

Climate Change – whose responsibility?

From the personal to the global

By

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A thesis submitted in fulfillment of the requirements
for the degree of

PhD in Sustainable Futures

University of Technology Sydney

2012

CERTIFICATE OF AUTHORSHIP/ORIGINALITY

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

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

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ACKNOWLEDGEMENTS

I decided to embark on my PhD journey at mid-life as a time to reflect, restock and embrace change. The wisdom of this decision may become more apparent down the track as, to say the least, the journey has been a challenge to my intellect, my stamina and my passion. I am indebted to the many people who have assisted and supported me along this path and were required to deal with my moods, abstraction and complaints.

I wish to express my thanks for the financial support provided by the Australian Government through an Australian Postgraduate Award and the University of Technology Sydney for a Thesis Completion Equity Grant and travelling scholarships. I have been privileged to be a part of the Institute for Sustainable Futures (ISF) community where I have benefited from financial and other resource assistance, excellent postgraduate administration and collegial support.

I am highly grateful to have had two wonderful supervisors in Dr Chris Riedy and Dr Simon Fane. Both have stuck with me through the whole journey and provided invaluable intellectual, emotional and practical support. I have appreciated their attention to detail and critique, boundless enthusiasm for my research, regular and timely feedback and good humour.

I acknowledge John Revington who edited my thesis quickly but with great care and to Johannes Behrisch, a fellow student, I give my heartfelt thanks for realising my diagrams from my poorly drawn efforts.

I would like to further offer my appreciation to all the students and staff involved in the postgraduate programme at ISF over the last four years. In particular I express my thanks to Prof. Cynthia Mitchell for her leadership of the programme and Suzanne Cronan for her friendly, timely and professional assistance and advice. To my fellow postgrad GASers of Dana Cordell, Keren Winterford, Jane Palmer and Dena Fam thanks for sharing all the scholarly insights and emotional ups and downs of my journey. I especially thank Tania Leimbach and Viv Benton for being wonderfully supportive and caring through the difficult times. I don't know what I would have done without your hugs Viv!

I thank my family and in particular my sister Jan and my mother for having to put up with my distractions throughout my study. To JP, Jaz, Zac and Bella – as always thanks for having me as part of your family and to Jack, a special thanks for your enduring friendship, support and advice. To my friends and fellow yogis I owe thanks for dealing with my emotional, physical and mental absences and to BKS, Geeta and Prashant Iyengar sincere thanks and appreciation for providing the path of yoga from which I continue to draw so much.

Finally, I wish to thank all those climate change activists who took part in my research and especially the members of the eight Climate Action Groups who gave their time and expressed beautifully their passion, commitment and drive to create political and social change. Your words, feelings and actions continue to inspire me. I dedicate my thesis to those community activists striving to create a cleaner planet, a more just society and a better future.

PREFACE

So how's the weather?

It just strikes me that talking about the weather is one of those universal things – it doesn't matter who you are and where you come from it is a unifying theme. In fact it is often the point of initial conversation with a complete stranger.

When I was at the Volendam conference I heard stories of changing weather patterns. Of course weather is not climate per se, but I find it fascinating to hear people's stories about it because it is one of our most essential contacts with nature: we feel and see and sense all the time in the outside world the things which define the weather – the wind, the rain, the sun (by the way haven't seen that for more than one day over here so far!)

So the man from the Environment Agency in Helsinki spoke about the fact that there is now less winter snow there and what an impact that is having on people over the dark winter months – they are getting even less access to light. Another guy told me that in his home of Sweden they are getting 5 months less of snow.

In Copenhagen the old man in his 70s spoke about the 4 years of drought that Kiribati has been suffering and about the sun – “the sun is getting hotter”, that's how he described it, “and it burns the skin”.

Taken from my blog entry written 12th December 2009 during my attendance at the Copenhagen Climate Conference.

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LIST OF PUBLICATIONS

Conference papers – peer reviewed abstract:

- Kent, J. C. 2011, 'People like me: opportunities and barriers for broad scale voluntary action on climate change', 2011 Colorado Conference on Earth System Governance: Crossing Boundaries and Building Bridges, Colorado State University, Fort Worth, Colorado, 17-20 May 2011.
- Kent, J.C. 2010, 'When States won't act: the role of civil society in linking local to global in climate change governance', *Democratizing Climate Governance Conference*, 15-16 July 2010, ANU, Canberra, ACT.
- McGee, C.M., Kent, J.C., Riedy, C. and Herriman, J. 2010 'Could deliberative processes empower civil society participation in climate governance' Berlin Oct 2010, in Proceedings of the 2010 Berlin Conference on the Human Dimensions of Global Environmental Change
- Kent, J.C. 2009, 'Individual Responsibility and Voluntary Action on Climate Change', *2009 Amsterdam Conference on the Human Dimensions of Global Environmental Change. Earth Systems Governance: People, Places and the Planet*, Volendam, The Netherlands, 2-4 December 2009.
- Kent, J.C. 2008, 'Individualized responsibility and climate change: if climate protection becomes everyone's responsibility, does it end up being no-one's?', *The 4 Rs - Rights, Respect, Reconciliation, Responsibility - Planning for a socially inclusive future for Australia*, Sydney, September 2008, University of Technology, Sydney, Sydney.

Journal articles

- Kent, J.C. 2009, 'Individualized responsibility and climate change: if climate protection becomes everyone's responsibility, does it end up being no-one's?' *Cosmopolitan Civil Societies: An Interdisciplinary Journal*, v. 1, no. 3, pp. 132-149
- Kent, J. C. (submitted), 'Third sector organisations and climate change: a case study of Australian Climate Action Groups' *Third Sector Review*.

Book Chapters

Kent, J. C. 2011, 'Individual responsibility and voluntary action on climate change: activating agency' In *Ethics and Global Environmental Policy: Cosmopolitan Conceptions of Climate Change*, Paul G. Harris (ed), Edward Elgar, Cheltenham UK.

ABSTRACT

Whilst over twenty years of international negotiations have failed to generate a global agreement to prevent dangerous climate change, increasingly governments are calling on their citizens to take responsibility for climate change within their households and lifestyles. This individualisation of responsibility positions climate change action at the centre of personal lifestyle choice and individual behaviour. If we are to accept this, then in what ways are individuals equipped to enact their responsibility towards climate change? What forms of agency do actors require and in what ways are these individual agencies responsive to the constraints of our presently unsustainable society?

In this thesis I undertake a transdisciplinary exploration of these questions drawing from five areas of theory (political; social; psychological; philosophical and cultural) that are concerned with the role of individual agency in climate change response. Each of these theoretical perspectives raises questions about the social, political and cultural contexts through which societal change is mediated. From them I argue that the individualisation of responsibility emphasises individual agency over structural responsibility (after Middlemiss 2010) and that existing theories fail to inform us why certain individuals are enabled to take action on climate change. Further, I identify three constraints to individual agency in relation to climate change mitigation. I propose that individual agents, in coming together in small groups express forms of collective agency which overcome these constraints.

I tested these hypotheses through my empirical research. My multiple case study consisting of eight Australian Climate Action Groups (CAGs) reveals two essential divergences between members of CAGs and others in the community. Firstly, under the conditions of risk (Beck 1992) individual actors either: take action around climate change; or otherwise express denial and/or disempowerment. Secondly, those engaged in climate change as an issue either: take individual responsibility for climate change action, reflected in their personal and private sphere behaviour; or, having overcome the constraints to agency, take collective responsibility for climate change reflected through political action in the public sphere.

To understand the role of CAGs in broader social change I analysed my multiple case study on CAGs through the lens of sustainable transitions and complementary theories. From this theoretical perspective I argue that CAGs operate as niches of radical innovation with the potential to translate innovation from their niche to the incumbent regime or otherwise destabilise the regime in order for broader social change to occur.

CHAPTER 1 - INTRODUCTION

1.1 Why research climate change?

Future weather will not be like past weather; future climates will not be like past climates (Hulme 2010, p. 1)

The weather is changing; the climate is too. We sense how the climate is changing, felt through subtle and ephemeral changes in seasonal patterns and weather cycles. The human impact on the Earth's atmosphere, which has been accelerating since industrialisation began¹, is disrupting global climate systems (IPCC 2007; Robinson et al. 2011). Together with the interlocking human impacts on the other elements of the biosphere, water and land, the very nature of life on the planet is threatened (Suzuki 2010).

Climate change has been described as a 'diabolical' problem (Garnaut 2008) and the greatest challenge to humanity (Ki-Moon 2009). The post-industrial climate forcing² (Butler 2010; Lacic 2010) is largely the result of a build-up of greenhouse gases (GHGs), mainly carbon dioxide created from the burning of fossil fuels. These gases act on the Earth's climate system, producing complex and uncertain impacts. These impacts spread spatially, so that the source of greenhouse gases can be distant from their greatest impact, and temporally, so that greenhouse gases can take up to 100 years or more to break down (IPCC 2007a). Their effect on the Earth's atmosphere is not only cumulative but also delayed. Climate change creates unequal impacts, falling most heavily on the poorest and future generations that are least responsible for creating the problem (World Bank 2009). Climate change is a "wicked problem" (Rittel & Webber 1973), that is, one which defies simple solutions and cannot be addressed "through the same thinking that created it" (Brown 2010, p. 62 citing Rittel 1972). The 'wickedness' (Brown et al. 2010) of climate change is evident in its complexity, spread and inequitable impact.

¹ According to Canadell & Raupach (2011): "Human activities have released half a trillion tonnes of carbon into the atmosphere in the form of carbon dioxide (CO₂) since the beginning of the industrial revolution. ...The dominant CO₂ emissions contribution from fossil fuels has accelerated in recent years, increasing at an average annual growth rate of 3.4% per year during the period 2000-08."

² Climate forcing is a "change" in the status quo of the "radiative energy budget" (IPCC 2007) within the Earth's atmosphere. The long-lived greenhouse gases (carbon dioxide, methane, nitrous oxide and halogenated compounds) are contributing both the greatest and most uncertain impacts on the Earth's climate (Butler 2010).

Addressing the wicked problem of climate change demands an unprecedented level of global cooperation. Despite this, over 20 years of concerted international effort to lessen the probability of catastrophic warming through a global treaty has failed to deliver an agreement to meet a safe temperature target³ (Climate Analytics & Ecofys 2011; den Elzen et al., 2010).

This complexity, the lack of simple causality and institutional inadequacy each contributes to what Gardiner (2006, 2010) describes as a “perfect moral storm”. Each represents an area of ethical deliberation essential to resolving the climate change problem but for which existing moral prescriptions are inadequate (Gardiner 2006). Who should bear the responsibility for the costs and burdens of responding to climate change is unclear as there is no single causal agent that can be identified as responsible for the problem. This positions climate change “as the moral challenge of our generation” (Ki-Moon, 2009) as it throws up ethical contestations not only internationally but also between each government and its citizens; and between present and future generations.

As an interlocking issue that respects neither national borders nor political timescales, climate change creates “a world of fluid heterogeneity, where scale becomes transient and Cartesian space easily subverted” (Hulme 2010, p. 563). It becomes another of the expanded global risks that individuals increasingly encounter (Beck 2006, 2010). Climate change is not just a problem for nations, institutions and civil society in the public sphere to resolve; it has become a focus for individualised responsibility and private sphere action (Carvalho 2010; Paterson & Stripple 2010). Risk discourses (Hulme 2009; Thompson & Rayner 1998), moreover, are pervasive in discussions on climate change, especially those that adopt the symbolism of ‘danger’ and ‘catastrophe’. For example, global atmospheric temperature rise scenarios and targets are often expressed as: 2 degrees is ‘good’, 4 degrees is ‘bad’ and 1 degree is ‘best’, ignoring the fact that these potential temperature rises involve varying risks dependent on their unpredictable impacts across the globe. Other scenarios call for adopting a war footing

³ The United Nations Framework Convention on Climate Change (UNFCCC) sets a goal of keeping global temperature “at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system” (Article 2 of the Convention). In 2010 governments agreed to keep global temperature rise below 2 degrees centigrade http://unfccc.int/essential_background/items/6031.php, accessed 13 December 2011. Analysis by Climate Action Tracker indicates that current global agreements are on track to deliver a temperature rise in the order of 3.5 degrees, <http://climateactiontracker.org/news/116/Durban-Agreements-a-step-towards-a-global-agreement-but-risk-of-exceeding-3C-warming-remains-scientists.html>, accessed 1 March 2012.

in order to urgently combat the ‘climate emergency’ (Spratt & Sutton 2008). But for Beck, global ‘bads’ such as climate change offer the prospect of positive social change as they break down the conditions that established what is increasingly perceived as a flawed and unsustainable model for modernity:

Many theories and theorists do not recognise the opportunities of the risk society, the opportunities of the 'bads'. I argue for the opening up to democratic scrutiny of the previous depoliticized realms of decision-making and for the need to recognize the ways in which contemporary debates of this sort are constrained by the epistemological and legal systems within which they are conducted (Beck 2000, pp. 226-7).

Climate change has become the symbol of our times, blending the local and the global, the past with the future, the ‘us’ and the ‘them’: a heuristic for examining not only the modern condition, but ourselves.

1.2 Climate change research as social and transdisciplinary enquiry

The absence of the social sciences (apart from economics) is notable in climate change research and risk analysis (Szerszynski & Urry 2010). Climate change has been principally considered a scientific problem which privileges expert knowledge (Demeritt 2001, 2006). This positivist framing of climate change is called into question by social constructivists on a number of fronts. Constructivist critiques of the Intergovernmental Panel on Climate Change (IPCC)⁴, the peak scientific advisory body on climate change, (see for example Demeritt 2001, 2006; Miller 2004) argue that the IPCC has perpetuated a globalising of reductionist climate knowledge by removing climate from its local and regional backgrounds. The causes and effects of climate change are therefore universalised and abstracted away from their social and political contexts. These globalising tendencies further threaten to trivialize the uneven power relations and basic inequalities evident across human relations. Positivist framing of climate change moreover promulgates scientific certainty as the condition which must be met if the world’s citizens are to unite behind a global climate policy.

⁴ See <http://www.ipcc.ch/>, accessed 12th December 2011.

The social sciences have been largely under-represented in climate change research (Beck 2010; Hulme 2009; Lever-Tracey 2008, 2010; Shove 2010; Urry 2010) despite clear evidence that complex human-centred global crises require an all-encompassing scientific, technological, economic, political, social and cultural response (Biermann et al. 2009; Brown et al. 2010). More recent economic critiques (Garnaut 2008, 2011; Stern 2006) have extended both our understanding of climate change and potential policy interventions. However, economics remains focused on an individualistic and calculative prescription “based on individual calculation, technology and development of markets” (Szerszynski & Urry 2010, p. 3). This is a narrow perspective that fails to capture the way human societies actually function.

Social constructivism has been increasingly adopted by scholars to investigate climate change from a different viewpoint – one which allows a broader framing of climate change and acknowledges the variety of actors, social structures and system processes that underpin its breadth and complexity (Pettenger 2007) (see Chapter 2 for a more detailed discussion). For this reason, climate change research is tending to breach the bounds of disciplinary scholarship, extending its reach widely so as to reveal the complexity of climate change as both a problem and a field of study and its central import in the concerns and imagination of the public mind (Hulme 2009; Weber 2010).

Scholars, interested in the processes and governance of global environmental change, are calling for transdisciplinary approaches (Biermann 2007; Brown et al. 2010; Price et al. 1990 in Hulme 2010, p. 558). Transdisciplinary work: tackles complexity and challenges knowledge fragmentation (Carew & Wickson 2010; Sommerville & Rapport 2000); deals with problems from heterogeneous planes such as climate change (Lawrence 2004); encompasses the hybrid, non-linear and reflexive, thereby transcending individual discipline boundaries (Balsinger 2004); and accepts local contexts and uncertainty (Thompson Klein 2004) (Lawrence 2010, pp. 17-18). Brown et al. (2010) state:

‘Transdisciplinary’ is taken here to be the collective understanding of an issue; it is created by including the personal, the local and the strategic as well as specialized contributions to knowledge. This use needs to be distinguished from a multidisciplinary inquiry, which is taken to be a combination of specializations for a particular purpose,

such as a public health initiative, and from interdisciplinary, the common ground between two specializations that may develop into a discipline of its own, as it has in biochemistry ... 'Open' transdisciplinarity includes the disciplines, but goes further than multi-disciplinarity to include all validated constructions of knowledge and their worldviews and methods of inquiry (p. 4).

In this thesis I adopt a transdisciplinary approach which incorporates knowledge from diverse sources to examine the complex problem context and breadth of stakeholder engagement in climate change (Carew & Wickson 2010).

1.3 Research context

As discussed above, much of the contemporary scholarship on climate change remains focused on climate science and economic responses and assumes that the governance of climate change is best situated globally, since climate change is a global problem. Climate change policy takes a lead from international institutions (mainly the United Nations Framework Convention on Climate Change (UNFCCC)) that apply “top-down” strategies to be delivered by states through their national climate policies. The emphasis on climate policy playing out on the international stage has also largely overridden the growing signs of dissent from civil society evident in an expanding grassroots climate movement (Hall et al. 2010; Jamison 2010). This movement displays deep concerns regarding the ability of governments to achieve an effective international agreement that can deliver the urgent action required to defuse the threat of catastrophic climate change (Hansen 2007).

National governments on the other hand often emphasise responsibility for climate change action at the individual and household level, that is, from the “bottom-up”. This assumes that the summation of local actions is (or can be) linked to national efforts and that this will lead to global scale change (WWF-UK 2008). How bottom-up approaches, those necessary actions at the local level, actually translate into a global-level response has received little attention (Evans & Abrahamse 2009; Goldspink & Kay 2007; Hargreaves et al. 2011; Middlemiss & Parrish 2010).

Numerous surveys, polls and social research studies (for example Leviston et al. 2011; Lowy Institute 2011; Neilsen & Environmental Change Institute 2007; Wolf & Moser 2011) have for at least the last decade tracked the level of public concern on climate change. High levels of concern were recorded in 2006 across many nations (Neilsen & Environmental Change Institute 2007), a bellwether year for public and political attention to climate change globally (McGaurr & Lester 2009). The year 2006 coincided, for example, with the aftermath of Hurricane Katrina and the release of the Stern Review on the Economics of Climate Change (2006). In the same year, former US Vice President Al Gore's film, *An Inconvenient Truth* was released internationally (Neilsen & Environmental Change Institute 2007). The film, which presented climate change science in graphic layman's terms, attracted a very wide audience. It was during this coalescence of globally significant events that the majority of Australian Climate Action Groups (CAGs) formed.

Climate Action Groups (CAGs), consisting of highly motivated and publicly engaged citizens who devote their volunteer efforts to working collectively on climate change, have emerged in recent years in Australia. CAGs are a distinct kind of group within the broader movement for community-based climate change action (see Chapter 5, section 5.2.1). They are usually small groups, strongly associated with place (often reflected in their names). Their structures may range from informal associations to more sophisticated incorporated organisations, but they rely on the commitment of a cohort of volunteers drawn from their local area. CAGs are diverse (The Change Agency n.d.). They vary in size from a few members to larger groups (which can have several thousand members), all drawn from their local communities situated across every state and territory within Australia (Climate Movement 2008)⁵. They are involved in different forms and scales of action from radical direct action and civil disobedience to bulk buying of solar goods and creating human beach signs. They are largely nonpartisan⁶ groups that may not subscribe to a particular political ideology yet share commonality in that they have come to see climate change as the most important target of their voluntary time, energy and resources.

⁵ See <http://www.climatemovement.org.au/> accessed 19th July 2011.

⁶ Personal communication. Also CAGs researched state on their websites that they are non-politically aligned.

I chose CAGs as the focus for my empirical research as they fulfill a unique role in grassroots action on climate change within Australia (section 5.2.1). CAGs are for me a contemporary example of the process whereby individuals concerned about climate change choose to come together in local community-based groups in order to take voluntary collective action. The emergence of CAGs also represents a particular historic moment in Australian climate politics and I felt it was important to document their role, coinciding as it did with my own research timeline and broader political developments both within Australia and internationally. The results of my research with CAGs are presented as a multiple case study.

The rise of CAGs also corresponded to the local political situation characterised by an Australian government predominantly skeptical about climate change. The Howard Government's response to expressions of social anxiety about the threat of climate change relied on individual actions and commitments to behaviour change at the personal and household level. In 2007, the Australian Government launched the \$25 million Climate Clever campaign⁷, 'Be Climate Clever: "I can do that"', which included a booklet mailed out to every Australian household emphasising what actions individuals (and households) could take to responsibly reduce their greenhouse gas (GHG) emissions. Similar government responses have been made in the UK, the USA and the European Union indicating that calls to take individual responsibility for climate change mitigation are shared amongst Western nations.⁸

Since that time, with the media and politicians increasingly voicing scepticism about scientific claims and with attention being focused on competing global crises (in particular the Global Financial Crisis), there has been a steady decline in public concern (Jones 2010; Lowy Institute 2011). Public trust in the ability of Western governments to find and implement an effective solution to the climate crisis has also declined due to political reluctance to enact progressive climate change policies both internationally and nationally (Ashworth et al. 2011; Brechin & Bhandari 2011; Hale 2010; Hetherington 1998; Höppner & Whitmarsh 2010; Lorenzoni et al. 2007; Lorenzoni & Pidgeon 2006;

⁷ "Be climate clever, families told." The Daily Telegraph, September 15, 2007. <http://www.news.com.au/story/0,23599,22420580-5009760,00.html> accessed 29/10/07.

⁸ Examples of government climate change information campaigns targeted at individual lifestyle and behaviour change include: "Be Climate Clever: I can do that" in Australia; in the UK, DEFRA's "Are you doing your bit?"; and the USA EPA's "Climate Change – What You Can Do", (<http://www.epa.gov/climatechange/wycd/home.html>, accessed 13th December 2011) and the European Commission's "You Control Climate Change" (see <http://www.climatechange.eu.com/> accessed 13th December 2011).

Markus 2011; Schyns & Koop 2010; The Climate Institute 2010). In this climate of public distrust, understanding what motivates individual and collective forms of taking responsibility for climate change action, and what enables citizens to regain trust in their politicians and public institutions, is of critical concern.

1.3.1 Problem context

Climate change is a diabolical problem for which no clear resolution is yet forthcoming. As noted above, the response to climate change has relied to this point largely on global top down processes through international climate negotiations and national policy settings; whilst the emphasis at the national level in countries such as Australia has focused mitigation efforts on aspects of local and individual responsibility. Recent failures in forging international agreements to keep global temperature rise below dangerous levels⁹ moreover has shifted interest to action at the local and community scale.

The individualisation of responsibility for climate change action preferences individual agency over structural responsibility (Middlemiss 2010) and requires individuals to not only be motivated in order to take action on climate change but also equipped to act as *agents* for climate change mitigation. (I understand *agents* as not solely possessing the *intention* to act within their personal and private spheres (Whitmarsh et al. 2009) but to be distinguished by their “*legitimacy* and *capacity* to influence outcomes” (Biermann et al. (2009, p. 32)) – see further discussion in section 3.6).

Clearly individuals face significant challenges to creating the scale of change necessary to combat dangerous climate change and climate change requires actors across all scales to contribute to the solution (Rootes et al. 2012). Prioritising individuals as the focus of climate change mitigation, rather than collectives, moreover tends to depoliticize civil society response (L. Middlemiss, personal communication, 12/6/2012). Whilst there are signs of a growing global climate movement within civil society, mass mobilization and large scale shifts in political responses and public opinion have not been realised

⁹“Rio+20 politicians deliver 'new definition of hypocrisy' claim NGOs: Greenpeace, WWF and Oxfam criticise world leaders for shirking responsibilities and say civil society must act in their place”, <http://www.guardian.co.uk/global-development/2012/jun/21/rio20-politicians-hypocrisy-ngos>, accessed 9th July 2012; Christoff, P, “Rio+20: doing the zombie shuffle”, <http://www.crikey.com.au/2012/06/22/rio20-doing-the-zombie-shuffle/>, accessed 29th June 2012; and “After Durban – is an agreement to agree better than no agreement at all?”, <http://theconversation.edu.au/after-durban-is-an-agreement-to-agree-better-than-no-agreement-at-all-4682>, accessed 5th August 2012.

(Rootes et al. 2012). Yet the increasing numbers of community scale collectives engaged in a range of climate change mitigation and sustainable development practices (Hoffman & High-Pippert 2010; Seyfang et al. 2010; Avelino 2011; Buchs et al. 2011; Seyfang & Haxeltine 2012) perhaps signals a social movement derived from the grassroots. This suggests that theories of change need to consider what motivates individuals to join grassroots collectives in order to take action and the potential for these grassroots collectives to seed broader scale social change.

1.3.2 Research aims

In response to the problem outlined above, my research is specifically concerned with ‘bottom up’ change, that is, how community action develops from the grassroots. My research aims to determine: firstly, why and how individuals take responsibility for climate change through their voluntary actions (RA1); secondly, how the shift occurs from individual agency to collective agency in grassroots climate change action (RA2); and thirdly, how collective grassroots action can lead to broader social change (RA3).

I address my first and second research aims initially in Chapter 3 which presents my literature review on the individualisation of responsibility for climate change. The first two research aims are taken up again in my discussion in Chapter 7 on the role of agency in climate action. The third research aim is explored through my literature review of socio-technical (sustainable) transition theory in Chapter 4 and discussed in Chapter 8 on CAGs as niches with regime-change potential.

1.3.3 Research objectives

Drawing from my three research aims, the following objectives have been used to guide my research. My research objectives are to determine:

- RO1 How people perceive their responsibility for climate change.
- RO2 In what ways individuals act responsibly to mitigate climate change. In other words, how individual actors acquire agency (that is, become actors with authority) within voluntary action.
- RO3 Whether the individualisation of responsibility is creating the conditions for social change on climate change.

- RO4 How people understand the institutional and personal conditions for responsibility in climate change action.
- RO5 How individuals' actions on climate change at the local level link-up to create global level change.
- RO6 What kinds of narratives, storylines, images and metaphors of responsibility for climate change people relate to.

The first three objectives relate to the individualisation of responsibility for climate change action. These objectives specifically frame my literature review in Chapter 3 and they provided the initial grounding of my theoretical enquiry which I take up through my empirical research. The fourth objective is addressed in Chapter 7 where I discuss the results of my multiple case study of Australian Climate Action Groups (CAGs). In Chapter 7 I develop a theoretical model which is based on my CAG research and which I argue can be applied more broadly. The fifth objective is taken up in Chapter 4 on socio-technical (sustainable) transition theory and is discussed in Chapter 8. I further reflect on this objective in Chapter 9 where I examine some of the limitations of my research and ideas for further empirical investigation. The sixth objective is picked up in the section of the literature review which specifically relates to climate change discourses (Chapter 2, section 2.3.1) and is discussed in relation to the results of my research in Chapter 6.

1.3.4 Research questions

With the above aims and objectives in mind I used the following research questions to guide my empirical research. The relationship between these research questions, the questions directed to CAGs (see Chapter 5: Research design) and the overarching themes of my research around the individualisation of responsibility, individual vs. collective agency and constraints and enablements to action are mapped out in Table 6 (Chapter 5, section 5.5.2.4).

- RQ1 How do members of Australian CAGs perceive their responsibility for climate change?
- RQ2 In what ways do Australian CAG members act responsibly to mitigate climate change?

- RQ3 How do CAG members acquire agency (that is, become actors with authority) within voluntary action?
- RQ4 What motivates members of Australian CAGs to join these groups and take collective action?
- RQ5 How can actions on climate change at the local level link-up to create global level change?
- RQ6 What kinds of narratives, storylines, images and metaphors of responsibility for climate change do people relate to?

Additional questions and hypotheses also arose along my research journey. I identify them in each chapter. In the sections below, I summarise the chapters and their guiding questions.

1.4 Thesis Outline

I present climate change as being complex, multifaceted and socially constructed and I assume that humans are central to both the causation and alleviation of this wicked problem. In introducing the background to my research and expressing my research interest I have identified some key themes which I take forward into my literature review.

1.4.1 Literature Review (Chapters 2-4)

Firstly, I examine climate change as symptomatic of the interlocking catastrophes of *unsustainability* promulgated through conditions of risk. Drawing from Beck's (1992) social theory of risk I argue that climate change is an iconic representation of risk society in the 21st century (section 2.4). I am in esteemed company here, as Beck has been influential in much of the scholarship concerning global environmental change, environmental politics and the sociology of climate change (see for example, Dryzek et al. 2003; Dryzek 2008; Hajer 1995; Hulme 2008, 2009, 2010; Torgerson 1999, 2008, 2010).

Chapter 2 examines Beck's theory within a wider explication of the social construction of climate change. This chapter responds to the following questions:

How are the social sciences incorporated within climate change research and knowledge?

What are the theoretical and methodological implications of a social constructivist approach to climate change research?

How does Beck's risk theory encompass ideas regarding individualisation, responsibility, risk and social change in relation to climate change?

A social constructivist epistemological position is adopted consisting of three key aspects, which lie “nested within the broad theme of power and knowledge” (Pettenger 2007, p. 6): ideational and material factors; agent and structure duality; and process and change (section 2.2.1). The objective for utilising a social constructivist approach to climate change lies in the ability for this approach to reveal: why and how actors take responsibility for climate change; how responsibility (in all its meanings) is formulated in climate change policy development; and the interplay of responsibility, power and knowledge in the responses to and development of climate change discourses.

The second core component of the thesis framing is individualisation (Beck & Beck-Gernsheim 2002) and in particular how, arising from the global conditions of risk, synonymous with ‘second modernity’ (Beck 1992), an individualisation of responsibility for climate change is manifest (Chapter 3). Beck and Beck-Gernsheim’s scholarship prompts the question here: *can the individualisation of responsibility create the conditions for social action on climate change?* I explore this question initially through three areas of literature that are concerned with the role of individual agency in climate change action. These are: individual responsibility as a product of neoliberalism; Beck and Beck-Gernsheim’s (2002) individualisation thesis; and psychological theories of behaviour change which privilege the individual.

Each of these bodies of literature raises questions about the social, political and cultural contexts through which societal change is mediated. Governments and global institutions state that any successful climate change mitigation strategy will require significant changes in lifestyles and behaviours (IPCC 2007b, 12; see also Garnaut 2008; Stern 2007); and “‘lifestyle’ connotes *individual* responses to/ responsibility for social and environmental change” (Evans & Abrahamse 2009, p. 501 – emphasis in original). This highlights an important role for individual action in meeting climate

change imperatives. The nature of these voluntary acts, how they are enacted and the relationship between the actions of institutions (whether global, national or local) and individuals becomes critical. It became important at this stage to determine which types of action undertaken individually can contribute to the best outcome in terms of global environmental change. I utilised a cultural theory discourse approach at this point (section 3.3.4) to map out a typology of voluntary actions against their respective cultural discourses.

The final theoretical input to the understanding of the individualisation of responsibility for climate change is discussed in section 3.4. This section considers the ethics of climate change broadly, from its contribution to international climate change policy through to understanding how individual responsibility and rights are being framed through a climate ethics lens. I conclude this section by bringing together theoretical perspectives on the individualisation of responsibility for climate change drawn from the social, political, psychological, cultural and philosophical literatures to argue that the individualisation of responsibility prioritises *individual agency* over *structural responsibility* (after Middlemiss 2010) and that the theories associated with these perspectives fail to inform us how the *constraints* to individual agency around climate change can be overcome.

I proceed to identify three *constraints* to individual agency (section 3.6.1): lack of personal empowerment; lack of reflexivity; and lack of political trust. This leads me to argue that individual agents, in coming together in small groups (such as Climate Action Groups (CAGs), the focus of my empirical study), express forms of collective agency which may overcome these constraints.

