaviour change that would encourage voluntary sector participation in the promotion of local sustainability.

As mentioned, after the Stage 1 conversations, I became aware that my engagement had influenced the participants, and prompted small changes in thinking which could potentially change behaviour. These changes or emergences are fully outlined in chapters 4 and 5 but they were significant in the development of my ideas around how an approach based on the principles of complexity thinking could be used to address complex problems. They demonstrated how conversation, a dialogic and dialectic process, can contribute to changing behaviour, either by reminding participants of forgotten intentions or by helping them develop new understanding (Feldman 1999). In the language of complexity thinking, the engagement with me in conversation was a co-evolutionary process from which all participants, myself included gained new insights. Social interaction and networking are already recognised as being able to transform established beliefs and values (Earl 2007) and this led me to develop the idea that the creation of an enabling infrastructure that promotes conversation or interaction between different stakeholders might be a way to overcome the barriers to voluntary sector participation in the promotion of sustainable behaviour that were identified by participants in this research. I realised that Communities of Practice (CoPs), based on conversation or face to face interaction and the principle that learning is a

social process that comes from our experience of participating in daily life (Lave and Wenger 1991, Wenger 2006) share many of the principles of complexity thinking and could potentially provide an enabling infrastructure to address complex problems like sustainable development. The potential of CoPs to support sustainable development in the voluntary sector is in discussed more fully in Chapter 6.

3.8 Conclusion

Sustainable development, as a way to address anthropocentric damage to the natural environment and support human society into the future, is a complex problem, requiring behaviour change from all sectors of society. The UK government believes the voluntary sector could be a useful ally in the promotion of behaviour change at a local level and this research aimed to examine this assumption by gaining a better understanding of the narratives in the voluntary sector around sustainable development, and how they influence behaviour. If the sector does not understand or see the need for behaviour change it is unlikely to support it.

A postmodern approach was chosen to open up the multiple narratives around behaviour change and sustainable development in the sector. Postmodernism is a way of uncovering hidden assumptions and challenging the content and form of dominant models of knowledge by breaking down disciplinary boundaries and denying privileged access to truth (Kilduff and Mehra 1997). When examining concepts like behaviour change and sustainable development, which have no universally agreed on representation, we should seek to understand how individuals make sense of these concepts in such a way that influences action.

'Understanding human behaviour is about understanding the perceptions and judgments that shape the world through self fulfilling prophecies and enactment processes.' (Weick 1995:56)

Discourse is at the heart of postmodernism research. Discourses are crafted within specific contexts as each individual perceives the truth about the world differently. What is important when trying to understand human behaviour is trying to understand the individual discourses, narratives and perceptions that shape the world (Kilduff and Mehra 1997). Conversation, an interactive process, reliant on two way exchanges between the

researcher and the participants, is a discursive approach that promotes the exchange of knowledge and the generation of understanding (Jackson 2005) and was adopted as the data gathering method for this reason.

With a multi-dimensional problem like sustainable development there can be no clear answers, but a starting point would be to help people better articulate what a sustainable society would look like, like both in aspirational and in operational terms (Porritt 2005). This would involve developing a clearer understanding of what sustainable development entails, including the need for changes in behaviour, and conversation could provide a way to develop our understanding of the present situation and our future challenges.

'We cannot build a future we have not imagined. The challenge is how to create an environmentally and socially sustainable economy. We need to imagine the future. But before we can do that we need to understand the present.' (Elgin 1994:243)

Complex social problems like this, challenge traditional linear rational approaches to change that focus on the quest for one essential truth (Smyth 2006) and epistemologically, the concept of absolute knowledge needs to be replaced with possibility. Complexity thinking, as a systemic, third order change approach that transcends the linear frameworks of first and second order change, enables us to explore the interdependency between competing narratives, opening up the possibility of different scenarios thus creating possibility rather than certainty. The type of social learning or learning through engagement supported by complexity thinking could increase the potential for behaviour change to support the Government's ambition for voluntary sector engagement in the creation of more sustainable local communities by encouraging new understanding.

Postmodern research methods complement complexity thinking by opening up the co-created narratives that comprise the dominant system and challenging the dominant narratives that inhibit change. Complexity thinking provides the flexible, inclusive framework that can help us make sense of these narratives and how they contribute to the big picture. Like letters in an alphabet narratives can be continuously arranged and re-arranged depending on the context and this flexible, inclusive approach could provide a way of encouraging behaviour change for sustainable development that is adaptable to the changing future and the local context. This would not only provide new ways of helping the

Government address sustainable development, but it could be a useful approach for other organisations facing complex problems.

The methodology I have used is not without its challenges but by attempting to bring together different voices to re-imagine the future, some of whom might not have been heard in this debate before, the hope is that it has opened up possibilities rather than shut them down. The choices presented may be challenging because, unlike the conventional scientific paradigm which assumes that everything is knowable (and therefore controllable), with co-evolution there is an acceptance that we cannot know everything and we cannot predict the future. However, exposing the previously unheard narratives around sustainable development in urban non- environmental voluntary organisations and disseminating these narratives will, I hope, encourage the debate that will help us respond, as citizens, to the challenges of the future and create a new story.

'The transformation of our world requires a new story. Materialistic science represented an evolutionary leap from a mindset that was relying on religious authority for verifying truths to one that valued an objective search for knowledge. In this global age of rapid change and transformation it is time for another such leap.' (O' Dea 2007:3)

Chapter 4 Understanding the Terrain: Stage 1 Conversations

4.1 Introduction

The UK government, aware of the challenges brought about by changes in the natural environment and the subsequent need for behaviour change to ensure future prosperity and well being, want to encourage all sectors of society, businesses, public sector, communities, and individuals to support the principles of sustainable development (UK Government 2005). The voluntary sector, because of its strengths, including its proximity to service users and the local community, and the degree to which it is trusted, could be an important ally in the promotion of the changes necessary to create a more sustainable society (Cabinet Office 2007). However, environmental considerations were found to be one of the areas with which voluntary sector organisations needed more help and guidance, with urban, non environmental organisations the least likely to change (The Big Lottery, EAC 2007a).

This research explored the UK Government aspiration to involve the voluntary sector in the promotion of behaviour change for sustainability, and the potential of complexity thinking as a different approach to behaviour change that could encourage voluntary sector participation. I used an emergent, iterative, two stage data collection process based on conversation, which allowed the discussions to follow the differing agendas of the different organisations involved (Bryman and Bell 2007).

The aim of the first round of conversations was to gather an understanding of the expectations around sustainable development in the voluntary sector, including what the government, nationally, (represented by EAC) and locally, (a city council) saw as the role of the voluntary sector in behaviour change. The information gathered clarified the focus of the research and informed the content of the stage 2 conversations with urban, non environmental organisations.

Stage 1 consisted of five conversations and examination of written documentation provided by the City Council and EAC.

Every Action Counts (EAC) (Chief Officer and lead consultant)	Project funded by DEFRA as part of the UK Government's Sustainable Development Strategy, Securing the Future (2005), to embed sustainable development into the existing work of local community groups.
City Council (CC) (representative from Environment Partnership Board)	City Council Strategy (2007) aimed to make the city '*an attractive and sustainable low carbon city*' based on a vision of environmental excellence.
Voluntary Organisation X (Chief Executive)	Voluntary sector support organisation supporting over 900 voluntary and community organisations in the City.
Voluntary Organisation Y (Chief Officer)	Voluntary organisation set up to promote partnership and networking in the City.
Consultants (N)	Contracted by Y to examine the setting up of a network of voluntary organisations in the city around the promotion of carbon reduction.

4.1.1 Background to participants

EAC was a three year national campaigning programme launched with £4 million funding from DEFRA (operational between 2007 and 2009) to cascade information down through a network of 29 major national membership based voluntary organisations. The Third Sector Declaration (Appendix 2) was the centrepiece of this programme. (The Community Development Foundation (CDF) took over as the coordinating partner for the Third Sector Declaration after 2009 - see Appendix 2)

EAC's aims were to:

- bring about a step change in community action regarding the natural environment
- change the way the voluntary and community sector does business
- support behavioural change at both individual and organisation level, around five themes – saving energy, travelling wisely, saving resource, shopping ethically and caring for the area. (EAC/CAG 2007)

The meeting with the Chief Officer, accompanied by a consultant working with EAC on the project, was to clarify government expectations around voluntary sector participation in behaviour change for sustainable development. I was given access to the research papers produced by the consultant (EAC/CAG).

CC's city strategy was to create a clean, attractive city that placed the environment at the heart of all its decisions. They signed the Nottingham declaration on climate change in 2006,

participated in the Carbon Trust Local Authority Carbon Management Programme and launched a Carbon Reduction Framework (2009:10) which recognised that reducing energy consumption and increasing energy efficiency could only be achieved by *'a shift in attitudes and behaviour towards more sustainable life styles'*, and that *'everyone had to do their bit'*.

The conversation with CC helped to clarify the local authority position on sustainable development and their expectation around the involvement of the voluntary sector in the achievement of the City's aims around carbon reduction and sustainability.

The two voluntary sector network support organisations (X and Y) represented the voluntary sector on the City Partnership Board. They did not work directly with service users but supported other voluntary organisations in the city. Organisation Y had engaged local consultants (N) to examine the possibility of setting up a Low Carbon Network in the city. I was given a copy of N's report and access to the consultants who wrote it.

The overall purpose of stage 1 was to get a broad overview of aspirations around sustainable development and the involvement of the voluntary sector, in order to inform the Stage 2 conversations with urban non-environmental organisations. I had no intention of trying to change behaviour but the emergence of some unexpected outcomes from my initial engagement, (fully outlined in section 4.6) suggested that merely engaging in conversation had the potential to change understanding and possible behaviour. For example, X and Y were reminded of things they had forgotten to do and N commented that

'Just by talking about what you do in your organisation, you can identify what you do for the environment. Co-benefits are unrecognised benefits for the environment that you discover through carbon conversations'.

Engaging in conversation therefore, has the potential to change knowledge and understanding and this new understanding or cognitive restructuring can stimulate behavioural change (Weick 2005). When considered from a complexity perspective, engaging in conversation acts as a way of increasing interaction in the system, which increases the potential for change.

'As more and more interactions with others are experienced, so a wider range of possible responses occur.' (attributed to Mead in Stacey 2007:274)

4.1.2 Structure of chapter and the key themes identified from the data

The first theme identified was around the awareness and understanding of sustainable development and the need for behaviour change. As indicated in the Literature Review, there are many different words and phrases used in relation to sustainable development and this was reflected in the language used by participants, for example, CC and N frequently used the phrase carbon reduction, whereas X and Y tended to use the word 'environment' or 'green'. Language is more than a system of symbols for labelling the external world, it is the basis of shared discourse (Cilliers 1998), and thus is an important factor when trying to understand a complex issue like sustainable development. Understanding and interpretation of the concept can be confused by the language used and this was issue that need further exploration in the Stage 2 conversations.

The following other themes also emerged from the data and are discussed in this chapter:

- Engagement in activities that are seen to contribute to sustainable development. EAC/CAG research suggests that there is limited engagement by the sector in behaviour change for sustainability (EAC/CAG 2007a).
- Barriers to change. Limited understanding, lack of relevance and lack of resource appeared to be inhibiting factors, along with lack of support from Government and poor relationships between the voluntary sector and local government.
- How could the sector be supported to participate in behaviour change is the next theme to be identified. Better understanding, more resources and the need for networking to share information and build relationships were identified as potential supporters of change.

The final theme discussed is the unexpected emergence of the potential for change highlighted as a consequence of participating in conversation.

The conclusion brings together the above themes and identifies the issues to be explored further in the Stage 2 conversations with non-environmental voluntary organisations delivering services in the city. It outlines how sustainable development, although compatible with the ethos of the sector, can be given a low priority due to funding and other pressures and how limited understanding of both the concept and the language also inhibits engagement. If sustainable development is regarded as purely an environmental issue it can lack relevance for a sector concerned with social justice, and limited awareness of co-benefits, or how improving sustainability could have other benefits, such as reducing costs, suggests that although there was an awareness that addressing environmental issues

was seen as a 'good' thing to do, the lack of understanding of the 'big picture' and the interconnectedness of environmental issues with wider social and economic issues could be a significant factor in lack of engagement by non-environmental voluntary organisations. The potential of conversation to change this perception and also possibly change behaviour was an unexpected outcome to be further explored in the Stage 2 conversations.

4.2. Theme 1: understanding sustainable development and the need for behaviour change

The EAC chief officer and the documentation associated with the project, (including the Third Sector Declaration), were very clear about the link between the natural environment, climate change and social issues, and that the interdependency between three pillars of sustainable development made it a relevant issue for third sector organisations to consider.

The CC representative and City Strategy documents also indicated a clear awareness of the interdependency between environmental, economic and social benefits. The Carbon Reduction Strategy for example, was seen as having the potential to deliver '*significant economic, social and environmental benefits*'. The City strategy recognized the need for a behavioural shift in consumption patterns and waste generation in the city, involving everyone: householders, businesses and third sector and public sector organisations. When asked specifically about the role of the voluntary sector in this agenda, the CC representative replied:

'*We need to understand what the sector can offer and discuss this with VCF reps before we can answer this question.*'

The implication of this statement is that CC intends to consult with the voluntary sector about their engagement in the City's sustainability aspirations.

Although EAC and CC documentation referred to sustainable development, many other words and phrases were also used, such as, sustainable consumption and carbon reduction. (A brief overview of the differing terminology used by the government (local and national) can be found in Appendix 1).

N, although using the phrases climate change or carbon reduction rather than sustainable development, also recognised the link between social issues and the natural environment and felt that climate change was a relevant issue for the sector to address because of the ethic of social justice in the sector.

'Talking about the effects of climate change and the effects on the poor in the world, and there is an ethic that runs through the voluntary and community sector which is about social justice.' (N)

N highlighted the potential of voluntary organisations to contribute to change.

'*The voluntary sector is diverse: the size of organisations, the aims of organisations, a wide set of social, environmental and spiritual aims and values (not only focussed on the bottom line), embedded in communities. That is their strength and therefore they can be powerful communication channels. They are known and trusted and can encourage change and offer leadership*.'

X, reflecting the ethos of social justice that runs through the sector was also clear about the link between social justice and the environment.

'*Values of well being and social justice are embedded in the sector'*. (X)

'*The voluntary sector tends to attract people who want to make the world a better place and are driven by a broader understanding of social, economic and environmental issues, suggesting people have woken up to climate change.'* (X)

'The Voluntary Sector wants to make the world a better place, so environment is important.' (X)

'*Air pollution in XXXXX costs £48 million and who are the people that live around the areas with the worst air pollution? So the environment does affect service user*s.' (X)

Y however, although articulate about the ethos of care in the sector, did not initially highlight the link between social justice and environmental issues.

'*There is an ethic in the voluntary sector which is about social justice, about care and compassion*'. (Y)

However, as the conversation progressed he recognised the disproportionate impact of bad environments on the poor and that this was a good reason for voluntary sector engagement in environmental issues/climate change issues. He recognised it was a growing agenda.

'Absolutely classic things like the housing stock, is a huge problem, and who lives in the worst housing? The people with the least income' (Y)

X and Y were both aware of the political agenda surrounding environmental issues.

'Because of the wider environmental agenda in government and business, the voluntary sector as a whole is aware of climate change.' (X)

'It (environment) is important as part, a strand amongst all the bits of the City strategy, because the whole point of the City strategy is about taking a number of different things which are all needed to create a successful city, of which environment is one, so it's important in that way.' (Y)

Despite awareness of the importance of environmental issues for the city, Y was very clear that the environment was not, and should not be the main focus of the activity in his organisation.

'Our organisation is not just about the environment, definitely not, but it is an important bit.' (Y)

He felt that focussing on environmental issues could get in the way of delivering the core mission.

'Most of the time people are responding to a need..... Has environment got anything to help these people get out the situations they are in? .....If the environment can help, great, the two will meet, but there might be times when trying to do that can just be seen as getting in the way or making it more difficult.' (Y)

This suggests that although there is recognition that sustainable development is a relevant issue for voluntary organisations to consider, it should not take priority. It supports Porritt's (2005) suggestion that the environment is a 'nice thing to do', but that the social agenda is more important.

N suggested that their research had found that a lack of understanding of the inter-relationship between the social, the economic and the environmental meant that environmental issues were often placed in an 'environmental silo'. This led to the perception that the environment wasn't relevant for many organisations in the sector. She felt that better understanding of 'co-benefits', the unrecognised environmental benefits of engaging in activities that are part of the core activities, for example, growing food on allotments can improve health benefits and cut food miles, leading to carbon reduction, could help to overcome this barrier.

4.2.1 Use of language

The lack of understanding of the interdependency between the social, the economic and the environmental may not be the only problem could be a result of the variety of different terms used to refer to sustainability/sustainable development. This can create confusion that can inhibit change because language contributes to sense making and sense making influences behaviour (Weick 1995, Weick and Quinn 1999). The interpretation and understanding of certain words and phrases can also stimulate or inhibit behaviour change.

'Language, categorisations, labels and their systems of production and mode of consumption are critical in the reproduction and transformation of the social realm'. (Bourdieu quoted in Everett 2002:56).

As mentioned, both EAC and CC used a variety of words and phrases in their reports: *'just and sustainable future', 'environmental sustainability', 'sustainable development', 'environmental justice'* and *'tackling climate change'*, *'sustainable', 'low carbon city', 'environment'* and *'climate change'*. (see Appendix 1 for further details). The CC representative however, used the phrase *'carbon reduction'* extensively throughout the conversation and made no reference to sustainable development.

Voluntary sector representatives, X, Y, and N did not use the phrase *'sustainable development'*. They were more familiar with the phrases: *'environment', 'greening', 'climate change', 'low carbon'* and *'carbon reduction.'*

This raises an important issue to discuss with the Stage 2 participants. What do all these phrases mean? Do they all mean the same thing? The plethora of different words and phrases associated with sustainable development could be adding to the confusion and diluting the need for behaviour change. The suggestion by N of the perception of an 'environmental silo' is linked to inadequate understanding of the interdependency between social, environmental and economic aspects, and suggests that certain phrases, e.g. environment, may be seen as lacking relevance for the sector. This would reduce the need to act, especially when funding is tight, and highlights the impact of language on behaviour (Taylor and Van Every 2000).

'If it is not seen as relevant, it is not something that will be supported or encouraged and may be seen as a drain on the organisation.' (Y)

'Non environmental voluntary sector organisations don't see the environment as part of their mission and therefore environmental activities are an add-on, a drain on resource that doesn't contribute to their mission.' (Y)

Although the phrase *'sustainable development'* wasn't widely used by voluntary sector participants, the importance and relevance of the concept seemed to be generally recognised as resonating with the values in the voluntary sector around social justice and making the world a better place.

Individuals interpret, translate and mobilise ideas so they fit within their frame of reference and in a study by Georg and Fussel (2000) 'greening' was enacted differently depending the meanings attributed to it. For change to happen people need to make sense of the world in a way that enables action. Appropriate communication is therefore important (McDaniel 2007) and if the Government wants the voluntary sector to support behaviour change it may need to consider how it communicates the sustainable development message. EAC was aware of this and in their final report, suggested that local authorities needed *'to effectively communicate relevance of sustainable development at the local level'*. (EAC/CAG 2008:28)

4.3 Theme 2: activities that contribute to sustainable development

EAC was set up to promote behaviour change in the voluntary sector. It provided resources, both on line and off line, disseminated good practice through its networks and trained community champions to work with voluntary and community organisations around five themes: saving energy, travelling wisely, saving resource, shopping ethically, and caring for the area. However, the consultant (N), who was also an EAC trained community champion, commented that the response she had had from local organisations for her services was *'zilch'*, suggesting that perhaps the EAC approach had not been as effective as hoped in reaching local organisations.

CC's Environment Strategy (2007) and Carbon Reduction Framework (2009) included and aim to reduce carbon emissions to 30% below 1990 levels by 2020. In the conversation the CC representative indicated the City's intent to challenge key stakeholders from the private, public and voluntary sectors to commit to the City's carbon reduction target. They were also working with two national voluntary organisations, The Carbon Trust and The Energy Saving

Trust, to develop their carbon reduction initiatives and in 2009 launched a climate change fund to support community projects. They were currently considering the introduction of a policy that would require all voluntary organisations tendering for funds to have an environmental policy. When asked about voluntary sector engagement in the carbon reduction agenda CC replied *'We're waiting for them to tell us what help they need and what support they need.'*

Organisation X admitted that *'in principle, (we) engage with green issues, but in practice, not much.'* Although they provide training courses for the sector, none of the training courses offered help or support with environmental issues. As an organisation, however, they had considered their own impact and signed the Third Sector Declaration. Their newly built low energy building used EAC templates and they also encouraged users renting office space to sign up to the EAC Third Sector Declaration.

Y, despite his initial ambiguity around the link between social justice and the environment, explained that they had engaged consultants N to set up an environmental network for the voluntary sector because they thought it was a growing issue. They had considered their own impact on the environment.

'(Environment) is an important bit of the work we are doing - how we operate as an organisation ourselves, our own internal housekeeping, what we try and promote. I see us sort of tackling it on different fronts.'

'As our own organisation - looking at our own things, when we do events we do think about, is this accessible by public transport? We try to make sure in stuff we send out about events we say whether everything's accessible. .....It is only small things like plastic recycling, what we do with a paper, how we manage it, use of computers, little things you can do as an office.'

Both X and Y, commented that the environmental agenda lay with one or two people rather being more widely disseminated and discussed throughout the organisations.

'The environmental agenda is driven by one or two people in the organisation, although nobody is hostile to it.' (Y)

N, as part of their consultation, had organised two workshops for voluntary organisations in the city to help identify the activities they were already doing or would like to do around community well being and carbon reduction, with a particular emphasis on the concept of co-benefits.

Overall, therefore, there was awareness that action was needed. EAC was trying to help the voluntary sector take action, CC wanted to support the sector, but was not sure how, and X and Y had considered their own activities but, apart from the workshops by N, there was very little engagement or networking with other voluntary organisations in the city to support their behaviour change.

4.4 Theme 3: barriers to engagement

There was an awareness, as indicated above, that sustainability was a relevant agenda for the sector to embrace, but in practice, as X implied, not much was happening. What were the barriers that limited this engagement? The EAC baseline survey (2007a:31) identified funding issues, lack of time, other priorities, and a need for training and information as barriers to change and the findings from this research reflect these barriers. Several other factors, for example, strained communications between local government and the sector was also identified.

4.4.1 Resource

Lack of funding was identified as a key concern and a major barrier to the development of sustainability in the sector.

'*Survival is the first priority for many organisations particularly at this time when funding is being cut.*'(N)

'*The focus is on the economic – the need to secure enough funds to sustain the organisation*'. (X)

A clear example of how lack of funds can inhibit change can be seen in the proposed environmental network that Y hired consultants N to initiate. It never materialised due to lack of funds and organisation Y was closed down shortly after participating in this research because CC cut its funding.

Documentation provided by both CC and EAC, however, highlighted how improving resource efficiency to address the low carbon agenda could also reduce expenditure and although both X and Y identified lack of funds as a barrier, they did not mention the potential of better environmental management as a way of saving money. This support N's claim that there is a need for better understanding and awareness of the co-benefits of

sustainable behaviour and how it can reduce operating costs and reflects the findings of EAC/CAG of the need for better information.

4.4.2 Mission

As already mentioned, for voluntary organisations struggling with capacity and funding issues, limited recognition of the link between environmental, social and economic issues, means they are not seen as core. The focus is on their core mission and environmental activities are given a low priority, as X and Y suggest.

'*We (the voluntary sector) are focussed on our mission. If we have to get xx info out, we can't be worrying about if our paper is sustainable or not. We haven't got the capacity to do that. We've got to focus.*' (Y)

'*I don't know whether that (climate change) message is getting through to a significant number of voluntary organisations, as they are more immediately focussed on health, social or economic issues.'(X)*

N, however, injected a note of optimism.

'*Most voluntary organisations have a clear focus or primary aim ..... some are beginning to understand co-benefits, about how environmental activity can contribute to their core purpose.*' (N)

4.4.3 Conflict between environmental goals and economic goals – the role of social norms

As well as the need to prioritise the core mission, there was a worry that engaging in environmental behaviour could undermine the 'social and economic good' the sector works to achieve.

'*There are contradictions between growing a strong economy and the environment, which can be seen as undermining this' (Y)*

'E*conomic growth to raise living standards might not be green'.* (X)

X however felt that part of the problem was the dominant narrative around short term economic growth, which was very hard to challenge.

'*Flooding and global warming – the link may be understood, but the focus is on short term fixes (techno) and not necessarily about the core issues.....The focus of local government is short term - there is little acknowledgement of the big picture.....I feel that I am in a small minority, even in my own sector, when it comes to talking about big picture stuff.....Most around the table at (...) thought I was potty - including voluntary sector colleagues, (they) either didn't understand the point, thought it was irrelevant or didn't want to know because*

it is politically unacceptable, it seems to me, to suggest anything that challenges the conventional wisdom around economic growth.' (X)

Dominant narratives, such as those around short term economic growth, can inhibit change because, as X suggests, it is difficult to suggest or do anything that is outside this social norm. Social norms define what is acceptable in society, provide criteria for judging actions, and influence what ought to be done or what is the right thing (Stacey 2007). They are obligatory and constraining and Emirbayer (1979) talks about how the power of the social realm and the reified nature that categories of knowledge adopt prescribe modes of thought and action in such a way that alternatives are labelled deviant, something X's comments suggest he was aware of.

Sustainable development, as outlined in the Literature Review, challenges commonly held beliefs or social norms around economic growth and short termism, and voluntary organisations, faced with other barriers, such as lack of resource and increasing pressure to conform to public sector management performance criteria could find this agenda a step too far.

4.4.4 Lack of governance

Governance, or lack of governance, was another area identified as having the potential to inhibit action on sustainability. The EAC/CAG report (2007b) suggested that sustainable development should be included in the governance and management arrangements of all organisations and that sustainability should be embedded into all policies: HR, procurement and transport.

CC indicated they were thinking about demanding an environment policy from all organisations applying for funding, but it was not a requirement at the time of this research. This lack of reporting was significant for both X and Y

'If LSP priorities it, action will happen.' (Y)

'At the moment there is nothing on governance courses about environmental governance. It is not a key performance indicator and there is no requirement for organisations to do anything about the environment.' (X)

Both X and Y felt that if the major funding bodies, such as, Big Lottery, Baring, Esme Fairburn, embedded sustainability reporting in the bid process, it would make a difference.

Creating a requirement to report on sustainable behaviour would therefore, potentially stimulate voluntary organisations to include sustainable development in all their activities and suggests that if CC wants the voluntary sector to contribute to the City's sustainability outcomes, they should not just think about requiring all organisations applying for funds to have an environmental policy, but should actually enforce it.

4.4.5 The role of government

Local government is an important source of funding for the voluntary sector and as suggested above, it could influence the activities in the sector through the way it allocates funds. The CC representative indicated that the council wanted to consult with the sector around the help and support they needed to engage in carbon reduction activities. The voluntary sector participants however, didn't think CC was being very supportive and that the behaviour of CC could actually be inhibiting change.

'Some times I think there is that argument between the statutory sector and voluntary sector groups about who might be best placed to deliver a particular piece of work around the environment, say it was educating people about home insulation or saving energy. Where does that best sit? Who can do it the best? Who gets the resources to do it? There is that argument/debate /game plan that is always taking place.' (Y)

Y suggested that the lack of clarity around responsibility created duplication, or '*re-inventing the wheel*' and he felt that CC did not trust the sector to get on with the things they were good at.

N's comments reinforce the lack of trust between CC and the voluntary sector.

'There has always been that question there from the City Council about what the voluntary sector can contribute and the evidence. "How can you show? You say you are jolly good at communicating these things, but how can you show that you are, that you are doing something that is worthwhile?" which is a hard question for any organisation really.'(N)

'The other thing that was happening, really in parallel with us doing the research, was that the City's Carbon Reduction Framework was being developed. There was not much visibility for us (the voluntary sector) to, kind of, input into it. It came out and then it went away again and it completely changed and came back again.....One of things that was highlighted at the strategic partnership meeting when it (Carbon Reduction Strategy) was adopted was that it doesn't really mention the voluntary and community sector enough.' (N)

The voluntary sector participants therefore, felt that CC did not fully engage with them and poor communication and the lack of trust between CC and the sector were barriers to

change. If sustainable development requires all sectors all sectors of society to work together, this is not a helpful situation.

Overall, the barriers identified by this research reflect the EAC findings that lack of funding, time, and lack of relevance to mission could inhibit change. Other factors, such as strong social norms, lack of governance and a poor relationship with local government were also seen as problematic. The next theme to be explored therefore is around the support needed to overcome the barriers and encourage behaviour change.

4.5 Theme 4: supporting change

EAC/CAG research (2008) recommended that training was needed to help voluntary sector organisations develop a better understanding of the integration between social, economic and environmental issues. This would help them realise the relevance of sustainable activities to their organisations and stakeholders.

N supported this, suggesting there was a need for a better understanding of co-benefits as a way of encouraging change.

'Understanding co-benefits is key to enabling action to reduce carbon emissions and get it on to mainstream agendas.'(N)

Inadequate communication between the government and the sector and lack of opportunities to network and develop a better understanding of the issues means that the potential resource savings available through energy saving and carbon reduction measures are not realised. Although the EAC programme was set up to help organisations understand these benefits, N indicated that very few of the organisations they had spoken to had signed up to the Third Sector declaration. They thought it could be because the message wasn't communicated in a way that made it pertinent to all voluntary organisations.

'*Really, if it is limited to people getting an e-mail occasionally nothing much is going to happen.'* (N)

Y also commented on the importance of communication and how it can influence the uptake of information.

'A challenge for people who are trying to promote and sell this thing about changing attitudes and so on, is being able to do it in the right way, and not in the way that makes environment get in the way of what you think is a really important need.' (Y)

'It is about finding out what are the key messages - what has to change.'(Y)

This suggests that better communication and the provision of networking opportunities to encourage the sharing of good practice could be enablers of change. Coming together to share information would unlock the potential of local experts, for example, by identifying people and organisations with expertise to support other organisations and the added advantage of this is that it would reduce the need for expensive training. If networking created a space for CC and the voluntary sector to work together it could have other benefits, such as improving the relationship between CC and the voluntary sector, which could lead to better utilisation of the existing resources, as indicated by comments from N.

'At the moment there are a lot of actions by a lot of different groups.'(N)

Although the voluntary sector participants implied that CC and the voluntary sector weren't very good at working together, the CC representative was supportive of the idea of networking. She recognised the value of sharing of good practice, but not it appears, at a local level.