At this point, it became apparent that my two key theoretical frames (outlined in Chapters 2 and 3 of the thesis) were insufficient for developing a deeper theory-based understanding of how local and grassroots action might translate into broader social change (my third research aim – see section 1.3.2). To understand the role of grassroots collectives in broader social change, I draw on a third body of literature in Chapter 4 – Socio-Technical (Sustainable) Transitions Theory (STT). STT seeks to understand broad scale change that emerges from the ‘bottom up’. For example, Smith and Seyfang (2007) conceive that civil society collectives operating within their local communities

act as “grassroots innovations”. “Grassroots innovations” possess the potential to influence or otherwise destabilise the incumbent regime in order to bring about change. This theoretical perspective contributed significantly to establishing CAGs as the focus of my empirical investigation.

In summary, from my literature review I establish that a social constructivist epistemological position is appropriate for my investigation into grassroots voluntary action on climate change as it is focused on the relationship between individual agency and the structural constraints to action within the broader context of climate change risk. The complex nature of climate change as a wicked problem embedded deeply within the political, economic, cultural and social conditions of global unsustainability demands a transdisciplinary research approach. In my literature review I have considered the role of the individual in taking responsibility for environmental action from across disciplines and I have incorporated a broad range of theoretical positions: social, political, psychological, cultural and philosophical. From these literatures I identify the critical role of collective agency in overcoming three constraints to individual agency in voluntary climate action. Lastly, in order to understand the relationship between collective agency and the transition to wider social change I incorporate a sustainable transitions theoretical approach.

1.4.2 Research Design (Chapter 5)

At the commencement of my research design chapter (Chapter 5) I discuss the relevance of Australian Climate Action Groups (CAGs) to my research objectives and present the rationale for investigating CAGs in my research. I argue that CAGs are a type of organisation that is distinct from the more established environmental non-governmental organisations (eNGOs) actively participating in climate change policy and advocacy work within Australia. CAGs have emerged from their local communities to take voluntary grassroots action on climate change. CAGs engage their individual members in collective climate change action and so express collective agency. They display characteristics of grassroots innovations and thus hold the potential to stimulate broader social change.

My research also coincided with important developments within the grassroots climate action movement in Australia and I acknowledge in Chapter 5 other complementary research conducted into CAGs that assists in extending knowledge on these community-based collectives. I identify, however, how my research design addresses normative and empirical gaps in understanding and pose the following questions:

- How do members of Australian CAGs perceive their responsibility for climate change?
- In what ways do Australian CAG members act responsibly to mitigate climate change? How do they acquire agency (that is, become actors with authority) through voluntary action?
- What motivates members of Australian CAGs to join these groups and take collective action?
- How can actions on climate change at the local level link-up to create global-level change?
- What kinds of narratives, storylines, images and metaphors of responsibility for climate change do people relate to?

A research design is then presented to address these questions. A qualitative research approach was adopted consistent with my social constructivist epistemology. Case study methodology is discussed and critiqued and found to provide an appropriate methodological framework for determining how and why people join community-based collectives to take responsibility for climate change through their voluntary actions. Focus group discussions were used as the primary data source along with several other methods (discussed in section 5.5.2). Analysis of the cases studied follows an abductive reasoning approach (Blaikie 2010), which involves the development of themes and their rich description within individual case study narratives.

1.4.3 Results (Chapter 6 & Appendix F)

The results of my qualitative enquiry form the Multiple Case Study on Climate Action Groups (CAGs) within Australia (see Chapter 6 for case study context and Appendix F). I preface the multiple case study by positioning my research within the contemporary historical, political and social contexts. I undertook my research in a period of significant flux around climate change action marked by significant upheavals in

Australian politics and internationally around the 2009 United Nations Copenhagen Climate Conference.

The multiple case study itself is informed by my empirical data (see Appendix A) and is presented in the form of case study narratives developed on each of the eight CAGs researched (Appendix F). The multiple case study is presented around two sets of themes (summarised in Chapter 6). The first set of themes (presented below) was drawn from the focus group questions.

- Motivation for voluntary action on climate change
- Types of individual and collective (group) action taken
- Individual and collective agency around climate change
- Constraints and enablements for action
- Scale of influence and action
- Communicating climate change.

The second set of themes arose out of the discussion as co-constructed discourses (Smithson 2000). These themes, together with my other data, the literature and further conceptualisations, are braided together (Baxter & Jack 2008) and presented within the discussion chapters of the thesis.

1.4.4 Discussion (Chapters 7-8)

In Chapter 7, the role of agency in climate action is discussed, bringing together theoretical understandings of individual and collective agency on climate change together with my empirical results, consistent with my second research aim, which is to determine how the shift occurs from individual agency to collective agency in grassroots climate change action. I draw on my findings to argue that CAG members can be distinguished from others within their communities based on a process of engagement with climate change as an issue. Vitality, CAGs provide insight into how agency can be activated within the broader community.

I detail my observation on participant and group characteristics to support my contention that CAGs represent distinct grassroots groups consisting of a particular 'elite' that formed under conditions of "moral shock" (Pearse et al. 2010). Participants

demonstrate both their individual and collective agency through their voluntary actions to address climate change and have overcome the constraints of lack of empowerment, lack of trust and lack of reflexivity.

The question of CAGs as change agents is examined further in Chapter 8 where I utilise the sustainable transitions literature. This examination corresponds to my third research aim, which is to determine how collective grassroots action can lead to broader social change. CAGs are conceptualised as grassroots innovations with the potential to translate community-focused climate action into more mainstream settings. I establish here a pathway for understanding broader social change processes that emanate from community-based collectives and transform themselves into wider social movements. This pathway incorporates the two complementary theoretical frames of the green public sphere and polycentrism. Both accentuate that social change occurs as a messy and disordered process and argue for the critical involvement of collectives in climate change action arising from the grassroots of civil society.

1.4.5 Conclusion (Chapter 9)

Having opened up a space for discussion on community-based social change on climate change I conclude my thesis by presenting a series of questions and ideas for further research. In particular I present some ideas that further conceptual understanding of the role of CAGs in social change processes. I am attracted here to the metaphors of rhizome and arborescence (following Deleuze) to describe dual pathways of social change: one horizontal and the other vertical that complement sustainable transitions theory and suggest that the social change potential of grassroots niches can be conceived as a “complex contagion” (Centola & Macy 2007).

CHAPTER 2 – THE SOCIAL CONSTRUCTION OF CLIMATE CHANGE

2.1 Introduction

In Chapter 1, I alluded to the dominance of science and economics in climate change discourses. In this chapter my aim is to help redress this imbalance by exposing and discussing how climate change is framed within a social context. In particular, I argue that how we know climate change patterns and potentially limits society's response. This reflects my personal journey in my research, as I have come to question the basis for my own understanding, how I perceive climate change and the framings of climate change through varying modes of discourse: ethical, political, scientific, economic and social. The very progress of the field, not only in scholarship but in the political twists and turns internationally, nationally and locally, has offered a rich palette for both personal reflection and action.

In this chapter I address the following questions:

- *How are the social sciences incorporated within climate change research and knowledge?*
- *What are the theoretical and methodological implications of a social constructivist approach to climate change research?*
- *How does Beck's risk theory encompass ideas regarding individualisation, responsibility, risk and social change in relation to climate change?*

This chapter explores these questions and provides three main propositions in relation to the social construction of climate change (in other words, how we *know* climate change). Firstly, in section 2.2, I discuss the limited role that the social sciences have traditionally played in relation to both our understanding of and reaction to climate change. I argue for a balancing of the hegemonic techno-scientific and economic bias with a social perspective through adopting a social constructivist epistemological stance. In section 2.3, I position climate change in relation to the discourses that commonly contribute to the different social and political views and responses to climate change. Lastly, in section 2.4, I select a social theory that adopts risk and uncertainty as the central characteristics of a post-industrial world (Beck's Risk Theory) for

illuminating how climate change occupies its contemporary position in our individual and collective psyches and for illuminating potential pathways for social change.

2.2 Role of the social sciences in climate change

Climate change has been principally considered a scientific problem (Rosa & Dietz 1998) and as such, scientific discourse has sought to provide accurate knowledge of how the climate is changing (Crotty 1998) and it has privileged scientific expertise (Demeritt 2001, 2006). As Pettenger argues (2007, p. 4):

... the perceived material reality of climate change is defined in social settings by scientists and policymakers (who may or may not be experts, Lahsen 2005). In other words “science ... is the politics of climate change (Lahsen 2007, p. 190).

Constructivist critiques of the IPCC (see for example Demeritt 2001, 2006; Miller 2004) – the pre-eminent source of scientific knowledge concerning climate change – argue that the IPCC has perpetuated a globalising of positivist climate knowledge through removing climate from its local and regional contexts. Demeritt (2001) argues that this abstracts its impacts away from social and political contexts and universalises both its causative and remedial actions:

From the very outset, global climate change has been constructed in narrowly technical and reductionist scientific terms ... Accordingly, the IPCC and the other national and international scientific bodies studying climate change have tended to regard it as a universal and global-scale problem of atmospheric emissions. They have tried as much as possible to divorce the scientific study of the problem from the social and political contexts of both its material production and its cognitive understanding (Agrawala 1998b, p. 312).

These globalising inclinations privilege objectivist knowledge and tend to trivialise uneven power relations and basic inequalities evident across human relations.

According to Rosa and Dietz (1998) this scientific framing of climate change can be challenged on two main fronts:

the first challenges the social authority of scientific knowledge by emphasizing the uncertainties that underpin scientific claims about climate change, and the second emphasizes the historical, social and political context of claims-making (p. 440).

As argued by Demeritt (2001, p. 329), the positivist framing of climate change promulgates scientific certainty as the rationale for uniting the world's citizens behind a global climate policy:

Appeal to the universal interests of a global citizenry is founded on scientific certainty, rather than the more difficult work of making global warming meaningful to a differentiated international public. As a result, continued scientific uncertainty has become the principal rationale for continued inaction. The narrowly scientific focus on global climate change addresses itself to an undifferentiated global "we" and relies exclusively on the authority of science to create this sense of some other basis of appeal, "we" are likely to act more as spectators than participants in the shaping of our related but different futures.

The positivist framing of climate change through scientific knowledge and claim-making can be illustrated through the historic treatment of the weather which has more recently coalesced and collapsed into a globalised notion of climate change. Miller (2004), in tracking the historic rise of the global governance of climate, claims that the weather, historically of local and regional interest, has been aggregated to now form an issue of global politics (p. 51) and "a common concern of humankind" (WCED 1987, p. 55). Whilst this situation serves the creation of a common global order around climate change, Miller (2004) questions how this might be related back to individual lives and livelihoods (p. 63). The *globalising* of climate has shifted the discourse away from local and tangible "vagaries of the weather", recorded through "our sense and memories" in "the calendar or the gardeners' almanac" (Jasanoff 2010, p. 235). In the global order (Marshall 2011), the unpredictability of the weather is conflated to the "chaotic climate" (Hulme 2009, p. 26) which must be stabilised as a public 'good'.

More recently climate change has attracted influential economic critiques (Garnaut 2008, 2011; Stern 2006) which monopolise climate change discourses. These economic critiques tend to align with neoclassical economics which fits easily into the dominant discourse. Responses to climate change therefore focus on "human practices as

individualistic, market-based and calculative” (Szerszynski & Urry 2010, p. 3) conveyed through technology and the development of markets (Szerszynski & Urry 2010, p. 3). Many academics have recently decried the limited purview of the social sciences in climate change discourse, restricted to these narrow economic responses (Beck 2010; Hulme 2009; Lever-Tracey 2008, 2010; Shove 2010, 2010a; Szerszynski & Urry 2010, Urry 2009, 2010). As Szerszynski and Urry (2010, p.3) argue:

.... in the developing analysis of this new global risk the social is both central and pretty well invisible.

2.2.1 Social Constructivism and the Study of Climate Change

In response, scholars have increasingly adopted social constructivism to investigate “the social and cultural elements involved in producing environmental knowledge” (Jasanoff & Wynne 1998, p. 4) and, of particular interest here, knowledge of climate change.

Pettenger (2007, p. 7) argues that constructivism provides a new perspective on climate change that promises to uncover the various societal actors, structures and processes that have been obscured by the dominant technocratic and economic framings. She outlines three principles of social constructivism which lie “nested within the broad theme of power and knowledge” (Pettenger 2007, p. 6) and which I draw on in this thesis:

- Ideational/ material factors
- Agent/ structure duality
- Process and change.

Ideational/ material factors

Constructivism engages both with ideas and with material factors or things and is concerned with how material and social realities interweave and interrelate. This co-evolution of material artifacts such as technology with social aspects is taken up more specifically in Chapter 4: Socio-Technical (Sustainable) Transition Theory.

Agent/ structure duality

In the process of arriving at their understandings of the climate change dilemma, constructivists have adopted and incorporated Giddens’ theory of structuration (Jackson & Sorenson 2006, p. 163) in recognition of the duality of agents and structure. As

Pettenger (2007, p. 7) points out, “the social construction of actors’ identities and interests and of structures, such as discourses and norms, is the heart of constructivism”. Structuration theory is discussed further in section 2.2.2 below.

Process and change

The third principle of constructivism illuminates its capacity to understand change through focusing on processes rather than objects. Constructivism opens up reflexive space, allowing “the construction of social structures by agents” as well as allowing “those structures, in turn, [to] influence and reconstruct agents” (Pettenger 2007, p. 7 citing Finnemore 1996, p. 24). This principle therefore highlights important themes within this thesis regarding CAG formation, collective agency and the potential for broader-scale social change explored in Chapters 7 and 8.

2.2.2 Structuration theory

Structuration theory is based on an ontology of recurrent social practices and their transformations; it is concerned with the nature of human action, the acting self, social institutions and the interrelations between action and institutions – with the relationship between agency and structure (Blaikie 1993, p. 99).

Structuration theory, developed by Anthony Giddens, is a social theory concerned with human action and behaviour within its societal context. As described above, it represents a key aspect of a social constructivist appreciation of climate change. Giddens (1984) developed structuration theory as a response to the “positivistic view” of the natural sciences (Blaikie 1993, p. 90) and their dominance in the formulation of social scientific principles. As Giddens states that contrary to nature, there are no universal laws governing human conduct (Giddens 1984, p. xxviii).

Structuration theory is therefore described as “an ontological framework for the study of human social activities” (Blaikie 1993, p. 69). It is concerned with the production and reproduction of society brought about through the mutual dependence of *agency* and *structure*. ‘Agents’ imply actors who can exert power, so agency refers not to the intention to act but the ability of humans to act (Giddens 1984, p. 9). Actors are embedded in structures, or rules and resources. This *duality of structure* is defined by Giddens to mean that “social structures are both constituted *by* human agency, and yet

at the same time are the very *medium* of this constitution” (Giddens 1976, p. 121). Agents are embedded in social structure and therefore constantly reproduce societal conditions recursively. In this way, Giddens distinguishes human action from fatalistic and determinist understandings: agents not only intend but are capable of choosing to act rationally; however, correspondingly, there are both conditions and consequences of those actions.

Structure has the ability to both enable and constrain human action. It acts “like the rules of grammar” (Held & Thompson 1989, pp. 3–4) as it not only allows action but also sets the boundaries of action. These rules are the “cognitive, interpretive frames” and the “cultural norms” (Grin et al. 2010, pp. 42–43) which are continuously instantiated and reproduced through everyday action. Structure is also supported by *resources*, which can be *allocative* (such as control over money or things) and *authoritative* (control over people) (Grin et al. 2010, pp. 42–43). Structuration theory therefore establishes that actors are not free agents in the neoliberalist¹⁰ sense of being able to enact individual choice and free will but that there are unconscious motives that underlie human action and with that, unintended or unknown consequences.

Structuration theory is particularly influential in constructivist thinking (see for example Pettenger 2007) and has been drawn on substantially in the development of more recent interdisciplinary and transdisciplinary approaches to social and policy change (see Buchs et al. 2011; Geels 2011; Grin et al. 2010; Grin & Loeber 2007; Hargreaves et al. 2011). Giddens himself described his theory as providing an alternative understanding of social change to the more prescriptive and universalising “historic materialism” (Giddens 1984, p. xxix) contained within the application of evolution to the social sciences. He outlines the following points of criticism to this approach as:

an irreversible series of stages through which societies move, even if it is not held that all individual societies must pass through each of them to reach the higher ones; some conceptual linkage with biological theories of evolution; and the specification of directionality through the stages indicated, in respect of a given criterion or criteria, such as increasing complexity or expansion of production (Giddens 1984, p. xxviii–xxix).

¹⁰ I explore the relationship of neoliberalism to the individualisation of responsibility for climate change in Chapter 3, section 3.3.1.

Some other examples of approaches that utilise structuration theory are: socio-technical transitions theory (for example, Grin et al. 2010), social practice theory (Shove & Walker 2010) and related interdisciplinary theories that draw strongly from science and technology studies, such as strategic niche management (Kemp et al. 1998; Raven et al. 2010).

Grin et al. (2010) note criticism of Giddens' theory on a number of fronts. Firstly, they observe that structuration theory has been criticised for its lack of inclusion of "the role of technology in social life" (p. 45). This could be reflective of a bias from those engaged in socio-technical research. Nevertheless, other contemporaries of Giddens, (such as Beck and Bauman) engage critically with the social elements of science and technology. Another criticism is that Giddens overemphasises social structures and individual actions "and never considers the ghost of networked others that continually inform that action (Thrift 1996, p. 54 cited in Grin et al. 2010, p. 45). The role of collectives and horizontal scale interactions between actors is therefore ignored in preference to the vertical interactions between actors and structures (Grin et al. 2010, p. 45).

Finally, as Giddens' concern is with the everyday practices of daily life, agency is often understood in micro terms and structure in macro terms. In other words, agents could be considered in macro terms as collective groupings of actors such as organisations or social movements and structures could be considered at the micro level in the rules that structure local practices (Grin et al. 2010 pp. 47–8; Hargreaves et al. 2011; Shove 2003). Grin et al. (2010) suggest that some scholars therefore prefer "local–global as a better distinction than agency–structure". This is a less nuanced distinction in my view and, I argue, goes against Giddens' intention to present structuration theory as primarily an ontological concern around human action.

Whilst much of this critique is warranted, it does not in my view diminish the importance of structuration theory in a social constructivist study of climate change and in particular it does not diminish its importance in theories of social change. I take these criticisms into account in the application of structuration theory to my research whilst acknowledging that the agency–structure distinction is critical to conceptualising and

critiquing individualist versus collectivist preferences for climate change action. I return to structuration theory in Chapter 4, as it is a critical component of the theoretical framing of sustainable transitions. In that chapter I take up these concepts further and draw out their implications for my research.

2.3 Role of discourse

In approaching the climate change “problematique” (Max-Neef 2005) from a social constructivist perspective, two items in particular dominate the climate change scholarship: discourses and the media. Whilst there is a rich literature on the importance of media in influencing public understanding and concern about climate change (see for example, Boyce & Lewis 2009; Boykoff 2007, 2008, 2009), the more critical focus for my research into community-based climate action collectives lies in the way their members co-construct climate change knowledge and act based on their worldviews. I do not therefore discuss the role of media in climate change here.

Dryzek (2005, p. 9) defines a discourse as:

... a shared way of apprehending the world. Embedded in language, it enables those who subscribe to it to interpret bits of information and put them together into coherent stories or accounts. Discourses construct meanings and relationships, helping to define common sense and legitimate knowledge.

As Dryzek (2005, p. 9) explains, discourses are essential to our contemporary understanding of environmental issues, as they both define and build on different elements of understanding surrounding an issue:

Each discourse rests on assumptions, judgments and contentions that provide the basic terms for analysis, debates, agreements and disagreements.

Discourses also manifest power, in that they can dominate or suppress other storylines (Foucault 1980 cited in Dryzek 2005, p. 9), which according to Bäckstrand and Lovbrand (2007, p. 125): “favor[ing] certain descriptions of reality and thereby empower[ing] certain actors while marginalizing others”.

Environmental discourses can create change by influencing institutions and thereby influencing policy development.¹¹ This implies that actors need to influence and re-imagine culturally-created narratives of climate change: “redefin[ing] the chessboard” so that “environmental problems are seen as opportunities rather than troubles” (Dryzek 1997, p.13).

2.3.1 Discourses of climate change

The power of discourses in communicating climate change knowledge that can translate into social action can be understood from two broad perspectives. Firstly, as discussed above, the scientific and economic storylines of climate change, prevalent in global politics and policy-making, influence and create selective understandings of climate change, narrow its perception both in terms of ‘problem’ and ‘solution’ and serve to replicate hegemonic power. Secondly, on a more individual and psychological level, discourses can drive particular courses of action, potentially stimulating or stifling forms of climate change mitigation practices (this point is drawn out further in the next chapter, in section 3.3.4).

The analysis of discourses “assumes the existence of multiple, socially constructed realities” (Hajer & Versteeg 2005, p. 176) and it is therefore the analysis of *meaning* that becomes centrally important in climate change policy development. As Hajer and Versteeg (2005) declare:

for interpretative environmental policy research, it is not an environmental phenomenon in itself that is important, but the way in which society makes sense of this phenomenon (p. 176).

Analyses of environmental discourses commonly portray the political narratives of climate change that are revealed in contemporary climate governance arrangements (Bäckstrand & Lovbrand 2007; Bulkeley 2001; Dryzek 1997, 2005; Oels 2005; Okereke 2006, 2008; Rutherford 1999). Other analyses, however, expose culturally created climate change storylines. For example, Hulme (2008) argues that contemporary climate change discourse can be conceived of as a “climate change as catastrophe” storyline through a historic analysis of human response to climatic change over time. Marshall

¹¹ Bäckstrand & Lovbrand (2007) describe policies as the “product of discursive struggles” (p. 125).

(2011), in a somewhat similar vein, asserts that human responses to climate change can be read as a rendering of psychosocial disorder. The analysis of climate change discourses thereby enriches and diversifies understanding of climate change as a research subject. I do not however adopt a discourse analysis approach in this thesis; rather, the discourses of climate change are drawn upon to illustrate different cultural interpretations and varying appreciations of the subject matter.

Reflective of the interest of global policymakers in climate change discourses, the 2001 Working Group (WG) III report of the IPCC considers several pragmatic “narratives about climate change” (IPCC 2001, p. 372). The report describes three discursive typologies of climate change as *hierarchical*, *market* and *egalitarian* which, according to the IPCC, can be used to classify the positions of different climate change actors, assist in resolving differences and understand how dialogues regarding climate change can evolve over time (IPCC 2001, p. 372).

These three positions are derived from Cultural Theory, which outlines four main behavioural groupings or typologies (individualist (equivalent to market), egalitarian, hierarchist and fatalist) to explain human–nature interactions (Jasanoff & Wynne 1998, p. 44). Cultural theory is also described as grid-group theory (Douglas & Wildavsky 1982), where ‘grid’ refers to the spatial, hierarchical dimensions of authority or interest and ‘group’ refers to the extent of individualism or collectivity. Egalitarians, for example, display low ‘grid’ (that is, they are free to negotiate equally with others) and high ‘group’ (or collectivist) characteristics whilst hierarchists share high ‘group’ characteristics with egalitarians but are also high ‘grid’ (or “imposed inequality”). Individualists are low grid and low group and fatalists display low group and high grid characteristics (Riedy 2008).

Each of these typologies has its own view of nature and conception of society. Fatalists perceive nature as a lottery and climate change outcomes as a function of chance (consequently, fatalists do not engage in climate policy discussions and are not identified with a specific climate policy discourse); individualists perceive nature as resilient and rely on markets to respond to climate change ‘stimuli’; hierarchists perceive nature as manageable and prefer the use of regulation and technologically-based ‘solutions’; and egalitarians perceive nature as fragile and regard the engagement

of deliberative processes and civil society as critical in a climate change response (O’Riordan & Jordan 1999, pp. 86–7).

These three discursive typologies (hierarchical, market (or individualist) and egalitarian) present as persistent themes in the climate change literature. Each discourse expresses different concepts of responsibility and thereby provides a means to expose and track constructs of responsibility within contemporary climate change debate. I will examine how each discourse constructs responsibility for climate change in the next section.

2.3.1.1 Responsibility discourses

Hierarchical discourses, also described as “green governmentality”, are “top-down”, “science-driven and sovereign-based”, “embedded in expert-oriented and public inaccessible storylines that favor policy and research elites” (Bäckstrand & Lovbrand 2007, p. 128). Responsibility for climate change action within hierarchical discourses lies primarily with institutions (for example, the UNFCCC).

Individualist discourses emphasise neoliberalist, market-based processes and individualised responsibility (for example, the Kyoto Protocol and emissions trading schemes). This discourse is often expressed as ecological modernisation (after Hajer 1995; see also Bäckstrand & Lovbrand 2007; Dryzek 1997) which encompasses both economic growth and environmental protection.

Egalitarian discourses involve collaborative, multilateral, public–private processes and responsibility is shared across society and institutions (Michaelis 2003). Bäckstrand and Lovbrand (2007) use the term “Civic Environmentalism” to describe the egalitarian discourse.

Contemporary discourses within the climate change policy setting are almost solely characterised by a market-driven (*individualist*) storyline (Bäckstrand & Lovbrand 2007; Michaelis 2003; Oels 2005). Bäckstrand and Lovbrand (2007) define the “commodification of carbon” in the Kyoto Protocol mechanisms as symptomatic of the hegemonic ecological modernisation discourse. Oels (2005, p. 199), applying Foucault’s notion of advanced liberal government (which can be equated with

neoliberalism), argues that market-based solutions dominate climate change institutional arrangements which have been opened up to much broader participation. She states that:

The Kyoto Protocol can be interpreted as a clear example of advanced liberal government. It draws on markets, technologies of agency and technologies of citizenship to create 'responsible', 'calculating' member states. The Kyoto Protocol establishes markets for emissions trading in the form of Joint Implementation, Emission Trading and Clean Development Mechanism. These markets institutionalize the idea that who or where emission reductions should take place is a matter of costs, not an ethical or moral issue (Oels 2005, p. 199).

Climate change policy options under advanced liberal government are no longer concerned with moral responsibility but become limited to market-prescribed solutions that shift responsibility in order "to secure Western lifestyle[s]" (Oels 2005, p. 202). Both the discursive frameworks of green governmentality and advanced liberal government thereby incorporate notions of individualised responsibility, whilst their counter-narratives envision responsibility as shared and opened up to wider citizen participation.

Matters of responsibility and lifestyle can therefore come to the fore in a discourse approach and they can be examined to determine their underlying meanings as well as their political and societal ramifications. In this way, "policy making becomes a site of cultural politics, leading people to reflect on who they are and what they want" (Hajer & Versteeg 2005, p.182).

2.3.1.2 Risk discourses

Szerszynski and Urry (2010, pp. 1–2) identify three climate change discourses: scepticism, gradualism and catastrophism, which resonate with contemporary social and political debates around climate change and risk. The discourse of scepticism considers climate change to be natural, not human induced and non-threatening. The scepticism discourse has recently gained more support with the increasing influence of ultra-conservative ('right wing') politics (exemplified by The Tea Party in the USA) and a powerful fossil fuel ("carbon mafia") lobby (see for example Hamilton 2007; Jones 2010; Moser 2009; Pearse 2009) in climate change politics. It is evident that scepticism

is gaining traction with the Australian population with recent surveys indicating a steady rise over the last few years (Leviston et al. 2011; Lowy Institute 2011; The Climate Institute 2010).

The gradualism discourse, which Szersynski and Urry ascribe to the UNFCCC, proposes that climate change is occurring gradually and whilst humans are contributing to it, it is a risk that can be managed. The catastrophism discourse proposes that the climate system can experience abrupt and unpredictable change and that humans are throwing the system into disequilibrium. This discourse is reflected in the work of Lovelock (2009) and Hansen (2007, 2008) for example.

2.3.1.3 Summary

In summary, environmental discourses are important informants of individual attitudes and motivations towards environmental concerns. They help to reveal how people relate in their everyday lives to matters of global risk, such as climate change. Macnaghten and Urry (1998) suggest that “the storyline of ‘global nature’ in particular would lack the connection with concerns of everyday life and thereby have a disempowering effect” (cited in Hajer and Versteeg 2005, p. 180; see also Demeritt 2001). (This resonates with Miller (2004) and Jasanoff (2010) cited in section 2.2 above.) The question of how action on climate change becomes personal but not disempowering has been the subject of considerable contention (Blake 1999; Hall et al. 2010; Moser 2009; Wolf 2011). In the following section, I raise some differing perspectives on how climate change discourses are critical to how and why people choose to take responsibility on climate change through their voluntary actions – a theme that I address more fully in the next chapter (Chapter 3).

2.3.2 Lifestyle politics – making the personal, political

Hajer and Versteeg (2005) propose that “responses to environmental crises should also be explained in terms of the particular ideas about the respective responsibilities of government and citizens” (p. 180). Drawing on Foucault’s concept of governmentality, they argue that shifts from government- to personal-level responsibility on matters traditionally under state control, such as health and food risks, can provide the opportunity to explain “how such practices come about and how they can function as a

society broad discourse” (Hajer and Versteeg 2005, p. 181). Responsibility can be conceived as something more than reflective practice as it is bedded in discourse so that a particular responsibility discourse could either promote or inhibit social action for climate change mitigation.

In a similar way, Goldspink and Kay (2007, p. 7) explore the agent–structure relationships that underpin the discursive adages “Think global: act local” and “Think local: act global” and state that:

an agent can form hypotheses about the relationship between a macro structural aspect of the social system in which it is participant and then act on that hypothesis, potentially changing the structure which it participates in generating. This gives rise to a feedback path between macro and micro phenomena that is not present in any other natural phenomena.

They argue that the micro–macro linkages implied by these slogan discourses are both under theorised and little understood. Their Wikipedia research project aimed to determine how norms are created, evolve and adapt to situations. They found that rather than being “consistent with a ‘norm as rule following’ behaviour” people are attracted to “emergent patterns” and from these adjust their own behaviour (p. 12) which is much more suggestive of behaviour influenced by a prevailing discourse. Applying this to an individualisation of responsibility discourse for climate change, it can be seen how the discursive idiom “Think global: act local” can be played out through personal action.

Spaargaren and Mol (2008) suggest that the demise of the state allows the citizen-consumer to have an emerging role in environmental politics as connections are forged with global-level institutions and processes through consumer practice. They define this citizen-consumer action as “lifestyle politics” which is “primarily about civil-society actors and dynamics beyond state and market” and “about private, personal and individual morals, commitments and responsibilities” (p. 357). In their view:

The concept of *lifestyle* as it is used by Giddens (1991) refers to the cluster of habits and storylines that result from an individuals’ participation in a set of everyday life routines they share with others. Every citizen-consumer can be characterized by his or

her unique combination of shared practices, the level of integration of these practices, and the storylines he or she connects to these practices. Lifestyle politics then refer to the ways in which individuals at some points in time (especially when confronted with sudden changes, challenges or fatal moments) reflect on their everyday life (Spaargaren & Mol 2008, p. 357; my emphasis).

These reflections on responsibility, risk and lifestyle discourses all draw on structuration theory, prompting the following questions:

Are responsibility discourses key to motivating reflective practices on personal lifestyle choice? In other words, are individual and household level climate change mitigation practices the result of wider structural influences that encourage individualised responses to environmental and social risks? If so, how might these discourses be harnessed for successful action towards wider scale climate change abatement?

In the next section I commence to address these questions through the lens of a social theory of risk. Beck's Risk Theory brings together the important elements of structuration theory and discourse (as identified in the sections above). Beck's thesis proposes that in modern society there is a growing individualisation of responsibility for global risks such as climate change.