'If you interview other City Councils I would appreciate if you can share some good practice that will help us reduce our carbon footprint.'(CC)

Understanding wasn't the only area N identified as requiring support. Even for those organisations that understood the need for behaviour change

'When it comes to the nuts and bolds they want a menu of things that they can do, some handholding.'

Improving networking opportunities locally, therefore, appears to be a way of supporting behaviour change that has many advantages, including improving communication and relationships within the City and reducing the need for expensive training.

4.6 Theme 5: the emergence of the potential for change as a result of conversation

The act of engaging in conversation with Stage 1 participants appeared to bring about small changes that increased the potential for behaviour change. The first example of a small change was that N called me a few days after our meeting to let me know that my research was already having benefits. N had prepared a brief report, commissioned by Y, about the possibility of setting up a voluntary sector environmental network. They had informed CC of the report but had had no response from CC until my meeting with CC. After my conversation with CC, CC called N to ask if the report was available because they wanted to take it to the Environmental Strategy Board. This could lead to initiatives by CC to support voluntary sector engagement.

Another example of potential change as a result of my engagement was that Y realised that environment had 'dropped off' the monthly agenda and he needed to put it back on. Engaging in conversation with me reminded him of something he had intended to do.

'*Just at the moment it has fallen off, and then you've just reminded me - it comes back on again.*' (Y)

X commented similarly on something that had slipped his mind - a travel audit that hadn't been carried out yet.

These are only small changes with no guarantee of any subsequent action. X and Y might or might not carry out their intention and this might or might not lead to changes in behaviour, but whatever the outcome, it supports the idea that engaging in conversation can stimulate change. These small changes have the potential to influence behaviour in the future, although they do not guarantee it. Weick (1984) believes that small changes or small wins, as outlined above, although insignificant on their own, can encourage others to do more small things and the examples of small changes from these initial conversations demonstrate how social learning or face to face engagement through conversation could increase behaviour change, as small apparently insignificant acts cascade down as each agent learns or is prompted by the acts of others.

4.7 Conclusion

The Stage 1 conversations confirmed that sustainable development is compatible with the ethos of the voluntary sector and is therefore something the voluntary sector could consider. However, the differing words and phrases used to refer to sustainability issues can cause confusion and contribute to lack of action. As N suggested there is a tendency to put sustainable development in an 'environmental silo' and overlook the social and economic aspects of environmental problems. This reduces the relevance of the issues for non-environmental organisations, thus both the confusion around language and the limited understanding of the interdependency between social, economic and environmental issues can act as barriers to change. Funding pressures can mean that environmental issues which are seen as lacking relevance to the organisational mission are given low priority, and regarded as something that is 'nice to do' rather than something that is important. Better understanding of the co-dependency between social, economic and environmental issues and more clarity about the co-benefits and how reducing energy usage to save carbon could also reduce costs, would make sustainable development more attractive and relevant to the voluntary sector.

Other barriers identified included strong social norms or dominant discourses that made it difficult to suggest new or different ideas, as exemplified by X who talked about how the dominant focus on short term economic outcomes limited wider thinking about the 'big picture' and the longer term effects of environmental damage. Poor communication and lack of trust between the voluntary sector and CC was also seen as a barrier to change as trust is an essential element of collaborative activity (Darwin et al 2002). Even though CC recognised the value of networking as a good way of sharing good practice and suggested that they wanted to work closely with the sector on carbon reduction, during the course of this research the networking organisation Y was closed down. This lack of networking and mutual cooperation between the voluntary sector and the local authority appears to be a significant barrier to further engagement by the sector in the promotion of local sustainability.

The unintended consequence of this stage of the research was the potential of engaging in conversation to encourage change. Dialogue and deliberation develop collective intelligence and enable agents to gain different understandings (undergo cognitive

restructuring) which can lead to innovative new ways of working or behaving. (Hajer 1997, Dryzek 2005, Buchs 2011). Better communication and networking in the city therefore, would increase opportunities for knowledge sharing, and overcome issues like lack of trust, as people learn from each other. This could have the added advantage of reducing the need for expensive training as local competences are recognised and shared. As N implied, talking about what you are doing can develop new understanding. The small changes that emerged as a result of my interaction support the potential of engagement as a way of encouraging behaviour change.

The potential for new understanding and the emergence of small spontaneous changes as a result of engagement in this research appear to reflect features of complexity thinking where new knowledge is dynamic, generative, emergent and behaviour emerges as a result of interactions in the system (Garcia-Lorenzo et al 2003). Encouraging connection and interaction in such a system is more than a process of information transmission. It increases the capacity to generate new meaning and knowledge, or the ability to create new order and '*different ways of working, thinking and relating.*'(Mitleton-Kelly 2011:17).

This is an area that will be further explored in the Stage 2 conversations with non-environmental voluntary organisations in the city along with the other issues highlighted above.

Chapter 5 Potential for Change: Stage 2 Conversations

5.1 Introduction

The previous chapter outlined the findings from the first set of conversations, the purpose of which was to gain an understanding of sustainable development as an issue for the voluntary sector and identify significant issues to explore further with the Stage 2 participants. Stage 2 conversations involved nine participants from six local non-environmental organisations and included people from a variety of roles and responsibilities: three managers, one paid employee, two trustees (one chair of the board and one working as a volunteer in the organisation), two volunteers who had previously been service users of the organisations and one volunteer whose only contact with the organisation was in a voluntary role.

As in Stage 1, conversation was the data collection method used. Conversation is a mutually constructive act in which information is clarified and understanding agreed in a mutual, often unaware process. The act of participating can stimulate change because participation can transform knowledge and generate new meaning as ideas feed off each other spontaneously (Shaw 2002), as was demonstrated by the small changes apparent from the Stage 1 conversations. In stage 2 I had to be particularly careful that the unnatural situation and the perceived difference in status between myself, an academic, and the participants, particularly the volunteers, did not inhibit the flow of the conversation. When there are differences in power or status it can lead to a situation where the researcher imposes their agenda by steering the conversation, and this would make the data inherently flawed. From a complexity perspective however, where change is a product of multiple dynamic interactions, the researcher, as one of many participants in the system, cannot influence the outcomes any more than any other participant. It is important, however for the validity of the research, that the researcher is open about their participation in the co-creation of the knowledge.

Despite the initial hesitation of some participants to speak freely, perhaps due to the unnatural situation, there was generally a trigger point, an issue that stimulated an emotional response. After this, as participants gained confidence in their own knowledge, they began to feel more comfortable and speak more openly. The individual trigger points

are discussed more fully in the next section, an overview of participants, but they are significant because they highlight the importance of emotion in human behaviour, something that needs to be considered in any change process (McMillan 2004).

As with Stage 1, when analysing the data I started by building on the themes highlighted in Stage 1: understanding of sustainable development, barriers to change, activities in the sector, support needed and potential for change. Other themes also emerged from the data, for example, engagement with service users, and although I have attempted to present the data thematically, the degree of overlap and interconnection between them makes this difficult. These findings, therefore, present, I suggest, a thematic description than a linear analysis (Creswell 2007).

Structure of the Chapter

After providing a brief overview of participants and their organisations, the main body of this chapter summarises the findings. The first theme explored is the understanding of sustainable development in the sector, how the various words and phrases associated with sustainable development were interpreted differently by participants. This is important because how we make sense of a situation influences our actions (Weick 1995). Understanding can therefore be an enabler of or a barrier to change, and the next section develops the barriers to change identified by Stage 1 participants and highlights new barriers identified by Stage 2 participants, one of which was increasing bureaucracy. As in Stage 1, norms were seen as inhibitors of behaviour change. This section also highlights the role of values in behaviour change. Values, unlike social norms, can act as a motivator of change (Emirbayer 1997) but both norms and values are strongly linked to emotion and the way we make sense of situations (sensemaking)(Kuhn and Woog 2005).

The influence of norms, values and emotions was highlighted by Stage 2 participants when the subject of recycling came up. Recycling, an activity that was widely supported by all participants is the next theme discussed. Another activity mentioned by all participants was energy saving. For charities with limited resources, reducing energy bills is one way of keeping costs down. Even though saving money was the main driver, many participants were also aware of the environmental benefits of saving energy – in other words they

appeared to understand the co-benefits of becoming more sustainable. Co-benefits was therefore the next theme discussed.

Closely linked to co-benefits the next theme looked at the factors participants identified as enabling change. These largely reflect the barriers, with resource being the most widely mentioned. However, discussing enablers and how to help their service users, (an issue all participants were passionate about) appeared to unleash creativity and they began to suggest things they would like to do if resources were not a problem. Many of these ideas incorporated the concept of co-benefits, in that they had the potential to improve the lives of service users and contribute to the sustainable development agenda at the same time. The emergence of these innovative ideas suggests that the sector has the potential for innovation that could encourage sustainable behaviour if there was an enabling framework

As mentioned, all participants were very clear that social justice and improving the lives of their service users were their main priorities and the next theme explores service user engagement in sustainable development activities and whether this was regarded as an appropriate agenda with which to engage. There were differing views on this, with some managers feeling that sustainable behaviour was not a relevant issue to discuss with service users, others worried that it would impose extra costs onto organisations or service users and some, ex-service users held a different view and didn't see a problem engaging with service users around sustainability issues. Although the voluntary sector, is designed to give voice to the voiceless (Said 2004), it is shaped by people in positions of relative power, usually educated workers and managers, and the difference of opinion between managers and ex-service users in this research supports the importance of including all stakeholders in any discussion around sustainable development, particularly service users, who are the ones who could potentially suffer the most harmful effects of environmental problems.

Dialogue has the power to challenge contradictions, shift patterns and offer the opportunity for a different exchange (Mulgan 2006). The next theme is around networking and the potential of social interaction and information sharing to support change. This research found that there were limited opportunities for organisations to network around sustainability, internally or externally, and that any information participants had about sustainable development seemed to be dependent on one or two interested individuals in

the organisation. The actions of Government are also important in encouraging sustainable behaviour and the findings from both Stage 1 and Stage 2 suggest that participants perceived a lack of support from Government, local and national, around sustainable development. Coupled with the limited awareness of key government initiatives, like the Third Sector Declaration, this suggests that there is a need for better communication and networking between the sectors. As the initial aim of this research was to understand how the voluntary sector could support the government and encourage behaviour change for sustainable development at a local level, this is a significant factor that could inhibit the governments' aspirations around voluntary sector engagement and needs further exploration.

The final theme discussed in this chapter is the emergence of small changes in understanding that occurred as a result of taking part in this research. As in Stage 1, Stage 2 participants appeared to change their thinking and understanding of sustainable development during the process of conversing. This suggests that if understanding is a key factor in behaviour change, increasing opportunities to transform understanding (cognitive restructuring) through engagement and interaction, could provide an effective way of supporting behaviour change. Recognition of the potential of conversation to change understanding and ultimately behaviour led to development of the second aim of this research: to examine if or how complexity thinking could provide a different framework for addressing complex multi-dimensional problems like sustainable development that overcomes barriers to engagement and could encourage voluntary sector participation in the promotion of sustainable behaviour at a local level.

5.2 Overview of participants

The following codes are used to identify the participants: (the first letter denotes the organisation and the following letters denote the roles)

M = manager, (for example a manager from organisation A would be AM)
W = paid employee
T = trustee (voluntary post)
TV = trustee who is also a volunteer in the organisation
SV = service user who is also a volunteer in the organisation
V = volunteer

The organisations and participants were:

Organisation	Participant/s
A (advice organisation)	AM manager
	ATV trustee and volunteer
M (mental health charity)	MM manager
	MSV service user and volunteer
S (supporting deprived community)	SM manager
	SSV service user and volunteer
C (care provider)	CT trustee and chair of Board
T (transport provider)	TW paid employee
R (supporting refugees and asylum seekers)	RV volunteer

Transport Provider, employee - TW

TW was a paid employee in an organisation that provides transport for the elderly and disabled. CC funded them to work on an enhanced public health programme around air quality monitoring in a part of the city that suffers from poor air quality caused by traffic congestion. TW was personally interested in sustainability, and well informed, being one of the few participants aware of CC initiatives around climate change because of the work on air quality monitoring. She was suffering from a bad cold on the day I met with her, and there were frequent pauses while she had a drink, but when I asked if she wanted to stop she was keen to carry on.

As this was my first conversation with a local organisation I asked TW for feedback on the process. She helpfully highlighted two areas for consideration. The first issue was when I asked about her awareness of the EAC programme and CC's strategy. She suggested it would have been helpful if I had brought copies of the relevant documents, as visual prompts would have helped jog her memory.

'*I might not remember the words but if I saw a document I might have seen that before*'. She also told me that she found it hard trying to articulate the views of other people in the organisation.

'*I know what my understanding is, but to be honest, sometimes you say something to somebody and they look at you as if you're talking Double Dutch and another day you'll say something and they'll launch in straight away. We can have an organisational view but within that context you get individuals and an enormous variety of people*'.

This feedback process itself could be seen as an example of how conversation can contribute to change. I took on board her comments and in future conversations brought along copies of relevant documents and made sure I only asked participants to talk about their own views and not those of others in the organisation, acknowledging that even though they work in the same organisation they might have different views – a reflection of the postmodern stance that all knowledge is subjective and not generalisable.

Advice Organisation A - manager AM, and ATV, a trustee who also volunteered in the organisation

AM was the manager of a small advice organisation with four staff and five or six volunteers. ATV was a trustee who also worked as a volunteer advisor. The organisation's main priority is helping clients with their financial problems. It operates from rented accommodation and both AM and ATV mentioned the inefficiency of their building in terms of energy use, and their inability to do anything about it because they didn't own it. AM was personally quite knowledgeable of environmental issues and talked about the smart meter he had at home, which he admitted he didn't use much. He saw himself as one of the drivers of recycling in his organisation, because he felt it was something good to do, not because he was aware of CC's commitment to carbon reduction.

ATV, was passionate about social justice and the voluntary sector values reflected in the organisation but had little awareness or understanding of sustainable development and did not initially see any relationship between the environment and social justice. Initially the conversation was more like an interview than a conversation because she said to me that she had very little knowledge of the subject area. However, there was a point in the conversation (emotional trigger point) where she moved from trying to answer my questions to engaging in conversation. This was when talking about transport and road tax. She suddenly became very animated about people who drive *'gas guzzling 4X4s'*, suggesting she would be embarrassed to drive one *'If I had one I would get rid of it'*. She began to see a link between sustainable behaviour and saving money when she realised that smaller cars are good for the environment because of reduced emissions but also that they cost less due to lower taxation (co-benefit). This emotional response helped the conversation to flow and helped her realise that although the core of her organisation was helping people save money, it was also possible to incorporate 'green' issues into organisational activities.

The conversation with ATV helped me understand the importance of emotion as a trigger point. It is important not only in helping conversation to flow, but because it also has the power to change peoples' understanding and help them see things differently. Georg and Fussell (2000) suggest that emotion is an essential, explanatory element in understanding how feelings shape the way individuals construct themselves and that interpretation and understanding are the outcome of both sensemaking and emotion (Fineman 1993). For ATV it was gas guzzling cars that triggered her interest. For AM, it was when we began talking about relevance to his organisation. Even though he had initially said he didn't think the environment had much relevance for the organisation, when he began to see the potential benefits of financial capability education for both clients and the environment (co-benefit) he became more animated. He realised that a focus on reducing expenditure, for example, by turning down heating or installing better insulation, could contribute to both carbon reduction through reducing energy use, and help clients save money in the longer term.

Supporting a deprived community, organisation S – manager SM, and SSV, a service user who volunteered with the organisation

This organisation had seven paid staff and like A, also operated from rented premises. SSV had been volunteering for just over a year, but had first come into contact with the organisation as a service user. Like ATV, she was hesitant initially to do more than answer my questions, claiming she didn't know very much about the organisation or environmental issues, because she was just a volunteer, but when we started talking about recycling she relaxed. This was her trigger point, an area where she felt comfortable, as she had strong opinions about recycling, not all of them positive. Personally she did a lot to save energy, mainly for financial reasons, and she was aware of a contradiction between her attempts to save energy and the wastefulness she saw in the city centre where *'lights were left on all night.'* She was also aware of and interested in other issues related to sustainability, such as the problem of disposing of low energy light bulbs because of their mercury content. She said the environment was never discussed in the organisation but personally she had a lot of interest and awareness of environmental issues and was keen to talk about them. This contrasted with the view of SM, her manager, who suggested that environmental issues weren't relevant for service users.

SM was very confident and open from the start of the conversation. She had strong views, preferred to use the term 'green issues', and was aware that sustainability was something the organisation *'ought to consider'*. However, personally, she wasn't convinced it would make a difference and she was particularly distrustful of the government's agenda around climate change, an opinion she was not afraid to share.

'I really think it is a pacifier that the government are giving to people. Don't use your car for 5 miles a week and it will cut down emissions but then you've got politicians driving two gas guzzling Jags... I don't think they are giving us the full truth and it's perhaps not as bad as they will have us believe.'

She was however, dedicated to her cause and her service users and admitted that as an organisation they were more interested in the carbon footprint as a way of saving money than reducing carbon emissions. When asked about an environmental policy she said they didn't have one and asked me for advice about how to draw one up, as *'It would be nice to know the starting point. We do our bit but are a bit cynical.'*

At one point, when we were talking about whether or not she was familiar with CC's desire to work with the voluntary sector, she asked for the recording device to be turned off and voiced her opinions about CC, who she felt didn't trust the sector and consequently tended to *'re-invent the wheel'*.

'They are very paternalistic. They believe they can do everything better than anyone else and that the statutory sector is the only way things can be done. They are more concerned with making sure they have sufficient income to keep their staff in jobs. They don't respect the Compact in any shape or form.'

She felt CC used a stick and carrot approach to get voluntary organisations to do what they wanted. She wanted to be listened to - real consultation and a recognition that they, the voluntary sector, might have some useful ideas.

Supporting carers C - chair of trustee board CT.

I originally sent letters requesting participation in my research to ten organisations. Because I was aware from my own work with voluntary organisations that managers often filter information and do not always pass it on to trustees, and I wanted to gather a variety of voices in different positions in the organisation, I sent letters to both the managers and the Chairs of Trustees. If I hadn't done this I might not have met this participant because CT

informed me when we met that the manager didn't believe in the value of research and wasn't supportive of my research, whereas he was. The conversation took place on a day when she was out of the office.

His organisation is affiliated to a national organisation although it operates independently. Most of their funding is from the statutory sector and it was the largest of the organisations I engaged with, employing about forty staff, not all full time. CT had come originally from the public sector and was confident and happy to give opinions. He, like others, used the word 'green' when referring to environmental issues and appeared well informed and interested in the issues. He was aware of his role and responsibilities as Chair of the Board, *'I'm the chair so I do the agenda'*. He read the EAC campaign literature I had brought along with interest and he also wanted to read the council strategy documents, so I left him a copy. The conversation was wide ranging, talking about renewable energy and fishing, but during the course of the conversation, like some of the other participants, it was noticeable that his understanding of the relevance of sustainable development to his organisation changed and he began to develop ideas about how to implement changes in the organisation, for example, by putting the environment on the board agenda. An interesting outcome of this meeting was when he had to go into the office to find some information for me about the environmental policy, he discovered that one of his staff was very interested in and knowledgeable about environmental issues because her husband was an environmental consultant and they lived in an eco-friendly house. She could be a useful source of information for the organisation, but she said she had never been asked about environmental issues and didn't talk much about it at work because it didn't seem relevant.

Mental health charity M - manager MM, and MSV, a service user who also volunteered

The organisation supports people with mental health problems and is an independent organisation, affiliated to a national umbrella organisation, which is mainly involved in campaigning. There were eleven staff, not all full time, and the bulk of their funding was from the statutory sector. MM, a manager reporting to the CEO, was the most knowledgeable and well informed of all the participants about sustainable development and he felt strongly about the issues because personally he was an active environmentalist, involved with the Transition Towns movement. MM clearly understood the concept of

sustainable development and readily articulated his personal values. He also knew that not everyone in the organisation shared his views, but he was aware that he could potentially influence people in his organisation though his behaviour. We discovered during the course of the conversation that we both prefer to buy locally produced products where possible – a trigger point. Conversation flows more easily if there is a common interest and this may be the reason MM was very comfortable talking to me about his personal values.

MSV, like SSV, a volunteer who had been a service user, was very shy at first, suggesting that, because she was only a volunteer she didn't know very much, but there was a clear trigger point when she found her voice. This came when talking about climate change and melting ice. She was an animal lover and when she realised melting ice posed a threat to polar bears, this stimulated her passion. Her comments at the end of the conversation, after the recorder was turned off are very revealing in terms of how conversation helps people make sense of situations.

'I really enjoyed talking about the issues. I do quite a lot to be green but wasn't aware of it. I also realise how good it is to talk about these issues. It helps you clarify things, realise what you are doing. You don't get much opportunity to talk about these things and it is very valuable. The environment is really important to me, something I didn't realise'.

Supporting refugees and asylum seekers R – volunteer RV

R is a community centre in a deprived area of the inner city. It is a registered charity and social enterprise that generates a substantial amount of its core costs from conference and catering activities. It is also funded by the Big Lottery and grants from CC.

Its mission is to help non English speaking immigrants/asylum seekers/refugees integrate into the local community. Its activities include:

- English teaching, the area in which RV, a white, retired professional, volunteers. English teaching is delivered to hundreds of men and women from migrant communities each week by over 40 volunteers.
- The Food Hub Café where service users create good meals from waste food to sell to raise funds
- TimeBuilders, a skills sharing activity
- The Lunch Club, where each week over 60 people come for lunch, friendship and activities

All activities are free of charge to service users.

The organisational ethos (from the website) is about valuing the unnoticed strengths and resources in the community, things that are often unappreciated and wasted. This includes the skills of the service users, and they try to find ways of enabling the immigrants to contribute, to belong and to build relationships because they believe these are the fundamental building blocks of personal and community resilience. They regularly organise community litter picks and have recently used Appreciative Inquiry to work with excluded women from the Pakistani community to encourage empowerment through the sharing of stories.

RV has been volunteering as an English teacher for over two years. She told me that she didn't know very much about the organisation because she only volunteers once a week and her only contact is with the full time paid employee who co-ordinates the English teaching. She didn't know how many paid employees the organisation had but she knew that most of the projects were staffed mainly by volunteers. She said she had never heard anyone talk about environmental issues in the organisation, and like many of the participants, she said she didn't know much about sustainable development but would try and answer my questions. It was clear that she was very concerned with the social inequalities and the hardship her students were enduring because she often returned to this topic in our conversation.

5.3 Discussion of findings

The remainder of this chapter provides an overview of the main findings from the Stage 2 conversations beginning with the first theme: the understanding of sustainable development by the voluntary sector participants.

5.3.1. Understanding Sustainable Development

The Stage 1 conversations highlighted how the variety of words and phrases used when referring to sustainable development issues could cause confusion and this is important because the way the words and phrase are interpreted has the potential to influence behaviour. Stage 2 participants were asked about their understanding of: sustainable development and other associated words and phrases - environment and climate change.

Sustainable Development

Participants were generally unfamiliar with this phrase. Although there was some recognition that it could be associated with the environment, it was confused with the word 'sustainable', commonly used in the voluntary sector to refer to organisational or financial sustainability (www.ncvo-vol.org.uk/sfp).

(AM) *'It would be financial. I think sustainable development is normally used in the context of environmental, but I think for us we'd be talking about financial.'*

Two of the participants were able to articulate the interdependency between the three strands – economic, social and environmental.

(TW) *'Economic, environmental and social progress – all going on at the same time – the three strands are given equal weight.'*

Others, however, had limited understanding of the relationship between the environmental, the economic and the social inherent in the concept and were unaware of how environmental issues could affect social development.

(ATV) *'It wouldn't really have come to mind - sustainable development in relation to social justice? ...I have not really heard of it before. It's the first time I've heard that one....Social justice.... is something we do every day, but thinking about it in relation to green issues, I haven't made that link.'*

Like ATV, RV did not initially link sustainable development with social issues. She talked about *'not overusing resources, not exploiting the environment unnecessarily and being able to maintain the business or activity in an affordable or sustainable way'*.

When I asked her about how it related to social issues she added

'I suppose I should have said, no exploitation of any resource human or environmental/ natural.'

When asked about possible relevance to their organisation, most thought that it was a peripheral activity, like changing to low energy light bulbs or recycling paper. It was not seen as core to their mission which was about social justice, changing lives and making the world a better place.

(ATV) *'Social justice is something we do every day.'*

(SM) 'I don't want to change the world but it would be good to be able to change lives locally.'

(M) 'It's about, I know it's horribly cheesy, but it's about making the world a better place.'

The lack of familiarity with the phrase sustainable development and the lack of awareness of the relationship between the social, the environmental and the economic inherent in the concept reduced its relevance for organisations focussing primarily on their social mission. This could be a contributing factor in the apparent lack of action by non-environmental organisations.

Environment

Phrases incorporating the word environment, such as, environmentally responsible, environmentally sustainable or environmentally friendly were more familiar to the participants and something they could more readily understand.

(MM) *'If you're talking about environment, you could be referring to your local environment, a patch of grass at the end of your street or something, and you might choose to plant some flowers in it or...I feel that the word environment is more easily understood, probably more accessible, less threatening to people.*

There was a general awareness of the importance of protecting, or not harming, the natural environment and some had a vague awareness that damaging the environment could be harmful to their stakeholders in some way. TW, for example, talked about the impact of poor air quality on the health of her stakeholders and the local community. The word environment was therefore, more easily associated social justice than sustainable development.

(CT) *'We work in areas of deprivation. I see a big link between environment and social justice.'*

(MM) *'The idea of linking the environment with mental health – that's there to some extent.'*

Despite this awareness, the environment was *'not high on our agenda'* (AM) and, as in Stage 1, the potential downsides of becoming 'greener' were mentioned. AM for example, was worried that efforts to reduce energy use could be restrictive, limiting the number of times you could boil the kettle, or that it would impact on organisational efficiency by increasing

the time needed for home visits if staff used public transport rather than cars. CT worried that it might increase inequality.

(CT) *'I have a view that to be green you need to spend more money. I think there is a link between higher cost green products and marketing opportunities of some big corporations. They make you spend money you don't need to spend....This could actually make people feel more marginalised.'*

Overall, the word environment was generally associated with practical issues like saving energy, not wasting paper or recycling, and it was not seen as core to organisational activities.

(ATV) *'I can't say environmental issues are at the forefront, but it is something everybody is aware of.'*

The perception of the negative impacts of trying to be environmentally friendly could be a reason for lack of priority but, as CT and SM suggested, financial pressures could also be important for cash strapped voluntary organisations, where saving money has to take precedence over peripheral environmental or 'greening' activities.

(CT) *'You pick the option that does least damage to the environment within, you know, your capabilities, and funding resource, staff and financial resources.'*

RV also thought that financial issues took priority over environmental ones. *'I would imagine most of their policies are driven by finance rather than an awareness of sustainability, but I don't know'.* She added *'They are very strict with the amount of paper now and I don't think this is driven by environmental awareness. I think it is very much driven by finance. But the two can be linked.'*

RV however, demonstrated an awareness of how activities to protect the environment could have beneficial financial impacts but indicated that she didn't think this awareness permeated the organisation.

'Most rooms have water coolers – those huge plastic bottles and they do use plastic cups. I have thought that this is a bit of a waste. It must be costly too.'

MM thought that the main reason environmental issues were not high on the agenda was because they lacked relevance to non-environmental organisations - they were not seen as relevant to the mission and were consequently regarded as something 'nice' to do rather than something important to do.

(MM) *'I still think it's seen as a bit of a .. something that's nice to do isn't it.'*

Climate Change

Although climate change has been recognised as having potentially serious economic and social effects (Stern 2006), it is often seen as merely an environmental issue, of far less concern than core economic and social priorities (Hale 2010). Participants in this research, although familiar with the phrase, saw it as a confusing environmental issue and as Hale suggests, they had limited awareness of the economic and social impacts.

(TW) *'There is quite a lot of confusion about that. I don't know that I'm particularly clear about it.'*

(ATV) *'There is too much conflicting information. My husband for instance thinks it is a load of rubbish. While ever there is conflict, doing something about it is going to be difficult.'*

As well as confusion about its meaning some participants displayed a sense of cynicism and doubt about its importance.

(SSV) *'If you look back in history there is climate change all the time – how do we know it is not just a natural development?'*

(SM) *'I think it is a load of crap....We all have to be socially responsible to make sure we don't do anything that is really bad, but I think our impact is so minimal when you have people like America guzzling all this carbon emission out. What we are trying to do is only a small pinprick.'*

(MM) *'There's so many mixed messages given out. With everything that happened at which university? .... It's easy for people to latch onto that and think ...they're just fiddling the figures and it's not true... I want to carry on with my consumerist lifestyle and not have to think about the impact on other people in other parts of the world..... I think the whole climate change thing ..... I think there's been a perception of in fighting as well ... you know, whether we go for nuclear or not....and then in society we just like to pass responsibility for things to somebody else. We elect a government so it's their responsibility.'*

(CT) *'I'm not wholly convinced .. .The climate is so big. It's how we actually affect that change by not buying aerosols. I'm not cynical about it, but I'm more questioning about the whole climate change thing.'*

One of the reasons social problems can be difficult to address is because people define these problems in ways that overwhelm their ability to do anything about them (Weick 1984). Climate change seemed to be too big an issue for small voluntary organisations.

(MM) I feel... my perception is that it's big. I think the trouble with climate change is that it's a bit of a macro term let's say. And I wonder whether people feel... in my personal view,

whether people feel detached from climate change. Climate change is something that we need national governments at least, you know, probably international bodies to be dealing with. You know, what can I do in (my city) for climate change and global warming, you know, I think that's what leads people to think, got to have to nuclear power plants or something.'

Despite the degree of cynicism and confusion around climate change, everyone seemed to have bought into the idea of reducing their carbon footprint. They all talked about how, as individuals, they were doing things at home, such as composting, or buying fuel efficient cars. This didn't seem to translate, however, into something that applied to their organisations. Climate change can be seen an example of how lack of clear information and mixed messages can reduce the potential for effective action. For most members of the public and the voluntary sector the primary source of information about climate change is the press, who often reduce the complexity of the issue into bite sized headlines which don't do justice to the issue (Smyth 2006). Controversy and confusion, such as the debate about whether climate change is or is not happening, can diffuse the need to act (Weick 1984) and this suggests that improving communication and information would increase understanding and this could make it easier for people to see the relevance of the issues and change their behaviour accordingly. Dobson (2010) believes that people won't change their lifestyles until public knowledge and understanding of sustainable development is improved.

This research was about exploring the potential of the voluntary sector to encourage behaviour change for sustainable development and these findings suggest that the level of understanding of the nature of sustainable development, and the confusion around the various words and phrases associated with it reduce its relevance and urgency for non-environmental organisations. There did not appear to be any real understanding of how anthropogenic changes to the natural environment could affect the local community and their service users and the intimate link between human behaviour, the natural environment and social and economic justice was not clear to participants. Financial sustainability was given a higher precedence than environmental sustainability and the confusion and cynicism around climate change reduced its relevance for small organisations.

(SM) *'We do out utmost to try and reduce the carbon footprint but we are more interested in where it can actually save the charity money.'*

(CT) *'I don't know whether it's entirely that they see a link with climate change or whether they just see the link with, you know, reducing waste and it'll, you know, save us money, kind of thing.....It's probably more to do with that, to be honest. It's keeping the travelling expenses down.'*

(TW) *'I don't know whether it's entirely that they (other staff members) see a link with climate change or whether they just see the link with, you know, reducing waste and it'll, you know, save us money kind of thing.*

Although participants were aware that recycling and saving energy were 'good' things to do personally, organisationally the social mission of the organisation took priority when allocating scarce resources. As sustainable development was not seen as relevant to the core mission, sustainable behaviour was seen as 'something nice to do', rather than something that could improve the health or wellbeing of stakeholders.

Individually participants engaged in activities that contributed to sustainable development, such as, recycling or saving energy, and it is interesting to consider why personal values don't readily translate into organisational values, especially in the voluntary sector, a values based sector and this research suggests that better understanding, particularly of the inter-dependence between the natural environment and social and economic issues would increase the relevance of sustainable development for the voluntary sector. The language used must also be taken into account because language contributes to sense making and the creation of social reality (Richardson and St Pierre 2008).

'Language, categorisations, labels and their systems of production and mode of consumption are critical in the reproduction and transformation of the social realm'. (Bourdieu quoted in Everett 2002:56)

The confusion engendered by the various words and phrases associated with sustainable development suggest that if policy makers want to increase voluntary sector engagement in behaviour change they should consider how to better communicate the importance of the natural environment for human wellbeing.

5.3.2 Barriers to change

Limited understanding is obviously one of the barriers to change, and Stage 2 participants identified other barriers, many of which reflected those identified by the Stage 1 participants.

Relevance to mission – applicability to local context

Because sustainable development (and climate change) were primarily associated with environmental issues, participants generally found it difficult to see how they related to the delivery of the social organisational mission and consequently they were crowded out by other more pressing issues.

(AM) *'It doesn't have so much relevance to service delivery.....Well I guess the major one (barrier) is that there's so many immediate issues that you're always kind of fire fighting... it doesn't get to the top of the agenda because there's so many pressing immediate issues'.*

(CT) *'We've never had sustainability on the board agenda. It is not talked about by staff – they are too busy doing the job.'*

MM however, thought that the way the organisational mission was interpreted could be the problem. Organisations, he said, tended to focus narrowly on their specific mission, ignoring or overlooking the wider context of social good, such as protecting the environment. He linked this to understanding, suggesting that a better understanding of the inter-relatedness between the social, the environmental and the economic, would make it easier for organisations to see the relevance of sustainability to their mission.

(MM) *'this idea of linking the environment with good mental health – it's there to some extent. .....They shouldn't be mutually exclusive should they – it ought to be possible ....Ideally it (environment) would be a core part of it (mission) because it's important isn't it?'*

TW agreed with MM *'the link is just not clear enough. They're (the links) not explicit..... not something that you'd think about everyday. But if you were challenged to think about them, then you would make the links'.*

Her organisation was more aware of the links social and environmental outcomes because of their work on air quality and health.

'The impacts of poor air quality on health and trying to raise awareness about climate change through our work with air quality.'

However, even if sustainable development was seen as relevant to the organisational mission, voluntary organisations are facing resource restraints that force them to concentrate on delivery of their core mission rather than spending precious resources on non-core environmental issues.

(TW) *'Any money that comes in obviously gets ploughed into the work we do – we're a non profit organisation so you always have to be really aware of costs.'*

Resource

Resources determine what does and doesn't get done and finance or lack of finance was high on everyone's agenda and *'nice to do'* environmental issues were of low priority. Even those with a better understanding like, MM, couldn't find the money to insulate their building, which would save them money in the long term by reducing their energy bills.

(MM) *'Is that a priority when I've got a million and one other things*?'

AM, like MM also pointed out how short term lack of money hampered environmental activities that could save money in the long term.

(AM) 'An expert could come and asses our building for energy efficiency, but then we would need the money to do the work.'

The restrictive short term funding nature of the sector appears to focus managers and fundraisers on securing the next tranche of money rather than taking a coordinated long term approach which could involve things like better insulation to guarantee future savings.

(SM) 'We are always being asked to tender lower ..... the way we're funded ... very, very limited about how much they will fund for management overhead costs.'

(CT) *'The non essentials get knocked off don't they? If there was anything obvious that we could do that we're not doing, we'd look at it. What we wouldn't be able to do is spend an inordinate amount (of time and money on environmental issues)'.*

Sustainable development is a long term issue and this makes it difficult to identify the measurable outcomes that much short term voluntary sector funding demands, something AM was aware of.

(AM) *'That's (sustainability) a long term measure that doesn't have a dramatic effect ...reductions in costs over a longer period of time. ... Where you have people being taken to County Court because they haven't paid a particular creditor, no amount of insulation is actually going to remove that problem.'*

It wasn't just lack of finance that was the problem. Staff resource and capacity was also an issue.

(MM) *'Funding and capacity are our biggest problems here.'*

(CT) *'If we had the capacity (staff) we could do an office equipment review, an energy saving audit and review transport arrangements.'*

Bureaucracy

Stage 2 participants highlighted another issue that limited their ability to engage in non core activities like the environment – bureaucracy. This impacts on staffing and all participants complained that bureaucracy and paperwork took up valuable staff resource with limited obvious benefit for the organisations.

MM *'(It) feels a bit like its missing the point really. When you suddenly find you've got another 50 policies that you didn't have before, somehow you've got to get everybody to at least read them and understand them.....the trouble is we still have the capacity issue.....even if the funding is out there, that usually involves a lengthy, complicated form somebody needs to fill in to get that funding.'*

(CT) *'There's new legislation coming out all the time, new policies.'*

Bureaucracy is a form of control linked to accountability, and it can inhibit change because it diverts staff time to meet externally set goals rather than focus on organisational improvement and innovative delivery (Weick and Quinn 1999). In CT's organisation, for example, the amount of paperwork put them off applying for a grant to improve their environmental performance.

(CT) *'There's probably a lot of hoops to go through to get it, so that's more time management time, and then there would be a lot of reporting to do once we got the money and we'd have to prove that we were greener than we were before we got it so there's a sort of disincentive....All bureaucracies are very good at producing papers - it's the rollout that the hard bit.'*

Increasing bureaucracy in the voluntary sector is associated with the demand for greater accountability and the need to demonstrate value for money as the voluntary sector becomes increasingly reliant on public sector funding (Wood 1992). Voluntary sector participants interpret this increasing need for accountability as a lack of trust by the statutory sector.

(SM) *'LA give us 8% of our funding but they ask us for more information than people who give us £150,000.'*

Participants from both Stage 1 and Stage 2 highlighted that the relationship between the voluntary sector and CC, who provide a significant amount of voluntary sector funding, was problematic. If government policy requires local government to work with the voluntary sector to encourage behaviour change for sustainability the lack of trust between local

government and the voluntary sector could be a barrier to change. This is discussed further in section 5.3.7.

The issue of increasing bureaucracy and its association with a lack of trust highlights the difficulty of using a linear reductionist approach to address the barriers to change. A simple solution like increasing funding, will not necessarily increase pro-environmental behaviour because of the other factors, such as bureaucracy and lack of trust, that inhibit change. This resonates with Seyfang and Smith (2007) and Buchs et al (2011) who suggest that barriers to environmental behaviour change are dependent on context and cannot be addressed in isolation.

Values and social norms

The voluntary sector is a values driven sector. The values serve to attract the workforce and volunteers (Whitelaw 1995, Gann 1996, Courtney 1996, Schwabenland 2006). Participants in this research demonstrated the importance of values when they articulated their views on social justice, outlined in section 5.3.1.

Values can be individual, organisational or societal and they help us make judgements about what is important (Hatch 1997, Stacey 2007, Emirbayer 1997). They can be effective motivators of action and have been found to be particularly influential when considering behaviour change for sustainable development, (Daily et al 2008, Joas 2000), as MM's comment suggests

(MM) '*Individuals values have to move on for them to feel it's (environment/sustainability) an important thing to do. I have personal values. I am clearly influencing the make up of this organisation and this goes for everybody here. It's about everybody's personal agenda moving on.*'

If, however, values become too entrenched they can lead to like-mindedness or social norms which inhibit change (Wagner-Tsukamoto 2008). Whereas values open up opportunities for action by specifying what is important norms are concerned with what is right and what ought to be done. They are evaluative, obligatory, constraining and restrictive and establish rules of behaviour sustained by shame, anger, embarrassment (Georg and Fussell 2000). In human society behaviour that doesn't conform to social norms can incur social sanctions such as exclusion or marginalisation (Stacey 2007). This is because,

as humans, we are sensitive to those around us (Gladwell 2000, Hale 2010, Buchs et al 2011) and are reluctant to act differently if we think our personal attitudes and values are not supported by those we interact with (Ajzen and Fishbein 1980).

'Our actions are deeply embedded in the wider environment and the habits and social norms of those around us'. (Hale 2010)

So, although values can support change, as MM implied, social norms can constrain the actions of individuals by suppressing difference. There were several examples in this research of how social norms were inhibiting change. In Stage 1, X talked about being regarded as 'potty' if he challenged conventional views on economic growth. In Stage 2 MM also mentioned the difficulty of going against social norms, saying he was seen as 'cranky' if he talked about his different views.

(MM) *'In a world or country where people still think changing the light bulb is about as much as they need to do to contribute, to do their bit for climate change, whatever, the idea that you might have a different social and economic system that is more integrated .....it's hard. When I have those conversations with people here, which I do, then that's seen as a little bit cranky'.*

SM provided an example of how social norms inhibited the potential for change in her organisation when she chose not to work with an environmental organisation on a joint bid for funding because of the negative perception of their 'difference'.

(SM) '(.....) *are lovely. They really are good and I know that their heart is in the right place, but they are seen by some the people here as nutcases..... it's peoples' perception of the ones who are dealing with green issues.*'

Overcoming SM's reluctance to engage with '*nutcases*' (a normative perception), could have lead to changes in behaviour if the bid had been successful. Successful change therefore, requires inhibiting tendencies, such as group norms, to be neutralised (Weick and Quinn 1999) but norms and values are not easy to change. MM was aware of the difficulty of getting people to engage with environmental issues. If they are not included in people's world views, i.e. not widespread in society, we can be reluctant to act.

(MM) 'I have personal values that mean for example, that I won't shop at Tesco...but trying to get other people that work here, you know supporting socially responsible businesses, people who are doing food and mood workshops, from their point of view... if your world view doesn't include those things then you're not going to bring it to your job either.'

The discussion around norms and values highlights another aspect of behaviour change - the importance of emotion in human decision making (Jackson 2005). Participants in this research became more engaged when the topics under discussion affected them emotionally, for example, ATV became animated when talking about people driving gas guzzling cars. She responded emotionally to gas guzzling cars because they didn't accord with her value framework and the emotional connection between gas guzzling cars and the sustainability agenda raised the importance of sustainability for her, thus increasing the likelihood of her changing her behaviour.

To conclude this section, understanding was a major barrier to change that had implications for the lack of relevance of sustainable development to the organisational mission. Other barriers included limited resources and capacity, increasing bureaucracy, a poor relationship between local government and the voluntary sector and strong social norms. Whereas norms can inhibit change, values can motivate change the next theme is recycling, an activity in which all participants engaged, and something which clearly highlights the influence of norms and values on behaviour.

5.3.3 Recycling

To better understand what sustainable development meant for participants, I asked about the activities in their organisations that they thought contributed to sustainable development. They all mentioned recycling. Some linked it to the values of frugality in the sector (SM) but for others it appeared to be almost a social norm (AM). Rather than an optional activity it seemed to be something they 'should' do.

(SM) '*We never throw anything away……I think most charities will be doing it*'.

(AM) '*I think all of us have felt that we should recycle. All of us have felt you should reduce waste…*'

Recycling could be seen as a success story in terms of behaviour change and exactly why it has become so widely accepted is outside the remit of this research. For most participants in this research it was clearly associated with their values around frugality and reducing waste – a valuative approach. For some stakeholders, like SSV and MSV, ex-service users, however, the benefits of recycling were more real. They understood how recycled clothes

and other household goods could save money for those facing financial difficulties and were keen recyclers themselves.

Recycling appears to be so successful because it combines a valuative element with a structuralist, self interested element, a combination, which, according to Dobson (2007), increases the chance of success. It does not explicitly contribute to the organisational mission and has few tangible benefits apart from the 'feel good' factor, but it is easy to do, and is supported by the Government through rules, regulation, policy and the provision of infrastructure.

There could be a downside to the success of this normative behaviour however. Participants in this research may recycle, not because it accords with their values or because there is infrastructure in place to make it easy, but because of the pressure to conform. Not behaving in accordance with the social norm could increase the chance of social exclusion (Buchs et al 2011, Smyth 2006, Azjen and Fishbein 1980). Furthermore, if recycling has become a social norm, this could inhibit further change. In a complex system, norms can bring the system to a standstill because they decrease the diversity that is an important source of novelty and adaptability (McDaniel and Driebe 2005, Cilliers 1998). Applied to behaviour change the normalisation of recycling reduces the need or desire to think of better ways of dealing with waste, such as not producing it in the first place, and in this way could inhibit further change towards a more sustainable future.

Apart from recycling, energy saving was another activity most participants talked about. As charities with limited resources, keeping costs down is important and reducing energy bills is one way to do this. Although saving money might be the main driver of action, participants were also aware of the environmental benefits of saving energy - an example of something N, in Stage 1, referred to as a co-benefit.

5.3.4 Co-benefits

Co-benefits or 'benefits recognition', are activities that result in social, personal, financial or material gain but also have side benefits (Hobson 2003, Middlemiss 2008). In relation to sustainable development these side benefits would relate to carbon reduction or other activities that support sustainability.

Participants were keenly aware that their organisations had to use their precious resources wisely in order to maintain their commitment to social justice through service delivery, and although they knew that saving energy was good for the environment, they were more interested in its financial benefits. It could reduce organisational costs and improve the management of their limited resources and saving money therefore, took priority over saving the environment.

(MM) '*The debate on the environment is such a broad one isn't it? I think one thing people definitely identify with.....partly because it hits their pockets, is issues around efficiency, energy efficiency.*'

However, for some, the co-benefits and how they could be applied to service users were not clear. AM's organisation, for example, advises clients about energy efficiency, but until his conversation with me he hadn't realised how this could also contribute to the carbon reduction agenda.

(AM) '*It's a win win isn't it? It's beneficial in terms of cost and it also means that you're not wasting the earth's resources ..... better for the environment and better for the bank balance.*'

Co-benefits not only highlight how environmental activities can contribute to social justice, thus increasing the relevance to the organisational mission, something participants are passionate about, they also incorporate a self interested rationale, such as saving money. AM's quote is an example of how engaging in conversation (with me) can change understanding and increase the potential for behaviour change, in AM's case by increasing his understanding of the relevance of environmental activities to the organisational mission. The promotion of energy efficiency has been recognised as a good entry point for non-environmental organisations because of its role in poverty alleviation and health (Barings 2010) suggesting that a better understanding of co-benefits could be important when trying to encourage behaviour change.

5.3.5 Enablers

Having looked at how a better understanding of co-benefits could be an enabler of behaviour change, this section looks at other factors participants felt would help them become more sustainable. These largely reflect the barriers identified earlier, for example, the provision of more resources, not only financial but staffing and expertise as well.

(SM) *'I'd like a member of staff who ... could go out and talk to people at their level, people who understand.'*

(CT) *'If you're going to drive this (environmental agenda) I basically need somebody here to spend time on it.... Send somebody to give us practical help....we haven't got an environmental champion - perhaps we need something from our central body'*

(TW) *'If we had a climate change champion in our organisation. I think we need somebody in the building who sort of, gets things organised and just raises it. A bit like, we've got fire wardens and it' part of their job ... a couple of hours a month or whatever....'*

(MM) *'Local government could provide advice as how to insulate our building – an insulation champion.'*

'Champions', representing somebody with the knowledge and expertise to help, was mentioned by three different participants, but it was not merely about having more staff, it was about having the right staff with the right skills. This raises the issue of knowledge and understanding. If sustainable development is not discussed inside organisations, as many participants implied, how can managers be sure they don't already have the expertise they need. CT, for example, had a staff member who was knowledgeable about environmental issues, but because it was never talked about within the organisation, this asset lay undiscovered.

As well as wanting 'champions', participants also felt more clarity and support from the Government would be an important enabler of change.

(TW) *'Some sort of fairly straightforward guidelines (from central government) so you knew what you were supposed to be aiming for and so on. I think that would help, and also from the local council as well, some kind of focus or some kind of economic imperative that you should do this, or that there are obvious benefits, whether financial or whatever.'*

The role of Government, local and national, in supporting behaviour change in the voluntary sector is more fully discussed in Section 5.3.8.

When talking about enablers of change, participants began to speculate about what they could do or would like to do if they had the resources. Interestingly many of the ideas demonstrated a better understanding of co-benefits than suggested earlier in the conversations, including:

(SM) *'Replacing everyone's (service users) fridge with low energy ones.'*

(CT) *'Somebody to go out with the carer and make people aware there are cheaper options – thinking creatively – it would be very nice if we could do that.'*

This suggests that the voluntary sector has the potential to be innovative and develop local responses to sustainable development, given the right support. It also reflects the benefit of engaging in conversation (increasing interaction in the system) as an enabler of change. Having conversations about sustainable development not only provides access to new information and ideas, it creates the space for participants to think about (reflect on) the issues in a way they may not have done previously.

It is also interesting to note that all the innovative ideas that emerged focussed on service users and the benefits of sustainable activities for service users, in contrast to views expressed, particularly by managers, that sustainable development was not relevant to service users. The next section highlights the views on promoting sustainability among service users, an important issue if the sector is to support the Government's agenda of promoting local sustainability.

5.3.6 Engagement with service users

When asked if sustainable development was something the sector should promote amongst service users, AM's comment sums up the general feelings.

'I think it (the sector) can take on that agenda and promote it amongst itself - it would be another step promoting it amongst service users.'

There were several reasons why it wasn't considered appropriate. Some saw a potential conflict between their mission of helping clients to save money and the extra cost of 'green' products.

(ATV) 'We wouldn't talk about Fair Trade (to clients who are struggling financially)'.

(SM) *'In a situation where you can't feed your children, are you really bothered that the coffee you're drinking is not Fair Trade? If you want to drink coffee you have to buy the cheapest crap that's available because that is all you can afford. Green issues go out of the way.'*

CT worried that the promotion of more expensive environmentally sustainable goods could increase feelings of marginalisation.

(CT) *'It's fine for people to eat free range chickens but actually .... you make people spend more money than they need to and of course, if you haven't got a lot of money to keep up with some of these agendas .....'*

RV, however, was more positive about raising awareness amongst service users, and when asked if she thought discussions around cost reduction and improved environmental performance would be appropriate to introduce into her classes she replied:

'Certainly, the language might be too challenging for some classes, but we cover aspects of heating and housing - the English way of life, settling in and useful tips about the practicalities of living, so it would be appropriate.'

TW raised a different issue. Her organisation had tried to engage service users by giving advice on home insulation but this had not been successful, in her opinion, because:

(TW) *'We didn't feel we had found the right way of getting through to them.'*

She was aware of the importance of good communication and that the provision of information alone was not enough to change behaviour. Practical support was also needed.

(TW) 'If we go out and we raise awareness, we've got to give people the means of doing something about it'.

However, it seemed that there was reluctance by the professional staff to engage service users because they had a perception that the issues were too difficult for service users to understand.

(TW) 'I think it is quite difficult now to get across to people that poor air quality doesn't necessarily have to look like a fog.... A lot of people don't make the link - you know, that poor air quality is doing something to the atmosphere, but we really don't know about it and its affects on health and so on'.

(SM) 'Certainly not our clients, the majority of them, purely and simply, because of lot of them are so busy just existing in the situation they are in that they can't think in a wider context'.

SM) *'(They) don't have the skills... even for something as ridiculous as coming here to do the allotment where people will actually help them. ..it's very difficult to get them to understand and to, sorry that sound patronising, to get them to take on board that this is something they should be considering.....or they choose not to ... they put a bill behind the clock because they can't deal with it at that moment in time.'*

The volunteer ex-service user, MSV, although supportive of charities themselves becoming more sustainable, and aware of things service users like herself could do that were good for

the environment, for example, turning lights off to save energy, recycling to reduce landfill, and washing on low temperature, when asked if she thought charities should promote sustainability among service users, adopted the view of the professional staff, implying that other service users would not be as interested as she was.

(MSV) '*For the volunteers and staff yes, but not the service users, because a lot of people won't know anything about it, won't be interested. If you put on people when they might not be interested... if someone came in and you said 'you've got to do this' or 'do this', 'you must recycle paper', I don't think the service users would like it because they don't come here for that.*'

RV, a volunteer, had a different view, acknowledging that she wasn't in a position to know what service users felt about these issues.

'Possibly - for all I know some of the immigrants may have skills in that area. It is not something I have done because I am only involved with those with limited language skills but some of them are engineers and educated people.'(RV)

The view of the other ex-service user, SSV, also differed from that of the professional staff. She was very aware of the personal benefits of becoming more sustainable, and was generally supportive of the idea of charities promoting sustainability amongst service users, as long as it didn't take up too much time. She said people didn't know enough about the issues, including those working in her organisation, because it was never discussed. Reflecting TW's concern about appropriate communication, she warned that that the message had to be appropriate and not '*thrust*' at clients inappropriately and suggested that posters in the consultation rooms or coffee mornings would be non-intrusive ways of bringing the issues to people's attention.

The difference in opinion between professional staff and other stakeholders suggests that although professional may staff claim to be speaking for their clients, there is a danger that they are operating from a position of assumed knowledge rather than listening to the views of their clients. This raises the issue of representation. Although the voluntary sector is designed to give voice to the voiceless, it is shaped by people in positions of relative power, usually educated workers, and representation can do violence to the subject of the representation because no one can speak for another without interpreting the words in their own way (Said 2004). Representation can be a tool for empowerment, but it can also be used to justify acceptance and reproduce existing social divisions and repression and

offers no basis of validity if it is not a true representation of those represented. Poulton (1999) highlights how professionals in the voluntary sector struggle to share knowledge and power with the people they serve. The possibility of misrepresentation of the views of service users by professional staff supports the need to include the voice of service users when discussing sustainability and to acknowledge that all voices need to be included in discussions about the future because '*ordinary people can speak knowledgably about the world*' (Agger 1991:121).

5.3.7 Networking, communication and the role of government

Engaging in conversation with MSV highlighted a significant issue for this research, that of latent or unrealised knowledge and the role of conversation in changing understanding. At the start of our conversation MSV commented that she didn't know much about environmental issues but as the conversation progressed, she realised she knew more than she thought. Talking about it helped her clarify the co-benefits of joining the allotment group, an environmental activity that had social, health and financial benefits for her - something she hadn't been aware of before.

(MSV) '*I really enjoyed talking about the issues. I do quite a lot to be green but wasn't aware of it. I also realise how good it is to talk about these issues. It helps you clarify things, realise what you are doing. You don't get much opportunity to talk about these things and it is very valuable. The environment is really important to me, something I didn't realise'.*

Lack of opportunity to talk about sustainable development, meant that MSV had not realised how important the environment was to her. Similarly lack of discussion in CT's organisation overlooked the knowledge they had within the organisation. This suggests that increasing opportunities to discuss sustainable development could be an important element of behaviour change. AM provided another example of how the cognitive restructuring that happens through engagement in conversation increases the potential for behaviour change. As we chatted about the co-benefits of saving energy, both for his organisation and for the environment, he came to see how this could also help service users – by saving energy they could reduce their debts. He could see how this could applying to their organisational practices

(AM) '*There would be more emphasis on advice to try and reduce expenditure in debt cases. That will also be good for the environment.'*

This supports the idea that increasing opportunities to discuss sustainable development (networking) increases the potential for behaviour change because in the process of engagement people question themselves and the reality they unconsciously subscribe to (Kuhn and Woog 2005, Mills 1993). Challenging their taken-for-granted assumptions in this way can lead to new insights as the unconscious is made conscious, as exemplified by MSV, who realised the benefits of sustainable behaviour not just for the polar bears but for herself as well.

This research found that there was little opportunity for networking or discussing sustainable development either within organisations or externally. SSV and TW said it was never talked about in their organisations. It was left to individuals to do what they could. CT also said it was never talked about because the environment wasn't on the organisational agenda and consequently, his organisation was unaware of a potential resource, a staff member with experience of environmental issues. Many voluntary organisations may have similar unknown skills that will remain under utilised if they don't have an opportunity to discuss sustainability in their organisations. This latent untapped knowledge could provide at no extra cost, the 'champions' participants suggested they needed to support sustainable activities.

MM understood the value of networking and social engagement and within his organisation actively tried to raise awareness of environmental issues, for example, by buying organic milk and initiating conversations about it. He also felt that the focus of individual organisations in the sector on their own narrow missions inhibited discussion of wider issues like the environment, and he recognised the need for the sector to start having discussions about the bigger picture.

(MM) *'I think the voluntary sector needs to see itself as part of a much bigger picture, as an extremely important part of the make up of society. There is a lot of overlap between what we do and the environment. It's very narrow minded to just....Ideally that would be a core part of it. It's just so important isn't it (the environmental agenda) it feels like it should be there'.*

As well as a lack of opportunities to discuss sustainable development internally, there was very little opportunity for the sector to engage with CC on this issue, despite CC's suggestion that CC wanted to work with the sector on the encouragement of sustainable behaviour.

Some participants suggested that the relationship between CC and the sector was part of the problem.

(SM speaking off the record) *'They (CC) say, well, we consulted with the community. They (CC) have an idea what they want to do and they will move heaven and earth to deliver that but in their way. They are very paternalistic. They believe that they can do everything better than anyone else and that the statutory sector is the only way that things can be done - more concerned with making sure that they have sufficient income to keep their own staff in jobs than really. They don't respect the Compact in any shape or form.... They re-invent the wheel... do things themselves when they could allocate money to voluntary organisations with the skills and expertise to do it.'*

The increasing burden of bureaucracy, associated with the need for accountability, could be making the situation worse. SM suggested that rather than the current stick and carrot approach from CC, which implies lack of trust, she would like to be trusted to develop ideas.

The comments from Stage 2 participants therefore, appear to confirm those from Organisation Y (Stage 1) who mentioned the lack of trust between CC and the sector and the perception that CC undervalued the knowledge and expertise in the voluntary sector. (Organisation Y was set up to support networking between the voluntary sector and CC, but was closed down due to funding cuts).

This difficult relationship could inhibit the joint working CC apparently aspired to achieve a more sustainable city, and this is supported by SM comments that she thought other cities were better at networking than CC because when visiting voluntary organisations in other cities she was aware that they seemed to be much more engaged in environmental activities.

For MM, this lack of wider engagement was not only a voluntary sector problem. He thought society in general, was very segmented and unconnected and that this could impact significantly on how we respond to the environment.

(MM) *'we are much less connected with each other, with our local environment with the food we eat .....our lives are so segmented. I have my home life, I have my friends, I have my work ... until we can start trying to bring those closer together'.*

These comments suggest that there is a need for to improve networking and engagement around sustainability both within the sector and more widely. Participants in this research expressed a desire for 'real engagement' between CC and the sector rather than the tokenistic approach that was hinted at in Stage 1, in relation the Carbon Reduction Plan and

by SM. TW thought it was tokenistic of CC to launch a pledge CC inviting people to sign up to changing their behaviour.

(TW) *'Although they (CC) keep saying they're going to push the climate change issue and have sort of awareness raising campaigns, I don't feel as though they've really got their act together well. It's alright pledging things but it's not going to actually change the climate is it?'*

The criticism and mistrust however, wasn't limited to local government, the way national Government communicated important issues like climate change was also criticised. The use of pledges to encourage behaviour change, for example, The Third Sector Declaration, was not appreciated, although MM and TW, were the only two participants who had heard of the EAC campaign. Is the lack of awareness of the Third Sector Declaration another example of ineffective communication?

(MM) talking about the Third Sector Declaration *'It's one of the things that really, I'm irritated by it because I feel that, just reading it, I feel it excludes people in some way .... an exercise in ticking boxes or something....Its all very well, you might sign a declaration but how do you get people to have some sort of sense of ownership or involvement in it ... if you're looking for an integrative approach .... then having a pile of policies that everybody hasn't read or a declaration someone has to sign - it feels horribly detached. I might agree with it at some level, but actually in terms of making tangible changes...changing people's attitudes then that's not going to do it. Probably something that targets peoples emotive feelings might be slightly better than just a lot of complicated terms and a declaration that people are not going to feel particularly ... identify with.'*

(TW) *'We did talk here about signing up to it and I don't know whether we signed up to it or not. I think there was something in it that made it more difficult to say we could do this or we could do that .... We didn't just want to sign up to something that didn't actually mean anything. You want to sign up to something you can do something about and we didn't feel as though there was anything that we could do in the way it was structured. You can make as many pledges and promises as you want, but if you're not following up with actions then you are not going to make a difference'.*

The approach of national government was also criticised for other reasons.

(SM) *'I truly believe that that global warming, it's not that it isn't going happen or it's not happening at the moment, but I don't think they are giving us the full truth and perhaps it's not quite as bad as they will have us believe.....* The *government are giving to people, don't use your car for 5 miles a week and it will cut down the emissions. Yes it will, but then you've got politicians driving two gas guzzling Jags whilst telling us to reduce our carbon.'*

MM thought that the issues around trust and credibility could be related to the hierarchical, top down, impersonal approach to communication from central government that acted as a constraint to change rather than encouraging it (McDaniel 2007).

(MM) '*The government is in this country.....It's a top down approach to try and get people to take on board important issues.... what attracts me is grass roots movements. My experience in terms of trying to change people's views and other people changing my views is that it's about the people you interact with every day. It's about your friends. It's about people you consciously or otherwise have respect for. Government can't just sit back and say 'we need to do ...'*

(MM) '*National governments, particularly this one, seem to think that they can throw large sums of money at problems and that will resolve it. It's about people's values and in the short term there's not a lot the council can do about that.*'

Lack of networking and meaningful, credible communication from and interaction with Government appear to be significant barriers when trying to encourage voluntary sector participation in behaviour change for sustainable development. Pledges in particular, were seen as remote, difficult to identify with and easily ignored, and the impersonal, one size fits all approach, was not seen as appropriate because it overlooked the diversity in the sector. Different voluntary organisations have different needs and approaches to encouraging sustainability need to reflect this diversity in a way that makes it applicable to each organisation, as AM suggested.