2.4 A Social Theory of Climate Change: Beck's Risk Society

As the previous discussion on discourses demonstrates, the notion of risk is central to the study of climate change. Risk theories often form the basis of scholarship on global environmental issues such as climate change (for example: Dryzek 1997; Hajer 1995; Hulme 2008, 2009, 2010). The work of social theorist Ulrich Beck is fundamental to this erudition (each of the authors above draw on Beck), typified in his magnum opus, *Risk Society* (Beck 1992). Beck is a key commentator on the impact of industrialisation on contemporary social conditions in the developed world. In particular his work examines the role of science and technology in post-industrial society, the dual processes of individualisation and globalisation, and the growing inadequacies of what were once respected institutions of government, law, market and the media.

Beck's work is often considered as a progression in the historic line of German metatheoretical social theorists (Mythen 2004, p. 184) and Beck himself sometimes references and compares his ideas to Weber, Marx and Habermas. Elements of his theory relating to the political sphere and social transformation reference Marx and Foucault. Beck, in common with other prominent risk theorists (especially Bauman and Giddens with whom he shares many common theoretical positions), adopts a social constructivist and transdisciplinary (Beck 2000a) stance. The relationship between agents and structure is central to his thesis (Lash & Wynne 1992, p. 2) as is reflexivity, discourse, participatory democracy and cosmopolitanism.

In asking: "How do we wish to live?", Beck (1992) places ethical considerations at the foundation of his risk thesis and proposes that societal transformation will proceed through an "ecological democracy [which] would democratize the politics of expertise by rolling back the industrial coalition's colonization of politics, law and the public sphere" (Dryzek et al. 2003, p. 170). Global risks or 'bads' unlock opportunities for large scale change by opening up depoliticised realms of decision making, which are constrained by epistemological systems to democratic scrutiny (Beck 2000a, pp. 226–7). The processes of individualisation, globalisation and attributing risk both delegitimise and destabilise the extant regime, creating potential for broad scale institutional change (Beck 2000, p. 225).

I find Beck's work compelling as it provides an overarching social perspective on globalisation, technology, modernity, individualisation, responsibility and social change. Beck's work, often criticised for its lack of empirical integrity (see Mythen 2004 for example), nonetheless fires the imagination. As Bronner (1995, p. 85 cited in Mythen 2004, p. 183) observes:

For all its problems, the work of Ulrich Beck retains an electric quality. Idea after idea jumps off the pages of his work. Some lack precision, others never receive justification, and still others contradict one another. Qualifications sit on top of one another; arguments disappear only to appear once again; fuzzy slogans compete with the claims of common sense. But then come the golden nuggets of dazzling insight.

Beck paints a landscape from which a broader conceptual understanding of climate change, both in terms of phenomenon and response, can be drawn.

There are four core elements to Beck's risk thesis that I discuss in more detail below: risk society; individualisation; reflexive modernity; and sub-politics.

2.4.1 Risk Society

In *Risk Society* (1992), Beck outlines the difference between risks of today compared with those of pre-industrial society. He argues that risks today "escape perception" and are often the by-product of technological advancement and "overproduction" (e.g. toxins in foodstuffs or the nuclear threat). For Beck, risks are now global and intergenerational, superseding both time and place (p. 22). He argues that:

... in the risk society the unknown and unintended consequences come to be a dominant force in history and society (Beck 1992, p. 22).

Beck sets out five theses regarding the nature of risks in postmodern society.

Firstly:

They induce systematic and often *irreversible* harm, generally remain *invisible*, are based on *causal interpretations*, and thus initially only exist in terms of the (scientific or anti-scientific) *knowledge* about them. They can thus be changed, magnified, dramatized or minimized within knowledge, and to that extent they are particularly *open to social definition and construction*. Hence the mass media and scientific and legal professions in charge of defining risks become key social and political positions (Beck 1992, p. 23 – emphasis in original).

Secondly, risk distribution does not necessarily "follow inequalities of class and strata positions" (p. 23) but can strike anyone (in what Beck describes as a "*boomerang effect*") and this acts to break down these traditional divisions. According to Beck: "ecological disaster and atomic fallout ignore the borders of nations" (p. 23). Thus, "risk society ... is a world risk society."

Thirdly, modernisation risks create opportunity for economic exploitation within capitalist societies:

... with the economic exploitation of the risks it sets free, industrial society produces the hazards and the political potential of the risk society (Beck 1992, p. 23).

In Beck's fourth thesis, as class and position in society cannot protect people from 'civilizational' risk, "knowledge gains a new political significance. Accordingly the political potential of the risk society must be elaborated and analysed in a sociological theory of the origin and diffusion of *knowledge about risks*" (Beck 1992, pp. 23–4).

Lastly, Beck outlines how the previously "*unpolitical*" is exposed to political scrutiny by a broader range of actors, in particular the public, under the conditions of the risk society (Beck 1992, p. 24):

... what thus emerges in risk society is the *political potential of catastrophes*. Averting and managing these can include a *reorganization of power and authority*. Risk society is a *catastrophic* society. In it the exceptional condition threatens to become the norm (Beck 1992, p. 24 – emphasis in the original).

There are four categories of these risks in the risk society that "no one saw and no one wanted" (Barry 2007, p. 245): ecological, health, economic and social; each one features as a recurring motif in Beck's work.

Beck describes how risk is mediated through knowledge and knowledge systems, and in particular, science. Risk is aligned with progress and indeed it is the tying of progress to technological development that creates a powerful legitimacy to risk in modern society. The growing "risk industry" provides further evidence that rather than perceiving risks as problems that should be corrected at source, industry and science use risk problems as further sources of technological research and development to become "*self-producible risk*" (Beck 1992, p. 56).

Beck theorises that science and technology, being non-reflexive, "are *entirely incapable* of reacting adequately to civilizational risks, since they are prominently involved in the origin and growth of those risks" (Beck 1992, p. 59). In response, "people themselves become small, private alternative experts in risks of modernization" (Beck 1992, p. 61). This becomes a persistent theme in Beck's work – the seeming paradox of

individualisation generated in response to the conditions of the risk society which for Beck becomes a “double-edged sword” creating “greater choice and autonomy” but also “the burden of continual decision and responsibility” (Mythen 2004, p. 119).

In the final part of *Risk Society*, Beck turns to the role of science and politics in the creation of the risk society. According to Beck, science plays several contradictory roles in the risk society – science can help make risks and threats more transparent or it can conceal and downplay risks (Beck 1992, p. 158). Science creates problems but also has a role in solving problems (that is, it is self-serving). It uses formerly criticised developments as “*the motor of expansion*” for its activities (Beck 1992, p. 161).

Beck (1992) hypothesises that in response to the conditions of the risk society, individualisation develops but there is a paradoxical tension created between individuals and the state and other institutions. Beck proposes that as the conditions that create the risk society (primarily the processes of globalisation and technological change) heighten, risks intensify and become increasingly uncontrollable. Beck describes the response of institutions to these conditions as ‘organised irresponsibility’¹². That is, organisations wish to create the impression of control and responsibility in light of these increased risks but instead reveal that the processes unleashed cannot be effectively controlled. Beck refers to genetically modified organisms and nuclear power as examples of the types of risks that fall into this category. With ‘organised irresponsibility’, the trust relations between people and institutions start to fail, again reinforcing the processes of individualisation. In the case of the political institutions that represent and articulate democracy, the failure of trust between institutions and individuals leads to citizen apathy (Beck, 1992, p. 137) and, as a result, traditional modes of democracy cease to operate effectively. Beck proposes that, as a response to the failure of institutional trust and ‘organised irresponsibility’, citizens may assert their constitutional rights through alternative democratic means:

If one conceives of this process of the realization of civil and constitutional rights in all its stages as a process of political modernization, then the following seemingly

¹² Giddens (1999) nicely summarises Beck’s concept of ‘organised irresponsibility’: “By this he means that there are a diversity of humanly created risks for which people and organisations are certainly ‘responsible’ in a sense that they are its authors but where no one is held specifically accountable” (p. 9).

paradoxical statement becomes comprehensible: *political modernization disempowers and unbinds politics and politicizes society* (Beck, 1992, p. 194 – emphasis in original).

Constitutional rights in this sense are hinges for a decentralization of politics with long term amplification effects (Beck 1992, p. 195).

Beck alludes here to his thesis that the processes of modernity and the freeing of individual agents from the strictures of state control will transition to a cosmopolitan society (Beck 2006a). Beck's "cosmopolitan vision" entails people acknowledging that they live in an "endangered world" but are also part of their "local histories and survival situations" (Beck 2010, pp. 258–9). According to Beck (2010, pp. 258–9):

climate change releases a 'cosmopolitan momentum'. Global risks entail being confronted with the global other. They tear down borders and mix the local with the foreign, not as consequence of migration, but rather as consequence of 'interconnectedness' (David Held) and risks. Everyday life becomes cosmopolitan: people have to conduct and understand their lives in an exchange with others and no longer exclusively in an interaction with their own kind.

For Beck then, the risk society provides the way for cosmopolitan social change to occur, created through the fracturing of institutional power and the rise of new forms of social movements. Everyday life becomes a response to global risk 'moments' and involves individuals coming together with others in order to create a new world order (a second modernity) based on a global, citizen-led deliberative democracy (Dryzek 2001, 2008, 2009; Hendriks 2006; Lidskog & Elander 2010).

2.4.2 Individualization

Individualization forms the second fundamental component of Beck's risk theory as individuals are cast free of their societal constraints and are required to forge their own biographical pathways (Beck 1992, p. 135). Here, Beck provides insight into his perception of the very deep psychological impacts of globalisation and technological change on the individual. He reiterates the seeming paradox of the individual as both required to assume high levels of personal autonomy (as traditional institutions

withdraw or become meaningless, or “zombies” (Beck 2000b, p. 80)) and also as personally powerless in the face of global developments.

According to Beck (1992), the conditions established in the risk society create:

[a] tendency towards the emergence of individualized forms and conditions of existence which compel people – for the sake of their own material survival – to make themselves the center of their own planning and conduct of life (p. 88).

Globalisation, in other words, cultivates a higher degree of “*individual or agential reflexivity* than ever before” (Archer 2007, p. 32 – emphasis in original) and this fundamentally impacts on individual lifestyles and biographies. This brings together the dual aspects of globalisation and individualisation in relationship and requires the principles of modernity established within traditional institutions of the state, law and politics to be recast (Beck 2000b, p. 83).

For Beck this individualising process contributes to the removal of societal constrictions and opens up new possibilities. As individualisation frees agents from structural restraints, the potential for individuals (as social agents) to actively engage with and change the prevailing social structure is created:

In effect structural change forces social actors to become progressively more free from structure. And for modernization successfully to advance, these agents must release themselves from structural constraint and actively shape the modernization process (Lash & Wynne, in Beck 1992, p. 2).

Individualisation is discussed in more detail in Chapter 3: Individualisation of Responsibility for Climate Change.

2.4.3 Reflexive Modernity

A third element of Beck’s theory that I wish to discuss here is *reflexive modernity*. Reflexive modernity describes the dual processes of globalisation and individualisation that create the conditions for solving the problems that modernity produces:

As the term 'reflexive' implies, what Beck (in agreement with Giddens who also focuses on the 'reflexivity' of social institutions) suggests is that modernization should mean that

society as a whole increasingly reflects upon its own development and the institutions which further and/or realise that development (Barry 2007, p. 251).

Societal progress or evolution (in Beck's terms, *second modernity*) is dependent on reflexivity (Barry 2007; Lash & Wynne 1992), and greater democratic control and public accountability lead to "the democratic 'redefinition' of what constitutes progress" (Barry 2007, p. 255). Reflexive modernisation requires industrial society to look back upon itself in a process of self-confrontation (Dryzek et al. 2003, pp. 169–170) as the foundations of industrial modernity are undermined through the modernisation processes themselves:

Additionally and radically, what reflexive modernisation implies is that society democratically makes decisions on its development path; that is, democratically 'regulate' social progress. The politics of 'risk society' thus concerns both the *direction* and the *substance* of social progress, and thus of social organisation as a whole (Barry 2007, p. 252 – emphasis in original).

Barry (2007) further argues that reflexive modernisation can be seen to be a form of "social learning" (p. 251), a means by which society, through greater "democratic accountability and institutional innovation" (Barry 2007, p. 252), seeks to address or otherwise cope with the pervasive risks arising from industrial modernisation.

Essential to Beck's reflexive modernisation argument is that current ecological and other risks will only be resolved if we begin with the moral question, 'How do we wish to live?':

Reflexive modernization is society's process of self-confrontation. Although the transition from industrial to risk society is rooted in developmental logic of industrial society, social movements play a crucial role in initiating industrial society's process of self-confrontation with its own foundations. Risk society is reflexive not only in so far as the consequences of industrial society undermine these foundations; it is also reflexive in the sense of being self-critical. As a result of environmental activism and the public awareness of risks it generates, citizens start questioning the prospects for managing environmental crises by further reliance on economic growth and technological rationality. New possibilities for social and political transformation arise from people's growing awareness that they are living in a society whose habits of

production and consumption may be undermining the conditions for its future existence. Thus Beck believes that reflexive modernization is accompanied by waning influence of state structures compared to diverse 'sub-political' spaces of civil society (Dryzek et al. 2003, pp. 169-170).

2.4.4 Sub-politics

The fourth element of Beck's theory concerns the sub-political regimes that develop under the conditions of risk which characterise the second modernity.

Reflexive modernization is the process, according to Beck (1992, 1997), that will open up industrial democracy to alternative forms of democratic action and political and social systems. The stable industrial regime relies on a "rules-based" politics (Beck 1997, p. 53) characterized by the goals of "economic growth, full employment, social security, and the succession of power in the sense of a change of parties or personnel" (Beck 1997, p. 53). This form of politics serves to maintain the existing power arrangements and privileges of the political regime played according to an established set of "democratic and economic rules of the game" (Beck 1997, p. 53):

The political is comprehended and operated as a rule-directed, rule-applying, but not a rule-changing, much less a rule-inventing, politics: it is a variation in the execution of politics but not a politics of politics (Beck 1997, p. 53).

In counterpoint, *reflexive modernity* is an age of uncertainty distinguished by global risks, which combines the threat of catastrophe with the opportunity to "reinvent our political institutions and invent new ways of conducting politics at social 'sites' that we previously considered unpolitical" (Beck 1997, p. 53).

Post-industrial development takes on this form of a third intermediate entity, "sub-politics", which sits between politics and non-politics (Beck 1992, p. 186). The new forms of 'sub-politics' that emerge in the context of risk, engage citizens in the "selection, allocation, distribution, and amelioration of risks" (Dryzek et al. 2003, p. 164) and, according to Dryzek et al. (2003), for the first time link the environmental imperative to the state's legitimation imperative (p. 164). Sub-politics, then, is

consistent with the strong form of ecological modernisation¹³ (Christoff 1996; Dryzek et al. 2003) and through opening political institutions and economic processes to an ecological rationality, the role of the state in politics declines as the role of sub-political spaces rises (Beck 1997, p. 59; Dryzek et al. 2003, p. 170). The new awareness of risk that permeates these sub-political spaces creates a centrality for trust: in sub-politics “risk and trust intertwine” (Christoff 1996, p. 492).

In a rare show of empiricism, Beck (1997) employs the example of the Brent Spar oil rig controversy to illustrate his thesis. The proposal to sink the obsolete oil storage platform in the North Sea off the coast of Britain by the Shell Company sparked an international environmental controversy in the summer of 1995. Greenpeace launched an international campaign, which successfully stopped the disposal of the oil rig at sea. However, in Beck’s (1997) analysis, the most damaging aspect of the campaign was to the UK government’s and Shell’s legitimacy (the UK government had approved Shell’s proposal) through a consumer boycott that extended throughout Western Europe:

Suddenly, everybody seemed to recognize the political moments in everyday life and acted upon them, in particular by refusing to fuel up at Shell gas stations. Quite improbable, really: car drivers united against the oil industry. In the end the legitimate state power is confronted with illegitimate international action and its organizers.¹⁴ By so doing the means of state legitimacy precisely brought about the break away from these structures. The extraparliamentary action “injured” the narrow frame of the indirect and hidden yet legitimate decision-making structures and was, in effect, a case of ecological arbitrariness to get around the perceived ecological insensitivity of the existing decision-making structures. In this sense, the anti-Shell coalition brought about a change in the political scenery: the politics of the first, industrial modernity made way for the new politics of the second, reflexive modernity (Beck 1997, p. 62).

Beck is sanguine regarding the rendering of the contradictions in the result, acknowledging that the opening up of political institutions to sub-political forces will generate variable outcomes. A diversity of sub-political interests can attach to risk

¹³ Christoff (1996) argues for an ecological modernisation continuum that ranges from weak to strong to describe the efficacy of a state’s enduring sustainable development transformations. He discusses strong ecological modernisation in the following terms: “...strong ecological modernisation therefore also points to the potential for developing a range of alternative ecological modernities, distinguished by their diversity of local cultural and environmental conditions although still linked through their common recognition of human and environmental rights and a critical or reflexive relationship to certain common technologies, institutional forms and communicative practices which support the realisation of ecological rationality and values ahead of narrower instrumental forms” (p. 496).

¹⁴ Here Beck (1997) is referring to the Greenpeace action which acted against the sovereign and legal rights of the UK and Shell.

issues and expose the limits of social trust in politics and institutions. The “Convoy of No Confidence”¹⁵ is a contemporary Australian example where sub-political emotions around institutional distrust¹⁶ have been harnessed against a government trying (at least) to strengthen its ecological modernisation credentials:

These different partial arenas of cultural and social sub-politics – media publicity, judiciary, privacy, citizens' initiative groups and the new social movements – add up to forms of a new culture, some extra-institutional, some institutionally protected (Beck 1992, p. 198).

Beck's sub-politics draws on political themes familiar in the theories of Foucault and Habermas and resonates with the work of Dryzek and Torgerson (for example) who arguably utilize sub-political frames in their respective understandings of social movement creation and progress.

2.4.5 Criticism

Naturally Beck's bold ideas have generated criticism (see Mythen 2004). Mythen considers risk society as one of four paradigms that have emerged in the social sciences to conceptualise risk:

1. Mary Douglas's anthropological approach (1966, 1982, 1985, 1992) with differences in risk perception identified “through particular patterns of social solidarity, world-views and cultural values” (p. 4).
2. A psychometric approach, e.g. Slovic (1987, 1992, 2000) – “Psychometric approaches have been oriented towards establishing the perceived constitution of various risks and the effects of this on estimations of harm” (p. 4).
3. Discourse approaches (Foucault, 1978, 1991 & others) – “have accentuated the role of social institutions in constructing understandings of risk which restrict and regiment human behaviour” (p. 5).
4. Risk society theorists (Ulrich Beck and Anthony Giddens).

¹⁵ Wilson, L. 2011, ‘A convoy of no confidence pulling to a halt in Canberra’ *The Australian*, 22nd August 2011, <http://www.theaustralian.com.au/national-affairs/a-convoy-of-no-confidence-pulling-to-a-halt-in-canberra/story-fn59niix-1226119228798>, accessed 14 December 2011.

¹⁶ In this case around perceptions that the Australian Prime Minister, Julia Gillard, gained office based on a lie regarding introducing a carbon tax.

Beck himself is described as a ‘champion’ for the Green movement in Germany and “a longstanding environmental campaigner” (p. 31) and Mythen acknowledges that “Beck's work is distinctive in that it turns environmental risk into a conductor for political engagement” (p. 36).

Reflective of this environmental ‘bent’, “Beck habitually refers to three ‘icons of destruction’: nuclear power, environmental despoilation and genetic technology (1992: 39; 1995a: 4)” (Mythen 2004, p. 19). His primary interest is to demonstrate the catastrophic nature of risk and its anthropogenic causes (Mythen 2004, p. 40).

Mythen, however, suggests that there are some undeveloped areas of Beck’s argument highlighted in the “speckled employment of scientific evidence” and the limited range of environmental examples he employs (p. 42). Mythen also notes that Beck is less strident in his criticism of “the negative effects of individual consumer choices in capitalist cultures” than he is of the “excesses of the capitalist system” wrought by “science, business, law and government” (Mythen 2004, p. 44).

The lack of empirical evidence to support Beck’s contentions regarding the risk society is a common criticism of his work (p. 113) and Mythen rightly argues that “we might reasonably request the evidence of a linear link between risk, behavioural change and political activity” (p. 46). Mythen goes on to suggest that Beck’s theory of social transformation is contrary to what “has long been established within critical social theory, [that] consciousness can not be simply equated to action” (he refers here to the ‘value–action’ gap) (p. 46) and suggests that “the emancipatory capacity which Beck attaches to the risk society very much depends upon the durability of the link between risk consciousness and political action” (p. 47).

Whilst I believe these criticisms are valid, Mythen presumes that it is individual action which will be the main force for social change, whereas Beck envisages changes across varying segments of society. In *Risk Society*, he proposes three political scenarios for social change: a refashioning of the capitalist system by reining in the sub-political power of techno-economic development through increased parliamentary scrutiny (people asserting their democratic powers/ rights); the bolstering of democracy through

judicial processes and freedom of the press; and the self-reflexivity of the sub-political sectors themselves.

Perhaps just to prove Beck right, as I write the world is in the throes of democratic upheaval that has now shifted from the Middle East (the ‘Arab Spring’) to the streets of cities such as New York (Occupy Wall Street¹⁷). Wikileaks¹⁸ continues to expose state hypocrisy and undermine the authority of nations, and the global dominance of the Murdoch media ‘machine’ is threatened.¹⁹

2.5 Conclusion

At the commencement of this chapter I posed three questions and established three propositions that I will now summarise and conclude with. Firstly, in asking: ‘How are the social sciences incorporated within climate change research and knowledge?’ I established that the social sciences have been historically under-represented in climate change research and discourse. Based on this reasoning, I have argued that my social constructivist epistemological stance within this thesis addresses this imbalance. In my response to my second question, ‘What are the theoretical and methodological implications of a social constructivist approach to climate change?’ I argued that social constructivism incorporates three key instruments (based on Pettenger 2007) for examining complex social problems that arise from global conditions of risk and I use these to frame my research. The three key instruments are: ideational/ material factors which I draw on in Chapter 4 in relation to the co-evolution of society and technology; agent/ structure duality which is exemplified in structuration theory and which underpins the essential relationship between actors and structures; and finally, understanding through this relationship how change occurs. Further, I argue for the critical role of discourses in a social constructivist climate change investigation as they reveal how social and political responses to climate change have been constructed and enacted. I concentrate on discourses around responsibility and risk and observe how individualised responsibility to a global risk issue can arise and infiltrate our collective psyches, prompting several questions that I take up in Chapter 3. Finally I pose the question, ‘How does Beck’s risk theory encompass ideas regarding individualisation,

¹⁷ See <http://occupywallst.org/>, accessed 14 December 2011.

¹⁸ See <http://wikileaks.org/>, accessed 14 December 2011.

¹⁹ See for example, <http://theconversation.edu.au/pages/murdoch-media-crisis>, accessed 14 December 2011.

responsibility, risk and social change in relation to climate change?’ I utilise Beck’s social theory of risk as a meta-theoretical frame for my thesis. Four elements of Beck’s thesis are discussed and critiqued: risk society, individualization; reflexive modernity; and sub-politics. All of these elements contribute to understanding individualisation, responsibility, risk and social change under contemporary societal conditions.

Having established a social constructivist epistemology for my research and identified agency, structure, discourse and risk as key theoretical concepts, drawing from Beck, I now examine in more detail the individualisation of responsibility for action on climate change.

CHAPTER 3 – INDIVIDUALISATION OF RESPONSIBILITY FOR CLIMATE CHANGE

3.1 Introduction

In Chapter 2, I established and argued for my social constructivist epistemology. I discussed how environmental discourses on responsibility can inform and shape both institutions and individuals and may promote or inhibit social action. Discourses of risk underpin how we have come to know climate change as a global ‘bad’. I established Beck’s risk theory as an appropriate metatheoretical frame for my research and discussed four elements of Beck’s risk thesis: the characteristics of risk society and how it relates to contemporary societal conditions under the threat of catastrophic climate change; individualisation (which I take up in more detail in this chapter); reflexive modernity, arising out of modernity and the impacts of globalisation; and sub-politics which opens the hegemonic politico-economic system to an ecological rationality.

I now consider, in the light of Beck’s thesis, an apparent conundrum which sits at the core of my first research aim (RA1) which is to determine why and how individuals take responsibility for climate change through their voluntary actions. On the one hand Beck suggests that in the progress of reflexive modernity individuals free themselves from structural constraints in order for modernity to progress. On the other hand, the conditions of global risk lead to a failure in trust between individuals and institutions. As I asked in section 2.3.1.3, how then can action on climate change be personal but not disempowering? Or as Middlemiss (2010, p. 153) states: “If empowering structures are not available, perhaps the responsibility of the individual is diminished in comparison to the responsibilities of structural agents”.

In this chapter I direct my attention to this seeming conundrum by posing the following question as a probe in order to develop a fuller understanding of the relationship between individual responsibility, empowerment and structural change:

Can the individualisation of responsibility create the conditions for social change on climate change?

In order to address this question, however, I need to broaden my focus temporarily to consider the following additional questions:

How do we understand responsibility for climate change?

In what ways do individuals act responsibly to mitigate climate change?

How do individual actors acquire agency through voluntary action?

The notion of responsibility, and more particularly the individualisation of responsibility for taking action on climate change, is therefore an important preliminary for this thesis. Prior to entering into a more detailed discussion on the individualisation of responsibility for climate change, it is important at this juncture to develop a fuller understanding of responsibility, how it is represented across varying disciplines and within different theoretical contexts, and why it is critical to understanding climate change policy in general and political action in particular.

Before turning to these varying theoretical positions I commence by providing an overview of the social research concerned with how people view climate change and understandings of what motivates individuals to take responsibility for climate change through their voluntary actions.

3.2 Social research evidence on people's views, motivations and behaviours on climate change

A considerable body of social research now exists to deepen our understanding of people's willingness to undertake actions to reduce their GHG emissions. The consumer groups AccountAbility and Consumers International (2007) surveyed 2,734 people in the US and UK and found that 66% of consumers agreed that individuals need to take responsibility for their contribution to climate change. A more recent survey of 1000 Australians (AccountAbility, Net Balance Foundation & LRQA 2008, p. 11) found even higher levels – 81% of Australian consumers agreed that everyone needs to take more responsibility for their personal contribution to global warming. The frequently reported types of actions taken are: turning off lights and appliances around the home and buying more energy efficient light bulbs and appliances (AccountAbility & Consumers International 2007; AccountAbility, Net Balance Foundation & LRQA 2008). Actions requiring greater commitments of time and money, for example buying green energy for

the home or using a carbon calculator to measure a household's GHG emissions, were the least likely to be adopted (AccountAbility & Consumers International 2007, AccountAbility, Net Balance Foundation & LRQA 2008).

In a similar vein, a European study noted that citizens were most likely to state that they had undertaken "passive" actions in relation to the environment that fit in with their daily lives (European Commission 2008, p. 12) rather than "active" ones: "using their car less (17%) and environmentally sensible consumption in terms of buying environmentally friendly products (17%) or locally produced products (21%). These "active" actions are also issues that worry Europeans the least" (European Commission 2008, p. 12).

Pidgeon et al. (2008, p. 73) argue that despite the increased interest and concern regarding climate change in the UK it "remains a low priority for most people in relation to other personal and social issues". They note the "discrepancy between individuals' intentions to mitigate and their actual behaviours; while people indicate frequently that they are willing to recycle and save energy in the home, only a minority of people do take measures to reduce their energy consumption for environmental reasons" (Pidgeon et al. 2008, p. 73).

The AccountAbility surveys on what assures consumers on climate change (AccountAbility & Consumers International 2007, for UK and USA and AccountAbility, Net Balance Foundation & LRQA 2008, for Australia), when mapping levels of concern regarding climate change against level of action, identified large discrepancies. In the US and UK research, 75% of respondents stated that they were concerned about global warming "but [were] challenged to see how their action could make a difference" and only 9% indicated both concern and willingness to take action (p. 26). In the Australian research, an equal number expressed concern but not willingness to act (75%), whereas a higher number expressed a willingness to take action (21%) (p. 20).

These findings reflect what is described as the "value-action" gap: the inconsistency between individuals' stated intentions and their actions (Blake 1999; Darnton 2006;

Kollmus & Agyeman 2002; Macnaghten 2003; Riedy 2005). (See for further on value-action gap in Section 3.3.3.2.)

Another significant barrier to people taking responsibility for their climate change mitigation actions relates to potential conflicts with current lifestyles. WWF-UK (2008) argues that program measures that ask people to take “simple and painless steps” without concomitant changes away from unsustainable lifestyle behaviours will ultimately fail to meet the significant challenges posed by climate change.

More recent surveys related to public views on climate change demonstrate that Australians maintain high levels of concern regarding global warming (Ashworth et al. 2011; Leviston et al. 2010; The Climate Institute 2010). However, this concern has declined over recent years in association with heightened political distrust and softening of the public’s willingness to pay for mitigation efforts. Support for government action remains strong. A survey conducted by the CSIRO reported 73% support for government action (Ashworth et al. 2011) and the majority of Australians believe that individuals, the wider community and governments all have a responsibility to take action on climate change. Sixty-one per cent say they are taking personal action around climate change (Ashworth et al. 2011).

There has, however, been a significant reduction in the public’s belief that climate change is an important issue since the level of highest concern in 2006. A CSIRO survey from that time found 91.4% of Australians agreed that climate change is an important issue, with 61% strongly agreeing (Ashworth et al. 2011, p. 15). A similar decline in concern has been noted in other Western countries (Leviston et al. 2011, p. 7). Leviston et al. (2011) found reduced levels of concern regarding climate change aligned with: the Global Financial Crisis (GFC) of 2008; the failure of the United Nations Climate Change Conference in Copenhagen to reach a fair, binding and ambitious agreement on action to address climate change; and the leaking of emails prior to the Copenhagen conference in December 2009 (known as “Climategate”) which raised questions about the accuracy and impartiality of scientific knowledge contributing to the IPCC’s work. Tranter (2011) and Moser (2009) identify a positive relationship between political party preference and climate change beliefs (in Australia and the USA respectively). In line with Tranter and Moser, Leviston et al. (2011)

suggest that the increasing polarisation of views around climate change beliefs is based on political alignment within Australia, UK and the USA. They argue that this polarisation is due to the move of some political parties towards a more conservative position in the last three years (p. 8).

The belief in shared (personal, community-wide and government) responsibility for taking action on climate change, together with perceived inaction over recent years has led “to an erosion of belief in political leadership, trust and credibility”, according to The Climate Institute (2010, p. 4). The Climate Institute also argues that true public concern and support for personal and political action on climate change are fragmented when concerns around climate change are separated from the linked issues of health and environmental pollution (p. 13). They note, for example, that 92% of those surveyed find pollution levels unacceptable and that “over 90% also believe that reducing pollution will ‘probably’ or ‘definitely’ result from action on climate change” (p. 13).

These social research findings around people’s concerns about, and motivations for, taking action on climate change are seldom brought together into meta-analyses (Leviston et al. 2011 and Wolf & Moser 2011 are two notable exceptions.) Whilst the surveys discussed here identify some broad trends, care needs to be taken in drawing specific conclusions from studies which have been conducted with a variety of surveying, sampling and analytical methods (Leviston et al. 2011). However, in the social research results presented here there are several important factors relevant to my research.