(AM) '*Its about specifics, relevant to us rather than a general thing for all.*'

Mitleton-Kelly (2011), in her study of two London hospitals, found that improving practice is context dependent and cannot be copied. Information has to be relevant and meaningful to the audience if it is to contribute to change. Thus emphasising the importance of communication that corresponds to the values of the situation in which decisions have to be made, when trying to encourage behaviour change (Cillers 1998, Wallis 2008, Wheatley 1994).

There were other indicators that communication and provision of information to support behaviour change in the voluntary sector needed to be improved: the limited awareness of the EAC campaign, the lack of knowledge participants had about CC policies around sustainable development and climate change. TW was the only participant who had vaguely heard of city's Carbon Reduction Plan but she didn't know what was in it. This is not because

they weren't interested, participants wanted to know more when I showed them copies of the policies that I had brought along.

If top down, paper based communication is not effective, how can the message be conveyed more effectively? When I showed AM a copy of the EAC pamphlet, he thought he remembered receiving it in the post, but had disregarded it as not relevant.

(AM) *'It's the jigsaw puzzle that rings a main bell. I may have seen this before, but it's not something I've been particularly into.'*

This raises another important issue about effective communication – history. If information is not immediately recognised as relevant or interesting is generally disregarded.

'Our own lives influence the way we perceive things (in the room). If something is of no interest to me I don't see it.' (Gaarder 1995:381)

If, however, shortly after my conversation with AM, a similar leaflet arrived in the post he would be more likely to read it and even act it on, as the topic would be familiar to him. Applying principles of complexity thinking, information that is not used fades away but the more something is used the stronger its representation in the memory (history). If a certain pattern of activity regularly appears an association will develop which increases the potential for change (Cilliers 1998:92). This suggests that if the Government wants the voluntary sector to support sustainable development, it will require more than a one off leaflet. AM supports this commenting that if he had been asked to draw up an environmental policy and an EAC leaflet had arrived at the same time, he might have taken more notice of it.

One way of raising the profile of sustainability would be for local government to insist that all organisations bidding for funds have an environmental policy, something CC told me they were considering but, at the time of the conversation, it was not a policy. It was also something some participants thought could be useful.

(SM) *'It would be an important issue to start to consider, if we had to have one (environment policy) to get funding.....If we have to have one in order to get funding ....we would have one(environmental policy). If they (funding bodies) did require one I am sure we could knock one up if needed.'*

AM's organisation however, had an environmental policy.

(AM) *'CC did ask whether we had an environmental policy and I guess that was the driver behind us developing an environmental policy... encouraging us to think about the issue.*

He didn't feel it had a lot of value.

(AM) 'It didn't make us change anything we did, but it made us write it down. You reflect on it and put it in some kind of order.....It is often the way with policies, that you actually do something but you don't necessarily have it written down as a written policy. So we just converted what were doing anyway into a written policy'.

MM also was dubious about the effectiveness of this approach – it could be merely another bureaucratic tick box. His organisation also had an environmental policy but it didn't necessarily lead to more sustainable behaviour. He commented that he was not sure when it was created or why, and if it served any purpose.

(MM) 'I'm not really sure that we're doing anything to promote sustainable forms of travel .... there is a policy implementation checklist and it shows that this so far, has been a bit of a paper exercise. We've written the policy, we can demonstrate we have a policy but actually to implement the policy somebody is supposed to be nominated as the champion ...I suspect that I'm the only person that's read it.'

Requiring an environmental policy as a condition for funding, therefore, could be seen as just another bureaucratic exercise that reflects what is already happening in the organisation rather than drive action. Although it may not guarantee behaviour change, it could however, increase the history in the system and this would increase the possibility of change in the future.

Another way of encouraging change, linked to the environment policy, was provided by MM, who had looked at their environmental policy in anticipation of my visit. He was *'minded to rework it'*. This is an example of how interaction can stimulate change.

(MM) *'I'm quite minded to do something with it actually. A report should be prepared and presented to trustees with recommendations for change - make it intrinsic into our values – it would be something service users would be more aware of .'*

Engaging the voluntary sector in behaviour change for sustainable development appears to require better networking internally and externally and more effective communication with government, locally and nationally.

'How people make sense of their worlds is critically important to their ability to function effectively'. (Weick 1995:29)

Increasing opportunities for networking, engagement and discussion between local stakeholders, CC and the voluntary sector could increase the understanding of the need for change, begin to build trust and develop more cooperative relationships between stakeholders. From a complexity perspective, encouraging networking increases the interaction and diversity in a system (Mitleton-Kelly 2003, Mihata 1997) which can lead to new understanding and potential changes in behaviour.

'*There are few influences more powerful than an individual's social network*'. (Gladwell 2000:165)

Social engagement can stimulate cognitive restructuring as participants gain new knowledge. These changes in understanding have the potential to lead to changes in behaviour (McDaniel 2007) and this was demonstrated by participants in this research. The next section will highlight the small changes in understanding that emerged as a result of engaging in conversation with me and how they could lead to changes in behaviour.

'*In a complex system transformation is achieved through a continuous process whereby changes individuals and groups that arise from individual and group learning experiences change the culture and behaviours of the organisations.*' (McMillan 2004: 74)

5.3.8. Emergence

In Stage 1 my engagement with participants reminded them of things they had forgotten to do, thus creating the potential for changes in behaviour. In stage 2, the changes were of a different nature:

- new or different understandings of the concept of sustainable development and its relevance to their organisation.
- interest in finding out more about sustainable development and requesting more information.
- suggestions of new behaviours or new ways of working.

New or Different Understanding

A N suggested in Stage 1 that you can clarify your understanding of what you can do for the environment by talking, MSV 's comments supported how engaging in conversation can lead to changes in understanding. After initially telling me that she didn't know much about the environment, by the end of the conversation she said that she realised she knew a lot more than she thought and that it was quite important to her.

CT also indicated initially that environmental issues weren't relevant because his organisation was too small to have an impact, but, like MSV, by the end of the conversation, he had changed his understanding. He realised that although his organisation was small, the sector as a whole was large and that working together they could have an impact.

(CT) *'The problem with the voluntary sector is that individually they're fairly small beer .... We're all very small. If you look at the Third Sector collectively it's big. If you look at it individually its small and I think that's probably the dilemma.....It's (environmental issues) probably one of the most important issues of our time.'*

CT's comments reflect MM's earlier criticism that voluntary organisations often focus too narrowly on their own mission and through engaging with CT became aware that his organisation was part of a bigger system and together the voluntary sector wasn't so insignificant. This new understanding led him to make changes in the organisation (changes in behaviour). He said he would put the environment on the Board agenda and add it to the annual plan – to raise its awareness in the organisation. He also thought about doing things like energy savings audits and these small actions would increase the sustainable behaviour of his organisation.

(CT) 'I'd certainly make them (the Board) aware of it (the CC Carbon Reduction Plan) and I'd read it. If there was anything obvious that we could do that we're not doing we'd look at it .....It would be something we could put on our year plan – even if we just talk about it.....We could do an office equipment review, energy saving audit, and re view transport arrangements.'

Other examples of changes in understanding include ATV's realisation that sustainable development has relevance for social justice, and AM's new awareness that saving energy could be a 'win win situation' for the organisation, for his clients and for the environment.

Requests for information as a result of engagement with me

My visit prompted both AM and MM to look at their environmental policies and consider improving or updating them. In organisation A, my interaction raised awareness of the environmental agenda and increased the potential for change, even before my visit.

(AM) *'Creating a better environmental policy would be a good outcome.'* (of my visit).

ATV commented on how my visit had made them engage with the policy and AM asked me for some templates to help them do this.

(ATV) 'The fact that you were coming and the fact that we had an environment policy, we talked about it.'

CT and SM also asked for information about environmental issues and I gave them copies of the Charity Commission guidance, the EAC leaflet and CC's carbon reduction strategy.

Potentially new ways of working – changes in behaviour (innovation)

As mentioned, both AM and MM decided to update their environmental policies, creating the potential for future changes in behaviour. Organisation T transports the elderly to luncheon clubs and as a result of my engagement with TW she came up with a new idea to engage with the luncheon clubs and raise awareness of sustainable, healthy food among stakeholders. She was also minded to create an environmental champion in their organisation to increase the awareness of sustainable issues, but aware that they would have to do it in a way that didn't require extra resource.

(TW) *'I think if we had a... climate change champion in our organisation, somebody in the building who, sort of, gets things organised, raises it a bit with people, a bit like.. fire wardens ... it's just a part of their job, a couple of hours a month or whatever.'*

MM had a similar idea about how to encourage sustainable behaviour without the availability of extra financial resources. He thought about using a volunteer to provide the needed human resource without the financial costs associated with a paid worker.

(MM) *'If it would be possible to get a volunteer to take that on I could try and recruit a volunteer specifically.'*

SSV appreciated the value of face to face networking as a way of encouraging learning and she thought it would be a good idea to initiate coffee mornings for service users to share information about environmental issues.

(SSV) 'They can find information from someone who has been through it.'

CT, as mentioned earlier, decided to put the environment on the Board agenda and think about carrying out an energy audit or a transport review but he also had ideas about how to spread the message amongst service users, if resources were available.

(CT) *'If we had the resources, it's great opportunity to for somebody to go out with the carer and .....'*

RV suggested that as a result of the conversation with me she might raise the issue of the water coolers and the use of plastic cups and she would certainly *'look to see if there are any environmental policies next time I am there – it would be good to know. There may be things going on that I don't know about.'*

The small changes listed above emerged as a result of my engagement with the participants and demonstrate how engaging in conversation creates the potential for behaviour change. As participants reflected on sustainable development in the course of the conversation, their understanding deepened and they began to reconsider its relevance for their organisations. Their suggestions of what they could potentially do provided evidence of how engaging this way can stimulate creativity/ innovation and new thinking.

'Environmental commitment cannot be assumed, but emerges from the frames and practices by which people make sense of their life'. (Georg and Fussel 2000:180)

This research was not designed as action research and although there is no intention to follow up to see if the suggested changes actually occur, even if they don't, increasing the history in the system has created the possibility that the participants in this research are more likely to respond to future government initiatives around sustainability.

5.4 Conclusion

The primary aim of this research was to explore the Government narrative around the potential of voluntary sector organisations to encourage behaviour change for sustainability in their local communities. From the stage 1 conversations it was clear that understanding was a significant factor that could influence behaviour change, and that confusion and lack of understanding could reduce the relevance of the issues and inhibit engagement.

Understanding was a significant issue for the Stage 2 participants who were generally unfamiliar with the term sustainable development, preferring the word 'green'. They found the various associated words and phrases like, environment and climate change added to the confusion because they did not see how environmental issues could have relevance for their social mission. Limited awareness of the link between degraded environments and the economic and social consequences for their local communities also acted as a barrier to engagement in behaviour change to support sustainable development.

Other barriers identified included lack of resource and capacity and increasing bureaucracy that was seen as taking up valuable staff time with little obvious benefit. The participants were generally distrustful of Government and felt it wasn't giving clear enough messages about the need for sustainability. They were also critical of the way the message was communicated through anodyne pledges and felt the increasing bureaucracy imposed on the sector detracted them from engaging with anything outside their core mission.

The limited opportunities for networking or discourse to develop an understanding of sustainable development (any information participants had about sustainable development was due to the personal interest of individuals) also inhibited the potential for change and the poor relationship between CC and the voluntary sector reduced opportunities for joint working, even though CC had expressed a desire to work with the sector around sustainability.

The role of social norms, values and emotion in behaviour change was also important for values based organisations and it was clear that for participants in this research, values were a key driver of their behaviour, whereas norms, unlike values, can inhibit change, as MM implied, when he talked about the difficulty of acting against strong social norms (Emirbayer 1997, Wagner-Tsukamoto 2008, McDaniel and Driebe 2005). This suggests that encouraging change in the voluntary sector needs to work within their value system and support those who want to challenge social norms.

When participants were asked what activities they engaged in that contributed to sustainable development, recycling and energy saving were the most common responses, but they were open about the fact that they did these things mainly because of the associated cost savings and had not considered how saving energy could also contribute to sustainability. This supports the earlier comment that understanding is an important influencer of behaviour change and suggests that developing a wider understanding could be a key driver of voluntary sector engagement in this agenda.

Although all participants appeared happy to promote sustainability within their organisations, the professional staff didn't feel it was something they should encourage amongst their service users. This highlighted an issue with representation and how the managers, those in power, can misrepresent the voices of their service users – those

without power. SSV, an ex-service user was, contrary to her manager's belief, very interested in and aware of environmental issues. RV, a volunteer also raised an interesting point that contrasts with the views of the professional staff – that she had limited understanding of the skills and knowledge of her service users. To overcome the potential for misrepresentation, this suggests that all stakeholders should be included in discussions around local sustainable development and their perceived lack of 'expertise' should not be dismissed. Ordinary people can speak intelligently about the world (Agger 1991).

A significant finding was that engaging with me appeared to change the participants' understanding of sustainable development and its relevance for their organisations. Meaning emerges and changes through social interaction and communication and in a co-creative process like conversation, agents retrospectively change their understanding. This revised sense making or cognitive restructuring can influence behaviour (Weick 1995:15).

'*Individual creation of meaning is producing and produced by the social context where past experience meets with present experience to shape the future*'. (Georg and Fussel 2000:177)

As participants in this research developed and changed their understanding they began to come up with ideas about what they could do to promote sustainable development (innovation) in their organisations. This supports the idea that discourse/conversation could be an effective way of increasing the engagement of the voluntary sector in the promotion of behaviour change to support local sustainability.

Discourse or conversation, as a form of social engagement, increases interaction, and in a complex system like human society, where behaviour is a product of interaction between agents and their environment and each agent co-constructs the future through the process of engagement, increasing conversation is a way of stimulating behaviour change that reflects the principles of complexity thinking (Stevens and Cox 2007).

It has been suggested that addressing sustainable development, a complex problem, requires a new approach (Voss et al 2006). The application of complexity thinking based on the encouragement of conversation, could provide this new way that would help us to think differently about the inter-related nature of our lives and recognise the interdependency between social, economic and environmental issues and the importance of sustaining the environment for the future (Mitleton-Kelly 2003, Stacey 2007).

Chapter 6 Voluntary Sector and Sustainable Development: to engage or not

'If we, as humans, try to take action in our favour without knowing how the overall system will adapt- like chopping down the rain forest – we set in motion a train of events that will likely come back and form a different pattern for us to adjust to, like a global climate change.' (Waldrop 1994:333 quoted in McMillan 2004:35)

6.1 Introduction

This chapter brings together the knowledge generated from Chapters 4 and 5 to address the first aim of this research: to explore the government narrative around the participation of urban non-environmental voluntary organisations in the promotion of sustainable behaviour change at a local level. The organisations that took part in this research did not appear to be fully engaged in this agenda but neither were they totally disengaged, suggesting that there is the potential for the sector to play a role in the promotion of local behaviour change if the circumstances support it. After highlighting the areas in which they were taking action and the barriers that were inhibiting further engagement I discuss the implications of these for voluntary sector participation in the government's agenda around the promotion of sustainable communities. The role of conversation as an enabler of change was a significant theme that emerged from the data and the potential of conversation to support behaviour change led to the second aim of this research – to understand if or how an approach to change based on the principles of complexity thinking could provide a way of encouraging voluntary sector participation in behaviour change at a local level. This is discussed in the following chapter.

6.1.1 Structure of chapter

To illuminate the attitudes to and the understanding of sustainable development and the need for behaviour change exhibited by the voluntary sector participants in this research, the data is presented under five major themes, four of which reflect the research questions highlighted below, and the fifth one relates to the potential of conversation to support behaviour change.

1. What do voluntary sector stakeholders understand about the current state of the natural environment and the effects of anthropogenic damage on society, including how it might affect their organisation, service users and community? (relationship between humans and the natural environment/understanding the implications of anthropocentric damage).

2. How is the concept of sustainable development and the need for behaviour change understood in the sector?
3. Do voluntary sector stakeholders consider that the sector has a role to play in the promotion of sustainable behaviour at a local level (including mitigating their own impact on the natural environment)? If so, how might they go about this and what support will they need?
4. Are there any barriers to the promotion of sustainable development?

Under each of the four major themes there are several sub-themes: the role of values and emotion in behaviour change, hierarchy, bureaucracy and social norms as inhibitors of change and the how representation can be a double edged sword that doesn't necessarily reflect the values of those being represented. These are important issues to be considered when trying to encourage voluntary sector participation in the promotion of sustainable development.

The fifth theme is around the potential of conversation to enable change. Conversation was the primary data gathering approach and this type of face to face engagement appear to encourage changes in the understanding of sustainable development amongst participants. The new understanding or cognitive restructuring that occurred increased the possibility of changes in behaviour, suggesting that creating opportunities (enabling environments) to discuss and reflect on sustainable development could offer a way of encouraging voluntary sector engagement in local behaviour change to support sustainable development, which is, as mentioned in the Introduction, the topic of the next chapter.

6.2 Voluntary sector interpretation of the sustainable development agenda and the need for behaviour change

6.2.1 Theme 1: Understanding the relationship with the natural environment

National government (represented by EAC - a Defra supported campaign) and local government (CC), although demonstrating an understanding of the interdependency between economic, social and environmental factors, appeared to take an anthropocentric approach to sustainable development based on shallow ecology and weak sustainability. They saw the natural environment as a resource to be protected because of its economic and social contribution to human welfare, but there was little explicit recognition of the systemic mutually dependent nature of the relationship between humans and the natural

environment. This perspective meant that they saw sustainable development as something that could be addressed in a linear way through the encouragement of relatively simple practical actions like turning off lights - first order change (Metzner 1995, Sterling 2004 Giradot et al 2001). Understanding the government approach to the natural environment is important because it affects how they engage with the voluntary sector on this issue.

The understanding demonstrated by the voluntary sector participants was varied. Many showed limited understanding or awareness of how changes in the natural environment could impact on their organisations, their service users or local communities, and the separation between environmental issues and social justice issues meant that tackling environmental problems, although seen as important by many on a personal level (a values based approach), was generally regarded as superfluous to the core mission of the organisation.

'Non-environmental voluntary sector organisations don't see the environment as part of their mission and therefore environmental activities are an add-on.' (Y)

Two participants however, (X and MM) were more aware of the interdependent relationship between humans and nature and appeared to take a strong sustainability perspective (deep ecology, systemic perspective). X for example, pointed out what he saw as a weakness of the linear, short term approach adopted by government that focused on short term fixes rather than deeper changes in thinking.

'The focus is on short term fixes (techno) and not necessarily about the core issues .....the focus of local government is short term - there is little acknowledgement of the big picture...' (X)

6.2.2 Theme 2: Understanding sustainable development and the need for behaviour change

Sustainable development, as indicated in the Literature Review, has at least 70 different definitions and suffers from confusion around both language and concept (Lozano 2008, Gladwin et al 1995, Smyth 2006, Redclift 1987). Other words and phrases, such as environment or climate change, add to the confusion and this was reflected in the participants' responses.

The phrase sustainable development was unfamiliar to many, and the word sustainability was associated with organisational or financial sustainability rather than environmental sustainability.

RV linked it with the environment but did not associate it with social issues *'not overusing resources, not exploiting the environment unnecessarily and being able to maintain the business or activity in an affordable or sustainable way'*.

Other words, like 'environment', 'green', or 'climate change' were more familiar, and many participants preferred to use the word 'green', but this was problematic because 'green' issues were not seen as having any relevance for organisations with a social mission.

(ATV) *'It wouldn't really have come to mind - sustainable development in relation to social justice? ...I have not really heard of it before. It's the first time I've heard that one. Social justice.... is something we do every day, but thinking about it in relation to green issues, I haven't made that link.'*

MM and TW were the only two who understood sustainable development and felt that their organisations should be committed to environmental goals because they had an awareness of social implications of environmental problems, MM because of his personal value system, and TW because her organisation had some involvement in monitoring air pollution. Because most could not immediately link sustainable development with their social values, about which they were passionate, they considered sustainable development as 'something nice to do' rather than something they should seriously consider that could benefit their service users and the local community. At an organisational level therefore, the need for behaviour change to support sustainable development lacked relevance and was not readily translated into organisational behaviour even though, at a personal level, all participants expressed some awareness of the need to save energy or recycle (weak sustainability) because it appealed to their personal values.

(SM) 'As an individual you do your own little bit at home. As an organisation we do our little bit here ....I don't really think that we (the organisation) do consider the environment'.

'Green' issues were also associated with negative connotations for some. Y, for example, thought 'being green' could potentially *'get in the way of'* the primary mission, AM associated it with increased costs and CT worried that a focus on 'green' issues would increase the marginalisation of already marginalised service users.

Climate change was familiar to all, but it was seen as too big an issue for small organisations to consider (CT) and the controversy surrounding it appeared to dilute the need for change (Hawken 1993, Smyth 2006, Weick 1984).

(SM) *'I think it is a load of crap. We all have to be socially responsible to make sure we don't do anything that is really bad but I think our impact is so minimal when you have people like America guzzling all this carbon emission out. What we are trying to do is only a small pinprick.'*

(ATV) *'There is too much conflicting information. My husband for instance thinks it is a load of rubbish. While ever there is conflict, doing something about it is going to be difficult.'*

Language plays an important role in understanding (Wallis 2008) and it was clear that the language surrounding sustainable development created confusion and reduced its relevance for the urban, non-environmental organisations in this research.

(Y) *'If it is not seen as relevant, it is not something that will be supported or encouraged and may be seen as a drain on the organisation.'*

The meaning of an object or concept to an individual however, is not only connected with language. It is dependent on the discourses they engage in (Richardson and St Pierre 2008) and Dobson (2010) believes that better public knowledge is a requirement for behaviour change. Participants in this research had limited knowledge of sustainable development and there was little evidence of opportunities to increase their knowledge. My engagement with many participants was the first time many of them had had an opportunity to discuss or consider sustainable development in their organisation. Engaging in conversation with me created the space for participants to think about the relationship between humans and the natural environment and as they began to reassess their understanding of how changes in the natural environment could impact on their organisation and stakeholders (social implications) this new awareness raised the relevance of sustainable development and in some cases, led to small changes in behaviour. CT for example, although initially indicating that he didn't see the environment as high on the agenda, decided to add it to the Board agenda and include it in the annual plan.

(CT) *'It would be something we could put on our year plan – even if we just talk about it. We could do an office equipment review, energy saving audit, and re view transport arrangements.'*

A key finding is therefore, that although sustainable development was an issue that initially participants found hard to identify with, the social learning that occurred as an outcome of engaging in conversation with me supported the emergence of new meaning (cognitive restructuring). Changes in understanding can increase the potential for changes in behaviour (Weick, 1995, 2005, Garcia-Lorenzo and Mitleton-Kelly 2003) as CT's response

(outlined above) demonstrates. This supports the suggestion that the creation of opportunities for dialogue and discourse (enabling environments or knowledge spaces) around sustainable development will promote social learning and the resulting changes in understanding could lead to changes in behaviour as participants re-assess the relevance of environmental problems for their service users and communities – make the link between social and environmental issues).

6.2.3 Theme 3: Role of the voluntary sector in supporting sustainable behaviour

As suggested earlier, even though encouraging sustainable behaviour was largely dismissed as something 'nice to do' rather than something core to the organisational mission, all participants mentioned some 'green' activities that were happening in their organisations. Recycling was widely supported, even though it had no apparent relevance to the organisational mission and provided no tangible value to the organisation. It appeared to appeal to the ethos of the sector, perhaps tied in with the values in the sector around not wasting resources. (ATV) *'We wouldn't want to be seen as a wasteful organisation.'*

Another reason recycling was so widely supported could be linked to the structural support provided by government through the provision of recycling bins and collection facilities (structural or first order approach). The success of recycling therefore could be because it combines valuative (second order) change and structural (first order) change, as per Dobson's environmental citizenship (2007).

Although the widespread support for recycling in the sector should be welcomed, its popularity could have a downside in terms of future sustainable behaviour. As indicated by the use of the word '*should*' by some participants, recycling appeared to have taken on the status of a social norm – something that ought to be done.

(AM) '*I think all of us have felt that we should recycle. All of us have felt you should reduce waste...*'

Social norms are values that have become fixed and are no longer open to re-negotiation. They are evaluative, obligatory and constraining and establish rules of behaviour, sustained through shame or embarrassment (Elias 1939, Stacey 2007, Georg and Fussell 2000, Emirbayer 1997). Unlike values, which can motivate change because they specify what is

important, social norms can suppress change because of the threat of social sanctions, exclusion and marginalisation for those that transgress them (Joas 2000). Both X in Stage 1 and MM in stage 2 gave examples of how social norms can inhibit change, suggesting that they were seen as *'cranky'* or *'potty'* if they talked about anything outside the norm. Social norms therefore, inhibit change and discourage acting differently (new behaviours). The creation of a social norm around recycling could similarly inhibit further change by removing the need to think about better or different ways of addressing waste (reduce the need for innovation), for example, by reducing the amount of waste generated in the first place. Therefore, although the widespread adoption of recycling as a social norm could have short term benefits for sustainable development, in the longer term the inertia generated could inhibit the innovation needed for a sustainable future (Weick and Quinn 1999). SM provided an example of the how the inertia associated with social norms can inhibit change when she declined to work on a new project with an environmental organisation because of her normative perception of them as *'nutcases'*.

Another activity participants reported that they associated with sustainable behaviour was saving energy. All organisations were interested in saving energy even though most admitted they were more concerned with the financial benefits for the organisation than how it contributed to the sustainable development agenda.

(SM) *'As I have said before we do our utmost to try and reduce the carbon footprint, but we are more interested in where it can actually save the charity money.'*

This highlights the need to improve awareness of the co-benefits of sustainable development. Co-benefits are activities that result in social, personal, financial or material gain and have other beneficial effects (Hobson 2003, Middlemiss 2008). For cash strapped organisations, struggling to secure the resources for their core mission, if they can see how an activity that reduces their carbon footprint also saves them money, they are more likely to engage in it. In a similar way that engaging in conversation with me helped participants develop their understanding of sustainable development, engaging in conversation with me also helped them realise the potential co-benefits associated with some of their activities, as exemplified by AM's comment.

(AM) *'It's a win win isn't it? It's beneficial in terms of cost and it also means that you're not wasting the earth's resources ..... better for the environment and better for our bank balance.'*

Contributing to sustainable development by saving energy or recycling was not seen as problematic but there was a mixed response when participants were asked what they felt about encouraging sustainable behaviour amongst their stakeholders and service users. X and Y from stage 1 thought it could be relevant and saw no reason why it shouldn't be encouraged, although Y had reservations that it might not always be appropriate and could *'get in the way'*.

(Y) *'Most of the time people are responding to a need..... Has environment got anything to help these people get out the situations they are in? If the environment can help, great, the two will meet, but there might be times when trying to do that can just be seen as getting in the way or making it more difficult.'*

The professional staff from Stage 2, with the exception of MM, however, were less clear about the relevance of sustainable development for service users and thought it was not an appropriate or relevant issue to encourage.

(AM) *'I think it (the sector) can take on that agenda and promote it amongst itself - it would be another step promoting it amongst service users.*

(SM) *'In a situation where you can't feed your children, are you really bothered that the coffee you're drinking is not Fair Trade? If you want to drink coffee you have to buy the cheapest crap that's available because that is all you can afford. Green issues go out of the way.'*

(TW) 'I think it is quite difficult now to get across to people that poor air quality doesn't necessarily have to look like a fog.... A lot of people don't make the link - you know, that poor air quality is doing something to the atmosphere.'

The reluctance to engage with service users around sustainable development seemed to be linked with a paternalistic attitude that service users would not have the interest, knowledge or skills to consider sustainability.

(SM) '(service users) *don't have the skills... even for something as ridiculous as coming here to do the allotment where people will actually help them. ..it's very difficult to get them to understand and to, sorry that sound patronising, to get them to take on board that this is something they should be considering.....or they choose not to ... they put a bill behind the clock because they can't deal with it at that moment in time.'*

Those not in professional roles took a different view. RV, for example, a volunteer, acknowledged that she wasn't in a position to know what service users knew or felt about these issues.

(RV) 'For all I know some of the immigrants may have skills in that area (sustainability). It is not something I have done because I am only involved with those with limited language skills but some of them are engineers and educated people.'

SSV, an ex-service user herself, was interested in environmental issues and engaged in recycling and saving energy, primarily for the self-interested rational reason of saving money, but also because she felt strongly that it was wrong to waste resources – a valuative stance. She was therefore aware of the potential co-benefits of engaging in environmentally sustainable behaviour and was generally supportive of the idea of charities becoming more environmentally friendly and encouraging behaviour change in service users, as long as it was done sensitively, and not '*thrust upon them inappropriately*'.

The difference between the perceptions of professional staff about what is relevant for service users and what service users themselves feel, raises the issue of representation and how the voluntary sector, although designed to give voice to the voiceless, can do violence to the subjects they represent because of the way they interpret the situation (Said 2004). This research found that some in the voluntary sector although acting with good intent, appeared to be operating from a position of assumed knowledge rather than listening to the views of their clients. They were not acknowledging the ability of ordinary people to speak knowledgeably about the world without the need for experts to talk for them (Agger 1991). Representation can therefore be a tool for empowerment, or it can be used to justify acceptance and reproduce existing social divisions and voluntary sector practitioners need to be aware of protectionism which works against the sharing of information and power with service users (Poulton 1999). Although some professional staff in this research may have felt they were furthering the social mission of their organisation and helping those in need, their misrepresentation could be doing harm to those represented because the effects of unsustainable development are likely to hit the poorest hardest (ESRC 2009) and they need to have an opportunity to engage in the debates about sustainability. The potential for misrepresentation suggests that any decisions about the appropriateness, or

not, of promoting behaviour change for sustainable development should include the voices of all stakeholders including those of service users.

6.2.4 Theme 4: Barriers to the promotion of sustainable development

The fourth theme is around the barriers to the promotion of behaviour change to support sustainable development. The interpretation and understanding of sustainable development has already been highlighted as barrier to change as limited understanding of the topic reduced its relevance for organisations with a social mission, but there were other factors that mitigated against voluntary sector engagement in the promotion of sustainable behaviour. These included:

- funding and staff capacity
- other priorities (linked to relevance to the social mission)
- lack of support from government (training and information)
- increased bureaucracy
- hierarchical relationships
- lack of trust between government and the voluntary sector

All participants talked about their lack of funding and capacity, implying that they were too busy carrying out their core mission (other priorities) and didn't have the funding or capacity to consider the environment – reinforcing the fact that it is seen as something *'nice to do'* but not core.