Firstly, there has been an apparent decline in belief in and concern about climate change in Australia and internationally over the last few years which may lead to fewer people taking personal responsibility for action on climate change. This decline has been evident since the height of concern noted in 2007 and has continued through the period of my research, providing important context for my findings. Secondly, the increase in polarisation in people’s beliefs about climate change, along with the erosion in public trust in politicians and political institutions, is another concerning trend. Finding ways to address the evident decline in public engagement with climate change under conditions of increasing distrust and scepticism will be needed in order to develop the extensive response required to address this complex global problem. Theoretical

perspectives on individual agency for climate change action may therefore be useful here. The next section provides an overview of five theoretical perspectives on how individuals are responsible for climate change.

3.3 Theories of Responsibility

Responsibility is an expansive concept, not readily defined. It communicates ideas of accountability or blame (Bickerstaff and Walker 2002), and duty and dependability – ideas that sit comfortably as broad moral principles for human action. In general, two aspects of responsibility are recognised:

- Responsibility as it relates to justice and law. This implies duties and obligations and is often expressed as being complementary to rights so that where rights exist, responsibilities are created (Bickerstaff and Walker 2002; Caney 2005; Dobson 2006; Singer 2002, 2006).
- According to Bierhoff and Auhagen (2000), responsibility is also a psychological phenomenon which works both at the personal level (as self-control and free will) but is also relevant at a societal level (p. 2). Apart from the creation of obligations or duties as described above, it also implies “ethical and moral values or caring” (p. 3).

Responsibility therefore has an important ethical dimension and is necessarily socially mediated; that is, as responsibility involves duties, obligations or care, it implies some relationship with ‘the other’ (Bickerstaff & Walker 2002, p. 2188). Responsibility as established above is a core tenet of international climate change policy. Diverse disciplines consider responsibility and its application varies across climate change discourses (see section 2.3).

Drawing from the politico-economic, social science, psychological and philosophical literatures, I will discuss several theoretical stances on responsibility: individual responsibility as an attribute of neoliberalism; as a process of individualisation; and as an aspect of human behaviour. I also draw from a cultural theory discourse perspective to consider typologies of individual responsibility and discuss responsibility as it relates to ethics and citizen rights.

3.3.1 Neoliberalism and the Rise of Individualism

The neoliberal conception of individual responsibility arose in the 1970s and has since been embraced globally (Harvey 2006). Neoliberalism, as defined by Harvey, “proposes that human well-being can best be advanced by the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, free markets and free trade” (p. 145). The political economic ideologies of Margaret Thatcher in the UK and Ronald Reagan in the USA, characterised by the dismantling of the social security net and “the passing of all responsibility for their well-being to individuals and their families” (p. 151), are commonly quoted exemplars of neoliberalism. According to Matravers (2007, pp. 5–6), neoliberalist ideals have now been incorporated into the political centre-left, in addition to their traditional association with parties of the political right.

Drawn from the neoliberal, capitalist tradition, individual responsibility now resonates much more widely, becoming a familiar catch cry of politicians, bureaucrats and NGOs, including environmental organisations.

According to Jackson (2005, p. 38):

The concept of individual choice, the rights of the individual and the supremacy of individual preference occupy a central role both in the structure of market economies and in the culture of Western society.

Calls for the recognition of individual responsibility have therefore become universally appealing – at least within Western democratic societies, where examples of these calls are rife. Governments increasingly call on their citizens to take greater responsibility across a broad spectrum of societal concerns, including obesity, employment, education, crime²⁰, terrorism²¹, and harm to the environment. Indeed this supports Harvey’s case that:

²⁰ O’Malley, P. in Barry, A et al.. (2000, p. 201) relates the following: “Responding to news that crime rates in Britain have reached record levels, the then Prime Minister, Margaret Thatcher, blamed a large portion of the crimes on the victims’ carelessness. ‘We have to be careful that we ourselves don’t make it easy for the criminal’, she said (Age 28 September 1990).”

²¹ The Federal Attorney-General recently called on Australians to be more “resilient” when faced with terrorist attacks and natural disasters and to be less reliant on emergency services, “Aussies need to be resilient: McClelland”; Sydney Morning Herald, August 21, 2008, <http://news.smh.com.au/national/aussies-need-to-be-resilient-mcclelland-20080821-3zjk.html#>, accessed 26th August 2008.

neoliberalism has, in short, become hegemonic as a mode of discourse, and had pervasive effects on ways of thought and political-economic practices to the point where it has become incorporated into the common-sense way we interpret, live in and understand the world (Harvey 2006, p. 145).

In *Individualization: Plant a Tree, Buy a Bike, Save the World?* Maniates (2002) sets forth the idea that the “individualization of responsibility” threatens to seriously undermine effective action to curtail life-threatening environmental concerns. He argues that the “individualization of responsibility” focuses on the person as consumer rather than citizen and that the ‘10 simple things you can do’ approach diverts people from more important environmental and citizen-led democratic action and hides the power disparity between citizens, governments and corporations:

A privatization and individualization of responsibility for environmental problems shifts blame from the state elites and powerful producer groups to more amorphous culprits like “human nature” or “all of us” ... thereby, “cloak[ing] important dimensions of power and culpability” (Maniates 2002, pp. 57–58, citing Chatterjee and Finger 1994).

Maniates proposes that the individualisation of responsibility reduces democratic process: both through global negotiations to address environmental problems, which he considers to represent only the interests of governments and corporations, and by those same actors suggesting that sustainability can be achieved through “private, individual, well-intentioned consumer choice” (p. 58). This leads Maniates (2002, pp. 58–59) to conclude that:

It is more than coincidental that as our collective perception of environmental problems has become more global, our prevailing way of framing environmental problem solving has become more individualized.

3.3.2 Individualisation as a response to the Risk Society

Another theoretical approach to individual responsibility can be found in the social risk theories of Bauman, Beck (discussed in Chapter 2) and Giddens, who all draw on the notion of individualisation as a defining feature of postmodern society. According to Beck (1992), the breakdown in social classes; greater competition for jobs; and the

collapse of traditional family structures, contribute to the growing liberation of individuals as the agents of their own life courses:

The tendency is towards the emergence of individualized forms and conditions of existence which compel people – for the sake of their own material survival – to make themselves the center of their own planning and conduct of life (Beck 1992, p. 88).

This conception of individualisation has been promoted through a neoliberal economic model “which rests upon an image of the autarkic human self” (Beck & Beck-Gernsheim 2002, p. xxi). Individuals are characterised not only as “masters of their lives” but as self-sufficient “monads”, divorced from social networks and possessing no sense of mutual obligation. The type of individualisation of responsibility that Beck and Beck-Gernsheim (2002) identify is distinct from this neoliberal interpretation, rooted as it is, according to the authors, in a historic line of “social-scientific” thought that places individualisation as “a product of complex, contingent and thus high level socialization” (Beck & Beck-Gernsheim 2002, p. xxi). Rather than atomistic beings, individuals exist within the context of developed modernity where “human mutuality and community rest no longer on solidly established traditions, but, rather, on a paradoxical collectivity of reciprocal individualization” (Beck & Beck-Gernsheim 2002, p. xxi).

Institutions also play a role in establishing greater responsibility for individuals, as there are now many more expectations placed by governments on their citizenry to take responsibility for areas which previously would have been more acceptably under state control. This has set in place an acceptance of less state intervention and greater responsibility for individuals on a wide range of social issues. As Beck (2007, p. 682) puts it:

Many features, functions and activities which were previously assigned to the nation state, the welfare state, hierarchical organization, the nuclear family, the class, the centralized trade union, are now transferred inward and outward: outwards to global or international organizations; inward to the individual.

The accelerating processes of globalisation and technological change are creating conditions in society that form two intersecting paths. On the one hand are

“individualized life paths that are increasingly reliant on individual choice and reflexivity” and on the other is the global distribution of risk (Mythen 2004, p. 118).

Individualisation, which “is imposed on the individual by modern institutions” (Beck 2007, p. 681), is a by-product of society that formulates around conditions of risk. So postindustrial society, which held the promise of wealth and wellbeing as a by-product of techno-scientific development, paradoxically has given rise to risks that are pervasive and deadly. These risks are not limited within state borders, are often invisible and can impact across generations.

Beck and Beck-Gernsheim (2002) hope for a form of “co-operative individualism” where there is continuous negotiation and renegotiation of areas of collective concern, which opens up the potential for new forms of democratic organisation (p. xxiii). They argue that the invention of these “new, politically open, creative forms of bond and alliance” (Beck and Beck-Gernsheim 2002, p. 18) is the ‘life or death’ challenge for democracy.

3.3.3 Individual responsibility, action and behaviour change

The third body of literature that places individual responsibility as central to responses to climate change is concerned with the psychology of human action and behaviour change. For example, one form of psychological model that focuses on the individual is rational choice theory (RCT). Jackson (2005, p. 35) states three assumptions that underlie RCT: “1) that choices are rational; 2) that the individual is the appropriate unit of analysis in social action; and 3) that choices are made in the pursuit of individual self-interest”. This section therefore needs to be read within the context of the extensive body of social research (see review in section 3.2 above) which seeks to understand what motivates individuals to act (or not) on climate change.

3.3.3.1 Voluntary action as behaviour

Voluntary individual and/or household action to reduce carbon emissions is of particular interest to Western governments, as, reluctant to prescribe regulatory provisions for their citizens’ behaviours and lifestyles, they expect their climate policy objectives (such as GHG emission reduction targets) will be voluntarily fulfilled through personal

and household-level behaviour change²² (Lorenzoni et al. 2007). Perhaps not surprisingly then, the voluntary action that people take around their lifestyles and homes, with particular emphasis on how an individual's behaviour is motivated by their concern about climate change, has been the focus of much empirical research (Moser 2009; Norgaard 2009; Whitmarsh 2009; Bickerstaff et al. 2008; Lorenzoni & Pidgeon 2008; Lorenzoni et al. 2007).

Whitmarsh (2009) describes individual voluntary action as behaviour with *intention*. This behaviour is understood to sit within a broader range of co-dependent influences (namely, cognition and affect). Voluntary action on climate change focuses on one aspect of this account – the behavioural – but with the understanding that in order to act people need “to know about climate change in order to be engaged; they also need to care about it, be motivated and able to take action” (Lorenzoni et al. 2007, p. 446). This action is dependent on a wide range of influences as individual behaviour is a “product of social and institutional contexts” (Lorenzoni et al. 2007, p. 446) that create complex motivations and constraints on voluntary action, which have received little normative attention in relation to climate change. Whitmarsh (2009) further makes the distinction between intention and impact, arguing that most research has focused on the *impact* of action (for example, by measuring how much a household's energy costs have been reduced) rather than the *intent*. She captures the relevance of this distinction in three ways: firstly, she points out that people may undertake actions with the *intention* of mitigating carbon emissions but that these may consist of ineffective “futile activities”; secondly, she points out that that intention can reveal the motivations underlying action; and thirdly, she points out that intention uncovers the harder-to-conceptualise range of values, beliefs and virtues that underscore pro-environmental behaviours.

Behavioural intention to mitigate climate change draws attention to the academic literature concerned with why people are failing to respond to the climate change threat through changes to their individual lifestyles (Norgaard 2009, p. 14) (discussed further in section 3.3.3.2 below). There is now widespread agreement that rationalist information deficit approaches (that is, approaches which assume that when information about climate change is provided, voluntary changes in behaviour will follow) have

²² Examples of climate change information campaigns targeted by governments at individual lifestyle and behaviour change include: “Be Climate Clever: I can do that” in Australia; in the UK, DEFRA’s “Are you doing your bit?”; and the European Commission’s “You Control Climate Change (see <http://www.climatechange.eu.com/>).

firstly proven largely ineffective or unsustainable, and, secondly fail to acknowledge the complex mix of attitudes, values and social norms that undergird behavioural change. “The widespread lack of public reaction to scientific information regarding climate change” (Norgaard 2009, p. 3) and the “failure to integrate this knowledge into everyday life or transform it into social action” (Norgaard 2009, p. 29) become even more perplexing when placed within the context of people’s stated high levels of concern regarding the effects of climate change (as noted in Section 3.2 above).

3.3.3.2 Individual agency and the value: action gap

Norgaard (2009) notes the disparity between people’s concerns regarding climate change and their adoption of low carbon behaviours. The discrepancy between individuals’ stated intentions and their actions has been widely described in the literature as the “value–action” gap²³ (Blake 1999; Darnton 2004; Jackson 2005; Kollmus & Agyeman 2002; Macnaghten 2003). There is a range of barriers proposed that contribute to the gap, however, of most relevance here is that people feel they lack the sense of empowerment to undertake actions that will lead to a less carbon-intensive lifestyle (Norgaard 2009; Rätzzel & Uzzell 2009).

Certainly, there is evidence that people are undertaking the ‘easy-to-do’ actions around their homes and their lifestyles (AccountAbility Net Balance Foundation & LQRA 2008; AccountAbility & Consumers International 2007; Bickerstaff & Walker 2002) but they are also demanding that governments play a greater role (Bickerstaff et al. 2008; Bickerstaff & Walker 2002; Lorenzoni & Pidgeon 2006; Macnaghten 2003; Pidgeon et al. 2008). Not only do individuals believe the level of action from governments on climate change mitigation is unacceptably low, but they also doubt whether governments are serious about climate change as climate change responses are perceived to be against nations’ economic interests.²⁴ Declining levels of public trust in governments (Hetherington 1998; Saward 2008; Schyns & Koop 2010) are particularly evident around responses to climate change (Höppner & Whitmarsh 2010; The Climate Institute 2010). This establishes both a tension between government and the individual

²³ Jackson (2005) uses the term “attitude–behaviour gap” to describe this phenomenon and notes that recent studies of domestic energy consumption demonstrate the lack of correlation between stated pro-environmental intentions and energy consumption (p. 53 citing studies by Gatersleben et al. (2002) and Jensen (2002)).

²⁴ Darnton (2006), p. 24 makes this point but it also features in the AccountAbility ‘What Assures’ research findings. In the Australian context both The Climate Institute (2007, 2010) and CANA (Australian Research Group 2006) surveys found that people are sceptical of the adequacy of the government’s response and expect that governments should be leading on climate change mitigations actions.

on the acceptance of a personal responsibility model for climate change mitigation but also the possibility for greater action if governments can demonstrate to the community that they are prepared to take a bigger role in preventing serious climate change (AccountAbility & Consumers International 2007; Bickerstaff & Walker 2002; Pidgeon et al. 2008).

Recent empirical research by Rätzzel and Uzzell (2009) exposes why the value–action gap may be an artifact of the research process itself (see also Shove 2010a). Psycho-social research has focused on individual environmental behaviours which, they argue, in turn, reinforces individualistic responses. Their argument is based on two core conceptions around individual responsibility and pro-environmental actions. Firstly, the idea that people’s concern is primarily focused on problems at the local level and, secondly, the idea that they possess the power to do something about them. Rätzzel and Uzzell (2009, p. 328) found that people display a spatial biasing in relation to their response to issues such as climate change, so that:

Ironically, then, although people feel that they are responsible for the environment at the local level this is precisely the level at which they perceive minimal problems. The areal level which they perceive has the most serious environmental problems is the areal level about which they feel least personally responsible and powerless to influence or act.

Recent empirical work undertaken in Australia on public attitudes to climate change supports these findings. Ashworth et al. (2011) found that people perceived climate change as a global issue over which individuals felt that they had little or no control.

Both the research and responses to action on climate change have remained centred on an individualistic causality and have failed to take into account the broader social and political contexts (Rätzzel & Uzzell, p. 328). Rätzzel and Uzzell (2009, p. 333) argue that people’s “sense of powerlessness might be a reflection of a larger issue, namely the reality of individualization and competitiveness that govern society at large” and that the “reductionist individualism” evident in a focus on individual-level responsibility and action might rightly dislocate people’s ability to respond for the good of society as a whole. This “psycho-social dislocation” is constructed by an artificially created

“dichotomy between individuals and society” and between “the local and the global” (Räthzel & Uzzell, p. 333).

In summary, the individualisation of responsibility for climate change mitigation is based on a model of individual behaviour change now largely discredited (Bulkeley & Newell 2010; Moloney et al. 2010; Seyfang & Hazeltine 2010). Such an approach, firstly, relies on individuals changing their behaviour within their households and personal lifestyles, assuming such “private sphere” (Stern 2005) actions will motivate broader scale change. The presumption is that sufficiently armed, actors will make rational choices on how they act, what they use and buy, and the lifestyle choices they pursue (Moloney et al. 2010). There is now widespread agreement that rational choice-centred approaches (Jackson 2005) have been largely unsuccessful. They fail to acknowledge the complex mix of human behaviours, attitudes, values and social norms that underpin behavioural change (Norgaard 2009; Jackson 2005) and there is an “assumed primacy of individual over collective behaviour change” (Moloney et al. 2010, p. 7616).

The public desire for institutions to take responsibility for climate change mitigation amongst calls for individual responsibility by governments and other institutions raise issues for the public of institutional trust, capability and duty of care (Bickerstaff et al. 2008; Bickerstaff & Walker 2002; Pidgeon et al. 2008; Macnaghten 2003). The clash between these desires also alerts the individual to the uneven power relationships that operate between the individual and the state and other institutions (Bickerstaff et al. 2008; Maniates 2002). Further, this draws attention to the way that people’s actions are constrained by the structural components of, for example, energy supply (Wilhite et al. 2000). Consequently, an ambivalence to personal action might be created, where people “choose not to choose” as they feel disempowered and ineffective in the face of the global climate challenge (Macnaghten 2003, p. 77).

3.3.4 Cultural Theory: a discourse classification for individual responsibility

A fourth body of theory that relates to climate change and responsibility is Cultural Theory. Earlier (section 2.3.1.1), I described the discursive typologies within Cultural Theory which have been influential in classifying different actor worldviews on climate

change (Ney (2000) and Thompson (2000) in IPCC 2001b; Hulme 2009) and which I will briefly restate here.

Cultural Theory sets out four distinct discourses that describe people’s different views of nature and society: hierarchical, egalitarian, individualist and fatalist. Each discourse expresses different concepts of responsibility. Fatalists perceive nature as a lottery and climate change outcomes as a function of chance rather than a focus for human intervention; individualists perceive nature as resilient and rely on markets to respond to climate change; hierarchists perceive nature as manageable and prefer the use of regulation and technological solutions; and egalitarians perceive nature as fragile and regard the engagement of deliberative processes and civil society as critical in a climate change response (O’Riordan & Jordan 1999, pp. 86–7).

There are, then, a myriad of ways that individual actors express their responsibility for climate change through voluntary actions aimed at reducing their carbon footprints.²⁵ I have constructed a typology of individual actions (Table 1) which goes a little way towards classifying the types of action choices individuals are presented in contemporary, developed Western societies.

The typology attempts to offer a distinction between the types of voluntary actions available to individual actors based on their cultural preferences. In the table, I represent these according to the Cultural Theory classifications of hierarchical, individualist and egalitarian (it is presumed that fatalists don’t engage on policy issues like climate change). Contrary to its depiction here, the Cultural Theory typology does not imply that individuals always act consistently with one of the four types. A brief outline of each typology follows.

Hierarchical	Individualist	Egalitarian
<i>E.g. personal carbon trading</i>	<i>E.g. consumer-based actions</i>	<i>E.g. grassroots climate groups</i>
Compulsory scheme	Voluntary	Voluntary
Transfers responsibility from the state to the individual/ household	Responsibility shifts from ‘citizens’ to ‘consumers’. (Maniates 2002;	Responsibility lies with the individual but is also shared with society

²⁵ Guidance for individuals and households in this matter has undertaken exponential growth in recent years but to detail these here is well beyond the scope of this discussion. See Accountability and Consumers International (2007) for a comprehensive listing within the UK and USA.

level	Spaargaren & Moll 2008; Scerri 2009)	(Garvey 2008; Harris 2008; Dobson 2006)
“Top down”	“Top down” and “bottom up”	“Bottom up”
Power remains with the state and/ or global institutions	Two potential avenues of power are revealed: 1. State power remains dominant (Maniates 2002; Scerri 2009) 2. State power is “hollowed out”, authority lies with consumers & global organisations (Spaargaren & Moll 2008)	Power is shared amongst citizens

Table 1: Three types of individual action (Kent 2009a)

In a top-down hierarchical approach to climate change mitigation, for example, global agreements are incorporated into national policy which could be prescribed to the individual through compulsory personal carbon trading. Personal Carbon Allowance (PCA) schemes are a particular example of personal carbon trading which have been a focus of research and policy deliberation in the UK, where the government has considered a compulsory scheme.

Personal Carbon Allowances

Roberts and Thumin (2006) in a report for the UK Department of Environment, Food and Rural Affairs (DEFRA) identify three main schemes for individual carbon trading proposed by researchers. These are: Tradable Energy Quotas (Fleming); Domestic Tradable Quotas (Starkey and Anderson at Tyndall Centre); and Personal Carbon Allowances (Hillman, Fawcett and Boardman at Oxford University). In such a scheme, individual and household-level carbon emissions would be budgeted to fulfill national targets. A PCA scheme would operate in a similar way to an emissions cap and trade scheme. That is, a cap or limit is initially established and carbon trading on an individual level can occur up to the limit of the cap (Seyfang & Paavola 2008). Over time the cap is reduced so that the total amount of carbon allowed to be emitted is reduced over time. Roberts and Thumin (2006) identify the following similar approaches that these schemes provide:

- *An independent body sets and polices the cap, with limits established well in advance.*
- *People can either surrender allowances as they buy energy, petrol or flights, or they could sell their allowances in advance and pay for the carbon as part of the price of each qualifying purchase (as visitors to UK would).*
- *Individuals would have something like a carbon credit card to 'swipe' to surrender their allowances from their carbon allowance accounts (p. 4).*

Some find the principle of PCAs appealing (Vandenbergh & Steinemann 2007) even if not practical from an administrative perspective (Lane et al. 2008). Vandenbergh and Steinemann (2007) offer a proposal which is similar but utilises the model of a national pollutant inventory. They propose an individual carbon-release inventory could be established that would link national reduction targets with reports on individual, voluntary commitments to carbon neutrality.

Consumer activism

Individualist discourses tend to promote consumer action. Consumer-based actions have been widely considered in relation to pro-environmental behaviours, particularly climate change (AccountAbility & Consumers International 2007; AccountAbility, Net Balance Foundation & LRQA 2008; Maniates 2002; Scerri 2009; Spaargaren & Moll 2008). Voluntary consumer actions are diverse and include: buying carbon offsets, for example, to offset a lifestyle choice such as an overseas holiday; paying a premium to encourage renewable energy uptake (e.g. Greenpower)²⁶; and investing in less GHG-intensive appliances (from washing machines to solar panels).

Civic participation

Voluntary actions that fall within the egalitarian typology involve engagement with civil society. Again these are diverse and could include, participating in collective online advocacy (e.g. GetUp!)²⁷ or taking part in voluntary activities through membership of an environmental organisation or a climate action group.²⁸

²⁶ See www.greenpower.com.au. Australian consumers can purchase Greenpower which is charged at a premium to allow the energy retailer to purchase power from renewable sources.

²⁷ See www.getup.org.au. GetUp! is an online campaigning and advocacy organisation based in Australia with approximately 336,000 online members which campaigns on a range of environmental and social justice issues.

²⁸ There are about 150 local grassroots climate actions groups (CAGs) active throughout Australia.

Pathways for individual action

Critical to this discussion is the role of individualistic responses to climate change abatement which fall within the purview of consumer-based action in the above typology. According to my argument thus far, governments and other institutions emphasise voluntary individualistic forms of responsibility for climate change mitigation. Individuals, however, in perceiving the complexity and extent of the climate threat and sensing their lack of power to enact global-level change, instead either choose not to take action or otherwise apply their agency through a limited and possibly ineffective range of personal private-sphere behaviours.

This leads to two potential pathways for individualistic action. The first pathway, critiqued by authors such as Scerri (2009) and Maniates (2002), positions consumer-based action as responsive to the prevailing forces of economic rationalism. In their critique, the only pathway currently open to actors for pro-environmental behaviour is through their consumer acts. However this action, whilst appearing to empower actors within their personal spheres of authority (in other words, their homes and lifestyles), diverts individual attention away from challenging the “knotty issues of consumption, consumerism, power and responsibility” (Maniates 2002, p. 45). Individualisation, for Maniates (2000, p. 65), is symbolic of the wholesale decline in public engagement in democratic processes in the West, which can only be “remade through collective citizen action as opposed to individual consumer behaviour”. In the same way, Scerri (2009) argues that personal actions deflect individuals from considering how these practices, when shared with other members of society, have the potential to challenge or support societal values; “personal acts of consumption stand-in for citizen's ethico-political commitments. In the place of engaging in a regulating body-politic, individual citizens are called upon to take initiatives and shoulder responsibilities themselves” (Scerri 2009, p. 477).

In contrast to the view that the “individualization of responsibility” (Maniates 2002), endemic in “Western culture and ideology” (Scerri 2009, p. 469), is a disempowering force that funnels human behaviour down an economic development path, Spaargaren and Mol (2008) argue that individualisation leads to three forms of “citizen-consumer” power: ecological citizenship, political consumerism and “lifestyle politics”. Ecological

citizenship is closely aligned to traditional notions of citizenship and refers primarily to relationships between actors and the state within the public domain (pp. 356–7). Political consumerism refers to the illumination of production-supply chains and related market processes in order to generate more ethical consumer choices. Eco-labelling and certification schemes are examples of political consumerism and are often auspiced through environmental NGOs (p. 357). Spaargaren and Mol (2008, p. 357) define “lifestyle politics” as “primarily about civil-society actors and dynamics beyond state and market” and “about private, personal and individual morals, commitments and responsibilities”.

Spaargaren and Mol (2008) (in distinct contrast to Scerri and Maniates) argue that the demise of the State allows the “citizen-consumer” to have an emerging role in environmental politics as connections are forged with global-level institutions and processes through consumer practice. This conception of an empowered consumer base incorporates much from the egalitarian typology and opens the possibility of incorporating forms of consumer practice within egalitarian citizen action (consumer boycotts, for example). Consumerism for Spaargaren and Moll (2008) becomes an entry point for greater democratic involvement at both local and global scales (as State power is “hollowed-out” through the modernising progression of globalisation). However, in saying this, they also delineate the form of individualism displayed in lifestyle politics as being distinct from the neoliberalist interpretation provided by Scerri and Maniates. I draw on Spaargaren and Mol’s statement on lifestyle politics (see section 2.3.2) again to emphasise how their interpretation differs from Scerri and Maniates. For Spaargaren and Mol (2008, p. 357):

lifestyle politics do[es] not favour automatically or exclusively ‘individualist’ notions of politics and consumer-empowerment. They are ‘individualist’ policies in a very, specific, circumscribed way ... *Lifestyle politics then refer to the ways in which individuals at some points in time (especially when confronted with sudden changes, challenges or fatal moments) reflect on their everyday life* (my emphasis).

These contrasting perspectives on individualist worldviews (illustrated above) foreshadow the tensions between: a model of individualisation of responsibility for climate change action that exists within an established hegemony which is essentially

unable to assure a sustainable future; and the potential laid out by Beck and Giddens, for example (along with Spaargaren and Mol), for the progress of a reflexive modernity where individuals reflect on their everyday life and take ‘citizen-consumer’ action with global change potential.

At this point I turn to consider the critical moral dimension of responsibility. In the following section, I take up how responsibility is understood within ethical theories and approaches to climate change and how these relate to the individualisation of responsibility for action on climate change.

3.4 The Ethics of Climate Change

As noted above (section 3.3), responsibility for climate change confers duties and obligations (Bickerstaff and Walker 2002; Caney 2006; Singer 2002, 2006), but also implies “ethical and moral values or caring” (Auhagen & Bierhoff 2000, p. 3). Ethical considerations are central to global climate change governance. For example, the UN Framework Convention on Climate Change, the Kyoto Protocol and the Copenhagen Accord all incorporate important ethical principles such as *polluter pays* and *common but differentiated responsibility*, which will be discussed further below. However, these elements are often overshadowed by the scientific and economic rationales for action, diverting attention from climate change as a ‘tragedy of the commons’ (Hardin 1968).

3.4.1 Principles of Responsibility in Climate Change Policy

Responsibility for climate change is one of the defining tenets of international climate change policy (UNFCCC 1992), as well as contestation, as the questions of who bears responsibility for the creation of greenhouse gas emissions and how responsibility is shared for their abatement are central to the climate change *problematique* (Baer et al. 2000; Beckman & Page 2008; Bulkeley 2001; Garvey 2008; Okereke 2008; Parks & Roberts 2010).

International climate change policy has been formulated around the principles of sustainable development established at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in 1992 and which include important equity principles such as: inter- and intra-generational equity and the polluter

pays principle (PPP). As Bulkeley (2001) observes, “the most long running and divisive debate” within climate change policy negotiations, centres on concerns over equity and the “respective responsibilities of nation-states for reducing emissions of greenhouse gases” (p. 435). Two principles structure how responsibility is conceived within the United Nations Framework Convention on Climate Change (UNFCCC): the principle of Common but Differentiated Responsibility (CBDR) and historical responsibility.

3.4.1.1 Principle of Common but Differentiated Responsibility

The principle of *Common but Differentiated Responsibility* (CBDR) is incorporated into the primary instruments that guide the international climate change governance framework: the UNFCCC and the Kyoto Protocol. The principle was first formulated within the Rio Declaration of the 1992 Earth Summit and as such sits at the heart of international climate change policy:

In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command (Principle 7 of the Rio Declaration).

The CBDR is therefore a statement that binds notions of fairness and equity in relation to access to the global commons by developed (Annex I)²⁹ countries and acknowledges the disparities between developed and developing nations in wealth, resources and access to technology.³⁰

The application of CBDR within the UNFCCC negotiations is hotly contested. The global goal decided and from what point in time emission reductions will be agreed (Garnaut 2008, p. 195) in effect establish the responsibility principles within the international climate governance regime. The rapid development of transition economies (such as India, China and Brazil), which are fast increasing their emissions, is shifting the debate on CBDR. For example, increasingly there are calls from the

²⁹ The United Nations Framework Convention on Climate Change notes three main groupings of countries according to their varying commitments. Annex I countries include: “the industrialized countries that were members of the OECD (Organisation for Economic Co-operation and Development) in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States”, http://unfccc.int/parties_and_observers/items/2704.php, accessed 6/01/12.

³⁰ http://www.eoearth.org/article/Common_but_differentiated_responsibility, accessed 5/11/08.

developed nations for developing countries to adopt mandatory emission targets.³¹ This was reinforced at the most recent United Nations meeting (COP17) held in Durban in December 2011. One of the major outcomes of that meeting was an agreement to incorporate all parties to the Convention within a future single legally binding agreement.

3.4.1.2 Historical Responsibility

Perhaps in light of this tension between developed and developing nations on emission trajectories, there have been attempts to further embed recognition of the disparity between developed nations and those in transition through an acknowledgement of historical responsibility. Brazil submitted what has become known as the ‘Brazilian proposal’ to the UNFCCC in 1995 suggesting that “Annex 1 burdens should be based on the relative levels of past emissions and their effects as manifested in the present climate” (Friman & Linner 2008, p. 341).

The treatment of the principle of historical responsibility in Friman and Linner’s view is representative of the power dynamics at play within the climate change treaty processes, and in particular they propose that the ‘technification’ (p. 344) of historic responsibility (through its representation in “simple climate models”) has weakened its equity focus. So, in effect, historical responsibility as part of the environmental discourse of climate change policy has been displaced and “institutionalized” (p. 346) within the UNFCCC, and excluded “on the grounds that pure science is essentially separated from social and political objectives” (p. 347). On these grounds, they conclude that “discussions of equity ... represent the true Gordian knot of North–South disagreement” (p. 351).

3.4.2 *Translating global emissions responsibility to the local level*

There have been attempts to translate these tenets of global and national responsibility around climate change into burden-sharing principles that apply more to the personal and or household scale. A few warrant a brief mention here.

³¹ For example, Garnaut (2008) states: “All developing countries continue to reject containment of their emission growth through the adoption of mandatory targets” (p. 179).

Noteworthy is Agarwal and Narain's (1991) influential work on luxury versus subsistence emissions. Their work seeks to 'personify' the burden-sharing principles of the CBDR by translating the spirit of what emissions reduction means to both developed and developing nations. At the heart of the contestation between the global North and South is the potential impact of an international climate change treaty on their respective development pathways. Reducing emissions in the North may curb what Agarwal and Narain describe as "luxury" emissions, that is, provide a relatively small impact on existing high standards of living, whereas reducing emissions in the South, where quality of life is often poor, can literally generate a life or death situation by threatening to reduce impoverished people to below their existing "subsistence" levels.

The other more pragmatic example is illustrated by Personal Carbon Allowances (PCAs) which have been proposed as a potential mechanism for transferring responsibility for national GHG emission goals to the level of the individual and/or household. PCAs are discussed in section 3.3.4 above.

Clearly, while there are ethical grounds for localising responsibility for a global problem like climate change, practical difficulties have prevented much progress in this area.

3.4.3 A rights based approach

Peter Singer argues that, on ethical terms, everyone has a right to the global atmosphere which is being used as a global 'sink' for greenhouse gas emissions. How such rights are distributed (for climate change as a global 'bad') becomes a "problem of distributive justice" (Singer 2002, p. 32) which challenges us to "adjust our ethics to take account of this new situation" (Singer 2002, p. 22). Singer (2002), in his essay on climate change, *One Atmosphere*, proposes on ethical grounds that developed nations have both a historical responsibility for climate change abatement (according to their respective contributions to the problem) and an obligation to compensate those countries that will unfairly suffer its consequences (pp. 30–38). Singer concludes that a fair-share model for climate change mitigation, based on an equal per capita share of future emissions, meets the fairness test (p. 48). This aligns with, for example, Garnaut's (2008) review recommendations.

Singer considers the failure of a nation to meet its responsibilities to mitigate climate change as a “moral failure” (Singer 2006, p. 415) and reiterates three alternative principles of climate change mitigation that may be applied under an ethical framing. They are:

- Nations should contribute to mitigation based on their historical contributions to the problem;
- All things being equal, applying a per capita share of the problem;
- Based on Rawls’ principle of fairness (Rawls 1971), compensating for those who, due to their circumstances, are less able or unable to afford to mitigate for climate change, wealthier nations should therefore make greater sacrifices (Singer 2006, pp. 418–9).

Irrespective of which principle is adopted, Singer states, each leads to the same outcome: wealthier industrialised countries taking a greater share of the mitigation burden.

According to Paavola and Adger (2002, p. 6), rights in the climate change debate include issues of both distributive and procedural justice. Singer’s argument above focuses on distributive justice. The “central dilemmas of procedural justice” include whose interests are taken into account in planning and decisions, who can participate and how. Paavola and Adger (2002, p. 6) ask: “is participation in decision-making limited to nation-states, for example? How much influence do different parties have on plans and decisions? For example, can nongovernment organizations and local communities directly influence decisions?” These questions may appear as a distraction from my central argument here, however, they raise important considerations for translating theoretical assumptions about the individualisation of responsibility for climate change into practical application. Paavola and Adger (2002, p. 4) argue that:

the distinction between utilitarian and rights-based approaches to equity ... lie at the heart of the crisis of governance that pervades the local, national and global communities ... that is, the tension between interdependence and independence, between pursuit of the greatest happiness of the greatest number, and the assertion of

individual, local or ethnic rights that ought not to be violated even at the expense of the aggregate good (citing Rayner & Malone 2000, p. 219).

Acknowledging and incorporating the rights of future generations to the atmospheric commons is also central to the ethics debate over climate change. As established earlier, one element of the complex nature of the climate change ‘problem’ relates to its delayed impact so that future generations who have not contributed personally to the buildup of greenhouse gases in the earth’s atmosphere, may suffer the worst outcomes of global warming. There have been various attempts to incorporate intergenerational concerns into a rights-based framework on climate change (see for example Beckman & Page 2008; Page 2007). However, acknowledging intergenerational GHG emission rights would require even more ambitious carbon mitigation targets in the short term and would imply significant imposts on the lifestyle aspirations of current generations. Such prescriptions remain difficult in practice (Gardiner 2006) and are largely politically unpalatable.

It is these issues of the rights of future generations, the rights of the non-human environment, and the lifestyle rights of the current generation (the ‘subsistence’ vs. ‘luxury’ lifestyles discussed by Agarwal & Narain (1991), for example) that have become the recent and thorny foci of ethical debates around responsibility for climate change (Paavola & Adger 2002, p. 8). I now turn to discuss how scholarship concerning human rights to the global atmospheric commons has been considered from the perspective of ecological citizenship.

3.4.4 Citizenship and Rights

Dobson (2006) states that as “environmental politics can be expressed in the language of rights, it can also be incorporated into the canon of liberal citizenship”. Drawing from Hayward (2000), he notes the growth of nations’ constitutional provisions that recognise a human right “to a liveable and sustainable environment” and argues that “this right to a sustainable environment might be regarded as the precondition for the enjoyment of other political, civic and social rights” (Dobson 2006, p. 3), thereby positioning ecological citizenship as a right which other rights depend on.

Melo-Escriheula (2008, p. 115) proposes that ecological citizenship has primarily been conceived as “the claiming of rights and the fulfilling of duties” which “foment an individualistic conception of citizenship”. He suggests a collective, civil society approach that provides a mechanism for inclusion and political participation – in other words, a deliberative democracy.

A rights-based approach to climate change therefore extends beyond a moral and ethical responsibility and seeks to create “a new cosmopolitanism that defends the need for a new conception of democracy and citizenship” (Saiz 2005, p. 163). This is similar to the way in which Beck (1992) proposes that globalisation, rapid technological change and the corresponding emergence of the ‘risk society’ create the conditions for social rupture and new forms of political reality. Saiz (2005, p. 165) argues that “the concept of ecological citizenship” provides “one of the[se] new theoretical spaces” resulting from globalisation and the dual realisation of the environment both as a public ‘good’ (and thereby to be valued and defended) and as a potential threat (through ecological catastrophe). Saiz (2005, p. 169) suggests that ecological citizenship provides “an emphasis on the relationship between collective responsibility and citizenship theory” and therefore entails the following key aspects:

human rights, including cultural rights (*rights*), environment (*responsibilities*), democracy, including subnational democracy (*participation*) and multiculturalism and reflexivity (*identity*) (Delanty, 1997, p. 301) (my emphasis).

These four elements could well inform an approach to researching collective action on climate change, one that emanates from local communities and that extends to a more global uptake. I take this up further in discussing my results in Chapter 7.

Dobson sees ecological citizenship as constituting “an independent and novel notion” compared to traditional citizenship as it “is more about obligations than about rights” (Dobson 2000b, pp. 59–60 cited in Saiz 2005, p. 174). Saiz states that Dobson’s view of ecological citizenship consists of three key elements. Firstly, “the ecological citizen has rights and responsibilities and there is no necessary reciprocal relation between the two”. In other words, ecological responsibilities are not conditional on certain rights. Secondly, “the private sphere as well as the public, is a key arena of activity”. Dobson uses the ecological footprint as an example of ecological citizenship being drawn into

the private realm. Finally, “justice is the key to ecological citizenship” with “‘secondary’ virtues, such as care and compassion” (Saiz 2005, p. 174). Ecological citizenship, in other words, requires a moral responsibility towards others irrespective of reciprocal rights.

3.4.4.1 “Thick Cosmopolitanism”

Dobson (2006) furthers this politicised form of environmental rights in his paper, “Thick Cosmopolitanism”. Cosmopolitanism is described as consisting of three key elements: *individualism*, *universality* and *generality*. Firstly, *individualism* places human beings as the central units of concern of a cosmopolitan framework for climate change, and so concern about climate change is primarily a matter of social and cultural concern rather than a response to ecological degradation. Secondly, *universality* applies the ethic of equality to each unit of concern, so that each person has the *right* to an equal share in the global atmospheric commons (Singer 2002). Finally, *generality* implies that each individual unit of concern has a moral *responsibility* for everyone, not just some subset: family, fellow citizens or members of their cultural group (based on Pogge 2002b, p. 169 cited in Dobson 2006, p. 167; see also Singer 2011).

Dobson’s thesis represented here echoes Beck (2000, p. 83) who states:

The principle that human rights precede international law refers, however, to international relations in the cosmopolitan paradigm of the second age of modernity. The categorical principles of the first age of modernity – collectivity, territoriality, boundary – are replaced by a co-ordinate system in which individualization and globalization are directly related to each other and establish the conceptual frame for the concepts of state, law, politics and individuals which have to be redefined. The bearers of human rights are individuals and not collective subjects such as ‘nation’ or ‘state’.

Beck suggests that globalisation and the rise of international law could create “a paradigm shift from nation-state societies to cosmopolitan society in so far as international law goes over the heads of nations and states and addresses individuals directly, thereby positing a *legally binding world society of individuals*” (2000, p. 84 – emphasis in original).

Dobson (2006) points to a contrast between thin cosmopolitanism, where “common humanity is a thin type of bind”, to thick cosmopolitanism, which requires recognition of ourselves in all other humans (pp. 168–9):

Recognising the similarity in others of a common humanity might be enough to undergird the principles of cosmopolitanism, to get us to ‘be’ cosmopolitans (principles), but it doesn’t seem to be enough to motivate us to ‘be’ cosmopolitan (political action) ...’Thin conceptions of cosmopolitan citizenship revolve around compassion for the vulnerable but leave asymmetries of power and wealth intact; thick conceptions of cosmopolitan citizenship attempt to influence the structural conditions faced by vulnerable groups’ (Linklater, 1998, p. 206) (p. 169)

Dobson proposes that such ties can be created when we feel responsible for the others’ situation – “if there is some identifiable causal relationship between what we do, or what we have done, and how they are.” When such responsibility is felt, matters of unequal power where a particular rationality becomes privileged (Okereke et al. 2009, p. 63) can be addressed through a cosmopolitan obligation, which influences the prevailing structural conditions.

Further a “cosmopolitan obligation” (Harris 2008) implies that individuals should undertake action on climate change *irrespective* of a State’s inaction (for example, where a developed nation fails to act through pursuing progressive climate change mitigation policies). As climate change is a problem of globalisation, this obligation would feasibly extend from the local (individual) to the global (collective). In this context, it is appropriate for my research to seek out settings where individuals are taking action based on their felt responsibility for climate change and its impacts.

3.5 Five aspects of responsibility

Based on my review of the literature on responsibility in the context of climate change I identify five distinct aspects of responsibility that I will explore through my research: spatial; temporal; moral/ ethical; relational; and behavioural.

Spatial

Responsibility for climate change can be located at a range of spatial scales: from the personal to the global. Moreover responsibility applies across the public and private spheres and thereby engages the breadth of actors involved in climate change policy development and deliberation. Responsibility for climate change mitigation can be reflected in the “personal, private-sphere” (Stern 2005) behaviours of individuals and householders through to the global negotiating processes undertaken through, for example, the auspices of the UNFCCC. I call on the spatial aspect of responsibility in my discussion of the relationship between local- and personal-scale action and global-scale action (Chapter 8).

Temporal

Climate change processes cross broad temporal scales. Greenhouse gas emissions, particularly carbon dioxide emissions, reside within the Earth’s atmosphere for up to a century or more (Hansen et al. 2008) and have the ability to impact the Earth’s climate systems across millennia (Hansen et al. 2008). The temporal scale of responsibility is reflected in both the intergenerational impact of climate change (Gardiner 2006) and historic responsibility for greenhouse gas emissions (Friman & Linner 2008). Both these issues have formed an important distinction within climate change negotiations and should inform humanity’s moral response. The temporal aspect of responsibility therefore provides an important justification for incorporating intergenerational considerations within an ethical response to climate change. Whilst I don’t intend to focus on this aspect in my research, its importance is borne out later through the responses of my research participants (see Appendix F and section 7.3).

Moral/ ethical

Responsibility encompasses a philosophical dimension and allows exploration of the ethics of climate change (Singer 2002, 2006). Matters of fairness, equity and justice feature prominently within climate change discourse. An important consideration is how far the circle of care extends both temporally and spatially (Singer 2011) and whether we can incorporate all of humanity (now and in the future) through a *cosmopolitan obligation* to taking action on climate change (Kent 2011). The moral/ ethical aspect of a cosmopolitan responsibility for climate change action is taken up further in Chapter 7.

Relational

Theoretical understandings of responsibility are relational. That is, responsibility is commonly argued in relation to social theories of risk (Bauman, Giddens, Beck) and rights (Caney, Dobson). These relationships are complex and contested and continue to form one of the central platforms of disagreement within international negotiations on climate change (UNFCCC). The relational aspect of responsibility is acknowledged throughout this thesis and is incorporated within discussions of risks and rights.

Behavioural

Responsibility has a behavioural dimension as it is a widely recognised attitudinal attribute examined in environmental psycho-social research (Bickerstaff et al. 2008; Pidgeon et al. 2008). Values of responsibility have been identified as significant motivators towards individual and collective behaviour change (Jackson 2005; Kaiser & Shimoda 1999). Understanding the behavioural aspect of individual and collective responsibility for climate change action is a particularly important consideration within my research. Chapter 6 and Appendix F detail my research findings and in Chapter 7 I incorporate my normative and empirical findings into a model of behavioural change (section 7.1).

These five normative perspectives on responsibility in relation to climate change map out the extensive terrain to be calculated and agreed on. I contend that climate change as a global risk issue, characterised by its inherent complexities, multiplicities and disordered ways of knowing, has been positioned as the subject of individual responsibility. If we are to accept that this is the case then in what ways are individuals equipped to enact their responsibility towards climate change? What forms of agency do actors require and in what ways are these individual agencies responsive to the structural enablements and constraints of our presently unsustainable society? I address these questions in the next section.

3.6 Individual responsibility, agency and structure

The self is not a passive entity, determined by external forces; in forging their self-identities, no matter how local their specific contexts of action individuals contribute to and directly promote social influences that are global in their consequences and implications (Giddens 1991, p. 2).

Taking individual responsibility for climate change implies that actors are able (and willing) to take mitigation actions, and that they are *actors with authority* (Biermann et al. 2009), possessing the power to engage in practices that will effectively reduce carbon emissions. Individual agency in this sense should be distinguished from the “unintended consequences of everyday activities” (Pattberg & Stripple 2008, p. 8), such as the ‘simple and painless steps’ (WWF-UK 2008) of changing household light bulbs and purchasing energy efficient appliances.

In stating that individual agency requires “actors with authority” I draw from Biermann et al. (2009, p. 32) who state within their schema of Earth Systems Governance³² that:

an agent is an authoritative actor. Authority is here understood as the *legitimacy* and *capacity* to exercise power, while power refers merely to the capacity to influence outcomes, with or without the legitimacy to do so (my emphasis).

Based on Biermann et al. (2009) I take *agents* to be distinguished by their capacity to take responsibility for climate change through their personal actions and not by their intentions alone (Whitmarsh et al. 2009). I argue in section 3.3.3 that many people are motivated and able to take simple steps around their lifestyles and households. In other words they display the *intention* to act in a fashion that may lead them to lower their carbon emissions. Agents, on the other hand, must demonstrate “their capability of

³²Earth Systems Governance acknowledges that the Earth’s natural systems are now strongly influenced by human activity (Biermann (2007). A governance framework is required, according to the ESG authors, to incorporate both the environmental and social interface. This interface needs to be comprehensive enough to capture the major challenges to the Earth’s systems (of which climate change is one) while acknowledging the overarching structural influences and constraints (which they term “cross-cutting” themes). The framework consists of 5 analytical problems: the 5 ‘A’s of: agency, architecture, adaptiveness, accountability, and allocation and access; with the 4 crosscutting themes of power, knowledge, norms and scale. As Biermann (2007, p. 327) states: “ESG .. requires the integration of governance research at all levels. It must bridge scales from the global to the local”. I draw from the ESG framework because: it captures much of my interest in climate change as a socially constructed problem; it integrates environmental and social concerns; and it counters existing governance and change thought with a holistic response that crosses disciplinary boundaries. See <http://www.earthssystemgovernance.org/about/crosscutting-themes>, accessed 20 December 2011.

doing those things in the first place” (Giddens 1984, p. 9). Agency according to Giddens implies power in the sense of the Oxford English Dictionary definition, “one who exerts power or produces an effect” and in Biermann et al.’s (2009) terms, agency involves actors with “the *legitimacy* and *capacity* to influence outcomes” (p. 32 – my emphasis).

This implies a logic of agency which extends beyond personal- and private-sphere behaviours (Stern 2005) (expressed, for example, as “simple and painless steps”). Such actions include the commonly cited changing light bulbs, turning off electronic equipment at the switch and purchasing energy efficient equipment – in other words, actions that might contribute to reduced personal or household carbon emissions but do not impact on the prevailing societal, political or economic systems that embed high levels of greenhouse gas emissions. Rather, agency should be read as those actions undertaken within the public sphere by empowered individuals that are able to reflect on the nature and consequences of their doing within a wider societal context.

The capacity for individual actors to undertake effective action is moreover constrained by the extent of their ability to act and by “the capability of the individual to ‘make a difference’ to a pre-existing state of affairs or course of events” (Giddens 1984, p. 14). The role of individual agency therefore needs to be understood as being both enabled and constrained by the *status quo*, the extant social and cultural norms that support contemporary societal institutions and the ‘rules’ of behaviour (Biermann et al. 2009; Beck 1992; Giddens 1991).

Implied from this is that active agency, which “connotes the capacity of human beings to reason self-consciously, to be self-reflexive and to be self-determining” (Held 2005, p. 12), requires reflexivity. “Active agents” are also bestowed with “both opportunities and duties” (Held 2005, p. 12). They create opportunities to take action but also, concomitantly, they have a duty that this action “does not curtail and infringe on the life chances and opportunities of others” (Held 2005, p. 13). Agency therefore implies a moral duty not only to act but to act without infringing the rights of others, thus expanding the notion of agency set out by Biermann et al. (2009) to incorporate a fundamental moral dimension to agency in individual action for climate change abatement. Moreover this moral obligation on the part of the individual to act exists even where governments fail to take action (Garvey 2008), conferring a “thick

cosmopolitan” obligation (Dobson 2006) on the individual that requires political action to address the structural /root causes of climate change.

Therefore the role of individual agency needs to be understood as being embedded in association with structure (Biermann et al. 2009; Beck 1992; Giddens 1991), so that:

Modernization involves not only structural change, but a changing relationship between social structures and social agents. When modernization reaches a certain level agents tend to become more individualized, that is, decreasingly constrained by structures. In effect structural change forces social actors to become progressively more free from structure. And for modernization successfully to advance, these agents must release themselves from structural constraint and actively shape the modernization process (Lash & Wynne 1992, p. 2 quoted in Beck 1992).

The ability for individual actors to effect social change is thereby contained within the understanding of the agent–structure relationship (see section 2.2.2). Reflexive individuals are not simply conceived of as reactive to social conditions; they can also actively intervene to change prevailing structures. However, while reflexive social actors are free to act, their actions can still be curtailed through institutional restraints. Moreover, as Pattberg and Stripple (2008) imply, individual action without critical reflection (such as ‘small and painless steps’) can simply reinforce the prevailing social norm of structural unsustainability (Gregory 2000, p. 495).

As individualised responsibility shifts from being a reflexive moral imperative to a set of personal lifestyle practices divorced from their social moorings that “neither sustain [n]or challenge the structuring of criteria for value in society” (Scerri 2009, p. 478), it becomes harder to imagine how atomised and disempowered individuals will be equipped to respond to climate change.

3.6.1 What constrains individual agency?

As I outlined above (see section 3.3.3.1) some of the ways that individuals can act in order to reduce their greenhouse impact are: as an agent of the state (hierarchical); as an economic agent (individualistic); or as a moral agent (egalitarian). But in what ways are the conditions for individual agency being constrained in modern society? Here I

propose that the inhibition of individual agency for voluntary action on climate change abatement can be demonstrated in three distinct ways and I will consider each in turn.

1. *Actors lack authority*; that is, they are not empowered to take action.

Agency derives from a sense of personal empowerment, which becomes the basis upon which people are able to take action within their spheres of authority. Norgaard's (2009) meta-analysis of psycho-social research on individual action in relation to climate change draws on several lines of empirical evidence to support the supposition that individuals in fact feel disempowered and ineffective. She notes Krosnic et al.'s (2006) observation that, as there is no easy solution to climate change people no longer take it seriously (Norgaard 2009, p. 14). She also points to the work of Immerwahr (1999) that identifies the lack of a sense of efficacy as a barrier to action (Norgaard 2009, p. 21). Further, she draws attention to Kellstedt (2008) who states that "increased levels of information about global warming have a negative effect on concern and sense of personal responsibility" (Norgaard 2009, p. 22), supporting Rätzl and Uzzell's (2009) contention that people perceive less responsibility for matters that are least under their personal control. Actors, in effect, are "choosing not to choose" (Macnaghten 2003) to engage with issues such as climate change. The global scale of the problem and the enormous power inequities evident at a personal level (compared to governments and corporations) overwhelm their ability to see themselves as "authoritative actors" (Biermann et al. 2009, p. 32).

2. *Actors lack trust* in the very institutions (namely, governments) that they turn to for action on issues of global complexity and risk, such as climate change.

Whereas governments place confidence in their citizens to respond to the climate crisis through their individual behaviours, the public displace their personal sense of disempowerment through the desire for institutional accountability. The result is a type of "organised irresponsibility" (Beck 1992) where climate change becomes another 'risk' that people and organisations are responsible for, yet for which no-one is held especially accountable (Giddens 1999).

Calls for individual responsibility by governments and other institutions raise issues for the public of institutional trust, capability and duty of care (Bickerstaff et al. 2008;

Bickerstaff & Walker 2002; Macnaghten 2003; Pidgeon et al. 2008). As discussed in section 3.3.3.2, people perceive that governments are not taking acceptable levels of action to mitigate the threat of dangerous climate change. They also doubt whether governments are willing to take action on climate change as they perceive that such action is contrary to governments' economic interests (Darnton 2006, p. 24). People are also alert to the unequal power relationships that operate between the individual and the state and other institutions (Bickerstaff et al. 2008; Maniates 2002).

3. *Actors lack reflexivity.*

The essential nature of reflexivity can be portrayed as breaking structural bonds in order to unleash individuals' agency (Beck 1992; Gregory 2000). If, on the other hand, individuals act "*without* questioning the norms of the wider society, the possibilities of change will be constrained by certain norms which are taken for granted" (Gregory 2000, p. 485). This sets up a "vicious circle" where actors, in conducting their daily lives, reinforce the social norms that in turn "circumscribe individual choice" (Gregory 2000, p. 485). Scerri (2009) argues that actors in Western society display their individualism as "elemental particles of society" (Supiot 2007, p. 14 cited in Scerri 2009) whose actions are merely "an instrument of economic development" (p. 473). The "individualization of responsibility" (Maniates 2002) has shifted the emphasis of voluntary pro-environmental behaviour to the domain of the consumer. Any ethical considerations are thereby subverted into expressions of green consumerism, which Scerri describes as a type of "ethics-lite". The linkages between morality and reasons for acting (Scerri 2009, p. 470) are severed in this atomistic interpretation as actors no longer reflect on their private behaviours in relation to broader societal values (p. 478). So in the same way as Rätzl and Uzzell (2009) propose a "psycho-social dislocation", Scerri (2009, p. 479) argues that individualisation creates a politico-ethical dislocation:

In the contemporary West, possibilities for achieving sustainability fall foul of a way of life that, while free to exercise sovereign choices over a plethora of opportunities, is increasingly cut-off from political – that is, value- and so power-laden – commitments to inhabiting the ecosphere on ethical terms.

3.6.2 Conclusion: Activating Agency

This chapter has specifically sought to address my first research aim, that is, to determine why and how individuals take responsibility for climate change. I have initially established through an overview of social research into peoples' views, motivations and behaviours on climate change (section 3.2) that whilst people perceive that they are individually responsible for climate change, this is a responsibility shared with other institutional actors (primarily governments). Also, despite peoples' stated concerns regarding climate change as an important global issue, in general, individuals are failing to take significant action to address it.

I posed four questions at the commencement of this chapter to draw out aspects related to the individualisation of responsibility for climate change. In response to the question, 'How do we understand responsibility for climate change?' I undertook an expansive transdisciplinary review of the literature concerned with responsibility for climate change action which I summarised into five aspects (section 3.5): spatial, temporal, moral/ ethical, relational and behavioural. In considering in what ways individuals act responsibly to mitigate climate change, I drew on the extensive literature that considers the types of actions people undertake. I distinguished between the personal and private sphere behaviours that individuals enact within their homes and lifestyles, and action in the public sphere. Utilising a discourse classification approach from cultural theory (section 3.3.4) I established a typology of individual action to distinguish the types of voluntary actions available to individuals based on their cultural preferences. The third question I considered was: 'How do individual actors acquire agency through voluntary action?' In reply to this question I established a definition of individual agency (section 3.6) that requires actors to be authoritative (after Biermann et al. 2009). In other words, agents possess the legitimacy and capacity to undertake voluntary action on climate change.

This exposed the conundrum in Beck's theses on risk and individualisation, that is, whether the individualisation of responsibility can create the conditions for social change on climate change. As stated in the introduction to this chapter, the root of this challenge lies in whether action on climate change can be personal but not disempowering.

To attempt to understand this conundrum I needed to consider the role of individual agents in relation to structural enablements and constraints. I have argued that there are three key constraints (section 3.6.1) to the uptake of effective voluntary action on climate change at the individual scale. Firstly actors, while acknowledging individual responsibility for climate change abatement, feel disempowered in the face of the complexity and enormity of climate change risk. Secondly, in acknowledging their essential powerlessness, citizens turn to their governments to take responsibility for climate change mitigation. However governments are seen by their citizens to be equally incapable, ineffective or uncommitted to rise to the climate challenge. Moreover governments increasingly expect that individuals will take voluntary action in their personal lifestyles but outside of a societal contract that sets up the provisions for sharing responsibility – thus creating a sense of distrust. Thirdly, the structural conditions of modernity inhibit the ability for self-reflexive individuals to generate social change as much of their individual action operates to reinforce social norms, or worse, in the absence of reflexivity, the moral bases for voluntary action are subverted through consumerism.

These three constraints are embedded within two “dislocations”. The first is a psycho-social dislocation that creates an artificial dichotomy between the individual and society, and between the local and the global, resulting in a type of hiatus in action through people “choosing not to choose”. The second is the politico-ethical dislocation that separates individuals’ moral reasoning for taking voluntary action from broader social values. Both dislocations imply the need for deep reflection on the climate change *problematique* at both the personal and societal scales (Gregory 2000), and suggests the necessity for a shift from individual responsibility to a shared one (Scerri 2009) along with a shift in power from governments and global institutions to civil society (Gregory 2000, p. 499).

Moreover, these constraints also reveal the need to refocus social science research – to shift to “transforming behaviours” rather than trying to form solutions from existing patterns of individual behaviours (Räthzel & Uzzell 2009). This has important implications for the way that climate change solutions are constructed between agents and institutions – implying a much greater involvement in democratic deliberations

between nations and their publics, as well as ways of communicating the threat of climate change that creates transformative responses. Whilst generating individual reflexivity through transformative learning programs would be one avenue for activating individual agency, I concur with Rätzl and Uzzell (2009) who argue that research needs to address how individuals aim to solve environmental problems collectively. This also aligns with my second stated research aim: to determine how the shift occurs from individual agency to collective agency in grassroots climate change action.

Finally, as climate change is a problem of increasing moral complexity (Gardiner 2006) situated within a socio-political context of increasing individualisation, the individual and collective may diverge rather than converge on action for climate change mitigation. Enacting a cosmopolitan obligation within global climate governance provides one potential counter for this course, as it would establish the elements of a common moral platform from which to address the problem of climate change. Such a cosmopolitan obligation would require that individuals “create collectivities with the relevant capabilities ... [to form] individual-duty-fulfilling institutions” (Jones 2002, pp. 68–9 in Dobson 2006, p. 181) and that confer rights and responsibilities for climate change mitigation at both the local and global scale. These collectivities could act as a foil to the structural constraints on individual agency.

In my research, I have therefore chosen to focus on collectives that are engaged in voluntary action on climate change to explore the ways that they have overcome structural barriers in order to activate their individual and collective agency. I draw on the theoretical frames that I have established from the literature; namely, I take a broad transdisciplinary approach to gauge how responsibility around climate change is enacted in practice and incorporate the five aspects of responsibility (as discussed at section 3.5). Further, I empirically test my assertions on the individualisation of responsibility by enquiring into how members of community-based collectives engage with climate change as their issue both individually and collectively. Finally, to understand how members of community collectives distinguish themselves from individuals within the broader community not actively engaged with climate change, I apply the three constraints to individual agency (discussed in section 3.6.1 above).

Before progressing to my research design (Chapter 5) I review one further field of literature in the following chapter (Chapter 4 – Socio-Technical (Sustainable) Transition Theory).

CHAPTER 4 – SOCIO-TECHNICAL (SUSTAINABLE) TRANSITIONS THEORY

4.1 Introduction

To this point I have established social constructivism as my epistemological position and utilised Ulrich Beck's risk theory as a metatheoretical frame for my research. Following on from this I have considered the individualisation of responsibility for climate change from a transdisciplinary perspective. I believe it was important to establish this background here, as the individualisation of responsibility sits at the crux of my research interest. In this chapter, I segue to an intriguing and emergent body of literature concerned with the theory of how change towards sustainability occurs. This part of my literature review contributes to the third aim of my research, that is, to determine how collective grassroots action can lead to broader social change.

According to Geels (2011), Socio-Technical Transitions (STT) theory is a middle range theory (MRT). Geels draws on Merton (1968) who defines MRT as: "theories that lie between the minor but necessary working hypotheses that evolve in abundance during day-to-day research and the all-inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behaviour, social organization and social change" (Merton 1968, p. 39 cited in Geels 2011, footnote 1 at page 26). Geels (2011, p. 26, footnote 1) further sets out the following characteristics of MRT:

- (a) MRT are not about broad, abstract entities such as 'society' or 'social system', but about concrete phenomena (such as socio-technical transitions),
- (b) MRT differs from grand theory, because it emphasizes interactions between theory and empirical research. So, MRT do not consist of elaborate frameworks with endless conceptual distinctions and limited linkages to empirical research,
- (c) MRT specify relationships between concepts into analytical models.

In this sense, I find that STT theory complements the use of a generalisable metatheory (in my case, Beck's risk theory). STT theory also provides a pluralist outlook on social change given that the theory incorporates other middle range theories as adjuncts to extend its normative and empirical application. In addition, all these elements contribute

to a transdisciplinary exploration of climate change from the perspective of societal change.

STT theory draws from diverse theoretical sources, including: innovation studies, sociology, institutional theory, science and technology studies, political science and governance to analyse the co-evolution of society and technology (Geels 2011; Grin et al. 2010). It has been widely employed in the study of technology (such as electricity use, transport etc.) and policy systems (den Elzen et al. 2011; de Haan & Rotmans 2011; Loorbach & Rotmans 2010). More recently its application has been directed towards processes of grassroots innovation and social change from the “bottom up” (Hargreaves et al. 2011; Middlemiss & Parrish 2010; Seyfang & Smith 2007).