(TW) *'Any money that comes in obviously gets ploughed into the work we do – we're a non-profit organisation so you always have to be really aware of costs.'*

(MM) *'Is that (environment) a priority when I've got a million and one other things*?'

Lack of support and guidance from CC was highlighted as another reason the voluntary sector didn't engage in sustainable behaviour. CC had indicated to me that they were considering stricter environmental reporting requirements, to as guidance for the sector, but this hadn't happened at the time of my research. However, although participants suggested that they wanted more support from government, local and national, they were critical of a policy that would require all organisations bidding for funds to have an environmental policy. This could be seen as a linear response to a complex problem. Participants highlighted how a simple response like reporting requirements (form filling and ticking boxes) did not necessarily guarantee change and could create further problems

(second order problems) by increasing bureaucracy, something all participants in this research criticised as a barrier to change because it is ineffective, time consuming and resource intensive.

(CT) *'All bureaucracies are very good at producing papers .... it's the rollout that's the hard bit.'*

(MM) *'We've written the policy. We can demonstrate we have a policy but actually to implement the policy somebody is supposed to be nominated as the champion .....I suspect that I'm the only person that's read it.'*

Bureaucracy is a form of control linked to accountability. It diverts staff time on externally set goals rather than an internally driven agenda (Weick and Quinn 1999) and doesn't guarantee action. Apparently simple solutions like the requirement for an environmental policy could therefore ultimately inhibit change because the increase in bureaucracy would reduce staff time available to spend on activities that could promote sustainability.

MM *'(It) feels a bit like its missing the point really. When you suddenly find you've got another 50 policies that you didn't have before, somehow you've got to get everybody to at least read them and understand them.'*

Another barrier to change was the hierarchical relationship between CC and the voluntary sector and the top down approach of national government. Most organisations in this study received some of their funding from CC and many participants (SM, MM, N,Y) thought the paternalistic, top down, hierarchical approach of CC contributed to a lack of trust between themselves and CC. They felt CC didn't trust the sector and undervalued their knowledge and expertise – in a similar way to the paternalistic approach of some professional staff to their service users.

(N) *'There has always been that question there from the City Council about what the voluntary sector can contribute and the evidence.'*

SM's comment demonstrates how the reporting demands imposed by CC were eroding the trust between the sectors and thus reducing the possibility of working together.

(SM) *'LA (CC) gives us 8% of our funding but they ask us for more information than people who give us £150,000.'*

It was clear that the barriers to change were complex, interrelated and multidimensional as for the example, is the link between hierarchical relationships and lack of trust or the need for accountability and its association with increasing bureaucracy.

In this analysis so far I have deconstructed the government narrative that the voluntary sector can mobilise for behaviour change at local level and contribute to the development of more sustainable communities by identifying some important themes that underlie this assumption. What was clear to me was that many of the issues raised appeared to be problematic because of the linear way we look at the world and I will now summarise the themes, highlighting how a systemic perspective could change the situation.

The first theme highlighted was the limited understanding of the relationship between humans and the natural environment and how this reduced the need for change. Most participants, except MM and X, had not given much thought to the impact of their organisational activities on the natural environment, nor had they considered how changes in the natural environment could impact on their organisations, service users or local communities. Natural systems are not linear and current environmental problems are said to have arisen in part, because of our tendency to understand the world from a linear perspective rather than as an interdependent, adaptive system (Borland 2009:560, Hutchins 2012, Sterling 2003). Therefore, because participants were unaware of the systemic nature of natural systems and their co-creative role in shaping the world they did not consider environmental issues to have relevance for social justice.

The next theme was around the understanding and awareness of sustainable development and the need for behaviour change. Language plays an important role in understanding (Wallis 2008) and sustainable development, which explicitly links social, environmental and economic issues, was generally not well understood as most participants saw the environment as something outside their core social mission. The disconnect led to fears that engaging in environmental activities would have a detrimental impact on organisational performance and the multiple words and phrases associated with sustainable development only increased the confusion and reduced the need to act. As above, the lack of systemic understanding of the dependency between social, environmental and economic issue could be linked to the dominance of linear thinking. Linear thinking could also be responsible for

most participants being unaware of the possibility of co-benefits (apart from saving energy) and how engaging in sustainable behaviour could have wider benefits for the organisation and its stakeholders.

Theme three looked at the role of the sector in promoting sustainable behaviour. It examined the activities of the participating organisations that could be seen as contributing to sustainable development and explored perceptions around engaging stakeholders in behaviour change. Many participants engaged in sustainable behaviour on a personal level and all organisations recycled and tried to save energy. The wide acceptance of recycling highlighted a sub-theme around the role of norms and values in supporting or inhibiting behaviour change and raised the importance of emotion (associated with values) in behaviour change. However, despite supporting sustainable behaviour on a personal level and encouraging recycling and energy saving in their organisations, many of the professional staff did not think it appropriate to promote sustainable behaviour amongst service users. Others however, including SSV, an ex-service user, held a different view, and this raises another sub-theme, the potential for mis-representation by professional staff. It highlights the need to acknowledge the distorting influence of power and control and reinforces the importance of including all stakeholders in discussions around the creation of sustainable communities (Smyth 2006) - an inclusive, non-hierarchical perspective that reflects the principles of complexity thinking – a systemic approach.

The fourth theme was around the barriers to change that participants identified. These included the restrictive, short term funding of the sector that inhibited action on activities outside the core mission, a reductive, linear approach that focuses on single issues at a time, and how the need for accountability and increasing bureaucracy simple activities associated with linear approaches to change, created a lack of trust between the sectors and reduced the possibility of joint working. Many participants were critical of the hierarchical approach of CC and the overall approach taken by national government.

(MM) '*The government is in this country.....It's a top down approach to try and get people to take on board important issues.... what attracts me is grass roots movements. My experience in terms of trying to change people's views and other people changing my views is that it's about the people you interact with every day. It's about your friends. It's about people you consciously or otherwise have respect for.*

As MM suggests, face to face engagement (non-linear) may be more important in changing opinions and behaviour than the linear top down approaches that currently dominate.

Poor communication between government, local and national and the sector was highlighted as problematic, but this research also found that internal communication was no better. Sustainable development or 'green' issues were rarely discussed internally within the organisations (SSV, TW, CT, RV) because as TW explained, time pressures meant they only talked about specific core projects.

(TW) '*We're usually on about, you know, specific issues to do with that particular job or whatever'.*

Overall, therefore, there was a lack of networking and information sharing internally and externally around sustainable development and this could be a significant factor in its perception as an issue that lacks relevance for the sector, something N highlighted.

(N) '*We need more networking in VCF sector around low carbon ambition.'*

The above four key themes provide an overview of the issues that potentially restrict the engagement of non-environmental voluntary organisations in the government's agenda to promote sustainable behaviour at a local level and highlight how linear perspectives contribute to some of the problems and how simplistic, linear solutions can lead to unintended consequences, such as increasing bureaucracy or lack of trust, that further reduce the ability of the sector to engage in behaviour change. As MM and N above suggest, however, networking and interacting with others – creating relationships, could offer a way to overcome these problems. Unlike linear perspectives which do not acknowledge the collective or social nature of learning, interacting with others is a non-linear process that can stimulate cognitive restructuring and lead to changes in behaviour, something that emerged as a result of my engagement with participants. The product of interaction is more than the sum of the constituent parts and conversation, a dialectic process of knowledge sharing (Feldman 1999), can help people recognise differing perspectives (cognitive restructuring) and challenge assumptions, power and meta-narratives (Kuhn and Woog 2005). Coming together to share information takes a systemic perspective as the interactions and ideas flowing round the system stimulate creativity and innovation and increase the capacity to generate new meaning and knowledge (Mihata 1997, Cilliers 1998, McMillan 2004, Stacey

2007, Johnson 2009, Mitleton-Kelly 2003, Macmillan 2004). New patterns or structures arising from interactive local level processes can as MM suggested, be an effective way of changing understanding that can potentially lead to changes in behaviour and the ability of conversation to stimulate behaviour change is the fifth theme discussed in this chapter.

6.3 Theme 5: Conversation as an enabler of change

As discussed in chapter 3, conversation was used as the data gathering approach for this research and, although not designed explicitly to encourage behaviour change, as a result of engaging in conversation with me, participants demonstrated small changes in understanding and came up with new ideas (innovations) about how they could promote sustainable development – behaviour changes.

My engagement with X and Y prompted them to do things they had forgotten: X remembered his intention to carry out a transport audit and Y was reminded that the environment had dropped off their monthly agenda. MM was minded to rework the environment policy, TW thought about making links with a voluntary organisation that supports healthy eating to increase the understanding in her service users of the connection between their health and the natural environment, and CT completely changed his perception of the importance of environmental issues to his organisation and decided it needed to be added to the board agenda.

(CT) It's (environmental issues) probably one of the most important issues of our time.'

Not only did he indicate he would add it to the board agenda, he also provided an example of how conversation can increase the potential for innovative behaviour by suggesting sending someone out with the carers to '*make people aware there are cheaper options - thinking creatively - it would be nice if we could do it'.* Just having an opportunity to talk about sustainable development produced another outcome for CT's organisation – the discovery of a previously unknown internal resource, a staff member with extensive knowledge of environmental issues. If environmental issues are included on the board agenda in future, this staff member could be a valuable asset and help the organisation achieve their aims, an asset that would not be known about if CT had not engaged in conversation with me.

The above are examples of how face to face communication (engaging in conversation) resulted in new understanding and how this new knowledge has the potential to change behaviour. It must be noted that there is no guarantee these changes will but occur but a concrete example of behaviour change did occur a few weeks after my conversation with MM. MM phoned to let me know he had put in a bid with an outside organisation to develop an environmental project, something he might not have done had he not engaged with me. This suggests that even if the changes are not immediate, conversation sews the seeds of future change by creating history in the system. In complex systems the past is co-responsible for the present and self-organisation or co-evolution is impossible without some form of memory or history (Cillers 1998). My engagement raised the profile of sustainable development and created history in all the organisations I engaged with thus increasing the possibility of future behaviour changes. The examples from this research demonstrate how conversation can be a powerful change intervention by stimulating social learning (Barrett et al 1995, Dixon 1997).

'The most basic mechanism of acquiring new information that leads to cognitive restructuring is to discover in a conversational process that the interpretation that someone else puts on a concept is different from one's own'. (Schein 1996:31)

The comment below, by MSV, a volunteer and ex-service user, who initially said that she didn't think she knew much about the environment, eloquently sums up the benefits of conversation as a way of increasing engagement and stimulating learning.

'I really enjoyed talking about the issues. I do quite a lot to be green but wasn't aware of it. I also realise how good it is to talk about these issues. It helps you clarify things, realise what you are doing. You don't get much opportunity to talk about these things and it is very valuable. The environment is really important to me, something I didn't realise'.

The ability of conversation or the creation of shared contexts where individuals interact with each other is significant when thinking about how to encourage behaviour change. The type of learning that occurs is based on a systemic perspective in which knowledge is regarded as dynamic, generative and emergent, intrinsically social in nature and generated through shared social interaction (Garcia-Lorenzo et al 2003). This is very different from the traditional linear view, dominant in many organisations (machine metaphor), which sees knowledge as a possession of the organisation to be managed through formalised rules and controls that simplify it to achieve predictability (Morgan 1986).

The government's approach to encouraging behaviour change, adopted by the EAC programme, could be described as a traditional linear approach where key infrastructure voluntary sector organisations were supported to cascade knowledge downwards, in the hope that receiving organisations would act on this new knowledge – a linear progression. It adopted the principle that the provision of knowledge through a series of simple actions or formalised rules applicable to all organisations would stimulate change. However, many participants in this research had not heard of the EAC programme, and one of the local EAC trained champions, (N), reported that she had had *'zilch response'* for help from local voluntary organisations, suggesting the message wasn't getting through. When I informed participants in this research of the EAC campaign they immediately criticised it for being top down, bureaucratic and based on the flawed assumption that the provision of information is sufficient to encourage behaviour change.

(MM) *'It's one of the things that really, I'm irritated by it because I feel that just reading it, (Third Sector Declaration) I feel it excludes people in some way .... an exercise in ticking boxes or something.....Its all very well, you might sign a declaration but how do you get people to have some sort of sense of ownership or involvement in it ... if you're looking for an integrative approach .... then having a pile of policies that everybody hasn't read or a declaration someone has to sign - it feels horribly detached. I might agree with it at some level, but actually in terms of making tangible changes...changing people's attitudes then that's not going to do it.'*

This criticism of the EAC approach appears to support the idea that bringing the voluntary sector on board to encourage behaviour change and local sustainability will need a new approach, one that moves away from top down, linear cause and effect relationships (Voss et al 2006, Kemp and Loorbach 2006, Blewitt 2010). In my analysis of the themes that emerged from my conversations, outlined in this chapter, I have tried to demonstrate how a different approach, a systemic approach, could be a more effective way of encouraging participation in local behaviour change because it can increase understand the multiple interrelated nature of the issues and thus avoid second order problems like increasing bureaucracy. As conversation, a non-linear interaction, has the potential to support behaviour change, I suggest that the creation of knowledge spaces (CoPs) at a local level to encourage interaction and communication between different stakeholders could be an effective approach that would raise awareness, increase knowledge and understanding and potentially stimulate innovation and behaviour change. Furthermore, there are features of

this approach, namely that it is local, inclusive and non-hierarchical, that may be more attractive to the voluntary sector than traditional approaches and this may encourage their engagement in the promotion of sustainable behaviour in ways that they have not previously engaged.

*'Strategies for sustainability need to be both top down and bottom up, ethically grounded in a language comprehensible to whatever the organisational level or geographical locality people find themselves living and working in.' (*Cairns 2004:2)

As Cairns suggests, behaviour change for sustainability needs to be locally specific and involve top down and bottom involvement and I suggest that CoPs offer a forward looking, adaptive, systemic approach based on multi-actor governance that focuses on strengthening community based management and nurturing learning to encourage change.

6.4 Conclusion

This chapter brought together the knowledge generated from Chapters 4 and 5 to address the initial aim of this research - to explore the Government narrative around the potential of the voluntary sector to engage in the promotion of sustainable behaviour and contribute to local sustainability. There was limited engagement in this agenda by participants from the urban non-environmental organisations in this research. The reasons for non-engagement were complex and interrelated but many of them could be linked to the dominant linear perspective that reduced the ability of participants to understand the complex nature of the issues and the consequent need for behaviour change. Examples of this limited understanding include a lack of awareness of the potential impact of environmental damage on society and their stakeholders and limited recognition of the link between to social and environmental issues, which led to sustainable development lacking relevance and therefore not something financially constrained organisations with a social mission should consider. Other factors inhibiting involvement in the sustainability agenda were around increasingly bureaucratic processes, the hierarchical approach of government, local and national, and poor communication between all stakeholders in the city.

This knowledge could be useful for government when formulating policies around voluntary sector engagement in sustainable development, but it must be noted that the small sample in this research cannot be taken as representative of all non-environmental voluntary

organisations and further research will be needed to see if these findings resonate with other non-environmental voluntary organisations in other areas.

Although this knowledge may be useful, social problems like sustainable development are complex and multi-dimensional, and involve social cultural, physical, technical, economic and political dimensions. As well as understanding there is a need to develop a different way of overcoming the barriers to change and encouraging participation because linear approaches do not seem adequate when tackling complex social problems and can lead to further problems (Mitleton-Kelly 2011). This type of problem could be better addressed using an approach that recognises the systemic nature of the issues and as found in this research, conversation, as a non-linear, co-creative process that stimulates social learning, has the potential to support behaviour change in a way that recognises and encourages systemic thinking. The creation of enabling environments or knowledge spaces that stimulate interaction through conversation could therefore, provide a different way of meeting the government's aspirations to engage the voluntary sector in the sustainability agenda. An enabling environment is a space of possibility. It does not attempt to control change through formalised command and control structures to achieve predictable outcomes but creates an environment that builds relationships and facilitates local autonomy and self-organisation through the encouragement of distributed intelligence and distributed responsibility (Mitleton-Kelly 2011). This approach could be more attractive to the voluntary sector that is critical of the current top-down approach of government. There is also evidence that rather than being told what to do – command and control approach, participative approaches to decision making bring about improved organisational performance and that organisations with active networks are able deal with knowledge more effectively (McDaniel 2007). This is because networking allows better access to additional intellectual resources (Garcia-Lorenzo et al 2003).

Communities of Practice (CoPs) Lave and Wenger (1991), a type of social engagement that uses discourse, debate and conversation to stimulate social learning or cognitive restructuring, could therefore provide an effective vehicle to support voluntary sector participation in the promotion of behaviour change for sustainable development at a local level and this will be explored more fully in the next chapter.

Chapter 7 Seeing the World Anew – contribution to practice

'No problem can be solved from the same consciousness that created it. We have to learn to see the world anew'. (http://www.einsteinquotes.com/ThinkingKnowledge.html)

7.1 Introduction

Following on from the discussion in the previous chapter, this chapter examines the potential of an approach to behaviour change based on the creation of local CoPs as a way of encouraging voluntary sector engagement in the promotion of sustainable development. CoPs are a form of social engagement that support social learning and encourage cognitive restructuring which can lead to behaviour change (Garvey et al 2009) and as a form on non-linear interaction could be said to reflect the principles of complexity thinking– a systemic approach that acknowledges the dynamic interdependencies in the world in which we live. This chapter therefore addresses the second aim of this research – to examine if or how complexity thinking could provide a different framework for addressing complex multi-dimensional, social problems like sustainable development in a way that would encourage voluntary sector participation in this agenda and overcome the barriers to engagement highlighted in this research.

This approach appears to have many advantages, not least that social engagement has been found to be a significant factor in encouraging pro-environmental behaviour change (Middlemiss 2009) and the lack of evidence of social engagement or networking around sustainable development in the city in which my research was located appeared to be an inhibiting factor. Many of the participants commented on the lack of information and opportunities to network around sustainability and any initiatives in individual organisations were down to the actions of individuals, like MM, who, for example, looked for opportunities to encourage sustainability by buying organic milk because it gave him an opportunity to talk about the issues to other staff members – social engagement. The local environmental network to support voluntary sector behaviour change never got off the ground due to funding problems and participants in this research had little awareness of the EAC programme, a government funded training programme to support voluntary sector engagement in sustainability. An approach based on CoPs would address the lack of

discussion around sustainable development in the city and could offer a useful way of supporting the government's aspiration to engage the voluntary sector in the sustainability agenda.

The potential of this approach to encourage behaviour change was demonstrated by my findings and conversation could change understanding and stimulate behaviour change. This supports the idea that the creation of CoPs (learning spaces based on conversation) could be an effective mechanism for encouraging local behaviour change.

The first section of this chapter gives a brief overview of CoPs and how they support social learning. Linked to this, is a discussion about how CoPs can be seen as reflecting the principles of complexity thinking. The next section highlights how an approach based on social learning could overcome the barriers to change and create a forward looking way to support sustainable development based on community based management. Following on from that is an outline of the particular features of this approach that could appeal to voluntary sector participants and thus encourage their engagement. After highlighting the advantages of this approach therefore, it is also appropriate to consider the weakness that could detract from its appeal. Thus far, I have laid out a theoretical perspective around the potential of CoPs to encourage voluntary sector participation in the promotion of sustainable development at a local level. The next step is to assess the credibility of this approach in a practical setting and its feasibility for the target group. This was done in stage 3 of this research, where I met with two of the original stage 2 participants to gather their feedback on my ideas, and examined of the operations of two environmental organisations operating in the city (Transition Network and Carbon Conversations) that appeared to be using approaches based on social learning to encourage behaviour change. After outlining the implications of the findings from Stage 3, I turn to one of the major barriers to engagement that voluntary sector participants in this research identified - the poor working relationship with CC, compounded by inadequate communication from government, at both local and national level. The next section therefore discusses the role of government if a CoP approach was adopted to encourage local behaviour change. It must be noted that this research was conducted prior to 2010 and since then there has been a change in government and a serious economic crisis. The priorities around sustainable development may have changed (this is discussed in more detail in the following chapter, chapter 8) but a

change in priorities does not detract from the use of CoPs as a way of encouraging local sustainable behaviour. The conclusion to this chapter highlights the contribution to practice and how an approach based on CoPs could be a useful vehicle to support local sustainability or to address other complex problems facing organisations and society as a whole.

7.2 Communities of Practice (CoPs) and social learning

The findings of this research suggest that the encouragement of social learning could offer an effective way of supporting local behaviour change and voluntary sector participation in this agenda. This is because human beings are inherently social beings and dialogue and deliberation are the building blocks of collective intelligence (Frame and O'Connor 2011). CoPs respond to the human need to be better connected with those around by offering a collective approach to learning using interaction as the medium through which sense making occurs. In a CoP various stakeholders come together to share their perspectives, insights, skills, knowledge and information and the collective sharing of stories and experiences contributes to maintaining, interrupting and transforming knowledge and understanding in a way that encourages learning and facilitates problem solving (Garvey et al 2009, Cross and Parker 2004). The interactive, cooperative nature of CoPs provides a safe space for dissent, conflict, disagreement and the sharing of failure, as well as success, and this can stimulate the emergence of innovation and new behaviours (Seyfang and Smith 2007).

'Dialogue does not require people to agree with each other. Instead it encourages people to participate in a pool of shared meaning that leads to aligned action.' (Jaworski 1998:111)

The conversations that take place in a CoP are non-linear, dynamic and related to meaning – a social construct that emerges from the interplay between participants and is sustained by social processes (Tsoukas and Vladimirou 2001). This type of non-linear knowledge is best facilitated or enabled through the creation of enabling environments or knowledge spaces (CoPs) to support the emergence of new knowledge, structures and practices (Alvesson and Karreman 2001, Garcia-Lorenzo et al 2003) and the fluid structure of CoPs acknowledges the interactive, co-evolving nature of knowledge in a way that encourages self-organisation and co-evolution with the environment. According to Macmillan (2004), this type of face to face interaction can bring about real change and renewal, not surface level change, but deep

down third order change where thinking and behaviours become significantly different. Furthermore, as organisations with active networks are able to deal with knowledge more effectively (Garcia-Lorenzo et al 2003), the development of local CoPs involving a variety of local stakeholders would increase the overall intellectual capacity in the network, potentially leading to other beneficial outcomes for the participants and for the city.

Creating local CoPs to support local level behaviour change for sustainable development by bringing local stakeholders together would encourage social learning as they question their own assumptions, challenge their mental models and shift perspectives. For voluntary sector participants, the cognitive restructuring that occurs as a result of engaging in this process would overcome the limited understanding of sustainable development, increasing its relevance (double loop learning) and potentially leading to new ways of working (Griffin et al 1998, Kallinikos 1998, Kauffman 2000). Renewal of trust between citizens and government has been identified as an important aspect of sustainable development (Porritt 2005) and bringing together various stakeholders in CoP would also overcome another barrier identified in this research, the lack of trust between the local authority and the voluntary sector.

For a CoP to operate successfully it requires: voluntary participation and a diversity of participants to provide a rich source of knowledge. This supports the idea that local CoPs should include not only actors from the voluntary sector, but other stakeholders as well: local government, local businesses and social enterprises, individuals and local community representatives. However, to encourage voluntary participation by busy people it is important that participants are fully aware of the potential benefits of engagement. Local businesses for example, who would contribute professional skills and possibly knowledge of sustainability practices, would have an opportunity to learn about the needs of the local community and create new relationships. The voluntary sector, would as highlighted above, be able to improve their working relationship with the local authority, an important source of funding, but more importantly, the inclusion of service users would provide professional voluntary sector staff with more knowledge about the interests and abilities of their stakeholders and potentially overcome the problem misrepresentation by professional staff. Enabling voluntary sector managers to get a better understanding of the needs and capabilities of their communities could also lead to the development of more appropriate

local services. It is important that service users have an equal voice in the discussions because unsustainable development is likely to have the most severe effects on the poor and disadvantaged, those that the voluntary sector seeks to aid and their inclusion would ensure that all outcomes are inclusive and appropriate to the local situation.

For the local authority (CC) that has ultimate responsibility for sustainable development in the city, coming together in a CoP could, as mentioned, overcome the poor relationship and lack of trust that was seen as inhibiting joint working between themselves and the voluntary sector and as CC gains a better understanding of local attitudes and capability, this recognition of the strengths, skills and expertise of the voluntary sector would reduce its tendency to *'re-invent the wheel'* , a criticism levelled at it by voluntary sector participants in this research.

(SM speaking off the record) *'They (CC) say, well, we consulted with the community. They (CC) have an idea what they want to do and they will move heaven and earth to deliver that but in their way. They are very paternalistic. They believe that they can do everything better than anyone else and that the statutory sector is the only way that things can be done - more concerned with making sure that they have sufficient income to keep their own staff in jobs than really. They don't respect the Compact in any shape or form.... They re-invent the wheel... do things themselves when they could allocate money to voluntary organisations with the skills and expertise to do it.'*

When speaking to me, the representative from CC acknowledged the importance of networking and sharing information and indicated that they wanted to work with the voluntary sector on local sustainability but that didn't appear to be happening as N's comment highlights.

(N) *'One of things that was highlighted at the strategic partnership meeting when it (Carbon Reduction Strategy) was adopted was that it doesn't really mention the voluntary and community sector enough.'*

Bringing the two sectors together in a CoP therefore would not only overcome the lack of trust and poor working relationship but could also reduce the problems associated with bureaucratic overload and remove the need for excessive accountability. Freeing voluntary organisations from the hierarchy of bureaucratic control would potentially improve their ability to improvise (Botting et al 2007) and the creation of opportunities to develop new and innovative, flexible approaches to funding could challenge the current dominant, inhibiting narrative around voluntary sector funding.

7.3 Communities of Practice and complexity thinking

Having identified the potential of CoPs to encourage behaviour change, this section, looks at the social learning that occurs in a CoP, how this approach to change reflects the principles of complexity thinking and why this could be a more appropriate way of encouraging change when addressing complex issues like sustainable development and behaviour change that are the product of human society – a complex adaptive system.

According to Mitleton-Kelly (2003) complexity thinking is not a methodology or set of tools, but a conceptual framework that offers new ways of thinking and seeing the world. It is a powerful social theory that encourages depth of thinking and changes in understanding (social learning) and opens up the possibility of changes in behaviour. As a theoretical approach to understanding the interactions in complex systems it is an holistic, multi-disciplinary approach that examines things in context (systemic) rather than addressing individual elements in isolation (linear). The emphasis is on non–linear relationships, connectivity and interdependence between internal and external actors and the structures within which they operate.

Complex systems adapt and co-evolve with their environment as all agents in the system influence each other through formal and informal relationships. This process of co-evolution and self-organisation creates the conditions for emergence - the ability of complex systems to create new order and different ways of working, thinking, relating and behaving. The natural world and human society can both be considered as examples of co-evolving complex adaptive systems which, as McMillan suggests, *'cause themselves'*, emerging as a result of self-organisation in response to attractors (McMillan 2004:33). A key feature of complex systems is co-evolution between agents and their environment - a non-hierarchical process where all those involved influence each other.

The social learning that is encouraged by engagement in a Community of Practice (CoP) reflects the self-organising, co-evolving nature of complexity thinking. CoPs are a participatory behaviour change approach involving *'groups of people who share a concern or passion for something they do'* and who learn how to do it better through regular interaction (Wenger 2006). Lave and Wenger developed CoPs as a social activity based on an understanding that non-linear learning and meaningful conversation were natural

bedfellows out of which unexpected things could emerge (Garvey et al 2009). The work is done in conversation, based on the principle that learning is a social process (Wenger 2006) and that conversation, is a non-linear interaction that acknowledges the interdependent nature of social relationships. Coming together in a CoP can be seen as a way of increasing interaction and connectivity in the system and enabling the co-creation that supports the emergence of change. There is no need for external control structures to support the self-organisation and co-creativity (co-evolution) that can lead to the emergence of new ways of thinking. Complexity thinking and CoPs therefore share the same perspective of knowledge as dynamic, generative, emergent, intrinsically social in nature and generated through social interaction (Garcia-Lorenzo et al 2003) and they both also support non-hierarchical interaction that relies on self-organisation rather than external organisation.

As highlighted earlier, sustainable development is a complex problem that has many interpretations and it has been suggested that the encouragement of behaviour change for sustainable development may require changes in our way of thinking (third order change) to acknowledge the complex systemic interactions that influence us and that we in turn influence in a co-creative cycle (complexity thinking) (Voss et al 2006, Rammel et al 2003, Smyth 2006). Behaviour change too is a complex, social, collective phenomenon, rooted in personal cognitive frameworks (sensemaking) and how individuals make sense of situations (Buchs et al 2011, Gatersleben and Vlek 1998, Millar et al 2012). Factors leading to behaviour change are multiple, inter-related and historically specific, and produced by a combination of social context and practices which are constituted, reproduced and transformed by actors in ongoing relationships (Buchs et al 2011). The complex nature of both sustainable development and behaviour change can be challenging for traditional linear rational approaches to change that are based on controlling uncertainty, as they are unpredictable and ongoing. Complexity thinking, a systemic perspective, provides a theoretical framework that can support the emergence of new knowledge, structures and practices in complex systems, and CoPs, reflecting the principles of complexity thinking, provide the practical application of this theoretical approach. Conversation is at the heart of a CoP approach and this research provided several examples of how engaging in conversation can lead to changes in thinking and behaviour thus supporting the idea that complexity thinking, enacted through CoPs, could provide a potentially effective new

approach to behaviour change that could encourage voluntary sector participation in this agenda.

7.4 Overcoming the barriers to change

Having highlighted how an approach to behaviour change based on CoPs that reflect the principles of complexity thinking could provide an effective way of addressing complex problems like sustainable development, I will now look specifically at how this approach would address the barriers to change identified in this research, which include:

- lack of understanding of the need for behaviour change to support sustainable development linked to lack of understanding of the systemic nature of our world and of sustainable development.
- funding resource and staff capacity
- bureaucracy
- lack of support from government compounded by a lack of trust and poor relationship between the government and the voluntary sector
- strong social norms

As discussed earlier, the barriers to behaviour change were complex and inter-related and consequently, although I discuss them under individual headings for clarity, this is an expository devise and in reality they cannot be addressed in isolation.

Barrier - lack of understanding

The organisations in this research were focussed on their social mission and because they did not understand the potential implications of anthropogenic damage to the natural environment for their stakeholders and were generally unaware of the links between social, economic and environmental activities, they did not consider sustainable development a relevant issue to address. This can be summed up as a lack of big picture or systemic understanding and it was a significant barrier to their engagement in behaviour change for sustainable development.

The lack of systemic understanding could be attributed to the dominance of linear rational frameworks from which they operate which led to them sing narrowly on their own social mission and giving little consideration of the bigger picture and how their activities could affect or be affected by elements outside of their organisation. This limited, linear view of the world is not unique to the voluntary sector, as Gibson highlights.