Socio-technical transitions occur, according to the theory, when innovative and radical solutions to issues of sustainability (described as ‘niches’) are able to challenge and ultimately overthrow the dominant system or ‘regime’ (Seyfang et al. 2010, p. 3). An STT approach acknowledges that shifting to a low or zero carbon future requires changes in both actors and structures as individual lifestyles and household-level behaviours are embedded in wider social, cultural, technological and institutional systems.

In this thesis, I have applied STT theory to the analysis of a multiple case study of Climate Action Groups (CAGs) in Australia (see Chapter 6 and Appendix F). Traditionally, STT theory has been used to understand how new technologies (or new practices) emerge and then transition into wider adoption throughout society. More recently STT has been applied to social innovations that emerge from the grassroots of civil society and that have the potential to translate into the mainstream (Hielscher et al. 2011; Moloney et al. 2010; Seyfang et al. 2010; Seyfang & Haxeltine 2010; Seyfang & Smith 2007). I will argue that STT theory therefore offers a useful heuristic for developing an appreciation of why CAGs have arisen as a particular and distinct grassroots community-based phenomenon in response to climate change and how CAGs could and do engage in broader-scale processes of social change within Australia.

4.2 Socio-Technical Transitions Theory

According to Grin et al. (2010), there are four conceptual notions that underpin the transitions of social and technological systems aimed at achieving sustainable development (from here on termed Sustainable Transitions). Firstly, systems (economic, cultural, technological, ecological, institutional) do not develop in isolation but *co-evolve* in a process of cyclical, iterative change (Grin et al. 2010, p. 4).

Secondly, a transition can be conceived as occurring across three levels: niche (micro); regime (meso); and landscape (macro). This is known as the multi-level perspective (MLP) (Geels 2005) and is commonly used to frame transition processes. (The MLP is explained in more detail in section 4.2.1 below).

Thirdly, the pathway of the transition is *multiphase* (Grin et al. 2010, pp. 126–131). In brief, the multiple phases consist of:

- i. The *pre-development phase* where there is a force for change but this has not yet created a visible impact on the extant system equilibrium;
- ii. The *take-off phase* or the point of ignition where changes pick up momentum;
- iii. The *acceleration phase* is the phase where structural change becomes visible; and
- iv. The *stabilization phase* where the system dynamics stabilise around the new equilibrium (Rotmans et al. 2001a cited in Grin et al. 2010, p. 126).

These phases of change together form an S-curve (illustrated at Figure 1³³) or rather an ideal representation for a societal change process.

³³ Reproduced from Grin et al. 2010, p 130 with written permission from Routledge Taylor & Francis, New York.

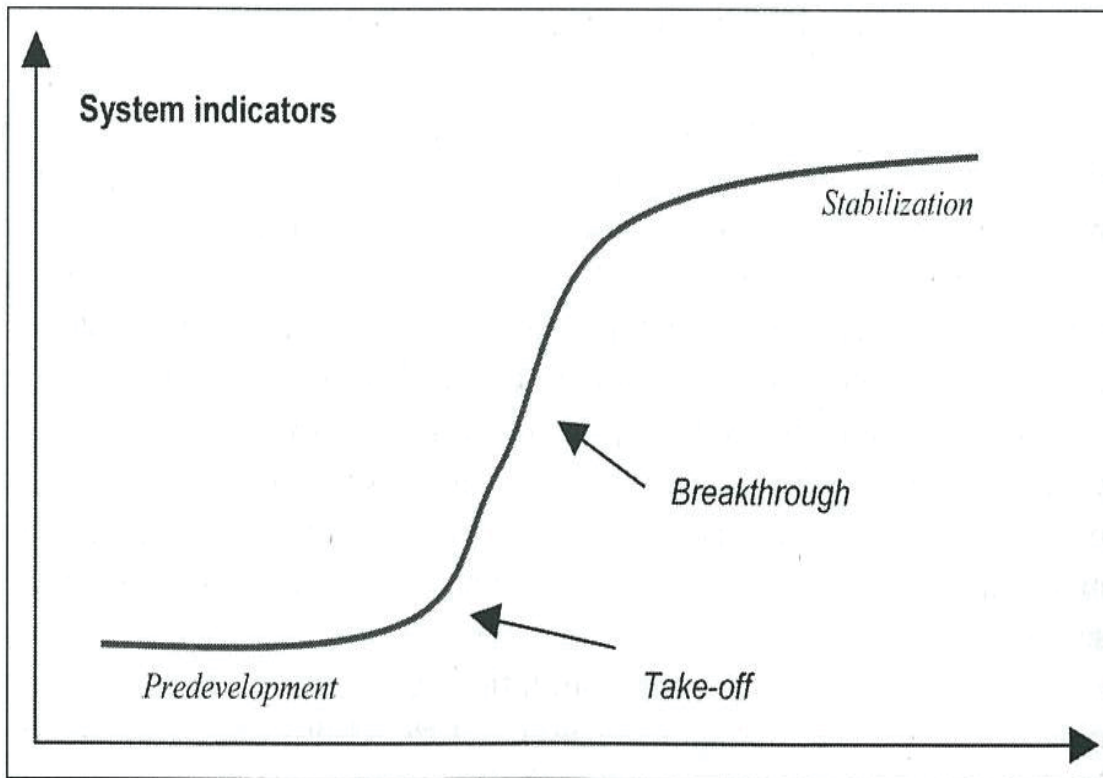


Figure 1: The different phases of a transition (Rotmans et al., 2001) (reproduced from Grin et al. 2010, p. 130).

In reality, Grin et al. (2010) note that these phases may lead to alternative and “non-ideal” outcomes (illustrated at Figure 2³⁴). In this S-curve diagram they identify alternative system progressions of system breakdown, backlash, and lock in. They also note that the S-curve does not replicate the timeframes required for societal transitions, which they argue usually occur over at least one generation or 25 years (Grin et al. 2010, p. 128). Nor does the S-curve acknowledge the relative mutability of the change phases which may incorporate varying degrees of acceleration or slow down dependent on what other impacts are operating outside of the particular transition (for example, unimagined events such as wars or large natural or man-made disasters). Grin et al. (2010, pp. 129–130) observe that the multi-phase framework is:

Primarily employed as a descriptive ordering framework for the direction, pace and magnitude of a transition, describing the changes in phases, and as an explanatory framework for explaining the driving forces and mechanisms behind the phases and their changes (from relative order and stability to chaos and instability and vice versa).

³⁴ Reproduced from Grin et al. 2010, p. 131 with written permission from Routledge Taylor & Francis, New York.

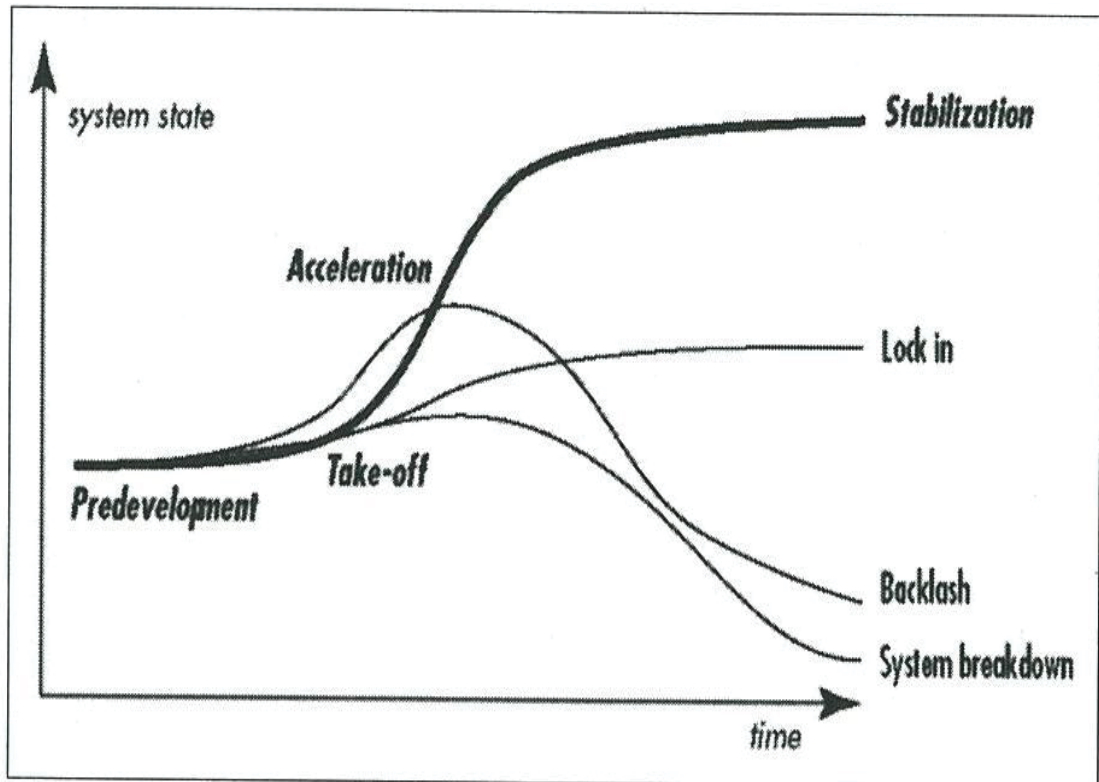


Figure 2: Alternatives for S-shaped curve (reproduced from Grin et al. 2010, p. 131)

Lastly, sustainable transitions involve *co-design and learning*. Sustainable transitions engage processes of social learning involving a “synthesis of theoretical knowledge, practical knowledge and practical experience” (Grin et al. 2010, p. 5). In other words, successful sustainable transitions require *knowing* and *doing* that is both reflexive and shared. Social learning, according to Reed et al. (2010, p. 5), includes the following three aspects. Firstly, social learning must demonstrate that a change has occurred in understanding in the individuals involved. Secondly, it must go beyond the individual to be situated within wider social units or ‘communities of practice’ (Wenger 1999) within society. Thirdly, social learning occurs through social interactions and processes between actors within a social network.

Implied by these four conceptual precursors is that sustainable transitions are “very complex and comprehensive phenomena” and it cannot be assumed that a particular “normative orientation” towards sustainable development will result in the shaping of transitions (Grin et al. 2010, p. 3). I find this an interesting proposition as it implies that direct and instrumental interventions around sustainable development (for example to

support a governmental policy position) may lack the impetus for creating change or may not deliver the intended outcomes.

4.2.1 The Multi-Level Perspective (MLP)

The MLP has three levels: “innovative practices (niche experiments), structure (the regime), and long term exogenous trends (the landscape)” (Grin et al. 2010, p.4) and is a particularly useful component of sustainable transitions theory. Niches or in other words, ‘micro-level’ sites are sites of innovation and transformative change. Action at the micro level is structured by the incumbent regime, or ‘meso’ level. The broader structural context for interaction between niches and regimes is provided at the ‘macro’ level by socio-technical landscapes (Scrase & Smith 2009). Transitions emerge when the dynamic interactions between these multiple levels of niche, regime and landscape set up a mutual reinforcement effect (Grin et al. 2010, p. 4). As Scrase and Smith (2009, pp. 709–710) argue, climate change is a topic well suited to analysis using this multi-level perspective:

This 'landscape' consists of material, demographic, ideological and cultural processes that operate beyond the direct influence of actors in any given regime and provide 'gradients for action' (Geels, 2004). Landscape processes, political or otherwise, bear down upon regimes, generating stress and creating opportunities. Broad societal concerns over climate change are one such stress. The hope is that these processes of niche development and regime destabilisation will, over time, generate a transition to a low carbon socio-technical regime. This could involve a gradual evolution or a more disruptive transformation: the STT perspective provides a conceptual framework for considering both.

Processes of change therefore need to overcome the inherent inertia created by path dependence and ‘lock-in’ of existing institutions, practices and social conditions. Raven et al. 2010 argue that there are three dimensions of regime lock-in: institutional, social and technological. First, institutional structures such as laws, regulations or cultural values, “are often very rigid, preventing the breakthrough of social innovations” (p. 59). Second, the social dimensions of lock-in are created by actors and social networks being “blind” to alternatives, lending support to existing systems that represent “incumbent organisational capital and institutionalised power” (p. 59). Third, the technological ‘hardware’ that is employed in supporting existing technologies and infrastructures

often involves large investments (both material and non-material) that embed them within the existing regime.

Given the inertia and embeddedness of regimes, it follows that key to achieving a sustainable transition is the ability to influence and/or disrupt the incumbent regime. Smith (2007, p. 446) suggests three modes of translation processes between niches and regimes:

1. Translating the root causes of *unsustainability* bedded in the regime into guiding principles for niche creation.
2. Applying lessons learnt from either unsustainable regimes or sustainable niches to the other.
3. Shifting the regime context so that it is more closely aligned with niche conditions.

These three modes of translation provide fertile potential for theorising about how CAGs can play a role at the niche level in processes of social innovation and change. CAGs (like other grassroots groups acting on challenges of unsustainability) adopt and implement alternative sustainable living and low carbon practices which have the potential to translate into mainstream behaviours. CAGs critique the root causes of climate change through questioning their own practice, as well as regime practices. They seek to instigate broader scale social change consistent with their collective values and norms through political action. I suggest, therefore, that CAGs fulfill the criteria of a niche within sustainable transitions theory.

4.2.2 Structuration in Sustainable Transitions

The multi-level perspective (MLP) lends a scalar sensitivity to the sustainable transitions thesis. However, importantly, rather than being geographical or spatial, the scale levels of the MLP represent “degrees of structuration” (Grin et al. 2010, p. 4). So that “the higher the scale level the more aggregated the components and the relationships and the slower the dynamics are between these actors, structures and working practices” (Grin et al. 2010, p. 4).

The structuration or ‘stickiness’ that pertains to each of the multiple levels varies. In the niche level, actors are most free from structure and the “options for agency” (Raven et al. 2010, p. 62) provide “the variation environment for radical innovations” (Raven et al. 2010, p. 61). In the regime, actors are more tightly bound through the dominant sway of extant institutions, processes and regulations. At the landscape level processes of change are the slowest, as actors are most bound to structures such as cultural norms, for example. Raven et al. (2010, p. 62) state that actors cannot influence the landscape level at all, but the landscape level “can have a major influence on their behaviours and choices”.

Earlier (section 2.2.2) I noted that Giddens’s (1984) structuration theory expresses a duality of structure. Actors are not only embedded in structure, which is defined as consisting of rules and resources, but they also act to reproduce structures (Grin et al. 2010, p. 42). Structures are required for action and can be both enabling and constraining (Grin et al. 2010, p. 43). As structuration theory has been a particularly important informant to sustainable transitions theory, I extend here some of the ideas essential to structuration theory that have been taken up within the sustainable transitions literature.

Whilst the idea of actors and structures could be conceived along a singular plane of interaction, Grin et al. (2010, p. 43) further emphasise the multidimensionality of structures. Drawing from Giddens (1979) they define three types of structures: of signification (meaning); of legitimisation (norms); and of domination (power) and state that all three dimensions are involved in social action. Giddens (1979, pp. 81–2) explains these three dimensions as being combined in different ways in social practices. He states:

The communication in meaning in interaction does not take place separately from the operation of relations of power, or outside the context of normative sanctions. All social practices involve these three elements. It is important to bear in mind what has been said previously in respect of rules: no social practice expresses, or can be explicated in terms of, a single rule or type of resource. Rather, practices are situated within intersecting sets of rules and resources that ultimately express features of the totality.

There are two types of context for the interaction between actors and structure: social systems and social structure (Giddens, 1979). Social systems are concerned with the interactions between actors in local practices. These can be conceived as horizontally oriented interactions which involve mutually dependent actors in processes of say, negotiation, conflict or exchange (Grin et al. 2010, p. 44). The social structure represents the vertically aligned rules and resources that are formal, cognitive and normative (p. 45). The directionality and dimensionality implied in the distinction between social systems and social structures (illustrated in Figure 3³⁵) have been instrumental to the formulation of sustainable transitions theory.

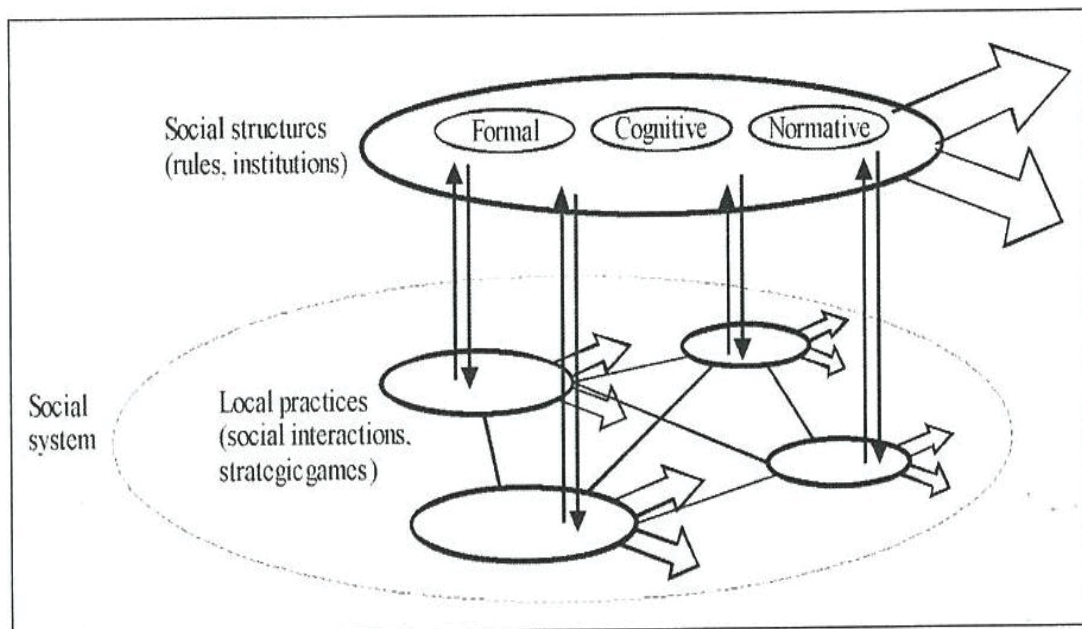


Figure 3: Social system and social structure (adapted from Deuten, 2003, p. 37) (reproduced from Grin et al. 2010, p. 45)

Reflexivity in action is the final element of structuration theory that provides a crucial understanding of the basis for sustainable transitions that I will note here. Previously I have noted the importance of reflexivity within risk theory as a counter to globalisation, as society is forced to look back upon itself and question the fundamental risk conditions that characterise modernity (section 2.4.3) as well as the role of traditional institutions of authority, such as the state. In Chapter 3 (section 3.6.1), I argued that a lack of reflexivity poses one potential constraint to the realisation of individual agency

³⁵ Reproduced from Grin et al. 2010, p. 45 with written permission from Routledge Taylor & Francis, New York.

and the uptake of pro-environmental behaviours and that reflexivity is an essential element in the activation of agency for climate change mitigation practices.

According to Grin et al. (2010, p. 233), reflexivity is a type of reflection where actors “scrutinize their conduct” and “which is quintessential for *Re*-structuration”. Grin et al. (2010, pp. 233–4) describe this process:

Reflexivity never just concerns a particular action, but considers the flow of conduct, extending well into the past as well as anticipating the future. Giddens thus speaks of reflexive monitoring. In reflexive monitoring, agents consciously reflect on the intended and unintended consequences of their own actions. They do so in relation to the structural conditions in which they find themselves, taking into account the potential of change in structural context, both through their conduct and through exogenous trends ... Reflexive monitoring adds to the capacity of actors to re-evaluate past experience and the present status quo, or, in the words of Beck et al. (2003: 12; c.f. 1.2) to break through the dominance of the past over the future.

The process of reflexive monitoring in sustainable transition action therefore requires actors who possess agency and can result in changed futures when “hegemonic ties” (Seyfang et al. 2010, pp. 5–6) to unsustainable trajectories are broken.

Sustainable transitions are conceived as the result of relatively rare conjunctions of factors that rely on the dual processes of radicalism at the grassroots and the more gradual and larger shifts required in landscape norms and practices (Raven et al. 2010). Due to the complexity inherent in this conjunction, a further implication is that the time scale for change cannot be predicted. Transitions may occur gradually as over time niche innovations become adopted into mainstream practice and institutional arrangements. Otherwise, rapid step-change may occur where fractures in societal norms arise suddenly at the landscape level. For example, the Fukushima nuclear reactor disaster in Japan caused by a tsunami rapidly led the German government to commit to shutting down all its nuclear power plants by 2022.³⁶ The sudden change in landscape conditions arguably forced regime change faster than existing niche, grassroots pressure.

³⁶ “Germany: Nuclear power plants to close by 2022” BBC News Europe, 30 May 2011, <http://www.bbc.co.uk/news/world-europe-13592208>, accessed 12th July 2011.

Sustainable transitions theory has been critical to the development of my understanding of how social change processes targeted towards achieving sustainability develop from the local and community scale; of how these processes are expressed in voluntary group action; and of how they can transition to the global scale. There are several elements of the theory (explained above) which highlight the potential for applying a sustainable transitions theoretical approach to research into grassroots community action on climate change. Firstly the MLP (section 4.2.1) provides a multi-scalar framework useful for determining the relationship between local community-scale action and the global scale. Secondly, by incorporating structuration in the MLP the potential for agents to enact radical innovation that can alter the extant regime is exposed. These two points are directly relevant to my third research aim relating to the translation of local action to the global scale. Finally, the centrality of agents' reflexivity in sustainable transitions is consistent with one of the critical enablements for individual agency that I have argued in section 3.6.1 above. Consequently, sustainable transitions theory is an ideal theoretical framework for understanding how local voluntary action on climate change can potentially facilitate broader social change.

The following sections briefly outline how sustainable transition theory has been applied and critiqued in relation to social innovations emerging from the local grassroots level, in particular, Transition Towns³⁷ and Climate Action Groups (CAGs). The contribution of complementary theory such as social movement theory to creating a fuller understanding of how social change arises from civil society is also examined.

4.3 Sustainable Transitions, Civil Society and Social Movements

Grin et al. (2010) acknowledge that sustainable transition theory, as a nascent research field, contains significant gaps and potential areas for future exploration. They concede the bias towards the technological in socio-technical transitions and suggest that greater emphasis on the social aspects of change is required, in particular with regard to how social processes may facilitate or co-emerge with niche development.

³⁷ Transition Towns commenced in the UK in 2006. There is now an international network of Transition initiatives. See <http://www.transitionnetwork.org/>, accessed 15 February 2012.

Innovations are often found to originate from the civil society sector, grassroots community organisations, social movements, new businesses and other ‘outsiders’ (Raven et al. 2010, p. 59). Recent attention has turned to the role of civil society in social innovation and the role of collective and community scale agency in multilevel change processes, areas often neglected in transitions research in favour of the more traditional focus on the market and state-based actors (Hargreaves et al. 2011, p. 4). Several authors have been investigating the potential application of the sustainable transitions scholarship to grassroots level climate change responses such as Transition Towns, Carbon Rationing Action Groups (CRAGs)³⁸ and community based Climate Action Groups (CAGs) (Heischler et al. 2011; Moloney et al. 2010; Seyfang et al. 2010; Seyfang & Haxeltine 2010; Seyfang & Smith 2007).

Seyfang and Smith (2007), in determining how “grassroots innovations” may shift existing regimes, extend contemporary thinking on how sustainability transitions may occur within civil society. They define “grassroots innovations” as:

Networks of activists and organisations generating novel bottom-up solutions for sustainable development; solutions that respond to the local situation and the interests and values of the communities involved (Seyfang & Smith 2007, p. 585).

They comment on the many, varied and growing types of local community-based projects emanating from the grassroots such as organic gardens, food co-operatives, low impact housing developments, community composting and farmers’ markets. Each constitutes a ‘local sustainability’ grassroots innovation or ‘niche’ (Seyfang & Smith 2007, p. 585).

Seyfang and Smith (2007) employ a framework that identifies three ways that niche influences successfully *diffuse* into mainstream (regime) practice. Firstly, through replication – that is, niches can bring about aggregate changes. As a case in point, Seyfang and Smith (2007) employ the example of Transition Towns which have replicated rapidly from their origin in 2006 through many communities throughout the

³⁸ Carbon Rationing Action Groups (see www.crag.org.au and <http://www.carbonequity.info/crags/index.html>) are community-based groups that come together to measure, reduce and potentially trade their personal and/or household carbon emissions. There are hundreds of CRAGs internationally (especially in the UK) but there are less than half a dozen active in Australia.

UK and other countries – there are now hundreds of such initiatives active worldwide.³⁹ Secondly, diffusion occurs through growth in scale and influence of niches by attracting more participants. As an example, the largest community-based CAG in Australia started from a group of forty people and has now grown to over two thousand members.⁴⁰ Thirdly, diffusion occurs through translation of niche ideas to broader mainstream audiences.

The second component of the framework deals with the *processes* that extend successful niche growth and emergence. The three processes consist of:

1. managing expectations so that grassroots niches can attract greater involvement by establishing “widely shared, specific, realistic and achievable” expectations;
2. building networks of wider support throughout their local communities and by broader stakeholder engagement;
3. processes of “social learning” (Seyfang & Smith 2007, p. 589) whereby knowledge is built and shared and groups are involved in reflecting on the “assumptions and constraints of mainstream systems” (Seyfang & Hazelton 2010, p. 5).

There are important implications of this work, in my view, for how local, collective and grassroots action can influence and potentially instigate broader social change. Hielscher et al. (2011, p. 6), for example, argue:

This framing of community action for sustainability as 'innovative' allows us to make novel contributions to the sustainability transitions literature around 'grassroots innovations', which are distinct from the existing literature in terms of: context (civil society rather than the market economy); their driving force (social and/or environmental need, rather than rent seeking); the nature of the niche (alternative values as opposed to incubation from market forces); organisational forms (diverse forms including voluntary organisations, cooperatives and community groups, rather than firms); and the resource base (grant funding, voluntary input, mutual exchange, rather than returns on investment). *Little is known about the conditions under which community-led innovations do or do not diffuse into wider society* (my emphasis).

³⁹ According to the Transition Network website at 2 September 2011 there were 382 official initiatives and 458 “muller” initiatives (that is, not yet officially part of the network) in 34 countries, <http://www.transitionnetwork.org/initiatives/map>, accessed 1 March 2012.

⁴⁰ See <http://www.breaze.org.au/>, accessed 1 March 2012.

Sustainable transition theory therefore offers a way to imagine “the ways that civil society groups generate radical innovations in niches, how they challenge existing regimes and how they influence landscape values” (Hargreaves et al. 2011, pp. 4–5). This relates directly to my second and third research aims, that is, to determine how the shift occurs from individual agency to collective agency in grassroots climate change action (RA2); and to determine how collective grassroots action can lead to broader social change (RA3).

The application of sustainable transitions theory to radical innovations emanating from civil society and its relation to social movements has recently become a focus of research conducted by Smith (2007, 2011) and Seyfang with others (Hargreaves et al. 2011; Hielscher et al. 2011; Seyfang et al. 2010). In brief, they take two different social movement theoretical models as their point of comparison with sustainable transitions theory. Seyfang et al. (2010) apply New Social Movement (NSM) theory to an analysis of Transition Initiatives in the UK.⁴¹ According to the authors (Seyfang et al. 2010, pp. 14–15), NSM theory can explain who joins movements, and why and how this might impact on the potential growth of a niche, thereby emphasising group deliberation and how collectives develop a common identity and purpose:

The application of NSM theories with a transitions perspective thus provides a way to link analysis of macro-social trends with the micro-level interactive social processes within which participants in the movement talk, argue, debate, build relationships and engage in ongoing or renewed social practices.

Smith (2011) brings a different perspective to the relationship of social movement theory to sustainable transitions by utilising a resource mobilisation (RM) approach (see footnote 34). Grassroots innovations can be understood through niche theory, that is, it can explain how radical and novel change can emerge and replicate from the grassroots. Social movement theory, on the other hand, can assist in understanding how path-dependent regimes can be “unsettled” (Smith 2011, p. 4). One of the key roles of social movements is to challenge and destabilise the status quo and Smith (2011, p. 4) argues

⁴¹ Bates et al. (2005) offer three distinct schools of social movement theory: collective behaviour and social movements research; resource mobilisation theory; and new social movement thinking (p. 16). In brief the distinction between resource mobilisation (RM) and new social movement (NSM) theories is that RM is concerned largely with the organisational capacities and processes that build and contribute to social movements (pp. 16–17). NSM is more interested in cultural issues and framing and the processes of deliberation that occur amongst social movement members (Bates et al. 2005, p. 17).

that: “in combination, these processes will determine how environmentalist forces in civil society will influence the mainstream of sustainable energy transitions” (p. 4). In effect, in working together, these two processes of challenging and destabilising facilitate sustainable transitions through the dual actions of unsettling regimes and nurturing niches (Smith 2011, p. 12). Social movement research examines movement identities, contexts, actions and outcomes within the context of “socio-economic and cultural change and for their relations to states, markets and cultures” (Smith 2011, p. 14). Smith proposes that an understanding of the processes of regime destabilisation can be enhanced through the adoption of the broad spectrum of political analysis that “conventional social movement research” provides (Smith 2011, p. 14). Social movement analysis, in adopting a multi-level transitions perspective, can also be broadened through: taking into account how regimes can shape civil society movements; identifying opportunities for regime destabilisation; and exploiting changing landscape conditions (Smith 2011, p. 15).

The work of Smith, Seyfang and others on complementary theoretical frames around grassroots innovations, regime destabilisation and social change therefore extends the analytic potential of sustainable transitions theory when applied to research on community-based climate change action. The incorporation of social movement theory into sustainable transitions theory allows more meaningful analysis of the social and political change promise of local-scale, collective and community-based action on climate change.

4.4 Complementary theories

As discussed above, Smith, Seyfang and others focus on social movement theory as an adjunct to sustainable transitions theory, with a view to better encapsulating the processes of change that emerge from the local and grassroots level through community-based action and their potential for wider societal adoption. Comparisons can also be drawn between sustainable transitions theory and other significant and evolving scholarship that seeks to conceptualise how social change can emerge and multiply from the local and grassroots levels in situations of global environmental change. There are two that I mention briefly here: polycentrism (Ostrom 2010); and the green public sphere (Torgerson 1999; 2008a; 2008b; 2010).

4.4.1 The green public sphere

To the extent that it seeks a unity of theory and practice in the pursuit of its goals, a social movement exhibits a tendency to silence all but one opinion. Public spheres, in contrast, are oriented to debate – an open exchange of differing opinions – and are sustained, at least in part, by the value that participants place on the process of the debate itself. Although the publics of civil society are multiple none can, by virtue of being public, remain entirely insular. The multiple publics are, rather, open to one another. They take account of one another, challenge one another, engage one another (with more or less conflict and cooperation) to such an extent that boundaries and identities become ambivalent, rather than fixed, and that the entire pattern of publics in civil society gains a fluid, dynamic quality (Torgerson 2008a, p. 20).

Torgerson goes on to suggest the use of the term “green public sphere” as a way of acknowledging pluralist accounts of political and social activism. What is the *green public sphere*? Torgerson is somewhat vague about the exact nature of this concept, which he uses as a metaphor to critique green politics and green movements. Torgerson describes industrialism as being inherently “ecologically irrational” (1999, p. x) as it is unsustainable, certainly in the long term, and, as he suggests, potentially in the short term as well. Green incursions into industrialism through, for example, sustainable development or ecological modernisation provide potential for incremental gains but also reinforce the “deficit of rationality of advanced industrial society” (Torgerson 1999, pp. 151–2).