'The big picture is still pretty much blank ..... Throughout this century we have designed our institutions - scholarly disciplines as well as corporate organizations and governmental bureaucracies - chiefly by putting problems and responsibilities in defined boxes to be handled by appropriate specialists. We are now beginning to recognise that this approach does not fit well in a world of complexity and interrelationship.' (Gibson 2000:9)

The dominant modern, anthropocentric paradigm, based on linearity, reductionism and the machine metaphor of utility, rationality, determinism, objectivity, positivism, that separates humans from nature has been considered the cause of many of the problems sustainable development is trying to address (Metzner 1995, Sterling 2003). Mitleton-Kelly (2011) and it suggests that organisational or societal change to address multi-dimensional problems, like sustainable development, require in-depth understanding of the many different and inter-related dimensions that interact and influence each other (an understanding of the systemic interactions).

AM provides an example of how linear thinking influenced his decision making as like many voluntary organisation managers facing multiple demands on their time and increasing competition for funds, AM said he focussed on immediate priorities and didn't have time for apparently non-related activities like sustainable development (linear thinking). Through engagement with me however, he began to understand the relationship between his organisation and the wider environmental agenda (systemic thinking) and how he could link his organisational activities around debt reduction with carbon reduction (co-benefit), something he had previously not considered. His perception of debt changed from a problem to be solved after it happened, to a problem that could be avoided through financial capability education – an opportunity rather than a barrier. Engaging in conversation therefore, a non-linear process, helped him understand the wider benefits of engaging in sustainable behaviour (systemic thinking), increased the relevance of sustainable behaviour for his organisation and its service users (cognitive restructuring) and led to the emergence of new ideas (innovation).

MM, on the other hand, the only participant who was aware of the limitations of linear, reductionist thinking before engaging with me understood how the segmentation of our lives (linear thinking) predisposed voluntary organisations with a social mission to ignore wider issues like the environment. He supported the idea of a more systemic approach that would bring environmental issues into the scope of socially focused organisations.

(MM) 'Our lives are so segmented. I have my home life, I have my friends, I have my work ... until we can start trying to bring those closer together'.

(MM) *'I think the voluntary sector needs to see itself as part of a much bigger picture, as an extremely important part of the make up of society – there is a lot of overlap between what we do and the environment.'*

(MM) *'Environmental issues and the organisational mission shouldn't be mutually exclusive.'*

Bringing participants together to discuss sustainable development in a CoP (non-linear interaction) would therefore provide the space to consider the limitations of the dominant linear view based on separation and enable the development of a wider understanding of the systemic nature of the world (bigger picture). As participants uncover the diverse perspectives of other agents through engagement in mutual learning they will have an opportunity to develop an understanding of the interdependence between social, economic and environmental issues, for example the link between air pollution and ill health, or how saving energy could also save money. The resulting cognitive restructuring could potentially overcome their lack of participation in the sustainable development agenda, and the growing awareness of the relevance of sustainable development to their organisational mission and to their service users could lead to the emergence of new ideas and behaviours to support sustainable development, as CT demonstrated. His broader understanding of the potential of the voluntary sector to support change, developed though engagement with me, led him to add sustainable development to the board agenda.

(CT) *'The problem with the voluntary sector is that individually they're fairly small beer .... We're all very small. If you look at the Third Sector collectively it's big. If you look at it individually its small and I think that's probably the dilemma.'*

Barrier – lack of resource and capacity

MM was keen to support sustainable development in his organisation but he identified lack of staff resource as a barrier.

(MM) *the trouble is we still have the capacity issue.....even if the funding is out there, that usually involves a lengthy, complicated form somebody needs to fill in to get that funding.'*

However, during our conversation he came up with the idea of engaging a volunteer to work on it (innovation). Like AM earlier, engaging in conversation shifted MM's focus from the lack of staff capacity as a barrier towards the potential opportunity to work differently and he began to see how the creation of a volunteering opportunity would serve multiple

purposes: provide the organisation with the help it needs to reduce its carbon footprint and support a volunteer to get work experience. Overcoming barriers though innovation in this way is known as bricolage - the ability to create what is needed from resources that are available rather than seek new resources (Botting et al 2007). Looking at it from a complexity perspective barriers are not seen as constraints in the system but as opportunities for innovation (Johnson 2009) and MM's innovative idea is a result of the co-creative process enabled through conversation with me that demonstrates the potential of engagement in a CoP to encourage innovation (new thinking).

Barrier - strong social norms (associated with lack of diversity)

The fear of being seen as cranky or different (operating outside the social norms) can make people reluctant to act (Macmillan 2004, Gladwell 2000, Hale 2010) and this research identified how dominant narratives or social norms inhibited change. X for example, pointed out the difficulty of suggesting anything that challenges the dominant narrative (social norm) around economic growth.

(X) 'Most around the table at (...) thought I was potty - including voluntary sector colleagues, (they) either didn't understand the point, thought it was irrelevant or didn't want to know because it is politically unacceptable, it seems to me, to suggest anything that challenges the conventional wisdom around economic growth.'

MM was also very aware of being seen as *'cranky'* when he tried to talk about sustainable development – something outside the 'norm'.

(MM) *'In a world or country where people still think changing the light bulb is about as much as they need to do to contribute, to do their bit for climate change, whatever, the idea that you might have a different social and economic system that is more integrated .....it's hard. When I have those conversations with people here, which I do, then that's seen as a little bit cranky'.*

From a complexity perspective however, difference and diversity are not seen as 'cranky' or 'potty'. They provide the creativity and innovation that is essential for the dynamism of the system. Conformity, in the form of social norms as both X and MM describe, can bring the system to a standstill and inhibit emergence and innovation (McDaniel and Driebe 2005, Cilliers 1998).

'In a complex system, development is a result of the interactions in the system and for a system to operate effectively it needs a multiplicity of interactions.' (Stacey 2007:196)

A CoP is an inclusive approach that encourages the engagement of diverse stakeholders, who bring different voices and perspectives to the table (voluntary sector staff, managers, volunteers, service users, local government, local community representatives). The mutual support and increased awareness provided by engaging with others in this way (multi-actor governance) can reduce the power of inhibiting narratives (social norms) and challenge taken for granted assumptions by breaking down misconceptions which can act as barriers to change. This way of working can reduce the stigma of thinking outside the box and open up the possibility of change by encouraging the exploration of different possible solutions.

Barrier – hierarchy, poor working relationships and lack of trust between the government and the voluntary sector

The hierarchical approach taken by Government was identified as a barrier to change by several participants in this research (SM, MM and CT) because it was associated with a lack of trust between the voluntary sector and the local government.

(MM) 'The government is in this country.....It's a top down approach to try and get people to take on board important issues'

(CT) '*There's probably a lot of hoops to go through to get it, so that's more time management time, and then there would be a lot of reporting to do once we got the money and we'd have to prove that we were greener than we were before we got it so there's a sort of disincentive.*'

Engaging in a CoP is a non-hierarchical process that encourages the active participation of all stakeholders to work together to develop their own locally appropriate actions - self organisation. This moves away from hierarchical approaches where 'experts' provide advice (Stacey 2007) because the impetus in a CoP is not from the originator or the persuasiveness of originator but from the interactions in the system (Latour 1986). Working together would help to challenge the dominant view that top down intervention (hierarchy) is the most effective approach to change and recognise the value of an inclusive approach that includes the diverse stakeholders from the local community (Mitleton-Kelly 2011b). Furthermore there is growing recognition that change can be more effective when it is not purely top down, for example, through government regulation, but when it happens at a local level (McDaniel 2007).

Barrier – bureaucracy

Bureaucracy was highlighted as a barrier to change because it was seen as a drain on staff time and fear of increasing bureaucracy inhibited action. An example of this was the perception by voluntary sector participants that the requirement for all organisations bidding for funds to have an environmental policy would increase bureaucracy – a second order problem arising from a linear response by CC to a problem. However, if CC and the voluntary sector worked together in a CoP it would create the potential to develop a more trusting relationship and the possibility of creating different ways of reporting on environmental performance (innovation) that could reduce the problems associated with increases in bureaucracy.

MM identified an example from his organisation that demonstrates how working together in a non-hierarchal way could encourage innovative working and support local sustainability. His organisation operates from an old and badly insulated residential house that they inherited. In 2010 CC ran a programme to reduce CO2 emissions and cut energy bills by supplying free insulation to residential households in the city, but as MM's organisation was classed as a business premise it wasn't eligible. If CC had a better relationship with the sector it would understand how supporting MM's organisation to reduce its energy use and hence its running costs, would enable more of the money MM received to be spent helping service users. Working together in a more trusting relationship could therefore encourage innovative solutions that could help voluntary organisations lower their energy bills and pass on the savings to service users to help them save energy. This would have the dual benefit of contributing to CC's carbon reduction targets and helping to reduce poverty in the city (co-benefit).

Utilising a participatory approach based on complexity thinking enacted through CoPs to encourage behaviour change therefore, appears to be able to overcome the barriers to change, but despite the advantages of this approach, a significant barrier identified by all the participating voluntary organisations was lack of time. It is now necessary to consider what would encourage time and resource poor voluntary organisations to engage in CoPs to support an activity they don't see as relevant to their mission - sustainable development.

7.5 The appeal of a CoP approach to non-environmental voluntary organisations

A CoP approach, as well as being able to overcome the barriers to change, exhibits many features that could be attractive to the voluntary sector and make them more willing to engage in an agenda many of them are currently not engaged in. These include: lack of hierarchy and a move away from the top-down approach currently favoured by government, a focus on small, locally appropriate outcomes, and acknowledgement of the importance of emotion which is important for a values based sector.

Lack of hierarchy

As mentioned earlier, participants in this research were particularly critical of the top-down, hierarchical, one-size-fits-all approach of government that led to poor working relationships. Mutual engagement in a CoP is not dependent on hierarchical command and control structures that aim to produce predictable outcomes (linear process) and working in this way would remove them from the tyranny of government hierarchy (excessive bureaucracy and control) and allow local organisations the freedom to develop ideas that work for them – locally dispersed power (co-evolution). The sharing and dissemination of knowledge in this way would promote new ways of working without formalised procedures (Garcia-Lorenzo et al 2003) and support the development of locally appropriate actions, unlike the current one-size-fits-all approach of government.

(AM) *'Its about specifics, relevant to us rather than a general thing for all.'*

Flexibility for local adaptation

Related to the lack of hierarchy and top down working is the ability for local adaptation. MM believes that sustainable development requires us to *'step back from mainstream society and do things locally and in a different way'* thus emphasising the need for local adaptation as opposed to generalised approaches. For him change starts at the local level (small changes) and this is because he understands how local relationships can be more effective than top down one size fits all approaches.

(MM) *'My experience in terms of trying to change people's views and other people changing my views is that it's about the people you interact with every day. It's about your friends. It's about people you consciously or otherwise have respect for.... Can't just sit back and let government do it...'*

CoPs, reflecting the principles of complexity thinking, recognise that any change intervention will have a different effect according to the particular individuals, institutions and infrastructures involved (Mitleton-Kelly 2003) and creating learning spaces that promote co-creativity and self-organisation will provide the flexibility for participants to act in ways that reflect their circumstances. All decisions will be local and open to renegotiation and taken in a way that respects the freedom of individuals and organisations to determine their own actions. Respecting local difference is important for the voluntary sector because it is a diverse sector with many organisations each with their own different organisational missions. An approach that allows them to take into account local circumstances and the diverse needs and desires of the different social groups, class, race, gender, ethnicity and age that make up their service users could be more attractive to the voluntary sector than current, top-down generalised approaches and encourage their engagement.

Small changes

Another feature that could attract voluntary sector participation is the focus on small, local change. Change from a complexity perspective is an emergent response to localised processes as small changes emerge from local interaction (Wallis 2008). Traditional linear top down perspectives aiming for large scale change often ignore or overlook the value of small bottom up approaches or small local projects. Engaging in a CoP that supports the principles of complexity thinking would acknowledge the effectiveness of small scale local change and could help small organisations understand that it is not always necessary to make major intervention to bring about major change (Seyfang and Smith (2007). As small problems are bounded, comprehensible, plausible, local and specific they can appear easier to tackle than large problems (Weick 1984) and success in a small area can have a reinforcing effect through positive feedback and the creation of a 'can do' spirit. Helping small organisations recognise how small changes, or small wins, although insignificant on their own, can contribute to larger scale change and understand that the big picture is a composite of many small local interdependencies could reduce the sense of helplessness associated with big, overwhelming problems like sustainable development. An added advantage of a multi-stakeholder approach is that working together can highlight examples of how other organisations are tackling big problems and this would enhance the confidence to continue with other small changes (Weick 1984). Recycling, an activity widely

supported by participants in this research could be seen an example of a small bounded activity, easy to do and tangible that contributes to the bigger issue of sustainable development (Freedman and Fraser 1966).

Role of Emotion

Sustainable development has the potential to affect people's lives and thus cannot be divorced from emotion (Weick 1984). Emotion is an essential explanatory element in understanding how feelings shape the way individuals construct themselves and understand the world (Finemen 1993). It helps people engage and reflect on what they think. This research found that emotion was important to participants. MM, for example, was aware of the importance of emotion in behaviour change and acknowledged that it was his passion for sustainability drove him to act.

(MM) 'If people don't understand it and don't feel emotionally involved it won't achieve its aim.'

MSV mentioned the fun and enjoyment she got from working with others on the organisation's allotment, fully aware of how this improved her mental health. She also talked about how MM's passion for environmental issues influenced her and the wider organisation.

This suggests that when trying to engage a values based sector like the voluntary sector to address complex social problems, like sustainable development, an approach to change that acknowledges the role of emotion might be more effective than traditional linear approaches. Complexity thinking recognises the need for emotion and intuition alongside rationality and logic, the conscious and the unconscious (Macmillan 2004) and Checkland's SSM explicitly acknowledges the role of emotion in human behaviour (Stacey 2007). The informal structure of CoPs, as well as stimulating cognitive restructuring and providing a supportive environment, would therefore provide a space in which emotion is acknowledged as an important aspect of social learning.

Discourses evolve from and are constructed by the unpredictable dynamics that constitute human interaction, and emotion can act as a 'trigger' (Georg and Fussel 2000).

'There are streams of communication, idea, emotions permanently in motion and interacting with each other and exhibiting emergence.' (Kuhn and Woog 2005:143)

I had first hand experience of how emotion can stimulate changes in thinking as I witnessed the emotional trigger points of participants and how this expression of emotion increased their engagement of in the conversation with me and helped them challenge their own assumptions. MSV, for example, an animal lover, became more energised about the need for sustainable development when she realised that global warming could harm polar bears. Similarly ATV recognised the link between sustainable development/environmental issues and social justice when she connected emotionally with gas guzzling cars and their contribution to climate change and air pollution (the role of emotion in this research is more fully outlined in Chapter 5).

It is also important not to overlook the role of emotion in communication. In this research participants were very critical of the EAC approach to behaviour change – dismissing the paper based way they delivered the information as lacking emotional connection.

(MM talking about the EAC paper based approach) *'It's one of the things that really, I'm irritated by it because I feel that, just reading it, I feel it excludes people in some way .... an exercise in ticking boxes or something....Its all very well, you might sign a declaration but how do you get people to have some sort of sense of ownership or involvement in it ... if you're looking for an integrative approach .... then having a pile of policies that everybody hasn't read or a declaration someone has to sign - it feels horribly detached.*

When we feel strongly about something, or have an emotional response, we are more inclined to act on it and a CoP approach that explicitly acknowledges the role of emotion in behaviour change could therefore be more effective in engaging the voluntary sector, a values based sector, than the EAC Third Sector Declaration, which participants felt was overly bureaucratic and difficult to identify with.

(MM) Probably something that targets peoples emotive feelings might be slightly better than just a lot of complicated terms and a declaration that people are not going to feel particularly ... identify with.'

To summarise this section, utilising an approach to behaviour change based on the principles of complexity thinking – CoPs, could have several features that are attractive to the voluntary sector and could thus encourage their participation in the Government's agenda around behaviour change for sustainable development. These include: non-hierarchical, inclusive working, a focus of small scale local change, and acknowledgement of the role of emotion in behaviour change. CoPs, operating from a different paradigm to the

dominant linear approach, offer a different way to address sustainable development that encourages systematic learning and can help participants appreciate differing viewpoints and work together to develop an accommodation or way forward (Stacey 2007). The aim is not to try and develop a truth about the situation but to provide a way of probing alternate world views and moving from a paradigm of goal seeking to a paradigm of learning (Stacey 2007). This is a particularly relevant approach when discussing natural systems and human society because they are in a complex interdependent relationship that is constantly changing and adapting, and any approach to change that helps us to think differently about our relationship with the natural environment and understand change as a continual process will be helpful as we face the on-going challenges (Church and Elster 2002).

Garcia-Lorenzo et al (2003) suggest that the creation of enabling environments based on the principles of complexity thinking (CoPs) offer a shift in perspective and a different way of thinking that can bring about fundamental change that many policy makers have found invaluable. I have highlighted the advantages of using an approach that supports complexity thinking to address sustainable development however this approach is not problem free. As a different way of working it challenges the traditional linear command and control approach (social norms), and does not guarantee change because prediction is impossible in a complex system (McDaniel 2007). Consequently, it will not provide the clear outcomes that many organisations desire and participants in all stages of this research highlighted as important. The potential difficulties in implementing this approach are discussed in the next section.

7.6 The challenges of adopting a CoP approach

Having highlighted the potential benefits of CoPs as a dynamic, flexible and adaptable way to contribute to the *'fashioning of a sustainable planet'* (Blewitt 2010:43) that may appeal to the voluntary sector, as with any approach, there are also problems and paradoxes and in the current dominant paradigm of linear rationalism, this new of working may be challenging to operationalise.

The first challenge is the inability in complex systems to predict outcomes and linked with this, the inability to replicate or generalise. This is because outcomes in a complex system are system emergent and context dependent and can't be *'reduced to building blocks which*

can simply be re-assembled in a different context and give rise to an identical outcome' (Mitleton-Kelly 2011b:15). The collaborative learning encouraged through participation in a CoP acknowledges that meaning varies according to the context, conditions and cultural frameworks and that all actors in the system modulate the pattern through their actions and interactions, intentionally or unintentionally. In this framework change is not the product of a carefully designed action plan but emerges from the interactions of the participating agents (Stacey 2001) and although this enables local organisations to respond in ways appropriate to their service users it also means it is difficult to produce a generalisable toolkit that can deliver predictable outcomes. As well as being unable to guarantee or predict outcomes, it is also a feature that any changes that emerge from a CoP process are unlikely to be immediate. For CC and the voluntary sector, organisations used to operating in a more predictable hierarchical way, the inability to control the process and determine measurable outcomes will be challenging and could lead to reluctance to commit resources to a change process with no guaranteed outcomes, especially in times of austerity when value for money and accountability is high on the agenda (Martin and Liddle 2011, McDaniel 2007). However, although a CoP is not a top down process that can be controlled by powerful intent, it is not totally random either (Johnson 2009, Chiva 2008). In complex systems, the direction of change can be influenced by a motivator or driving force and strengthening the basic driving force can influence change in a certain direction (Macmillan 2004). Despite the inability to plan and predict, Garvey et al (2009) point out that most human discoveries have been collective social achievements and when considering sustainable development, therefore, it would be the responsibility of national Government to provide the basic driving force or attractor, in the form of a vision, delivered through policy frameworks and leave the design of the responses to players at a local level. There would also have to be top level support from Government, local and national, for the creation of local CoPs that move away from the linear paradigm of management which would constrain and stifle the innovation and focus on facilitation that supports emergence (Alvesson and Karreman 2001).

Although, in theory, the voluntary sector might welcome this more equal, participatory approach, working in this non-hierarchical way will require a major shift in understanding from all participants, not just CC, and training will be needed to help all participants move

away from the established Newtonian Cartesian perspective of society as rational, mechanistic and controllable (which is how outcomes based funding works) towards an understanding that the world is characterised by unpredictability and change (McMillan 2004, Ison and Russel 2000). Furthermore, the process will require good facilitation throughout, preferably by a neutral agent, to avoid reverting to old assumptions because when human beings come together, whatever the intention, there are always power differentials. Powerful agents can, intentionally or unintentionally, exert control using rituals, language, assumptions and narratives to subvert the process and this can eventually lead to conformity or normative outcomes which inhibit innovation and creativity (Garvey 2009). Adopting a CoP approach potentially challenges the power base and strong culture of the local authority and well established ways of working (Garvey et al 2009) and overcoming resistance and avoiding the return to old group norms, defensive reactions and hierarchal ways of working will require commitment, communication, acceptance of diversity, tolerance of complexity and recognition that not all is controllable. This is a difficult agenda if not fully supported.

However, the provision of evidence of how this type of process can create the potential for future changes could be used to build confidence in the process. Mitleton-Kelly (2011b:10) and Macmillan (2004) have demonstrated that complexity thinking can be used by non-academics to produce significant benefits for the organisation/s employing it. Mitleton-Kelly (2011a) for example, found that in the NHS, lack of opportunities for staff to get together to engage in active learning and an over focus on financial outcomes was inhibiting sustainable changes. The creation of enabling environments helped staff understand the underlying principles of complex systems and become comfortable with unpredictability and uncertainty and led to embedded changes and improved organisational sustainability.

The examples of small changes from my research could also be used to support local actors. History is an important element of complex systems and is the result of interaction. Information is ignored, discounted or forgotten without an opportunity to deliberate on it, (Daft and Weick 1984) and dialogue and discussion can be effective in stimulating change because they create history in the system by providing multiple cues and mechanisms that *'enable debate, clarification and enactment more easily than the provision of large amounts of information.'* (Corner and Randall 2011:2). ATV demonstrates how my engagement

created the history that has sowed the seeds of future change. I took an EAC pamphlet with me to all conversations and when I showed it to AM it jogged his memory. He indicated that he might have seen it before, but because it had no relevance to him he had ignored it. At the end of our conversation, however, he commented that if another EAC pamphlet arrived in the post, he would no longer immediately disregard it as irrelevant but would consider acting on it. This is because he now has some familiarity with the topic – it has a history for him. Encouraging engagement through CoPs therefore contributes to the development of history, and although action may not be immediate, it will increase the propensity for participants to act in the future, as AM indicated.

Another challenge is the need for continuity of participation in the CoP to allow the development of good relationships that support the emergence of structural properties and internal logic (Feldman 1999). Securing a high level of regular participation by all members could be problematic in times of economic difficulty, particularly for voluntary sector participants who identified lack of time and capacity as barriers to change. To encourage their participation in this challenging, time consuming activity will require a good communication strategy prior to the process. An e-mail or pamphlet, a one-size fits all approach that is not relevant to each organisation is likely to receive the same response as the EAC pamphlet – zilch. They must be made aware of the potential benefits of engagement, for example, the potential money saving for organisations facing financial challenges and have evidence of adequate government support throughout.

Linked to the need for good communication is the issue of training in the principles of complexity thinking to help participants understand the process. McMillan (2004) in her work 'Changing the Open University', aware of the potential difficulty of trying to implement complexity thinking in organisations, developed a framework of twelve principles to help guide the process. I have adapted McMillan's New Directions Action Group principles to draw up some guidelines about how to support a multi-stakeholder local CoP to encourage behaviour change for sustainable development:

- *Participation must be voluntary.*
- *Basic training should be provided for all participants on the principles of complexity thinking to include an understanding that*:

the behaviour of complex systems is characterised by multiple local agents interrelating in an open network.
complex systems operate on a non-hierarchical basis.
self-organisation is an emergent property of the system as a whole.
outcomes or changes emerge from local interaction and cannot be planned or designed
large scale change is an emergent response to a series of small local changes

- *An acknowledgement that multi-stakeholder groups are essential to support diversity and creativity.*
- *Recognition that non-hierarchical processes based on self organisation, unlike command and control approaches, free people up to work in ways that are constructive and creative and can lead to innovation and new ideas.*
- *An assurance that all meetings are safe, supportive, non-political, egalitarian, open, democratic and respect different viewpoints and freedom of expression.*
- *Trusted and skilled facilitators to support the process and ensure equality of participation.*
- *Senior managers need to understand and support the above principles and provide resources e.g. staff time, to give validity to the process and let participating staff know the exercise is valued by the organisation/s.*

To conclude this section, if sustainable development is an issue that society and the Government consider important to address, it will be the role of Government to create the conditions that support behaviour change, in the form of policies (vision), and provision of the frameworks and resources to support the setting up of CoPs to stimulate local changes. Good communication and training in the principles of complexity thinking beforehand, as well as good facilitation throughout the process will be needed to ensure equality of involvement, dismantle cultural and hierarchical barriers and prevent certain agendas dominating to create the social norms that lead to ossification and inhibit change (McMillan 2004). Although this is a challenging agenda and it may be easier for Government to look the other way and carry on as normal in times of austerity, I feel that this approach could have advantages in the longer term, not only in encouraging more sustainable communities but as a new way of addressing other complex problems that society is facing. Despite the fact that the outcomes cannot be replicated, if the underlying principles are understood they can be adopted indifferent contexts (Mitleton-Kelly 2011a) and in a complex and dynamic environment we need to consider new ways of operating.

I have highlighted the theoretical strengths and weakness of adopting a CoP approach to encourage voluntary sector participation in the sustainability agenda, and the next stage of my research is to assess the credibility of my analysis – the topic of the next section.

7.7 Stage 3 Evaluating CoPs in practice

To asses the credibility of adopting CoPs in practice I contacted the initial stage 2 voluntary sector participants to get their feedback on my ideas, and to develop a clearer understanding of how this type of approach works in other settings, I met with the local coordinators of two environmental organisations that appeared to be operating in a similar way using conversation and networking to encourage behaviour change. These organisations were both part of national networks - Transition Towns and Carbon Conversations.

7.7.1 Feedback from original stage 2 participants

I produced a short report to present my ideas to stage 2 participants for feedback, but was only able to meet two of the original participants (individually) (TW and SM) as others had moved on or their organisations had closed down. At the meetings I briefly outlined the concept of a CoP and the principles of complexity thinking that underlie it, and stressed what I saw as the advantages of the approach for the voluntary sector - that it was non-hierarchical and would allow voluntary organisations to develop their own ways to support sustainable development rather than being dependent on CC to control the process. I highlighted how working together with other city stakeholders could not only improve local relationships but seeing different perspectives could encourage a more comprehensive understanding of sustainable development and the need for behaviour change. Both participants expressed some initial difficulty grasping the context, perhaps demonstrating the constraints of the dominant linear paradigm they are used to operating under but also perhaps, because I had a limited amount of time to explain the process fully. This confirmed that the process will need adequate support and training if it is to be successful.

Despite their doubts however, both participants liked the concept of CoPs and thought it was a good idea in principle.

'In principle it's a good idea but the practicalities are difficult.'

They appeared to support the underlying features:

- that CC would be an equal participant and not leading the sessions (non-hierarchical)
- the concept of service user involvement and the inclusion of people that are not in positions of power (co-creation)

The primary difficulty both participants envisaged with implementation stemmed from their mistrust of CC:

'the LA only engage with the voluntary sector because they want them to do the work for nothing. They are very controlling and want things done in a certain way. It would be nice if the LA listened to the sector.'

They also worried about the lack of clear outcomes *'it shouldn't be prescriptive but the aims should be clear'*. If the outcomes weren't clear they feared it would turn into another talking shop that CC could use to say they had consulted with the sector. As well as wanting a clear explanation of the purpose and aims and re-assurance that the engagement would bring about change they pointed out that it would need constant monitoring and follow up to make sure that CC was doing what it promised and that the process didn't become overly bureaucratic.

TW suggested that using existing green groups in the area as facilitators might be a good way of encouraging voluntary sector participation because they have the knowledge and expertise, are less likely to work in a hierarchical way and would be more readily accepted by other voluntary sector participants than CC.

Another concern, reflecting the original concerns of stage 2 participants about lack of support was that it needed to be supported at a high enough level *'somebody with a bit of oomphh'*.

'It's (sustainable development) got to be talked about by the leaders, the politicians, nobody is telling us it is important so it is not on the top on my list.'

TW wanted a clear message of commitment from the council at the highest level and an explanation of how the changes would be supported. She felt that that current lack of commitment to sustainable development by CC and the national government was a major barrier to voluntary sector participation. Linked to this, she also talked about the need for

the right infrastructure to be in place. There was no value in informing service users about energy saving and home insulation if they did not have the resources to do anything about it. On the plus side however, she thought that getting all sectors to work together was a good idea that might ensure the right resources were available.

In terms of resources, both pointed out, that CC itself, due to local government funding cuts and the loss of staff, may not have the ability to commit time and resources and their worries about time and resource were not limited to CC. They also expressed doubts about voluntary sector participation, reflecting the initial findings that *'a problem could be finding the time – if it is not a core aim why would an organisation commit to it?'*

SM summed up the problems in the voluntary sector:

'You've got your head down trying to deliver what you have to deliver and you don't have any time to put your head above the parapet and think 'oh we could do this' or 'that would be interesting'. Sometimes I haven't got time to even pass it through my brain. I am so busy doing the stuff that I have to deliver today. That is exactly what there isn't – creative thinking time in the voluntary sector.'

To overcome this, they suggested running the CoPs as funded workshops for a fixed time period. Limiting the commitment and funding the process might make voluntary organisation more willing and able to participate.

To attract engagement they agreed it was important to make the benefits clear *'all organisations want to save money on energy',* but they also thought offering lunch as a sweetener would encourage participation.

They highlighted the need for a good communication strategy, appropriate to each organisation, to start the process, pointing out that the diversity of the sector meant that *'it is not one size fits all, it is a patchwork'*.

Another issue both participants raised was that there were similar initiatives locally, e.g. the Green Commission and they didn't want to see this running alongside other activities but not joining up.

'All the green activities must work together and feed into each other. Green Homes – that's similar isn't it – learning from each to make homes more energy efficient.'

Despite their concerns, however, they welcomed the idea of bringing diverse stakeholders together to develop a clearer understanding of what is needed to achieve sustainability on an holistic level rather than the many organisations working individually at present and not achieving anything and they felt that a CoP approach had some attractions and could be useful if the right support was in place.

7.7.2 Examples of conversation and networking as enablers of local change

I also met with the coordinators of two local 'green' groups supporting the low carbon agenda, one using a networking approach (Transition Movement) and one using time limited face to face engagement (Carbon Conversations).