Following Hannah Arendt and occupying similar territory to John S. Dryzek, Torgerson sees politics as a space for debate and “meaningful disagreement” and suggests that operationalising green politics requires the joining of an environmental ethics with a discursive ethos (Torgerson 1999, p. 120). Torgerson positions discourse (which naturally involves human communication), at the heart of the green public sphere. He argues that: “communicative ethics, however, is not necessarily homocentric, but simply human – as is the content of all ethical views, whether ecocentric or homocentric” (p. 119). More importantly it is determining “how human beings are to acknowledge and accept their inescapable role in representing nature – a task that is both aesthetic and political” that is at the core of his argument (Torgerson 2010, p. 346). As well as being

aesthetic and political, this task is, I suggest, essentially moral (see for example Gardiner 2011). According to Torgerson (1999, p. 120):

A community combining an ecological ethos with a discursive ethos would need to listen to ecological voices, including those that speak on behalf of resource conservation, wilderness preservation, moral extensionism and ecological sensibility. Other ecological voices might demand attention as well. To persist unquestioningly in the domination of nature would simply help sustain a mystification of human/ nature relationships.

A homocentric view based on human domination of the human/ nature relationship is, in other words *irrational* as it does not recognise the continuity between humans and nature, or our essential animal self. Torgerson (1999, p. 120) considers that:

Adequate consideration of the human/ nature relationship would call for an ecological ethos, shaped among human beings as they collectively deliberate on their interchange with nonhuman nature.

The nature of green relations and green politics therefore is fundamentally morally based, requiring equal consideration to the equality of relationships between humans, and between humans and nature (Torgerson 2008a).

The importance of dialogue and debate is core to Torgerson's (1999, p. 129) thesis, as:

an interchange of considered opinions, debate can foster an imaginative interplay of identities, interests and perspectives that encourages evaluations and judgements from an enlarged viewpoint. *More than political outcomes are important, for the very process takes on value for those who participate in it* (my emphasis).

Again, Torgerson emphasises here that the intrinsic importance of politics lies in its performance, rather than purely in its functional and constitutive enactment and how narrow self-interest and uniformity of ideas are moderated through sweeping discursive engagement. In this way, Torgerson's key emphasis on diversity of opinion, discourse and debate in the public sphere *as* politics (after Arendt) prefigures the importance of social learning both to the individual and the collective.

Torgerson distinguishes the green public sphere from instrumental notions of green politics and convergent views of environmentalism based on an obsession with bringing unity to the green movement (Torgerson 1999, p. 19). The idea of building a green movement as a unified ‘we’ is disparaged by Torgerson as:

Despite all talk of diversity and inclusiveness – ... elements that cannot merge with the movement’s essential identity must be pruned away and, in effect excommunicated. ... Here the *we* (my emphasis) would not be an instrument, but a space of appearance, a common world. The point would not be to achieve overall agreement – some final settlement of issues – but to make meaningful disagreement possible. Concerns to promote unity and coherence in green politics often overlook the obvious: a discourse is emerging as a basis for a green public sphere (Torgerson 1999, p.19).

But neither should a view of green politics based on “possessive individualism” be adopted that relies on a collectivity of individual “good deeds” (Torgerson 1999, p. 131). Reminiscent of my discussion in Chapter 3 on the individualisation of responsibility (see for example Scerri 2009 and Maniates 2002), Torgerson believes that emphasising such individual acts of personal responsibility “deflects attention from systemic patterns of incentives, structured principally through the administrative sphere, that serve to shape and direct the behaviour of the possessive individual”, thereby reinforcing existing regime-influenced behaviours. Rather, it is the context of individual action that is important and in particular the opportunities “to engage in debates of the green public sphere” (Torgerson 1999, p. 131).

For the most part, Torgerson is critical of the notion of environmental social movements (and social movements more generally), and is wary of the “instrumentalist overtones accompanying the trope of ‘movement’” (Torgerson 2008a, p. 29). This distancing is conspicuous in the defining features of the green public sphere which he describes as:

Not a movement or even a movement of movements, the green public sphere is animated by exchanges of differing opinions. Central to the green public sphere, moreover, is ambivalence between common identity and radical difference. This ambivalence may necessarily be constitutive of a green politics for a divided planet (Torgerson 2008a, p. 31).

In one of the few occasions of reference to an empirical example (drawing on Schlosberg 1999), Torgerson (2008a, pp. 148–9) suggests that the environmental justice movement demonstrates the capacity to broaden the diversity of the green movement. He characterises this movement within the green public sphere as “the net that works”. He argues that the environmental justice movement: achieves diversity; is decentralised and locality-based, not bound by a unifying strategy or doctrine; and is networked across issues and groups through an “eclectic pluralism”. The green public sphere can be conceptualised therefore as a “network of spaces” in which public communication occurs and where “the local and global intersect” (Torgerson 2008a, p. 28). In this way, Torgerson provides a different political analysis of social movements than Smith and Seyfang but shares their evaluation of how grassroots collectives engaging in environmental action at the local and community scale can nevertheless, through discursive engagement, form alternative networks that serve to counter the extant regime of advanced industrial society.

Torgerson’s notion of the green public sphere informs my research in several important ways. In particular, Torgerson draws together two elements that inspire my choice to focus my research on voluntary grassroots community action on climate change. Firstly, the characteristic of the green public sphere as an inclusive and pluralist network of spaces provides a model of social change which aligns to an ethically based model of individual and collective responsibility (reminiscent for example of cosmopolitanism – see section 3.4.4). Secondly, Torgerson’s emphasis on human communication and deliberation around diverse views is not only consistent with a social constructivist epistemology but also guides my choice to adopt a communicative, collective and deliberative form of research method, namely focus groups. Torgerson’s thesis also shares commonality with sustainable transition theory, in particular in relation to how change can translate from local, niche settings into broader scale regime change.

4.4.2 Polycentrism

In a similar vein to Torgerson, Elinor Ostrom argues against coordinated global response and global governance structures as the sole means of successful climate change action. Drawing from decades of research into community governance of

common pool resources (an example of a common pool resource could be a local irrigation system), Ostrom has recently extended her thesis to incorporate climate change (Ostrom 2009). Climate change presents, according to Ostrom, a potent example of a “global ‘public bad’” where maintaining the common pool resource of clean air (or, in other words an unpolluted global atmosphere) represents a “global public good” (Ostrom 2009, p. 5). She argues that whilst current global efforts have largely failed, ‘chaotic’ and ‘messy’ polycentric action is viable. Polycentrism is offered as a counter to what Ostrom perceives as the dominant reply to a problem that is global, coordinated and central. Polycentrism implies that many centres of action operating at multiple scales can be equally, if not more effective than global-scale responses (Ostrom 2010b). Ostrom’s polycentrism concept hence displays significant similarities with the multilevel perspective of sustainable transitions theory:

Polycentric systems tend to enhance innovation, learning, adaptation, trustworthiness, levels of cooperation of participants, and the achievement of more effective, equitable, and sustainable outcomes at multiple scales, even though no institutional arrangement can totally eliminate opportunism with respect to the provision and production of collective goods (Toonen 2010). Enabling citizens to form smaller-scale collective consumption units encourages face-to-face discussion and the achievement of common understanding. Creating larger collective consumption units reduces the strategic behaviour of the wealthy trying to escape into tax havens where they could free ride on the contributions of others. Further, creating polycentric institutions related to climate change helps to fulfil the "matching principal" in international law that problems involving multiple levels (e.g. global, national, regional and small scales) should involve contributions at each of these levels (Adler, 2005) (Ostrom 2010a, p. 552).

Rational individuals can participate in collective action around a common pool resource where the conditions for cooperation exist. Ostrom (2009) identifies a range of important variables that enhance such cooperative arrangements and that can feasibly occur at the grassroots. Some to note in particular are: the prime role of trust and reciprocity amongst actors in cementing cooperative collective arrangements; the provision of an even playing field; and the reinforcing formulation of co-learning that occurs within collective action and which helps to generate higher levels of social capital over time (Ostrom 2009). Further, repeated opportunities for associational behaviour can create patterns of group trust and reciprocity, assisting civic engagement,

reversing the erosion of social capital and potentially facilitating the creation of a deliberative public sphere (Hoffman & High-Pippert 2010, p. 7572). I would argue that this is similar to Torgerson's notion of the green public sphere.

I contend therefore that Ostrom's polycentric approach, together with Torgerson's green public sphere, are complementary to sustainable transitions theory for the following reasons. Both polycentrism and the green public sphere recognise multiple loci for change, much like niches, some of which emerge from the local and grassroots levels of civil society. Both acknowledge that diverse actors need to be engaged in the process and both stress the importance of networked connections between collectivities. Furthermore, collective action necessitates trust and cooperation amongst actors and requires social learning to contribute to society-wide change through processes of deliberation and reflection. I found these complementary theories to be useful adjuncts in framing my research questions. In particular their emphasis on the contribution of grassroots innovation to social change, the role of group dynamics and, in particular, the centrality of discourse and deliberation within collectivities has influenced the selection of CAGs for my research and the research questions I took to the CAG focus groups. Further, these literatures point to a conceptualisation of CAGs as grassroots niches with a role in bringing about broader scale social change. Sustainable transitions theory (along with polycentrism and the green public sphere) has proven to be a useful tool in the analysis of my research results and in association with the rest of the literature I review, it contributed to the normative underpinning of a model of change that I develop later in the thesis (see Chapter 7).

4.5 Conclusion

In summary, sustainable transitions theory offers an analytic construct for positioning local grassroots community-based action within a wider social change framework. It explains behaviour change from a collective or social perspective rather than an individual perspective; it explains how innovations emerge and translate across the multiple levels of niche, regime and landscape; and it argues that for change to be successful it needs to be consistently adopted at the local (micro), national (meso) and international (macro) scales (Moloney et al. 2010, p. 7621).

Several important elements underpin sustainable transitions theory and assist in understanding how radical innovations can emerge from the grassroots with the potential to unsettle incumbent and unsustainable regimes. The multilevel perspective (MLP) provides a scalar framework for social transitions that incorporates niches (micro level), regimes (meso level) and landscapes (macro level). Structuration emphasises the importance of the degree of stickiness in the agent–structure relationship so that radical innovations have the capability to emerge from niches. Change can occur either gradually or as step-change, as the destabilising of regimes can be achieved through slower translation of niche innovations or otherwise brought about through landscape-level “shocks” (Ungar 1995) that may facilitate fast and big change. Social learning can shift social norms and lead to the adoption of new, shared social practices.

The limitations of sustainable transitions theory lie in its level of abstraction and lack of empirical application to more complex and pluralistic problems such as climate change (Hargreaves et al. 2010). Sustainable transition researchers have tended to focus on supply-side aspects of technological innovation, such as systems of energy supply, rather than address demand-side issues such as sustainable consumption, for example, thus failing to fully acknowledge civil society’s central role in social transitions (Hargreaves et al. 2011, p. 5). The political role of niches is not explicated and nor is the question of how power relations play out between the multiple levels of niche, regime and landscape (Meadowcroft 2011). There is a need therefore for complementary theoretical framings to be employed in developing a fuller understanding of how grassroots action can translate into society-wide changes. To this extent Smith, Seyfang and others suggest that social movement theories may provide a complementary addition to transitions theory by revealing the collective identities and interests that form the basis of collective action targeting climate change.

Sustainable transitions theory, in my view, illuminates the difficult conceptual territory that transition (or otherwise, change) theory occupies, as finding a neat fit with empirical findings is difficult to accomplish. In this sense other theoretical niches are emerging. I draw on two here – polycentrism and the green public sphere – which complement sustainable transitions theory as they capture, at least for me, the impression of how the local and the global interrelate around important social

challenges such as climate change, as well as encompass essential interpersonal relations based around trust, cooperation and deliberation.

Each of the theoretical perspectives laid out above contributes to an analytic framework for my multiple case study of Australian Climate Action Groups (CAGs) (Chapter 6 and Appendix F). Sustainable transitions theory (as extended by Smith, Seyfang and others) expresses how CAGs as niches, through their political action at the grassroots and outside of the state, contribute to the breakdown of dominant, path-dependent and unsustainable regimes. Smith's (2007) three modes of translation can be usefully applied to analyse CAG actions in terms of their regime-destabilising potential. Torgerson (1999, 2008, 2010) re-conceptualises the role of social movements in an alternative model of green politics, the green public sphere. Stressing the importance of ideological pluralism, discourse and a human-centred ecological rationality, the green public sphere represents a re-imagining of a post-industrial regime based on a core of green and moral values. Torgerson's thesis illuminates how CAGs, situated as they are outside of the state, might contribute to this alternative post-industrial and low-carbon regime through their expressed collective values and the role of discourse, debate and differing opinion within CAGs and their networked spaces. Finally, Ostrom's (2009) polycentrism, expressive of a collective agency, identifies the important interpersonal relations of trust, reciprocity and cooperation as central to group action and the multi-scale governance of the global atmospheric commons.

In the following chapter I set out the research design for my empirical investigation of Australian grassroots climate action groups.

CHAPTER 5: RESEARCH DESIGN

5.1 Introduction

In the previous chapters, I established that climate change is an important, ‘wicked’ problem requiring a transdisciplinary research approach that takes into account its socially and culturally embedded nature. In Chapter 2, I outlined my social constructivist epistemology, an approach increasingly adopted by scholars to investigate “the social and cultural elements involved in producing environmental knowledge” (Jasanoff & Wynne 1998, p. 4), and knowledge of climate change, in particular. Following on from this, I introduced my metatheoretical framing of the climate change *problematique*, Beck’s risk theory, which illuminates the importance of individualised responsibility in the context of social change processes and the progress of modernity. This led to a further incursion into the literature (Chapter 3) in order to contextualise some of the broad ideas of Beck’s theory within a transdisciplinary investigation of the individualisation of responsibility for climate change. In particular I examined the literature in order to address my first research aim (RA1): to determine why and how individuals take responsibility for climate change through their voluntary actions. To address my second research aim (RA2, to determine how the shift occurs from individual agency to collective agency in grassroots climate change action) and third research aim (RA3, to determine how collective grassroots action can lead to broader social change), I needed to incorporate additional theory. The literature review in Chapter 4 specifically addresses sustainable transitions that emerge from collectives that form at the grassroots of communities with potential to translate into wider societal change.

Before I commence a more detailed discussion of the framework employed within my research and to extend my reasoning commenced in Chapter 4 on the selection of Australian Climate Action Groups (CAGs) as the focus of my empirical work, I present some relevant background. Section 5.2 sets out the distinct role that CAGs play in the Australian climate change action arena. I consider why research into CAGs can enhance understanding of both individual and collective motivations and behaviour targeted towards climate change mitigation. I identify the gaps in current research into grassroots

climate action collectives and the role of my research in responding to the research questions posited in the introduction to this thesis (section 1.3.4).

I then outline my research design framework and discuss the selection of the case study methodology as appropriate to fulfilling the aims of my research. This methodological framework allows my empirical outcomes to be analysed through the lens of the theory and literature set out in Chapters 2, 3 and 4. I employ several methods in order to develop a multiple case study. I discuss the selection of these methods in light of their capacity to consider the role of actors within their structural contexts; their ability to emphasise dialogue and exchange; and their ability to draw fruitful research results from collectives that arise voluntarily from their local communities.

5.2 Developing the research design

To facilitate the development of my research design and to understand why and how voluntary action on climate change is conducted and facilitated at the individual level, I undertook initial scoping interviews with key actors working on voluntary community-level climate change action in the non-government sector (sometimes referred to as the third sector – see for example Avelino 2011; Buchs et al. 2011; Kent (submitted)). (Refer to Appendix A: Summary of Research Data Collection for an outline of the data sources utilised in my research.) Scoping interviews revealed that, in Australia, a lively and energetic grassroots⁴² and community-based sector was developing in the form of Climate Actions Groups (CAGs). These groups are characteristically small, voluntary and not aligned to larger-scale voluntary programs such as those associated with some of the bigger and well established Australian environmental non-government organisations (eNGOs) which I had originally perceived to be a more natural target for my research. I became particularly interested in CAGs as they arose spontaneously out of their particular communities rather than facilitated or auspiced by other organisations. This, in my mind, confirmed their grassroots status and positioned CAGs as representative of the point where individuals may first take their motivation for voluntary action on climate change into a collective setting. The following section sets out the distinctive nature of CAGs and the position that they occupy within Australian community-based climate change action.

⁴² The Macquarie Dictionary (2005) defines grassroots as: “spontaneously from the people; a grassroots political movement”.

5.2.1 CAGs as a distinct type of Australian climate action collective

In Chapter 1 (section 1.4.1), I alluded to the rise of civil society action on climate change and presented Australian Climate Action groups (CAGs) as local and community-based collectives that play a distinct role in Australian climate politics. CAGs have positioned themselves as apart from the established environmental non-government organizations (eNGOs) working on climate change policy and advocacy, often distinguishing themselves through more radical policy positions. For example, segments of the grassroots climate action movement have adopted much stronger greenhouse gas reduction targets than those being considered by Australian governments. Some groups, for example those affiliated with the Climate Emergency Network⁴³, have set a target of return to pre-industrial levels of atmospheric greenhouse gases (below 280 ppm CO₂ equivalents), a far more radical and less compromised position than that of the major Australian eNGOs (as discussed below).

Ideological, political and power positions vary between the more established, better-resourced and politically influential eNGOs and the grassroots-level CAGs. At times, this has been revealed by areas of specific conflict and significant acrimony between the two groups.⁴⁴ The CAGs, for example, pride themselves on a level of non-partisanship that they perceive goes beyond the positions of the major Australian NGOs active on climate change and which allows them to develop a more progressive agenda. CAGs are often more focused on the urgency of responding to the threat of catastrophic climate change (Climate Emergency Network, n.d.; Beyond Zero Emissions, n.d.). NGOs, on the other hand, are required to engage in current policy processes to maintain their positions of influence with governments. This may require a compromise on their positions and slower responses, at times exposing themselves to perceptions of institutional ‘capture’ (Doyle 2009; Doyle & Doherty 2008; Smith 2011; Smith & Stirling 2010).

⁴³ <http://www.climateemergencynetwork.org/> accessed 17 April 2011. CEN’s charter includes the following statement: “The Global Community must concurrently halt man made greenhouse gas emissions, remove excess carbon dioxide from the atmosphere, and actively cool the Earth.”

⁴⁴ Scoping interview accounts from members of climate action groups and NGOs confirmed the significant tension between the two at the commencement of my research in 2008. This has also been evident in email exchanges through e-lists such as grassroots_climate_oz@yahoogroups.com (GRCO).

These tensions between CAGs and Australian eNGOs are indicative of their varying positions along a spectrum ranging from the ‘radical’ to ‘conservative’ or ‘reformist’ (Dryzek 1997). Continuing disagreements between some more ‘radical’ CAGs and more ‘conservative’ eNGOs on fractious policy issues are evident.⁴⁵ For example, proposals for natural gas (a fossil fuel) as a transition fuel until more renewable energy sources come online have caused significant ruptures between CAGs and eNGOs. Many CAGs argue that gas should not be used as a transition fuel as it will lock in future GHG emissions and use up resources that could go into renewable energy development, whereas many eNGOs see gas as a necessary part of a more gradual transition to a new energy mix.

In Doyle’s terms (2009), eNGOs operate under “dual strategies”, employing the approach of engaging both as non-government organisations and as social movements. CAGs on the other hand display the characteristics primarily of social movements. CAGs therefore tend to have more radical orientations and hold politically progressive positions, expressing forms of collective “green radicalism” (Dryzek & Stevenson 2010, p. 11). CAGs are currently disempowered as political actors, whereas eNGOs campaigning on climate change tend to be more engaged with policy and policy-makers. This positions them closer to centres of political power and can lead to greater political conservatism.

These arenas of tension between CAGs and eNGOs can also be distinguished through Dryzek et al.’s (2003) framing of the relationship between environmental movements and the State. States may be *inclusive* or *exclusive*; that is they may include or restrict representation from particular groups (Dryzek et al. 2003, p. 6). Hall et al. (2010) observe that in the latter years of John Howard’s 1996–2007 Coalition government, CAGs emerged as a counter to the restricted access of established eNGOs to the climate change policy table. They emerged under the influence of state *exclusivity* around climate change. States may engage more broadly with a range of actors under an inclusive regime. This more aptly represents the current more tenuous political situation within contemporary Australian politics where, in a hung parliament, a minority Labor government is in power through the support of The Greens and three independents. This scenario potentially opens greater access to representatives from a broader range of

⁴⁵ I have noted such exchanges on the GRCO e-list, coinciding with the debate around establishing a carbon tax in Australia.

interests. Inclusivity, however, can lead NGOs to moderate their positions as they become “conditioned by state imperatives” (Dryzek et al. 2003, p. 82). Dryzek et al. (2003, p. 82) argue that eNGOs may become bureaucratized and their organisations may be less directly democratic under conditions of state inclusivity, reflective of Doyle’s (2009) observations regarding eNGO conservatism noted above.

Dryzek et al. (2003) further specify that states may be *active* or *passive* in terms of representation. Under their definition, Australia is likely classified as a passive state as it is “agnostic about the patterns of interests, organizations and movements that exists in society, and does little or nothing to advance or impede the standing of particular groups” (Dryzek et al. 2003, p. 7). Under a passive state, both Australian eNGOs and CAGs are necessarily required to employ strategies that will secure the government’s attention.

CAGs and eNGOs also occupy different locales of influence. Dryzek et al. (2003) propose five locations of influence: core of the state; periphery of the state; policy influence at a distance; para-governmental action; and cultural change (p. 150). ENGOS often focus on operating within “the core of the state” (Dryzek et al. 2003, p. 131) or “in the periphery of the state” where their influence can more directly impact on governmental policy and political actors. The limitations to this approach lie in the resultant potential (whether real or imagined) of state co-option or capture. CAGs sometimes operate at the periphery but more commonly in what Torgerson has termed the “green public sphere” (1999, 2008): the “politicized aspects of civil society” (Dryzek et al. 2003, p. 15), thus equating more to Dryzek et al.’s locale of cultural change. CAGs therefore: “are separate from, and often confront, the state” (Dryzek et al. 2003, p. 15); they take action “from afar” (Dryzek et al. 2003, p. 142); and do not seek “any formal share in state power of the kind sought by interest groups and electorally-oriented political parties” (Dryzek et al. 2003, p. 15). In this way CAGs are “self-limiting” in their action; their influence on policy is secondary to their efforts to influence and ultimately change public opinion (Dryzek et al. 2003).

These types of tension that are evident in the relationships between Australian CAGs and eNGOs are of more than academic interest as they reveal the differing approaches of these two distinct groupings within the broader climate movement and open up

potentially productive stratagems for political and social change (Doyle 2009, p. 116). As explicated by both Dryzek et al. (2003) and Doyle (2009) the relationship between CAGs and eNGOs is important to understanding how civil society groups participate in climate action, the types of mutual or oppositional positions they occupy, and the strategic opportunities that they choose to exploit. In this way civil society challenges to hegemonic power, and the social movement that is building around climate change, can be further explored and understood.

5.2.2. Australian Climate Action Group (CAG) research

Given that CAGs only emerged as distinct actors within Australian community climate change action in recent years (Baer 2011), it is perhaps not surprising that there has been little academic research specifically focused on them. In this section, I discuss the findings from relevant academic work in order to contextualise my research within the broader literature.

Hall's involvement with her local CAG from its inception formed the basis for a participatory action research (PAR) project around the development of a climate protection bill in the lead-up to the 2007 federal election (Hall et al. 2010, p. 72). The bill was modelled on the successful UK legislation that had been significantly influenced by the eNGO, Friends of the Earth UK (Höppner & Whitmarsh 2010). The rationale for such an ambitious project lay in Hall's prior research that identified the significant potential for grassroots groups as "pressure groups" and a collective "citizen voice" on climate change (Hall et al. 2010, p. 73) in a climate of active state exclusivity (Dryzek et al. 2003) of Australian eNGOs.

The PAR process resulted in an increase in personal empowerment through collective action (p. 85) and Hall et al. (2010) observe that participants increased their knowledge of the political process and gained political credibility, grew confident in communicating with members of parliament and developed persistence through this campaign (pp. 87–8). Hall et al.'s research (illustrated in the quotation below) describes the motivations for CAG members taking climate change action and how working collectively strengthened their personal ability to act. Hall et al. (2010, p. 88) observe:

Unifying our concerns as a group emboldened us and ensured that tasks were shared out to those who had time and energy, preventing us from individually 'burning out'. We discovered how working together as a pressure group increased the legitimacy and lobbying power we would not have had as individuals. We maintained our energy and enthusiasm in the project through the foundation of social support that we mutually provided to each other as we worked on the project. Beyond the election outcome, the skills we have each gained and agency we have developed since joining CAC and writing the Bill have given us the confidence to remain powerful and effective advocates for action on climate change in our community.

Whilst not specifically addressing CAGs, Pearse et al.'s (2010) digital ethnographic study of Climate Camp participants illuminates the instrumental and affective dimensions of grassroots climate change action. (Of the 25 participants in their study only one was noted as a member of a local climate action group). A Climate Camp, according to Pearse et al. (2010):

is a form of strategic direct action geared to movement building. Camps are spatial interventions mounted as close as possible to the physical site of large-scale carbon emissions. The Camps create a temporary community that combines workshops on how to address climate change issues with a series of direct actions against expanding fossil fuel installations. As such, they create ideological power as counter-sites, designed to unmask and contest plans to expand carbon-intensive infrastructures and industries (p. 82).

Pearse et al. (2010) emphasise the moral basis for acting on climate change, participants describing it “as the right thing to do” and often precipitated by a “moral shock” or “disjuncture” between held values or beliefs and their actions. Echoing Hall et al. (2010), participants describe their personal journeys to climate change activism and the associated strengthened personal empowerment gained through collective forms of action, and how commitments and enhanced mobilisation build over time through association with like-minded people.

Pearse et al. (2010, p. 90) describe CAGs as “groups ... often populated by people mobilized for the first time, or in a much more intense way than previously” (p. 91), contrasting with the majority of their participants who “were considerably involved in

one or more environmental organisations or autonomous collectives”. This points to an important aspect of CAG research not specifically addressed by Pearse et al.’s research: What draws people newly active around climate change to CAGs rather than more established eNGOs?

This research on CAGs within Australia points to some gaps and research needs in order to develop scholarship further on the role of grassroots community collectives in voluntary action on climate change. Whilst Hall et al. (2010) point out that the group empowers and facilitates CAG members, what drew these members to the group in the first place? Why did the CAG represent the best type of group for their voluntary time and efforts? Can these conditions be found in other CAG groups with different members that have emerged out of other communities?

Pearse et al.’s (2010) research emphasises the importance of the moral basis for action of their Climate Camp activist subjects. Their research prompts the following questions: What precedes this “moral shock”? Does it need to be the basis for all activists/ activism on climate change? And it also raises the question that has already been stated above: What motivates those newly active around climate change to join CAGs rather than more established eNGOs?

The research contributions of Hall et al. and Pearse et al. provide useful foundations for my own research. Four questions arise from their work that I take forward through the analysis of my research data to inform the discussion in Chapters 7 and 8.

Drawing from Pearse et al. (2010):

- What motivates those newly active around climate change to join with others through CAGs?
- Is a moral shock the requirement for CAG members to engage in voluntary action on climate change?

Drawing from Hall et al. (2010):

- What characteristics are common to CAGs, given that CAGs engage in different forms of climate change mitigation action and their members come from different communities?

- How might these common characteristics inform a general model of collective behavioural action on climate change?

5.2.3 Grassroots climate action groups internationally

Whilst not specifically a focus of my research, the question arises of whether CAGs are a uniquely Australian phenomenon or can similar developments be seen overseas? My intent has not been to research climate action groups within international communities as my interest lies in the specific relationship between local community climate change action within Australian cultural and social contexts. Nevertheless, some recent literature has examined grassroots climate action arising in other developed nations, in particular the UK (Hielscher et al. 2011; Middlemiss & Parrish 2010; Paterson & Stripple 2010; Seyfang et al. 2010; Seyfang & Haxeltine 2010; Seyfang & Smith 2007 and USA (Krakoff 2011). This literature informs my research. Some of these forms of grassroots action, in particular Transition Towns, initially arose in the UK but have since been taken up as local level initiatives across all major continents. A significant portion of this research (the UK research in particular) utilises (or references to) sustainable transitions theoretical approaches. I have outlined sustainable transitions theory in Chapter 4.

Most of the sustainable transitions research concerning grassroots collectives active on climate change focuses on Transition Towns which present as a distinct centrally networked model of grassroots organisation and action different to the more organic emergence of Australian CAGs (Kent 2011a). The application of sustainable transition theory to Australian case studies has been limited. Moloney et al. (2010) researched 100 Australian environmental behaviour change programs focused on influencing householder consumption behaviours and lifestyle practices that contribute to reduced energy consumption. Two CAGs were included in this research. Their research adopted sustainable transitions as part of their theoretical framing but did not specifically consider community-based collective and public sphere action.

My research fills the gaps in the research identified above in that no research on Australian grassroots initiatives has specifically looked at questions of responsibility and the translation of local voluntary action into broader social transitions.

5.2.4 Limitations of focusing on CAGs in my research

At this point it is important to discuss the potential limitations of adopting CAGs as my primary research focus. The first limitation lies in using one model of grassroots collective in order to generalise more broadly on aspects related to responsibility and voluntary climate change action. The purpose of my initial scoping interviews was to determine the best selection of groups for my empirical work. As discussed in section 5.2, CAGs presented as a particular type of vibrant grassroots organisation that could be found in communities throughout Australia. My initial scoping failed to reveal other collectives taking voluntary action on climate change with a similar spread and diversity as CAGs. Transition Towns, for example, emerged around the same time as CAGs but when I commenced my research very few Transition initiatives were evident in Australia, compared with over 100 CAGs nationwide. This situation has changed over recent years as many more Transition Town proposals have sprung up and they offer rich potential for future investigation.

The second limitation lies in the ability of CAGs as community-based collectives to reveal research outcomes related to the individualisation of responsibility consistent with my first research aim (RA1: to determine why and how individuals take responsibility for climate change through their voluntary actions). In Chapter 3 (section 3.3.3) I outline the results of a comprehensive review of the literature related to the individualisation of responsibility. I identified a growing understanding within the psycho-social scholarship that an individualised approach to understanding peoples' motivations for taking responsibility for climate change through their actions may represent an artifact of the research design itself (namely by focusing on researching individuals) (Jackson 2005; Moloney et al. 2010; Räthzel & Uzzell 2009; Uzzell & Räthzel 2009). Based on this understanding I felt it imperative to engage with groups in my research and utilise methods that encouraged group discussion. My selection of CAGs was purposive in this regard, but as identified above it also allowed my research to consider the motivations of individual CAG members for taking responsibility for climate change and it enabled me to reflect on the different types of action they undertook in terms of their individualised responsibility.

5.2.5 Summary

In summary, CAGs identify themselves as non-partisan, community-focused and as having a progressive agenda for climate change action. Little prior research has focused on these groups.⁴⁶ CAGs therefore presented as an important subject for my research focus that could elucidate: why and how individuals take responsibility for climate change through their voluntary actions (RA1); and how the shift occurs from individual agency to collective agency in grassroots climate change action (RA2).