7.7.2.1 Carbon Conversations

Carbon Conversations is a national programme run by a community interest company, Surefoot, (www.carbonconversations.org) *'to support a community of practice working with values based change methods to protect the environment and promote social justice'*. Developed in 2005-2007 in Cambridge by a psychologist, Rosemary Randall, to help individuals cut their carbon footprint, there are currently two versions: a community version aimed at individuals and a workplace version aimed at organisations. In the community version a trained facilitator guides small groups of 6-8 through a structured change process utilising conversation. The facilitators have to pay for their own training and are not remunerated for running groups, so they do it out of a commitment to the cause rather than for a profit motive. Groups meet regularly once a week for 6 weeks. Attendance is voluntary and in theory the only cost for participants is the cost of the manual (£13.95) which all participants are expected to purchase. Sometimes, however, there is a small additional charge to cover the cost of room hire and refreshments.

Carbon Conversations utilise a CoP approach to support values based change – very similar to the approach suggested in this research. They:

- provide a non-judgemental, non-hierarchical arena - a space for people to explore what climate change means for them (sensemaking).
- emphasise sharing and learning from each other (social learning).
- recognise the importance of values, emotions and identity in the change process.

The group process creates a space to share hopes, doubts and anxieties, work through difficulties associated with changing intention into action, and deal with social pressure (social norms). It provides reliable, well researched information and practical advice to assist learning, and support the creation of personal plans for change.

There are many feature of this approach that resonate with the CoP approach I have suggested: the focus on social learning to support behaviour change and the acknowledgement that knowledge and awareness alone are not enough to influence behaviour changes – people need to engage on an emotional level.

The local facilitator has run three groups in the city and for him the strength of this approach is that it is not coercive and does not play on guilt to push people into changing their behaviour. He did however highlight some of the weaknesses with the process, one of which was that it appeared to only attract affluent middle classes who have the resources to enable them to change their lifestyles. This supports the findings of this research that the encouragement of behaviour change in groups that do not have the resources to change will require adequate support. Another weakness he identified was that at the end of the six-week programme participants filled in an action plan to take away and hopefully act on but there was no follow up to see if participants actually changed their behaviour. He also commented that he felt the process could be seen as *'overly structured and prescriptive'*, leaving little room for adaptability and relying on the *'control'* of the facilitator to follow the standardised process. This could be interpreted as suggesting it does not actively support the principles of self-organisation and co-evolution, but despite the weaknesses, the coordinator felt that engaging in this way did have profound effects on participants.

7.7.2.2 Transition Towns Movement

The Transition Town movement was started in Totnes, Devon, by Rob Hopkins in 2006 in response to the threat of climate change. Acknowledging that big problems like climate change are too big to deal with alone, Hopkins recognised the power of community and standing together as a way of helping to see possibilities for the future. His aim was to raise awareness of sustainable living and build local ecological resilience which he defines as *'the capacity of a system to absorb disturbance and reorganise while undergoing change so as to still retain essentially the same function structure and feedbacks.'* (Hopkins 2006).

According to Hopkins, Transition is a Social Experiment and a Big Idea for how to move forward.

'a vision for future that encourages the changes we need to make for a low-carbon, socially-just, healthier and happier future, where people work together to find ways to live with less reliance on fossil fuels, reduced carbon emissions, improved wellbeing for all and stronger local economies.' (Hopkins 2013:35)

His idea spread rapidly, developing into the Transition Network, a UK charity that encourages local grass roots initiatives and community-led responses to climate change and shrinking supplies of cheap energy. According to Haxeltine A. and Seyfang G. (2009) in 2009 there were 94 Transition Towns Villages, Cities and Islands in the UK and a further 40 around the world in Ireland, Canada, Australia New Zealand, USA, Italy and Chile.
The transition agenda is radical, based on a different approach to growth (deep green values and strong sustainability) to create a happier, healthier society that is adaptable to future changes. It is a new type of civil society movement that brings people together to act and produce change by focussing on innovation and whole systems. It grew from Hopkins disillusionment with the government approach, which he saw as reactive rather than proactive. They (the government) '*see the immediate problems and strive to deal with them*' but '*they don't have a longer term vision that makes sense of where we're heading*' (Hopkins 2013:11). He talks about the need to '*redesign institutions, embolden communities, encourage innovation and experimentation and support people to be prepared for future changes.'*, and is a firm believer that the bottom-up approach is better at meeting our needs both now and in the future.

Hopkins developed six guiding principles and twelve steps (https://www.transitionnetwork.org/support/12-ingredients) as a way to achieve Transition communities (Rob Hopkins 2008)

Principles of Transition (from http://transitioncornwall.com/6-principles-of-transition/)

Visioning
Inclusion
Awareness-raising
Resilience
Psychological insights
Credible and appropriate solutions

The Transition approach is not about telling people what to do but about bringing them together to develop their own initiatives – social change as emergence - an emancipatory view based liberation from hierarchy and the structure of a one size fits all tyranny. He believes that when people engage in this way the feedback loops from community connectedness can lead to innovation. Transition can be seen as a socially creative strategy that creates inclusive spaces to enable emergence by opening up possibilities rather than closing them down. It aims to demonstrate creative possibilities at a local level rather than attempting large scale change with a focus on networking, facilitating and sharing expertise and experience (Scott-Cato and Hillier 2010). I think the quote on the inside fly sheet of Hopkins' book (2013) nicely sums up the potential of the movement to encourage change.

'It's like whoah, when we get together, it's like everyone is feeding everyone else.....Everyone listens then someone comes up with another idea', (Emiliano Munoz, Portillo en Transicion)

Although Transition originally started as an environmental process it is now a cultural process that Connors and McDonald (2010) locate within new environmentalism (Hershkowitz 2002, Speth 2008). New environmentalism focuses on collaboration between individuals, communities, governments and businesses (whole systems). Unlike traditional environmentalists who focussed on anti-growth measures and lobbied governments to regulate the excesses of the market (Connors and McDonald 2011), new environmentalism reflects the growing questions around whether governmental control and regulation is enough to achieve the changes required to achieve sustainability (Speth 2008). Like Hopkins, it sees the core driver of potential change as coming from the local level and suggests that cooperation between various groups may be a more effective platform for change.

Criticisms of the Transitions approach

Despite the optimism and although there is a plethora of anecdotal evidence of its success it is difficult to quantify the actual changes that it has brought about. Connors and McDonald (2011) suggest it is still in the awareness raising stage and that its activities are not always seen as positive by the whole community. In Totnes, for example, Connors and McDonald claim that TTT merely took over the existing networks.

Although Transition purports to reflect the principles of self-organisation through learning and sharing from each other, the highly structured way that Hopkins outlines is criticised by

some as limiting (Connors and McDonald 2011), the formal accreditation process groups have to go through to achieve Transition status has been called hierarchical and restrictive and the 12 steps of the Energy Descent Action Plan (EDAP) - part of the accreditation process - have been criticised as being rigid, top down, prescriptive and not inclusive, leaving little room for local adaptation and alternative views. Haxeltine and Seyfang (2009) and Scott-Cato and Hillier (2010) however point out that step 1 is to set up a steering group and design its demise from the start. The encouragement of groups to break up into smaller working groups focussing on particular aspects of energy descent and eventually become self-sustaining thus removes the possibility of hierarchical control. Hopkins himself asserts that rules should support the activities (act as an attractor) without taking them over or swamping them with bureaucracy, because if you have too many rules you spend too much time dealing with the rules.

Transition has also been criticised for an over reliance on compromise and lack of meaningful change. Connors and McDonald (2011) for example, suggest that the focus on localised responses to big issues loses sight of the global responses to issues such as climate change, and will not challenge the exploitative economic system at the core of the problem. Scott-Cato and Hilier (2010) and Haxeltine and Seyfang (2009) are similarly critical of the apolitical stance of Transition and the absence of an analysis of power, suggesting there is little evidence that macro level change will emerge as a result of Transition unless it challenges the existing economic and political structures. Hopkins however claims the whole Transition agenda is at odds with conventional assumptions around economic growth - in the 'End of Growth' camp and that the Transition movement is premised on whole society change starting at the local level, to protect the most vulnerable in society.

'*Economic growth as we have known it is a thing of the past*' (Hopkins 2013:25).

Recognising that this is not an agenda on which governments are likely to be re-elected and that governments alone are unable to tackle the big problems facing society, Hopkins saw a need for a different approach, one that challenges conventional assumptions by opening up spaces at local level and allowing in unheard voices to challenge the dominant agenda.

Other criticisms are that there has not been enough done to translate the ideas into mainstream setting (Haxeltine and Seyfang 2009). Transition, according to Haxeltine and

Seyfang is relatively ineffective at engaging outside its normal sphere of influence, only attracting those that are already interested in the agenda– insider activists. Unless it engages more widely with mainstream actors, not just local authorities, but transport companies, supermarkets etc. they feel the message is unlikely to be effective. Transition's resilience model with its focus only on peak oil has also been challenged as overlooking the prospect of future shocks that may not be what we are expecting. According to Haxeltine and Seyfang (2009) Transition needs to build systemic properties that can cope with diverse threats, as too much focus on one area, like peak oil, can stifle innovation

Local Application

There was a Transition initiative in the city in which this research was taking place. I met with the coordinator to find out how it operated. The coordinator explained that in 2007 four of them had got together, excited by the idea and through regular meetings to develop ideas, they set up an organisation and opened a bank account. The Transition vision and principles encourage groups to register and go through accreditation to become officially recognised, however, as they were all working full time they found it difficult to raise funds and attend the necessary training. The group never applied for official Transition accreditation because they couldn't sustain the commitment required and currently the coordinator is the only one still involved. She said it was difficult and hard work to sustain a purely voluntary group with no paid staff and no resources on your own and it took a lot of time and effort to keep it going. She is constantly advertising for more volunteers.

Although the group is not officially registered, the coordinator works within the ideas of Transition on the basis that regular meeting and engagement can stimulate the emergence of practical local projects. She has built up links with local networks and supported/spawned many volunteer led independent groups affiliated to the network. Some of the groups that are networked through this Transition network include: The Climate Alliance and Green homes and together they have:

- shown environmental and topical films at venues
- created an edible community garden
- hosted creative low-energy social events like the pedal powered 'Zero Carbon Cabaret'
- organised a street party

- set up a community food project to buy a 9 acre field and created a community farm
- organised permaculture courses on sustainable living
- created a vision for a sustainable local area by 2030
- held the 2013 Transition Awards
- started a Repair Café

She sees the current role of Transition in the city as supporting local groups by providing networking opportunities through the website and the production of regular newsletters that promote local activities and events. Unofficially, she also meets with local councillors to promote the Transition agenda (lobbying) and she implied that not being an official Transition group had given them a degree of freedom to draw up their own vision and structure in a way that is locally appropriate. When asked what she thought the main achievements of the group were she replied that it was difficult to identify specific outcomes, but the community farm was doing very well, she is often invited to events about community energy schemes and overall she thinks '*Awareness raising, influencing the council (informally), supporting networking*' are the main achievements.

7.7.3. Implications for this research

Many of the features of the Transition movement and Carbon Conversations mirror the CoP approach I have suggested as a way of encouraging local voluntary sector participation in behaviour change for sustainable development. Both appear to support the principles of complexity thinking, by focussing on the encouragement of non-linear interaction, self-organisation and emergence to stimulate behaviour change and I will now highlight how the findings from Stage 3 of the research can add credibility to my findings.

On page 221 I highlight the need for a guiding vision to work as an attractor to support change, suggesting that it is the role of Government to create the conditions that support behaviour change, in the form of policies (vision). Haxeltine and Seyfang (2009) consider visioning more powerful than campaigning for environmental issues and Transition has a clear vision of what kind of society it wants to achieve. Carbon Conversations is about realising a vision of a low carbon lifestyle and the two voluntary sector participants in Stage 3 also talked about the need for a clear vision.

I also highlighted on page 221 that there was a need for a clear framework and resources to support the process. The Transition movement and Carbon Conversations both have well

developed processes or frameworks to support change, although these have been criticised by some as being overly controlling and prescriptive. However, when it comes to resources the local Transition coordinator indicated that she was struggling to find the resources to keep her group going and the coordinator of Carbon Conversations outlined the need for financial resources to support behaviour change commenting that his approach appears to only connect with those affluent enough to make changes. The need for clear frameworks and financial support was also something the voluntary sector participants highlighted, indicating that there is no point raising awareness if there are no resources on the ground to take action thus emphasising the importance of top level government support – to attract the resources.

In my analysis I suggest that voluntary participation is important to sustain the non-hierarchal, inclusive dialogues that stimulate innovation to support local action on big problems (social learning). Transition regards itself as a '*self-organising system driven by people's enthusiasm and ideas*', and networked so that '*when good ideas emerge they can be rapidly disseminated.*' (Hopkins 2013:48). Carbon Conversations create a non-judgemental, non-hierarchical arena that provides a space for people to explore what climate change means for them (sensemaking) and then encourages them to act on their new knowledge. Stage 3 participants also welcomed the idea of creating an opportunity to come together in a non-hierarchical, inclusive way.

Another important element that I identified was the importance of emotion in behaviour change, especially when trying to encourage voluntary sector participation. Hopkins is aware that '*people tend to engage with what they are passionate about*'. (Hopkins 2013:70) and Carbon Conversations promote values based change, thus acknowledging the relevance of emotion.

Another similarity between my approach and that of Carbon Conversation and Transition is the focus on small, local level changes that can influence the bigger agenda. According to Hopkins, '*Small changes can add up to something extraordinary*' (2013:48) and Carbon Conversations see individual change as a way of tackling the bigger issue of climate change. Haxeltine and Seyfang (2010) explain the importance of niches (small organisations outside the mainstream) in influencing the dominant regime through the cumulative effect of many

small changes and the voluntary sector, as individual local organisations working outside the mainstream will find it easier to focus on small scale locally appropriate change than large scale change.

Finally, I see the strength of all three approaches as the encouragement of possibility not probability. Possibility is not the same as probability because although probability may provide more certainty, it requires evaluation and monitoring (bureaucracy) which would stifle the innovation that is at the heart of the three approaches under discussion. As Hopkins suggests, in times of change and uncertainty, *'helping to generate those possibilities is perhaps the most important work we can do' (*Hopkins 2013:65).

Although the focus on possibility can be seen as a positive it can also be seen as a weakness in a society that prefers clarity and predictability. Hopkins (2013) is aware of the need for solutions to be credible and appropriate, not just 'happy talk', the coordinator of Carbon Conversations, although recognising the possibility of change, commented that the lack of follow up meant that as far as he was concerned change was always only a possibility. Stage 3 voluntary sector participants were also very clear that they did not want to see a process that was *'another talking shop'*. Despite this lack of predictability I believe that a CoP approach that promotes social learning can be effective in encouraging behaviour change to support sustainable development because it will contribute to everyday knowledge and expertise and stimulate second order learning as participants question taken for granted assumptions (Haxeltine and Seyfang 2009). The process will only be effective however, if it is well supported, locally and nationally, and I suggest the following issues need to be taken into account when designing the process (these reflect the principles that I adapted from Macmillan (see p219).

- an emphasis on voluntary, non-hierarchical, multi-stakeholder involvement
- a clear vision to guide the changes, with a high level of support for the process to ensure validity and provide the resources to support change.
- good facilitation, probably by a local 'green' organisation, as suggested by the Stage 3 participants to overcome the mistrust of CC by the voluntary sector
- time limited commitment – as per Carbon Conversations, to allow planning for the staff resource to make regular participation more likely.
- good communication about the process beforehand, including training in the principles of complexity thinking and clear dissemination strategy afterwards.

As Stage 3 participants suggested paid workshops with lunch provided as a sweetener could be used to entice voluntary sector participation, as would making sure that the process was joined-up and linked with other organisations with a similar agenda to avoid duplication.

It is clear that for a CoP approach to attract the voluntary sector participation desired by government and encourage local behaviour change for sustainable development the government has a key role to play and the next section looks at the role of government in supporting this agenda.

7.8 Role of Government

'A sustainable community is one that people want to live, work and visit both now and in the future. It meets the diverse needs of people who live there and considers the needs of future residents. It is sensitive to the environmental limits of the planet and is well planned built and run. It also respects the needs of others – whether in this country or abroad- to make their communities sustainable.' (Big Lottery 2006:2)

Diamond (2005) in his book 'Collapse', describes what happens when societies fail to manage their natural resources sustainably and if the UK Government wants to create sustainable local communities it needs to focus on policies that afford our life support systems the *'the highest possible political priority'* (Porritt 2005:306).

As a way of encouraging sustainable communities, sustainable development is a concept that has been given much attention but, as discussed earlier, it is a complex and contentious issue that is not easy to action and it raises questions around whether the current approach based on control and regulation will be enough to achieve the changes required (Connors and McDonald 2011, Speth 2008). Carefully designed linear approaches can be too rigid and static in a complex and dynamic world that demands flexibility and adaptability, yet sustainable development is seen as *'too complex to allow scientific uncertainties to be reduced to a level that many decision makers and managers would prefer'* (Blewitt 2010:22). Classic machine bureaucracies, like government, with their linear hierarchies and rigid reporting structures find it difficult to adapt to the type of changes demanded by the sustainability agenda whilst at the same time managing the competing priorities and needs of their stakeholders (Weick and Quinn 1999). The complex nature of social problems like sustainable development therefore, may require a new approach that creates *'opportunities for conversations about the world: how it is; how it could be; how it should be.'* (Mulgan

2008:3) and puts community and local change at its heart. This has been recognised by a recent report by JRF (2014) which highlighted the importance of social capital in adapting to environmental changes.

'Improvements in community social capital, while being one of the hardest outcomes to achieve, may ultimately provide the greatest benefit and lead to local championing of pro-environmental change' (JRF accessed 12/13/2014)

If the UK Government is serious about the creation of sustainable communities and wants the voluntary sector to work with them to support behaviour change at a local level, the findings of this research suggest that moving away from the top down hierarchical approach that the voluntary sector participants in this research were so critical of, could be an important element of the change process. Hale (2010) identified the hierarchical, controlling approach of government and lack of community participation as one of the failures of government around sustainable development, claiming there has been too little done to help voluntary organisations find their own expression of interest and interpret climate change in terms that works for them. Hand (2011) like Hale thinks there is a gap in the government's understanding of the nature and value of community action, suggesting that community organisations deliver a broad set of objectives based on social, economic and environmental outcomes and although government wants the voluntary sector as an ally in the promotion of behaviour change there is little emphasis on encouraging communities to identify their own approaches to sustainability (Hand 2011). Jones and Liddle (2011) support this, claiming that some public sector commissioners are unaware of how to engage with the third sector. The lack of understanding and engagement between the voluntary sector and local government was something identified in this research. It led to the idea that the creation of CoPs, a multi stakeholder approach based on conversation, would offer a different approach that would overcome the misunderstanding because it would support trust building and the development of relationships between the sectors. The nature of its modus operandi could also encourage voluntary sector participation by allowing them to interpret and act on sustainable development in their own way as Hale suggests.

Bringing diverse local stakeholders together to work non-hierarchically in a CoP exploring sustainable development creates the potential for new ways of working because unlike traditional, linear approaches it does not restrict the self-organisational ability of the system,

stifle local creativity and inhibit the emergence of change and innovation (McMillan 2004). It does however introduce an element of risk because, as a different way of operating based on the principles of complexity thinking, outcomes cannot be predicted or controlled. Even though it is not possible to control and predict the outcomes, the changes will not be totally random. They can be guided or influenced by a framework/vision (new attractor) that will prevent the system disintegrating into chaos (Stacey 2007, Mitleton-Kelly 2003). It is important to note here that a framework or vision is not the same as a common goal (Backstrom (2004). A common goal can lead to the development of norms which stifle creativity, whereas a shared vision is always temporary and open to revision by stakeholders. It acts as a priority framework to guide to the desired changes but provides the flexibility at a local level for actors to develop appropriate local initiatives (Wallis 2008).

'It is about unleashing a few ground rules that allow emergence to happen'. (Stacey 2007:254)

Transition Towns and Carbon Conversations both identified the need for a clearly supported guiding vision to support behaviour change and a criticism from the voluntary sector participants in this research was that Government was not providing them with enough support and guidance around sustainable development.

(TW) *'Some sort of fairly straightforward guidelines (from central government) so you knew what you were supposed to be aiming for and so on. I think that would help, and also from the local council as well, some kind of focus or some kind of economic imperative that you should do this, or that there are obvious benefits, whether financial or whatever.'*

They were not asking to be told what to do, but wanted some sort of framework at national and local level to guide their actions. The role of national Government therefore, would be to provide a guiding vision or policy framework to support local actors to develop their own change initiatives around this vision and to support the multi-stakeholder conversations that can deliver the local changes, acknowledging that local people are often best placed to understand the needs of their communities (Church 2005). Another issue that the government will have to consider is that community groups are often small, underfunded and lacking expertise in sustainability. They will need ongoing support and funding as well as basic training to develop the innovation, knowledge and skills that exist at community level

and avoid inaction due to risk aversion (Hand 2011, Seyfang and Smith 2007, Mitleton-Kelly 2011b).

The creation of CoPs around sustainable development supports the earlier claims that public services require enhanced democratic decision making processes and the encouragement of collective leadership involving public, private, business, community and voluntary engagement to identify local priorities (Jones and Liddle 2011). This joined up, co-productive approach to public services that connects local action to higher level policies could be particularly effective when trying to encourage sustainable development, which is said to require equal partnerships between communities, government, businesses and academics to maximise the value of community action (Church 2005, Hand 2011). Hand believes that in terms of sustainable development the government should move

'from seeing community action as an opportunity to deliver behaviour change messages, as in EAC, towards seeing the potential community action to holistically address social environmental and economic issues'. (Hand 2011:9)

If policy moves away from top down goal setting towards local cooperation in equal partnerships the role of leaders in this new way of thinking will have to change. They will become *'systems thinkers, boundary spanners, conceptualisers and connectors'* rather than planners and controllers (Liddle 2010:661), relying less on tool kits that provide short term fixes and more on understanding longer term coordination across the boundaries of government and between the different sectors in society (whole systems thinking).

This type of flexible, locally determined approach would theoretically, be more appropriate in a pluralist liberal democracy where it is not desirable to attempt to enforce behaviour change through laws and regulation (structuralist approaches) (Gibson 2000, Wagner-Tsukamoto 2008). Public governance in a pluralist state should involve multiple processes to inform policy making decisions and multiple actors to contribute to public service delivery (Jones and Liddle 2011, Hale 2010). Not only would it overcome many of the barriers to change and support local skills development, Mitleton-Kelly highlights another advantage of working together in this way, that it can be facilitated using relatively low levels of funding and technology (Mitleton-Kelly 2011b:23).

A systemic, interactive approach based on mutual learning and equal partnerships represents a step change that challenges dominant ways of working and is likely to face opposition. One way of addressing this is to ensure that all actors have basic training in the principles of complexity thinking and understand that the maintenance of organisation in natural systems (complex systems) is through adaptation, self-organisation, co-creativity and evolution and not through central management control (Hudson 2000).

*'The crucial point (of the complex systems approach) is that from a macroscopic point of view the development of political, social or cultural order is not only the sum of single intentions but the collective result of non-linear interactions.' (*Mainzer 1996:272 quoted in McDaniel and Driebe 2005)

To summarise therefore, if adopting a CoP approach to encourage the creation of sustainable communities, the role of national government will be to develop an inclusive vision or guiding framework to support local action. Local government too will have to change and move away from the belief that services delivered by the third sector have to have specifically measurable outcomes or timescales (Jones and Liddle 2011). As well as being responsible for deepening public commitment to action and showcasing /supporting innovative delivery of solutions (Jones and Liddle 2011, Hale 2010) local government will be expected to participate fully in the local CoP /s and support the engagement of local stakeholders in a non-controlling way. The use of local 'green' voluntary organisation to facilitate the process could help to reduce the fear of dominance and control by the local authority that participants in this research saw as a major weakness of this approach.

There is growing evidence that government is aware of the need for change. The New Public Governance agenda (Jones and Liddle 2011) recognises the contribution of multiple interdependent actors to public service delivery and that services should no longer *'rest solely with professional and managerial staff - rather the aim is to move towards co-production with users and communities*' (Jones and Liddle 2011:158).

At a local level too, statutory guidance to local authorities, 'Creating Strong, Safe and Prosperous Communities', (HM Government 2008) identifies the role of local authorities as setting the overall strategic direction and long term vision and working with local partners to develop a sustainable community strategy.

'The purpose of a sustainable community strategy is to set the overall strategic direction and long-term vision for the economic, social and environmental wellbeing of a local area... in a way that contributes to sustainable development in the UK.' (Hale 2010:19)

Shove (2010) however, is not so optimistic, suggesting that current policy initiatives around climate change are fundamentally flawed because many of the choices are already made - community action should be about challenging the existing systems not just changing behaviour.

7.9 Conclusion and Contribution to Practice

The Government believes that the voluntary sector has an important role to play in the promotion of local sustainability because of its ability to highlight new issues and different perspectives (HM Treasury 2002 2005 2006) and, because it is generally trusted by local communities and therefore more likely to be able to influence local change than a government led approach (Seyfang and Smith 2007, Buchs et al 2012, Middlemiss 2009). Seyfang and Smith (2007) suggest that the voluntary sector, as a niche sector (pioneering organisations, technologies or users that have different social, ethical and cultural rules) is a rich source of innovation that has historically initiated radical change by challenging entrenched cognitive, social, economic, institutional and technological processes (norms) that '*lock us into trajectories that lock out sustainable alternatives*' (Seyfang and Smith 2007:591). Voluntary sector organisations, operating outside the mainstream in less hierarchical ways can stimulate change by challenging the established elements of social order (dominant narratives) and can over time have a profound impact on mainstream discourses and norms (Schwabenland 2006, Rothschild 2000, Leat 1993, Springett 2006, Kiel and Desfor 2003, Tandon and Mohanty 2002, Earl 2007, Seyfang and Smith 2007).

Another reason the voluntary sector should be seen as an important contributor to the sustainability agenda is that although the potential of an unsustainable future will affect all of us in different ways, environmental problems are likely to disproportionately affect the poorest in society, and the poorest in society, those who the voluntary sector represents, are the least likely to have their voices heard (ESRC 2009).

The previous chapter examined the first aim of this research: to explore the government narrative around voluntary sector participation in the sustainability agenda and gain a

better understanding of the contribution of the sector to support behavioural change at local level and contribute to the creation of more sustainable communities. The findings suggested that, apart from recycling, popular with all participants, and some attempts to save energy (for financial reasons rather than to promote sustainability), the non-environmental organisations in this research were not very engaged in this agenda. There was also an indication, by managers in particular, that the promotion of sustainability to stakeholders, an environmental issue, shouldn't be given a high priority by organisations with a social mission.

Behaviour change is a complex issue that is more likely to happen if the appropriate ideas and opportunities are introduced in appropriate social and cultural conditions (Middlemiss 2008), and for the non-environmental voluntary organisations in this research, limited understanding of the potential effects of anthropocentric environmental damage on local communities, little awareness of the links between social, environmental and economic factors and confusion around the concept of sustainable development meant that they did not see the encouragement of behaviour change to support sustainable development as an appropriate agenda. Bruner (1991) suggests that it is the coherence of the narrative, rather than the reality, that contributes to action and doubts about legitimacy, as for example around climate change, can lead to reluctance to act. It could be said therefore, that the main barrier to engagement in the promotion of sustainable behaviour by participants in this research was that the narrative for change lacked coherence. The reason it lacked coherence was that a lack of local networking and engagement meant there was little opportunity for small non-environmental organisations to understand the implications of sustainable development for their organisations, stakeholders and communities.

A key finding of this research however, was that engaging in conversation has the potential to change understanding and stimulate changes in behaviour.

'*... it (dialogue) encourages people to participate in a pool of shared meaning that leads to aligned action.*' (Jaworski 1988:11)

Conversation or engaging in dialogue, a co-creative process, can be a powerful change intervention because talking about issues can lead to cognitive restructuring or new ways of thinking, a precursor to behaviour change (Macmillan 2004). Social interaction and

networking therefore encourage collective learning and support new thinking and understanding which can stimulate innovation and transform established beliefs and values (Earl 2007, Backstrom 2004).

This led to the conclusion that the non-environmental organisations in this research would be more likely to engage in the promotion of sustainable behaviour if they had opportunities to develop a comprehensive understanding of sustainable development in a way that helped them recognise the interdependency between social, economic and environmental goals (systemic thinking). Many of the participants in this research, facing resource pressures, were so focused on their own organisational mission that they did not have the time or the opportunity to consider the wider impact of their activities on other agendas like sustainability. Ineffective and inappropriate communication and support from government at both national and local level created a lack of trust between the local authority and the voluntary sector, which further reduced the opportunities for developing a shared understanding of this complex agenda.

This research suggests therefore, that the creation of local CoPs focussing on local sustainability would provide enabling environments that would support voluntary sector engagement in behaviour change. Cops are an inclusive, non-hierarchical way of facilitating the spread of knowledge that acknowledges the participation of all agents in the system - a systemic approach that mirrors the principles of complexity thinking. Bringing together diverse stakeholders around a topic, the work is done in conversation based on the principle that learning, as a social process, emerges from the participation (Lave and Wenger 1991). Knowledge is seen as non-linear, dynamic and generated through social interaction (social learning) and the emphasis is on self-organisation and co-creativity, and removes the need for hierarchical control (Garcia-Lorenzo et al 2003). The goal of the interaction would not be to proclaim definitive answers but to identify and clarify questions and develop a broader perspective of what sustainable development means at a local level.

Stern (2006) believes that shared understanding is critical in shaping behaviour and underpinning the response to climate change. CoPs, therefore, a powerful way to encourage depth of thinking and open up human possibility, could, when applied to sustainable development create the potential for behaviour change because they encourage

'shared understandings of the problem and an ability to reframe system dynamics so that short term individual interest and long term sustainability and development become more balanced and integrated.' (Morgan 2006:271)

The second aim of this research was to understand the potential of complexity thinking to provide a different framework for addressing complex multi-dimensional problems like sustainable development in a way that would encourage voluntary sector participation. CoPs reflect the principles of complexity thinking in that they are non-hierarchical, non-linear and support co-evolution, self-organisation and emergence. They create local opportunities to have conversations around what is important, and they do so in a way that is potentially more attractive to the voluntary sector, a values based sector, than linear approaches like the EAC, because they are inclusive, non-hierarchical, focus on small changes, acknowledge the importance of emotion in behaviour change and provide the flexibility to develop locally appropriate solutions.

However, the responsibility for local sustainability cannot rest solely with the voluntary sector. In a complex, dynamic system like the Earth, where the effect of any one agent's activity will influence all the other agents in a co-creative way (Holland 1995), an effective change process must include the multiple perspectives and rationalities of all agents involved. Local CoPs therefore, should include a diverse range of local stakeholders – a multi-stakeholder approach, to encourage interaction at the individual, organisational and community level. Consequently I suggest this changes the focus of this research from

'How can voluntary organisations be encouraged to contribute to behaviour change in their local communities' to *'How can all elements in society work together to develop a shared understanding that would support sustainable patterns of behaviour?'*

The creation of a shared context or space (CoP) where individuals interact with others increases connections between parts of the system and supports double loop learning (Griffin et al 1998, Kallinikos 1998, Kauffman 2000) and there is evidence that this type of participative approach to decision making can lead to improved performance (McDaniel 2007). In this research lack of trust was one of the barriers to change that reduced the possibility of effective joint working between CC and the voluntary sector. Engaging in a multi-stakeholder CoP would not only lead to a richer understanding of local skills and

knowledge but it would also increase levels of trust between participants and potentially improve performance.

Another advantage of a multi-stakeholder approach is that diversity is essential in complex systems as it increases the potential for the emergence of innovative solutions and resists the creation of strong valuative social norms which inhibit change (Berg 1989). A multi-stakeholder approach would encourage diversity of knowledge and views, improve information transmission, challenge strong social norms and open up the possibility of generating new knowledge and understanding (cognitive restructuring) from which new ideas and actions can emerge (emergence) (Garcia-Lorenzo et al 2003).

As the principal conceptual framework within which governments are seeking to reconcile the potentially conflicting imperatives of economic growth, social justice and environmental sustainability (Porritt 2005) sustainable development is, as discussed in Chapter 2, a contested topic with competing definitions (strong or weak). It highlights contradictions and paradoxes around inequality and the quest for continual economic growth that render traditional linear approaches to behaviour change redundant because they require stable environments and clear lines of accountability between cause and effect. Climate change is an example of a continuous, open-ended issue that challenges traditional linear approaches, like EAC, that focus on short term fixes to specific issues problems. Complex adaptive systems like the Earth where our behaviour affects the natural environment just as the changes in the natural environment impact on us require new approaches to behaviour change - flexible approaches that help us recognise our role in the co-evolution of our world – third order change (Smyth 2006, Voss et al 2006). This research could therefore make an important contribution to this ongoing debate because it offers a way to address a complex problem like sustainable development, a concept that has no simple solutions and requires us to continually innovate to meet the ongoing challenges of an interdependent, dynamic natural world (Church and Elster 2002, Voss et al 2006, Dobson 2007)).

CoPs, based on the principles of complexity thinking, can meet this challenge and ongoing quest about sustaining what for whom (Gladwin et al 1995) because this co-creative, self-organising way of engagement overcomes the established cognitive, evaluative and institutional boundaries underlying the modernist problem solving approaches (social

norms). They offer an engaging forum that encourages participants to recognise the interconnectedness of the system and the systemic effects of their behaviour (Voss et al 2006, Borland 2009, Smyth 2006, Buchs et al 2011). In other words they create the potential for a new way of thinking (systemic) that challenges the reductionism of the dominant linear rational world view that separates humans from nature, and is said to be the cause of many of the problems sustainable development is attempting to address.

'A complexity perspective on social research and theorising may be most valuable for its role in bringing about alternative descriptions rather than promoting certain interventions.' (Kuhn and Woog 2005:139)

Complexity thinking transcends the boundaries of linear rationality and moves away from the mechanistic, linear world view, consistent with the modernist problem solving approach (Voss et al 2006). It is a powerful, reciprocal, co-evolutionary process in which small changes can have dramatic effect and potentially shift the system into a new paradigm (Gladwell 2000, Stacey 2007, McMillan 2004). It is therefore not necessary to make major interventions in order to bring about significant change (Mitleton-Kelly 2011b)

'Changes in individuals and groups that arise from individual and group learning experiences change the culture and behaviours.' (McMillan 2004: 74)

The enabling environment created by CoPs could potentially shift perspectives and bring about fundamental changes in relationships, behaviour and organisations (third order change). Third order change transcends first order or structural change and second order or valuative change, but it does not deny their legitimacy and this is important in a pluralist society, as Dobson (2007) highlights, because different stakeholders will interpret the issues differently. To avoid the imposition of social norms that can stifle innovation, structural first order approaches, like policy initiatives or second order valuative approaches must be able operate alongside and within the third order change approach and a CoP approach, supporting the principles of complexity thinking would provide the flexibility for strong and weak sustainability values (first, second and third order change) to operate simultaneously, and enable participants to respond in ways they are most comfortable with.

CoPs appear to offer an inclusive, non-hierarchical way of promoting local sustainability and encouraging voluntary sector participation in behaviour change, but it is now important to highlight the challenges this presents. In complex systems it is not possible to design

specific emergences, it is only possible to support conditions that may inspire movement in certain directions (Kuhn and Woog 2005) – possibility not probability. All outcomes of the CoP process will be local and temporary, determined by the participants at the time, and although there is the potential for this approach to bring about the desired changes, it also raises the possibility of no changes or changes in the opposite direction. The very characteristics that make Communities of Practice an attractive vehicle for encouraging local behaviour change are also the characteristics that make them challenging for traditional hierarchical organisations, like Government, that is used to working from the dominant linear paradigm that requires control and predictability (McDaniel and Driebe 2005). Furthermore, as this process requires voluntary participation, it is likely that some may choose not to engage, and securing their commitment in the current climate of austerity, where CC and the voluntary sector may be struggling to find the time or resource could be difficult.

That is why, as this research has highlighted, for this approach to be effective, it will need for top level support from government to give it validity, a clear vision to guide the desired changes and on-going support and training at a local level to ensure the process does not revert to old style hierarchy or become just another talking shop, something the voluntary sector participants were keen to avoid. As it involves changes in practice for local authorities, an important source of funds for local voluntary organisations, they will need to be supported to move away from their traditional controlling role and engage in this inclusive, non-hierarchical process. McMillan (2004) recognised the need for a framework to guide this type of change and developed her New Directions Action Group Principles when working with the OU. A key element of this was training to help actors understand the principles of complexity thinking. Before engaging in local CoPs therefore, participants will require training to give them the confidence to accept that that lack of control will not lead to chaos and that change does not require central management but can be achieved through self-organisation (Hudson 2000, Hutchins 2012). Adapting McMillan's (2004) New Directions Action Group Principles to support the local CoP process should give participants the confidence to engage and Elias's (1939 and 2000) statement may offer some further reassurance. He points out that Western civilisation is not the result of any kind of calculated long term planning, nor is it all down to chance or 'mysterious social forces'.

'Many single plans and actions of men can give rise to changes and patterns that no individual person has planned or created.' (Elias 2000:366)

The interweaving and interplay of intention and actions of many people has led to an orderly pattern of development in a particular direction (self-organisation) and long term population wide patterns have emerged without an overall plan or blue print through the interaction of groups and individuals in their local situations in intentional and planned ways. Although the outcomes cannot be foreseen by any of them, order emerges (Mainzer 1996).

As was suggested in the feedback by stage 3 participants, to encourage voluntary sector participation the process should also be time limited and adequately supported financially. Facilitation by a local green group would re-assure voluntary sector participants that CC won't revert to old norms and attempt to control the process through bureaucracy.

If the UK Government is serious about encouraging local sustainability, an effective response depends on creating the conditions for collective action, and a key building block of this is shared understanding and shared participation. A multi-stakeholder CoP approach based on the principles of complexity thinking could provide a common framework to help people work together (co-evolve), learn how to evolve with our environment in a sustainable way that can cope with the uncertainties of the future (innovation) and avoid second order problems. The principles of complexity thinking suggest that large scale change emerges as a product of small local changes, and this opens the potential for a move away from the dominant linear paradigm based on control and hierarchy, towards a more holistic, cooperative approach to sustainability – third order change (Banerjee 1998, Mitchel et al. 1997, Freeman 1984), but perhaps more importantly, an approach to behaviour change based on local CoPs will help participants gain a new appreciation of the interdependencies between humans and nature whilst retaining the possibility for individual interpretations. At the very least this will raise awareness of the agenda and create history in the system – and this creates the possibility of future change.

As human beings with agency we have a choice. We can choose sustainability or we can carry on with business as usual and deal with the consequences. There is not one future but multiple possible futures, dependent partly on how we choose to respond and we must

bear in mind that the choices we make will not only affect society today but will also affect future generations. The important thing is that the conversations take place.

'At every level the greatest obstacle to transforming the world is that we lack the clarity and imagination to conceive that it could be different.' (Roberto Unger quoted in Hopkins 2013:77)

CoPs, based on principles of collective learning, support the emergence of local competences (Backstrom 2004) and could offer new choices and innovative ways of overcoming the problems of sustainable development. They have the potential to develop social capital, build trust, facilitate the spread of knowledge, enable new understanding and encourage the innovation that will contribute to the creation of local sustainability (Elias 1939-2000, Mitleton-Kelly 2003). The findings of this research could therefore act as a useful source of information and guidance for policy makers tasked with encouraging sustainability but it must be noted that this was a small scale local project and the findings cannot be generalised to the whole sector. It does however give an indication of the way forward and the principles need to be tested with other voluntary sector organisations in other local authorities. They need not be limited to sustainable development but can also be adapted for new contexts because despite the fact that successful outcomes cannot be replicated, by opening up human possibility and encouraging depth of thinking, if the underlying principles are understood they can be applied to different situations and an understanding that complex problems require an enabling environment that is responsive to change and co-evolves with the wider environment could be useful for other organisations facing complex problems (Kuhn and Woog 2005, Mitleton-Kelly 2011b). The value of this approach is therefore, not in copying the process but in understanding the transferable principles and how to apply them in differing contexts (Mitleton-Kelly 2011b).

I close this chapter with wise words from Jonathon Porritt (2005:316) who, drawing on Charles Darwin, suggests it is not the strongest or most intelligent that survive but those that are most responsive to change.

Chapter 8 The Conclusion - but not the End

'The ability to perceive or think differently is more import than the knowledge gained'
David Bohm (quoted in Jaworski 1998:172)

8.1 Introduction

Using an emergent, participatory approach based on conversation, I attempted to understand the various complex narratives in the voluntary sector around sustainable development and how they influenced behaviour. I found that a lack of understanding was the main barrier to change and in the course of this exploration I also discovered that engaging participants in dialogue and discourse around sustainable development changed their understanding of the concept and its relevance to their organisation and its stakeholders. From these basic observations I developed the idea that Communities of Practice, based on the principles of complexity thinking – a systemic approach, could provide a new and different way of supporting the government's agenda to encourage voluntary sector engagement in local behaviour change. Engaging in discourse promotes social learning which leads to new understanding and in a complex social system like human society, this increase the likelihood of behaviour change. As there are doubts about relying solely on the self-interested rationality of regulation to address this complex issue, and it is not possible, nor desirable to indoctrinate a pluralist society with the values of sustainable development, there is a need for a coherent approach that enables choice and diversity appropriate to local need (Porritt 2005, Joas 2000, Wagner-Tsukamoto 2008). As such the outcomes of this research may have relevance for public policy decision makers, locally and nationally who are charged with encouraging sustainable community development.

I acknowledge that CoPs do not offer a definitive solution to the problems of environmental degradation, nor can they guarantee behaviour change because prediction is not possible in a complex system and it will be impossible to measure or quantify the changes that occur, but based on the findings that emerged from this research I believe that the encouragement of multi-stakeholder CoPs that bring local stakeholders together will enable a wider, more systemic understanding of the need for behaviour change and create the potential for appropriate local initiatives to support a more sustainable society.

'The complex interactions of biology, ecology, economics and technological and social factors must be understood and coped with in an ethical sustainable way to save both human systems and humankind.' (Cairns 2004:2 in Blewitt 2010:22)

This approach has several weaknesses. One is the lack of predictability because for organisations used to operating under the dominant paradigm of linear rationality, working in this new way may be difficult to action. In the current normative climate of austerity that demands clear accountability and certainty, for the voluntary sector and local government facing financial uncertainty, CoPs will be a challenging concept to which to commit resources. Furthermore, unless the government highlights sustainable development as an issue of significant importance to warrant action, behaviour change will not happen. I therefore offer CoPs as an idea whose time has perhaps not yet come, but this does not mean that this research has no value. CoPs offer a way to address complex problems in a changing environment that could have relevance for public policy decision makers, locally and nationally and for other organisations facing challenging issues.

As postmodernism and complexity thinking suggest, the environment is always changing and what is relevant today may not be relevant tomorrow. My research took place over several years and many changes occurred during the course of this research. The next sections highlight the political changes that took place and the changes in my understanding as a result of engaging in this doctoral research. The conclusion discusses the relevance of complexity thinking in the modern world.

8.2 The changing political environment

From a complexity perspective the system has to be studied as a whole as all elements are involved in the co-creation of the system. The social and political environment in which this research is situated therefore, has to be taken into account.

'Theoretically informed and knowledgeable research is not, nor should it pretend to be, innocent, naive or outside the highly political and even politicized arenas of knowledge production of the 21st century.' (Clarke 2005:75)

As a part time doctoral student, I began developing my ideas in 2007 and since then there has been a global economic recession (2008) and a change of government in the UK (2010). The UK is currently facing severe economic challenges that are affecting both public sector and voluntary sector funding and significant cuts to local government will impact on the voluntary sector (NCVO 2011, Hand 2011).

The change of Government could have relevance in terms of policy approaches. 'Securing our Future' (2005), a product of the previous government, was updated in 2010 to become 'Shaping our Future'. Although this reiterated aspirations around the importance of civil society in addressing climate change, the revised vision centred around the concept of the Big Society, recasting the relationship between people and the state and place, with less emphasis on the role of government and more on the empowerment of citizens and individual opportunity (http://sd.defra.gov.uk/gov/approach/civil-society/ March 2012). The current free market ideology and value pluralism of modern society may not be conducive to large scale social control models to bring about (enforce) the vision of a sustainable society (Wagner-Tsukamoto, Gibson 2000) but it seems just as unlikely that purely voluntary approaches, such as environmental citizenship (Dobson 2007) or the Big society, values based approaches, will be sufficient to bring about sustainable development, in times of increasing austerity when all but the essentials slip down the agenda. It is my belief that if the current Government does not prioritise sustainable development, create a vision for a sustainable society and provide adequate resources to support the sustainability agenda, 'Shaping our Future' could become just another document that is unlikely to effect change even though this type of approach can be relatively inexpensive (Mitleton-Kelly (2011b).

8.3 My learning

The research stance I took placed me as a co-creator of the outcomes and as such, not only did I influence the research process and outcomes, which I have tried to account for through reflexive practice, but I was also influenced by my engagement in the research. As well as gaining a better understanding of the research process, an in depth knowledge of sustainable development and a better understanding of complexity thinking, perhaps more importantly, I am much more aware of my own stance on the world and more confident about my approach. Working in a business school in which linear rationalism appears to be the dominant framework, I have doubted myself and at times, was tempted to abandon my subjective approach and adopt a more linear approach that meets the 'norms' around a doctoral thesis. I therefore found carrying out research in one paradigm, whilst trying to provide the necessary academic rigour of a different one, very challenging.

The emergent approach I adopted, based on complexity thinking, a non-linear paradigm, made it difficult to capture and record, in the coherent, linear rational way required of a doctoral thesis, the multitude of connections and linkages that emerged from the data. I resorted to jotting down the themes and ideas randomly and as I interacted with the data, miraculously some kind of order emerged. This taught me to trust that it was alright to allow the research to happen without fully understanding it and confirmed to me the benefits of complexity thinking as different approach. Order can emerge out of apparent chaos. It doesn't have to involve detailed forward planning.

A significant example of emergence is that at the start of this research journey I was interested in postmodernism, and only vaguely aware of complexity thinking. The discovery of a book by Cilliers (1998) that linked postmodernism with complexity thinking gave me new insights into how the research could progress. In other words, I was living complexity thinking, as changing my history, changed my understanding and the final outcomes of my research.

On the practical side, as well as reading too much and writing too much, during the construction of this thesis, a meta narrative and itself an oxymoron in postmodernist terms, I experienced times of relative paralysis as I attempted to weave a thread through the multitude of stories and discourses I explored, all of which appeared equally valid in their contribution to the debate. I had to decide to discard hundreds of words, for example, did I need a chapter on ethics or one on the use of language? These were difficult decisions and the process of discarding and post hoc justification reinforced the importance of reflexivity and how much this final thesis is my creation and why therefore, I have to be open about my participation in the process. The end product is not the truth. It is a truth, relative to time and place, a temporary accommodation created by me in order to achieve my doctorate. This does not mean it does not have validity or relevance, but that the context must always be taken into account when applying the learning in different situations.

With hindsight I can see that I might have designed this research differently. I could have started by creating a CoP (action research) and taking a longer term approach, following up the small 'emergences' I noticed as a result of my participation to see if they precipitated any longer term changes. But in spite of these doubts, the most significant thing I learnt was

that conversation is at the heart of the way we humans are continually recreating ourselves and our world. Through the act of engaging in conversation I understood the importance of engagement and I learnt about the significance of language, how to use language that is relevant for the participants and how certain phrases trigger more interest or more importantly, connect emotionally, furthering the conversation and increasing the potential for behaviour change. Overall therefore, I have gained much from my journey and I don't see this thesis as the final destination. It is merely a pause at an appropriate point in time, leaving many avenues still unexplored and many questions still unanswered. Areas for further research include: service user engagement with sustainable development and an examination of the assumptions made by managers about service users, further exploration of the relationship between the voluntary sector and local government and more research into how the principles of complexity thinking can be applied in different contexts.

I do not see the lack of finality as a weakness in the research process. It is a feature of knowledge creation in a dynamic world where what appears relevant today may no longer be valid tomorrow. There will always be unexplored areas and unanswered questions and although a different methodology, involving different participants would have produced a different thesis I do not believe the lack of an objective stance against which to judge this work, renders it valueless. It is a snapshot, the relevance of which can only be decided by those who read it. Every reader will take something different from it. This is my contribution to a sustainable future and I hope you found some thing of value to you.

'We may hope for a conclusion, for something like the traditional retrospective summary and judgement, a stentorian voice to restore balance and perspective to an otherwise imbalanced and volatile world. But such a return to the sanctuary of the critical voice is precisely what is denied the trajectory of postmodern discourse. Instead we find ourselves left with something more modest but perhaps more urgent. That is the task, not finding ends, solutions and finalities, but of living in a world from which these privileges and certainties have been withdrawn.' (Wakefield 1990:151)

8.4 The relevance of complexity thinking in the 21st century

Much of the literature on complexity thinking has been about applying complexity theory in organisational settings with limited boundaries (Macmillan 2004, Stevens and Cox 2007). I have considered its application on a different scale, with a more diverse group of

participants. As an approach that does not produce definitive outcomes, in a time of austerity I am aware that it may be difficult for local government or local voluntary organisations to choose to spend their time or resources on CoPs to support sustainable development and when faced with a choice between setting up a CoP around climate change or funding care for the elderly, sustainable development, a long term issue with intangible benefits, may struggle. However, we can't get away from the fact that *'the economy is a wholly owned subsidiary of the environment. Destroying the environment to save the economy is like cutting the branch upon which one is sitting'* (Kumar 2012:1). I conclude therefore, that complexity thinking is a valid and appropriate change approach in changing and uncertain times, and may be particularly relevant when tackling ambiguous concepts like sustainable development. The social learning it fosters can change culture and behaviour and can provide a useful and valid challenge to dominant meta-narratives that inhibit change. Enacting the principles of complexity thinking through CoPs therefore may offer a different way of encouraging behaviour change for sustainable development in local communities but this approach is also relevant in other situations and for other organisations facing complex problems. The importance of dialogue and discussion as a way of changing the future should not be lost or ignored.

'The future is not something that simply happens to us – we shape it. And it is the responsibility of this generation to shape a future that is sustainable, that respects and enhances the environment and puts us firmly on the road towards a low carbon Britain.' http://sd.defra.gov.uk/documents/DEF-ShapingOurFuture_WEB.PDF 2012 February accessed 29/4/12

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Appendix 1 – Use of Language in UK Government documentation, including the EAC and the Charity Commission

EAC material used a variety of phrases in its reports: *'just and sustainable future', 'environmental sustainability', 'sustainable development', 'environmental justice', 'tackling climate change'*.

www.defra.gov.uk/sustainable/government/advice/community/index.htm accessed 14/11/09

'*Greening*' was used in one publication - '*Changing the Way we Work, an EAC Guide to Greening your Office*'.

The focus was on saving energy, travelling wisely, shopping ethically, saving resources and caring for your area, but it also mentioned the need to adapt to the impact of climate change and reduce carbon emissions.

The link between the environment, climate change and sustainability were clearly outlined. '*We aim to support community groups to become more environmentally sustainable in order to tackle climate change and contribute to the sustainable development of their neighbourhoods.'* (2008:22)

CC documentation used a similar variety of phrases: *'sustainable', 'low carbon city', 'environment'* and *'climate change'* (Carbon Reduction Framework 2009). Although the Environment Strategy (2007) explicitly acknowledged the interconnectedness between the social and the environmental, the focus seemed to be on low carbon as the most important driver of behavioural change. The CC representative used the phrase '*carbon reduction*' extensively throughout the conversation.

UK Government Securing the Future – Sustainable Development Strategy (2005)

Phrases used: sustainability, sustainable consumption and production, climate change and energy, natural resource protection and environmental enhancement, sustainable communities, greenhouse gas emissions.

Sustainable development was defined as - *'enabling all people throughout the world to satisfy their basic needs and to enjoy a better quality of life without compromising the quality of life of future generations.'*

Defra Framework for Pro-environmental Behaviours (January 2008)

Phrases used: carbon savings, sustainable finance and investment, sustainable consumption, environmentally friendly, climate change.

UK Low Carbon Transition Plan, Department of Energy and Climate Change (2009) www.decc.gov.uk/en/content/cms/pusblications/lc_trans_plan/lc_trans_plan.aspx accessed 24/11/09

The language is focussed on climate change, rather than sustainable development. It talks about emission cuts, carbon budgets, and 'helping people to make their whole house greener.'

Charity Commission 'Going Green: Charities and Environmental Responsibility' (2008)

Uses green in the title, but generally refers to environmental sustainability. No explanation of sustainability but the link between the environment, climate change and sustainability was clearly outlined.

'*We aim to support community groups to become more environmentally sustainable in order to tackle climate change and contribute to the sustainable development of their neighbourhoods.'* (2008:22)

It acknowledges that '*all parts of our society are being encouraged to think about environmental sustainability and the expectations of charities to address these issues are growing.'*

It makes reference to the EAC campaign and promotes the Third Sector Declaration on Climate Change.

It talks about how charities may be reluctant to carry out environmental work as it may not be seen as a legitimate use of charity resources but states that this is not a problem. Although charity law does not require engagement in environmental activity, the Charity Commission supports and encourages charities considering it as a way of maximising their effectiveness.

Appendix 2 - Third Sector Declaration

Defra, understanding the unique position of the voluntary sector to promote sustainable development that combines ecological sustainability with social equity, launched The Third Sector Declaration 'Securing the Future' on June 18, 2007 (EAC 2007)

'The Declaration is intended as a statement of intent from Third Sector organisations to tackle the issue of climate change by taking action in our organisations and in our communities. We believe that climate change will disproportionately affect the disadvantaged, poor and excluded and that the Third Sector has a central role in working with communities and government to promote sustainable development that deliver both environmental and social justice.' www.everyactioncounts.org

The EAC project came to an end in 2009 and was taken over by Justact.org who re-launched the Third Sector Declaration with revised wording.

New declaration

'Everyone has a right to a clean and healthy environment. We know that climate change is a major challenge to this right, ours and future generations. Climate change is not only about the environment. It can have positive and negative impacts on our ability to support a prosperous and fair society. Climate change projections continue to show that the UK will increasingly suffer from climate change and that it will also have a massive negative impact on the poor in this country and others around the world. So we need to mitigate and adapt to the impacts of climate change now.

There can be no excuses for doing nothing. We need to just act. Regardless of our mission and vision or how we define our organisation – voluntary, community group, non governmental organisation or social enterprise - we know we need to take action, for the following reasons:

- *climate change will bring around one of the greatest social, environmental and economic threats to society. Issues such as health, housing, transport, waste, food production and equality will all be affected by the impacts of climate change, such as flooding or more extreme weather events*
- *injustice, poverty, exclusion and disadvantage all reduce the ability of countries, communities, families and individuals to respond positively to that challenge*
- *reducing our carbon emissions enough to avoid the worst impacts of climate change will require a transformation in our economy and society, and it's essential that this transition to a low carbon future is fair and equitable.'*

accessed 01/10/2010 http://www.justact.org.uk/declaration/

Appendix 3: Voluntary Sector Initiatives that support voluntary sector activity around behaviour change towards sustainable development

The Charity Commission, www.charitycommission.gov.uk/enhancingcharities/enviro.asp, (2008) published a report about charities and their environmental responsibility, acknowledging their long established role in this area and suggesting they develop this role further, as champions of environmental sustainability. A key finding from the report was that almost two thirds of the charities interviewed were aware that environmental issues did not exist in isolation and that it was impossible to separate environmental issues from social and ethical factors. They saw a direct connection between an improved environment and improvements in social issues.

The Charity Commission added recommendations on environmental responsibility to key pieces of Commission guidance: Hallmarks of an Effective Charity (CC10) and The Essential Trustee: What you need to know (CC3)

www.charitycommission.gov.uk/about_us/About_the_Commission/ccnew31.asp (accessed 7/7/10)

Trustees should have regard to the impact of their charity's activities on the environment and consider ways in which they can take an environmentally responsible and sustainable approach to the charity's work. The addition clarifies that there is no legal barrier to charities exploring the environmental impact of their work even if it is not part of their core charitable purpose. There is a dedicated page on the website 'Environmental Responsibility: what role should charities play?' which includes information to help charities think about the way in which they work and signposts other organisations that can assist charities in addressing their environmental responsibilities.

'What ever a charity's core areas of work are, it may consider environmental issues and we hope that this recommendation will prompt a wider debate by charity trustees about what environmental responsibility is and how it can be acted upon. Indeed environmental activity is an area where charities can learn from each other and there is the potential for charities to share knowledge experience and practice.'

The Charity Finance Directors Group www.cfdg.org.uk, launched advice and guidance entitled: Sustainability in Practice: Monitoring and Reporting, Kate Hand

http://www.cfg.org.uk/~/media/Files/Resources/CFDG%20Publications/Sustainability%20in%20Practice.ashx (no date) Accessed 7/7/10

'We must all put environmental concerns at the centre of what we do. This guide is a great, practical aid in doing exactly that. It shows how charities can take responsibility for the impact of their operations, take steps to reduce that impact and then report their progress in a transparent way. And in a testing economic climate, what organisation wouldn't want to cut costs by using resources and energy more efficiently?' (from forward by Hilary Benn)

NCVO Get Ready for Climate Change www.ncvo-vol.org.uk/advice-support/climate-change/get-ready (no date accessed 15/12/10) gives advice and support, outlines the social justice aspects of climate change and the impact on the poor. It explains how the poor are less able to afford flooding insurance, and that the ill and disabled will find it harder to adapt to extremes of weather and rising costs.

Baring Foundation www.baringfoundation.org.uk, (2008) *'The New Politics of Climate Change - why we are failing and how we will succeed'* a pamphlet by Stephen Hale of Green Alliance which outlines the role that the third sector can play in persuading politicians to take action to combat climate change on the scale that is needed.

NESTA National Endowment for Science Technology and the Arts (launched the Big Green Challenge www.biggreenchallenge.org.uk) 2008 – 2010 to stimulate and support community led responses to climate change
http://www.nesta.org.uk/areas_of_work/public_services_lab/big_green_challenge

(Bunt L. and Harris M. 2010 Mass Localism - a way to help small communities solve big social challenges) www.nesta.org.uk/libarary/documents/Masslocalism_Feb2010.pdf

Supports greater opportunities for grass roots innovation and presumes the community has the capacity to innovate. It calls for appropriate funding streams, not short term target based with bureaucratic requirements, and new tools for community connection and more

opportunity for civic engagement. It stresses that the targets have to be jointly agreed on a local basis and not by government.

Carnegie Trust www.carnegieuktrust.org.uk – report on climate change and social justice http://www.carnegieuktrust.org.uk/2005---2010-programme/future-of--civil-society

'The Commission concluded that it had become impossible to imagine plausible responses to the greatest challenges of our time - including political distrust, economic crisis and climate change - without significant input from civil society'.

City Bridge Trust www.bridgehousegrants.org.uk, Greening the Third Sector 2008 http://www.citybridgetrust.org.uk/CBT/Grants/WorkingWithLondoners/08GreeningThirdSector.htm

Aims of the initiative: Most of us are now well aware of our society's dependence on vulnerable natural systems, and on dwindling global resources. This Trust undertook a pilot programme of eco-audits of a sample of London's third sector organisations in 2006.

Appendix 4: Participant Consent Form and Information Sheet

Consent Form (July 2009)

Title of Research: Understanding Environmentally Responsible Behaviour in the Voluntary and Community Sector

Researcher: **Christine Gilligan**
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1. I confirm that I have read and understand the information about the above study, including the statement about the legal limitations to data confidentiality, and that I have had an opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time.
3. I agree to take part in the above research.
4. I agree/do not agree to the interview being recorded (delete as appropriate).

Name of participant..... Signature

Name of researcher ..... Signature

Date:

Participant Information Sheet

Research Project: Understanding Environmentally Responsible Behaviour in the Voluntary and Community Sector

Researcher: Christine Gilligan

I am an academic member of staff at Sheffield Hallam University and I am undertaking a part-time doctorate (DBA) as part of my professional development.

Research Area

We are all, business, governments and individuals, being urged to consider environmental issues, such as climate change, and to think about how we can change our behaviour to mitigate the associated risks and protect our natural environment. I am interested in the views and opinions of people working the voluntary sector, especially around how they see these issues affecting their sector and stakeholders and what they see as their role in mitigating these risks.

I hope that by gathering a variety of different views: at board level, from employees and volunteers and from service users, my research will contribute to a wider understanding of pro-environmental behaviour change.

The outcome of my research will be present at academic conferences and published in selective academic journals. I am also happy to share my findings with participants.

Confidentiality and Ethics

All the information that you provide will be kept strictly confidential and your name and the name of your organisation will not be revealed in any outcomes. Anything that is written or presented on completion of my research will protect the privacy of the individuals and organisations involved. I will be the only person who has access to the interview records, although I may be required to present an anonymised transcript for examination purposes.

(In some exceptional situations it is possible for data to be subject to subpoena, freedom information claims or mandated reporting by some professions.)

Sheffield Hallam University has a Research Ethics Committee that is responsible for the conduct of research carried out in the name of the University and you are invited to contact this committee if you have any concerns.

www.shu.ac.uk/research/ethics.html

Additionally, the two supervisors listed on the consent form will be happy to confirm the validity of the claims of the researcher. May I take this opportunity to thank you very much for agreeing to take part in this research and remind you that you are free to withdraw at any time.