A further important consideration, borne out in the scoping interviews, was the voluntary nature of the development of CAGs. In other words, they are not auspiced by larger established environmental organisations which in many cases are working on a specific campaign objective within Australia and they are not based on any particular model of networked development (unlike Transition Towns). Instead, CAGs evolved out of their local communities in response to their members' concerns. This distinguishes CAGs as providing a particular example of the relationship between individual and collective agency for climate change action. This is important as the reasons why individuals join collectives in order to take action on climate change at a community scale within Australia is not well understood. Finally, given the importance of avoiding catastrophic climate change and the need to generate solutions that engage stakeholders at all scales, from the local to the global, the potential for local community-scale action to translate into global societal change deserves critical research consideration. Whilst this has received normative attention (for example Biermann 2007; Gupta 2007; Biermann et al. 2009) there is little empirical evidence to draw from. Investigating how CAGs perceive the linkages from their local and community contexts to broader social scale can contribute to this research need.

Based on the reasoning outline above, I selected CAGs as the focus of my empirical investigation and took the following questions into my empirical investigation.

Research Questions

1. How do members of Australian CAGs perceive their responsibility for climate change?

⁴⁶ Some recent exceptions include the work of Hall et al. (2010), and Baer (2011).

2. In what ways do Australian CAG members act responsibly to mitigate climate change?
3. How do Australian CAG members acquire agency within voluntary action?
4. What motivates members of Australian CAGs to join these groups and take collective action?
5. How can actions on climate change at the local level link-up to create global-level change?
6. What kinds of narratives, storylines, images and metaphors of responsibility for climate change do people relate to?

In the following section I set out the methodological considerations for my research.

5.2.6 Methodological considerations

With CAGs identified as the most appropriate focus for my research, the next step in my research design was to determine the best methodological framework for undertaking my research. Qualitative research inquiry is consistent with a social constructivist epistemology and I wanted to understand how people understand their individual responsibility and collective agency in their own terms. A quantitative approach such as surveys would have pre-structured peoples' responses. I chose a qualitative method as I wanted to be able to mimic the kind of natural dialogue that occurs amongst people in groups. I adopted a case study methodology as I wanted to investigate how and why individuals attain collective agency through their voluntary actions on climate change.

Further, my literature review established that, traditionally, research into the motivations for undertaking pro-environmental behaviour focuses on individuals. I am interested in how individuals find collective agency, so I believe that it is important for my research to adopt a collective approach rather than isolate individuals (see section 3.3.3.2). I therefore chose group interviews, in the form of focus groups, as the primary data collection method. Focus groups encourage group discussions that can allow both individual and collective motivations of group members to be enunciated in their natural setting. Focus groups also provide the potential for dialogue and debate and can therefore more readily replicate natural interpersonal exchanges between group members. For these reasons undertaking focus groups with CAGs was the most

appropriate choice for my research. The focus group method is explained further at section 5.4 below.

As my research is concerned largely with the ‘how’ and ‘why’ of individualised responsibility and its relationship to collective forms of climate change action, an approach that incorporated the ‘how’ and ‘why’ (see section 5.3.1 below) of specific action, along with the potential to generalise and thereby formulate or contribute to theory, was important. The case study methodology embodies such approaches. A multiple case study allowed research into individual cases in terms of their unique local context, history and concerns as well as the ability to draw comparisons between cases. It provided the most appropriate methodological framework capable of drawing together my normative and empirical findings. A description of the case study methodology follows.

5.3 Case study methodology

A case study methodology encapsulates a broad range of analytic tools and provides a flexible approach to understanding a particular case or multiple bounded cases of research interest (Creswell 2007). A case study involves: the collection of data from a number of sources (whether qualitative or quantitative or both) based on a series of propositions or issues (Baxter & Jack 2008); analysis which acts to converge the data into an overall case (Baxter & Jack 2008, p. 555); and then the development of a detailed narrative which provides "conveyance of deep meaning, reader accessibility, and opportunity for readers to recognise and consider researcher subjectivity" (Mabry 2008, p. 219).

Two main approaches to case study methodology are encountered in the literature (Stake 1996 and Yin 2009). Each author’s methodology draws from a constructivist paradigm and is focused on researching a context-dependent phenomenon (Baxter & Jack 2008, pp. 544–5).

5.3.1 Advantages and Limitations of Case Study Methodology

The main strengths of the case study approach lie in its ability to study a phenomenon within its 'real-life' context. As Simons (2009, p. 23) states:

Case study can document multiple perspectives, explore contested viewpoints, and demonstrate the influence of key actors and interactions between them in telling a story of the programme or policy in action. It can explain *how* and *why* things happened (my emphasis).

A case study in this sense becomes both a process of inquiry into a subject of interest, in my case climate action groups, and the product of that inquiry (Stake 2006). The case study helps to reveal the motivations and beliefs underlying participants' behaviours and worldviews and describes their rationales for action based on a personal, detailed and functional connection with the case. The case study offers a methodology suited to this purpose because according to Mabry (2008, p. 215): "social reality is created by humans and is complex, dynamic and context dependent".

Case study methodology is flexible as it is neither timescale nor method dependent and can explore and respond to changing situations. Case studies reported in narrative form allow vicarious experience of events and the application of "tacit knowledge" (Polanyi 1958), unspoken understandings of 'gut feelings'" (cited in Mabry 2008, p. 219). This is important for revealing the deeper motivations for action in participants' own words which may not be forthcoming in other less personal research methods (such as surveys).

The commonly portrayed limitations to case study research according to Flyvbjerg (2006, p. 221) "indicate that it is theory, reliability and validity that are at issue". In discounting five misunderstandings about case-study research, Flyvbjerg makes the point that theories and universals are not found in the study of human affairs, and therefore case studies, as "concrete, context-dependent knowledge", are "more valuable than the vain search for predictive theories and universals" (Flyvbjerg 2006, pp. 223–4). One of the key criticisms of the case study is its time and context bound nature and the risk of over-generalising (Simons 2009, pp. 23–4). Flyvbjerg (2006) counters that the "force of example' is underestimated" (p. 228). Finally, the subjectivity of the researcher is noted which, as Flyvbjerg rightly claims, applies to all qualitative methods and is a factor for consideration during research validation and verification (2006, p. 235).

Yin (2009, p. 41) sets out three important tactics for ensuring case study validity. First, the researcher can use multiple sources of evidence to allow triangulation of research data drawn from different sources (Yin 2009, p. 117). Second, the researcher can increase the reliability of the case study by maintaining a chain of evidence which links the elements of the case development process (Yin 2009, pp. 122–3). As a final aspect of validation, Yin (2009, pp. 182–3) recommends providing a draft of the case study report to respondents for their review and feedback. (I discuss how these validation concerns are addressed in my research in section 5.5.2 below).

5.3.2 Case study as theory building

Theory-generated refers to generating theory arising from the data itself, whether this is through a classic grounded theory approach (Glaser and Strauss 1967), a constructivist grounded theory approach (Charmaz 2006), or some other interpretative lens that leads to an eventual theory of the case (Simons 2009, p. 22).

According to Simons (2009, pp. 21–2) case study research can be either theory-led or theory generated. Generating or building theory from data (Corbin & Strauss 2008) has become popular in qualitative research through grounded theory (Glaser & Strauss 1967) which draws on systematic procedures for data collection, analysis and theory development. More recent interpretations of grounded theory draw on a constructivist stance (Charmaz 2006). The use of the case study as a research framework allows claims on theory making. Flyvberg (2011), in fact, makes a strong case for the theory development capability of the case study methodology. Nevertheless, my approach is distinct from grounded theory. I apply an abductive research strategy (Blaikie 2010) which I describe in section 5.5.3.1. In effect such an approach involves a process of bringing both my research and the outcomes of my literature review together through the development of case study narratives for each of the CAGs. The case study methodology provided a natural vehicle for this integrative process and led to new theoretical contributions which I present in Chapters 7 and 8.

In summary, the case study methodology provides a framework for considering complex, multifaceted and ‘real-life’ social perspectives. It is a flexible methodology that can incorporate multiple cases and allows the integration of normative and

empirical findings. The development of narratives to describe and document each case also provides a rich understanding of the research that can be communicated to a wider audience. I have therefore chosen a case study approach as it offers the following elements that are important to my research: the ability to examine the diversity of voluntary climate action emerging from specific community contexts as multiple cases; the ability to situate my research on voluntary grassroots climate action within its local, national and international contexts; and finally, the opportunity to employ case study narratives which honour the contribution of my CAG participants.

Having established case study as my main methodological approach, I now discuss my main approach to data collection for my case studies – focus groups.

5.4 Focus Groups

Focus groups allow in-depth exploration of socially, historically and culturally constructed meanings (Creswell 2007, p. 21) in a group setting and are consistent with a social constructivist epistemological position.⁴⁷ They elucidate “the language people use when thinking and talking about specific issues” (Stewart et al. 2009) and thereby, through individual and group narrative, they can reveal the worldviews and “collective identity” (Munday 2006 quoted in Smithson 2008) of group members. Focus groups therefore can contribute real world knowledge to understanding complex human attitudes and beliefs, utilising the language of participants, and how their views are deliberated and negotiated within a group context. All these elements are fundamental to my research aims, specifically to understanding why and how individuals take responsibility for climate change through their voluntary actions (RA1); and how the shift occurs from individual agency to collective agency in grassroots climate action (RA2).

5.4.1 Focus Group Analysis

Whilst the procedures for conducting focus groups are detailed extensively within the qualitative research literature, the processes for *analysis* are largely lacking (Frankland

⁴⁷ Cunningham-Burley, Kerr and Pavis (1999, p. 188) note that focus groups as derived from their application in market research can operate within a positivist paradigm. However more recently social research has employed focus groups where “participants ... [are] considered as active subjects, who are involved in constructing social reality through interaction” (Cunningham-Burley, Kerr & Pavis (1999, p. 191).

& Bloor 1999; Smithson 2008). The main focus within the literature is on a process of *systematic analysis* that can demonstrate the validity of the claims made. However, as Smithson (2008, p. 363) notes, postmodernist social researchers place less emphasis on this, preferring an unstructured approach where focus groups produce “locally situated accounts – ‘collective testimonies’ (Madriz 2000)”. Indeed, Frankland and Bloor (1999) suggest that no “distinctive analytic techniques” are required in the analysis of focus groups.

There are a range of perspectives for the analysis of data from focus groups which vary according to their purpose. Considerations include: the epistemological position of the researcher; the role of the moderator; and the method of analysis chosen (Smithson 2008). For example, focus groups can be analysed as narratives, discussions or conversations with an emphasis on either the individual’s or the group’s response. The moderator’s role may be more active or passive and the focus for the groups may be presented as broad themes or distinct questions. The content of the focus group can be what’s important to analyse; that is, the subject matter that was discussed. Otherwise it may be the conversation that is important, how it flowed (or not), the role of silences and omissions, as well as points of disagreement and discord. Analysis techniques can vary then from a very detailed linguistic approach where every utterance, pause and interruption is important, to a broader sweep of understanding which may be based simply on a verbal report (Krueger et al. 2001). The level of detail recorded has implications for the transcription method, analysis and reporting.

5.4.2 Role of transcription in focus group analysis

In accordance with the breadth of focus group approaches described above, the level of detail found in the analysis of focus groups varies according to the research purpose. The role of transcripts in analysis then becomes the primary consideration. Krueger et al. (2001) identify a spectrum of recording and reporting methodologies ranging from written notes and verbal reporting (primarily applied in market research settings) to full audio recording with detailed written transcription (primarily applied in academic settings). Obviously, the depth of analysis is dependent on the detail recorded, but the level of detail also needs to be considered in light of the time available to transcribe the

audio recordings. The time needed to transcribe each hour of recorded discussion can range from four to eight hours (Krueger et al. 2001).

5.4.3. Advantages/ limitations of method

One advantage of focus groups is that they are efficient; that is, they generate lots of data more quickly than interviewing individuals separately. The researcher is able to interact directly with the group, allowing clarification and probing of verbal as well as non-verbal responses. In addition, large amounts of rich data are obtained in the respondents' own words. Focus groups are socially interactive, which means members can interact and build on other respondents' responses. Participants can also find them enjoyable and the data gathered is usually easy to understand and interpret (Stewart et al. 2009, pp. 593–4; Patton 2002, pp. 386–7).

Limitations of focus groups are that they involve a small number of respondents within a limited period of time, so they are representative of a particular historical and social context. Members are not independent of each other (in the focus group situation) so there are risks involved in generalising from the data obtained. In a similar way, the researcher is engaged in the group conversation, not independent of it, which may bias the data in favour of the researcher's opinions. The open-ended nature of responses can make summation and interpretation of results difficult (Stewart et al. 2009, pp. 594–5; Patton 2002, pp. 386–7). There are also the potential challenges posed to the researcher/moderator in the focus group setting of dealing with conflict, with participants who become distressed, and with ensuring that all participants' views are heard.

Focus groups were chosen as the primary method for data collection as their strength lies in understanding “how people think or feel” (Krueger et al. 2001, p. 2) about a topic of interest, in my case, voluntary action on climate change. Understanding how and why members of CAGs become involved in climate change action, and in particular their motivation for joining with others in order to take collective responsibility for climate change, is a key aim of my research.

It was particularly advantageous to my research to involve CAG participants as a collective as opposed to individual members. Focus groups allowed a closer replication

of CAG group processes; participants were for the most part used to deliberating together, making the research more authentic. As participants were familiar to each other, bringing them together in a focus group contributed to deeper levels of affective response (see section 7.4.2). The involvement of CAG members in the focus groups also contributed to their individual and collective reflection on their group participation and actions (see section 7.8.2).

Because each group only had a small number of participants, I conducted multiple (eight) groups. As my research is particularly interested in collective agency for climate change action, I was not concerned by the lack of independence of group members. In my research I considered this a boon as often rich and illuminating discussions evolved that provided deeper insights into individual participants' motivations and experiences. These discussions may have been continuations of conversations that group participants had been engaged in over some time. I developed comprehensive focus group discussion guides (see Appendices B and C) to offset potential issues which may have resulted from my dual role as conductor and moderator of the groups and which would allow me to address any issues of group process that may have arisen. Details on how the method was applied to my CAG research are included in section 5.5.2.4.

Focus groups were particularly suited to my research because: the method encourages participants to discuss both their individual and collective motivations and behaviours; and it provides a group-based method focused on dialogue where the interactions of the participants allow the conversation to more closely represent the group's natural deliberative processes.

5.5 Research design framework

Table 2 sets out the framework for my research design. My research incorporates a range of qualitative methods, namely focus groups; interviews; participant-observation and document analysis (see Appendix A for a full list of data sources). Eight focus group discussions conducted with Climate Action Groups (CAGs) in NSW and Victoria form the major source of data for my research. Under my case study methodology, each focus group becomes a 'case' in terms of its analysis and reporting and the entire body of research data, incorporating the eight cases in their entirety, forms the multiple case

study. The secondary and tertiary data sources listed in the table also provided important input. The methods employed to generate the data and how they have been applied in my research are described in section 5.5.2 below. In brief, these additional data sources served to guide the development of my research design and provided important background and context to my multiple case study of Australian CAGs (see Chapter 6 and Appendix F).

How the distinct elements of the research design apply to my research is described further below.

Qualitative Design Framework			
Social Constructivist Epistemology			
Case Study Methodology			
Data sources	Methods	Analysis	Reporting
<i>Primary</i> 8 focus group discussions <i>Literature review</i>	Focus groups	Primary Themes (<i>research questions</i>)	Multiple case study report based on 8 case studies
<i>Secondary</i> Scoping interviews Stakeholder interviews	Interviews	Secondary Themes (<i>emergent</i>)	
<i>Tertiary</i> Participant observation Document analysis	Participant observation Document analysis	Theory building approach applied using abductive research strategy	

Table 2: Qualitative design framework

5.5.1 Multiple Case Study Methodology

A multiple case study of eight Australian Climate Action Groups was chosen as the overarching research methodology. I utilised Yin (2009) as my primary source for the

development of my multiple case study, though I found close correlation with Stake (2006) and have taken some guidance from this source as well.

A multiple case study (see section 5.3) was employed to allow the study of the eight CAGs in depth across different locations and group perspectives. In particular, the multiple case study methodology was chosen to investigate: whether the different community contexts that CAGs arise from, and their differing forms of action, were related to different formulations of responsibility for climate change (as set out within the typology of individual action – see section 3.3.4); and whether the group type and focus impacted on the effectiveness of individual CAG actions.

Each case study is framed around my research questions (see section 5.2.4) (Creswell 2007), so the research relies on an internally consistent application of the same questions across groups in order to identify points of similarity and difference (Yin 2003). The eight cases selected for study were approached through purposeful sampling (Creswell 2007). In other words, the CAG sample was not random and a purposeful selection process was undertaken. Creswell (2007, p. 75) favours this approach as it allows different perspectives to be researched. To assist the initial selection of CAGs for my research, I consulted listings of climate action groups operating within Australia.⁴⁸ These listings were examined and potential cases selected according to their location and the types of voluntary action undertaken. Potential cases were incorporated into a table and selected CAGs were approached for involvement in my research. The selection tool used for selecting CAGs is included in section 5.5.1.2 below. A summary of the groups included in the study is presented at Table 5.

5.5.1.1 Considerations for case selection

In developing the cases studied the following considerations were taken into account:

- The bounded and context-dependent nature of the cases studied. The data collection occurred within a particular timeframe (see timeline in Chapter 6) which coincided with a period of considerable political flux on climate change policy both within Australia and internationally. The circumstances related to these political upheavals (described in detail in section 1.3) meant that many in

⁴⁸ See <http://www.climatemovement.org.au/groups/> and <http://www.environmentvictoria.org.au/content/join-climate-action-group> for listings.

the wider community did not trust politicians to make progressive climate change policy decisions.

- A double layer sampling design (see section 5.5.1.2) was employed to create maximum variation of cases (Creswell 2007, p. 127; Flyvberg 2011) and to generate as much information as possible. Drawing from CAGs that are situated in different geographic settings and which employ variable forms of action and tactics was an important consideration for the validity of my results. Variation amongst the CAGs also supported the drawing of generalised conclusions and theorising across the CAG research cohort.
- The choice of cases to study aimed to involve actors with agency; that is ‘actors with authority’ (Biermann 2007) that demonstrated ‘praxis’ (Freire 1972a, p. 99 cited in Crotty 1998, p.151) or critical reflection in action. This was an important consideration in my selection of CAGs for my research. As demonstrated in my literature review, common responses to climate change drawn out in social research (discussed in section 3.2), involve disempowerment and denial. In order to determine what contributes to individuals taking responsibility for climate change through their public sphere activities, it was important to select groups of individuals actively engaged in taking voluntary action on climate change.
- The focus of the cases was on agents who were engaged in relationships (across scales and networks) at a political and/or societal scale that allows change to occur (Dryzek 1997; Freire 1972). In other words, it was important to my research aims to involve groups of actors that engaged with wider networks in order to determine how their local grassroots action potentially contributed to broader societal change. CAGs were appropriate for my research as they demonstrated strong local community links and prior to the commencement of my research were developing stronger network linkages through greater attention to the development of regional, state and national ties.

5.5.1.2 Selection Criteria for Climate Action Groups

As noted above, selection of CAGs for involvement was purposive and followed a set of required criteria:

- A core active membership with a minimum group number of six. This was a practical consideration as I wanted to obtain between five and eight participants

from each CAG for the focus groups and my original scoping and group research had identified that some CAGs only had a few active members.

- The selected groups needed to be engaged in a form of voluntary action for climate change mitigation. As my research is concerned with how and why people take voluntary action on climate change it was important to ensure the groups selected were taking some form of action in a voluntary capacity.
- Membership had to have been active within the last three months for inclusion. This was another practical consideration to ensure that focus group participants would be drawing on their lived experience in the here and now and that the group discussion would more closely reflect the group dynamics.

The double-layer design (Krueger & Casey 2009) consisted of two layers related to location and type of action, as detailed below. The rationale for adopting these two layers for the sampling of CAGs was to develop a multiple case study with maximum variation in groups. Group location according to geographic region was used to determine whether the type of community that CAGs emanated from was an important contributor to the case study findings (for example rural vs. inner-city). The type of group focus was also used to determine whether varying forms of group action could be equated with a typology of individualisation that my literature review had suggested.

Layer 1 relates to geographical areas: CAGs were selected according to their location based on the Australian Standard Geographical Classification (ASGC) Remoteness Structure (ABS 1216.0, 2001). The structure sets out six Remoteness Areas (RAs), presented below:

0	Major Cities of Australia
1	Inner Regional Australia
2	Outer Regional Australia
3	Remote Australia
4	Very Remote Australia
5	Migratory

Based on this geographical classification, CAGs were invited to participate in the focus groups from the top three RAs. (Note that at the time of case study selection there were

no CAGs in NSW and Victoria in the remote, very remote and migratory RAs). For reasons of practicality, my research was limited to CAGs in NSW and Victoria. However, this was not a significant limitation as the majority of CAGs are located in these two states. The other practical considerations were: the accessibility to groups; their willingness to participate in my research; and time and resource limitations in undertaking the research.

Layer 2 relates to the audience/ group membership: I selected CAGs that varied in their approach to voluntary climate action along a spectrum from locally-based individual actions (e.g. fitting solar panels to homes) through to radical direct action (e.g. activists chaining themselves to a coal train). These forms of voluntary action align with differing perspectives on responsibility for climate change mitigation which I have developed previously into a typology of action (see table 1 in section 3.3.4). I expected that groups at different points in this typology might respond differently to the research questions so it was important to include CAGs drawn from across this spectrum. Drawing on Table 1, CAG group activities can be categorised according to their hierarchical, individualist and egalitarian stances. How this categorisation was applied is illustrated in Table 3 below.

Hierarchical	Individualist	Egalitarian
VM	VM	
		GA
	DA	DA
CRAG	CRAG	
	PA	PA
Ed	Ed	

Table 3: Categorisation of voluntary actions according to responsibility stance

Key:

“Voluntary measures” (VM) – examples are: signing up to Greenpower; fitting solar panels.

“Group action” (GA) – for example: making human beach signs.

“Individual/ collective direct action” (DA) – for example: activists chaining themselves to a coal train; other forms of civil disobedience, such as blocking access to coal infrastructure.

“Carbon rationing action group” (CRAG) – specific voluntary measures undertaken with peer responsibility/ support.

“Political action” (PA) – for example: political lobbying/ advocacy; taking legal action.

“Education” (Ed) – for example: holding information meetings and/or workshops; working with schools.

CAGs were characterised according to the table above based on information provided on their websites and also from personal communication with contacts closely involved with CAGs in NSW and Victoria. The table below represents the selection tool used to identify and list potential CAGs for focus groups. It utilised the double-layer design parameters described above.

Table 4: Double layer selection tool

(see over)

CAGs	Major city	Inner Regional	Outer Regional	Hierarchical	Individualist	Egalitarian	Notes
	√				DA PA	DA PA	Strong focus on individual DA & political lobbying.
NSW	Major city	Inner Regional	Outer Regional	Hierarchical	Individualist	Egalitarian	
NSW2	√			Ed	Ed DA	DA PA	Focus group held 14 April 2010.
NSW1		√		VM Ed	Ed	PA	Focus group held 17 November 2009.
		√		Ed	PA		Group declined being involved. (Personal communication, 25/2/10)
	√			Ed VM	PA		Group willing to participate (November 2009).
NSW4	√	√	√	VM	GA PA	GA Ed	Group originally approached declined being involved. (Personal communication, 23/3/10). Focus group held with related group 16 May 2010.
NSW3		√		VM	PA	Ed	Focus group held 1 May 2010.
VIC	Major city	Inner Regional	Outer Regional	Hierarchical	Individualist	Egalitarian	Notes
	√				PA	PA Ed	Group objectives are founded on intergenerational responsibility. Unable to establish contact.
	√			VM	PA DA	Ed DA	Group has agreed to participate but insufficient numbers for focus group.
	√				PA	PA DA	Group has agreed to participate but insufficient numbers for focus group.
VIC2	√			CRAG			Focus group held 29 April 2010.
		√	√	VM	PA	Ed	Group contacted for focus group in November 2009. Insufficient numbers to proceed.
VIC1		√		CRAG			Contacted in March 2010 however group no longer meets.
		√		VM		Ed	Focus group held 28 April 2010.
VIC3		√			PA	PA	Member of CEN. Focus group held 29 April 2010.

Considerations in CAG selection

There were a number of limitations to the CAG selection approach (evident in Table 4 above) which I discuss below.

Firstly, the geographic diversity of groups was intended to obtain the widest possible variation in groups according to location. Flyvberg (2011, p. 307) describes this type of selection as “maximum variation cases”. Due to time and resource constraints, I limited selection to the two Australian states, New South Wales (NSW) and Victoria (VIC) that have the greatest proportion of the Australian population and the largest number of active CAGs. My preliminary research also found that the majority of groups were located in the top three geographical areas (according to the Remote Area classification) which meant there was less diversity in the geographical spread of groups than I had anticipated.

Secondly, the layer 2 selection attempted to sort CAGs according to different types of action. The typology of action (Table 1) was utilised to assist in this process, however the process of allocating groups according to their actions involved a significant degree of subjectivity and the selection criteria were necessarily imprecise at this early stage of my research (that is, the detail of the types of action conducted by CAGs became clearer through the detailed focus group discussions than it was from websites and other material).

Thirdly, as noted in Table 4 above, despite my attempts to achieve the maximum variation in CAGs for case study selection, several groups declined to participate in the research and several groups were unable to provide the minimum number of participants for a focus group to proceed.

An important aspect of the selection process was the purposeful inclusion of a Carbon Reduction Action group (CRAG)⁴⁹ within the cases. I included one CRAG as I am particularly interested in the relationship between individualised forms of climate change voluntary action versus collective forms of action. My hypothesis was based on

⁴⁹ See footnote 34.

my understanding from the literature that CRAGs would sit at the individualist end (as opposed to the egalitarian end) of the voluntary climate action scale (see section 3.3.4). The CRAG was therefore included in the CAG sample as an example of an “extreme/deviant case” (Flyvberg 2011, p. 307). Flyvberg states that such cases can help to expose “the limits of existing theories and to develop new concepts, variables, and theories that are able to account for deviant cases”. The purposeful inclusion of the CRAG also helped to increase the variation in my sample.

Nevertheless, despite the limitations discussed above, my final sample of eight CAGs included groups from two states, from urban, regional and rural areas, and groups taking very different types of voluntary action. The sample is sufficiently diverse to allow some general findings and hypotheses about CAGs in Australia.

5.5.2 Methods employed

As outlined in Table 2, I chose several qualitative methods to support the case study development. These are discussed below.

5.5.2.1 Interviews

Unstructured face-to-face and telephone interviews were conducted for to assist case study identification, selection and conduct (Kvale & Brinkman 2009). The primary aim of these initial interviews was to understand the scope of voluntary Australian climate change action in the non-government sector. The interviews were not recorded and the information obtained was not directly utilised as research data. Rather, this data allowed: a conceptual mapping of the non-government sector in relation to community-based climate change action; the identification of potential cases; a basic understanding of the strategies and goals of a cross section of the key climate change NGOs operating within Australia; and an understanding of the relationships these NGOs had with grassroots climate action groups (CAGs).

Additional interviews were conducted with individual CAG members who attended the 2009 United Nations Copenhagen Climate Conference. These interviews were recorded and transcribed and assisted in formulating the background and context to the multiple case study (see Chapter 6).

5.5.2.2 Participant-observation

Participant-observation is an ethnographic method (Patton 2002) that has increased my understanding of the motivations and actions of CAG participants as they undertake their collective (group) climate change-focused activities. Participation and observation in CAG and other community-based climate action has helped me to acquire firsthand knowledge and experience of group activities and interaction and provided a more nuanced understanding of the contexts for CAG development, organisation, decision making and the interpersonal interactions between CAG members and between CAGs and other organisations.

During the period of my research I have participated and observed in the following settings and activities:

I attended Climate Camps in NSW in 2009 and 2010 (see section 5.2.2 where Climate Camps are described). Climate Camps commenced in the UK in 2006 (Doyle 2009) and have been taken up across mainly Western democratic countries. Climate Camps have several goals but are primarily geared towards building a grassroots movement based on climate change action. Camps are usually located at or near major sources of global warming pollution (such as coal mines, power stations, airports). They are set up as temporary symbolic communities which function according to principles of participatory democracy. They use alternative/ renewable energy and adopt sustainable living practices for the duration of the camp. Climate Camps are set up for networking between participants and different groups, and for training in activism. Camps use a model of democratic decision making to ensure inclusivity and equity amongst participants. In 2009, I attended the Helensburgh (NSW) Climate Camp and volunteered as a facilitator of group processes. In 2010, I attended the Bayswater B Climate Camp in the Hunter Valley (NSW).

In December 2009 I attended the United Nations Climate Change Conference in Copenhagen. I had several roles in Copenhagen that allowed me to observe and learn from civil society action both within the formal United Nations-sponsored proceedings and the various alternative civil society forums. I was accredited as an observer for the University of Technology Sydney (UTS); attended as a member of Climate Action

Network Australia (CANA); undertook interviews with several CAG members attending Copenhagen; and participated in public protests.

In 2010 and 2011, I attended national climate summits held in Canberra (2010) and Melbourne (2011). The summits provided a forum for information sharing and networking for CAGs with the aim of building a broad and inclusive national network for the coordination of climate action campaigns and the development of campaign positions.

Throughout the period of my research I also participated in varying public protests and undertook voluntary activities with several CAGs based in Sydney.

Participation in these activities expanded the types of interactions I had with CAGs throughout the period of my research and contributed to the validity of my research findings. As noted in section 5.3.1, the diversity of data sources that contribute to case study development is important for research validity (Yin 2009).

5.5.2.3 Document Analysis

Document analysis primarily involved the review of CAG and other stakeholder websites and of email lists. There are several email lists commonly used by CAG members to share information and foster contributions to collective policy formation, letters to politicians, petitions and the like. I routinely reviewed contributions to these lists throughout the period of my research. Document analysis contributed to my understanding of the concerns and motivations underlying CAG member actions, and assisted in developing the background context to my research.

5.5.2.4 Focus Groups

Eight focus groups (2–2.5 hours each) involving of 4–7 participants per group were held with CAGs in NSW and Victoria between November 2009 and May 2010. Details of the focus groups conducted are included at Table 5 (see below) but in summary: 40 adults in total participated across the eight groups consisting of 20 women and 20 men. The average age of participants was 53 years (with a range of 20 years to 75 years).

Considerations

- One focus group (VIC1) included a participant aged 15 years who attended the focus group in place of one of her parents (with parental permission) at late notice. Although this participant took part in the discussion I have excluded her contribution from the research analysis as my research was targeted towards adult participants.
- The median age of participants was 61 years reflecting that there was not an even spread of ages in the focus groups (see Figure 4 below). Notably under-represented in the focus groups were young adults or participants in the 18–24 age group and adults who were the parents of young children. Three of the focus groups consisted entirely of people aged 55 years and over, many of whom were retired or approaching retirement.

Group	Location	Date	Number & type of participants
NSW1	NSW Regional	17 November 2009	7 (5 males; 2 females) Age range: 60–75 years
NSW2	NSW City – Urban, inner- city	14 April 2010	6 (2 males; 4 females) Age range: 27–40 years
VIC1	VIC Regional	28 April 2010	5 (4 females; 1 male) Age range: 15–67 years
VIC2	VIC City – Suburban	29 April 2010	4 (All male) Age range: 55–74 years
VIC3	VIC – Suburban	29 April 2010	5 (2 males; 3 females) Age range: 64–72 years
VIC4	VIC City – Urban, inner- city	30 April 2010	4 (1 male; 3 females) Age range: 20–63 years

NSW3	NSW Regional	1 May 2010	5 (1 female; 4 males) Age range: 25–60 years
NSW4	NSW City – suburban	16 May 2010	5 (1 male; 4 females) Age range: 36–70 years

Table 5: List of focus groups conducted

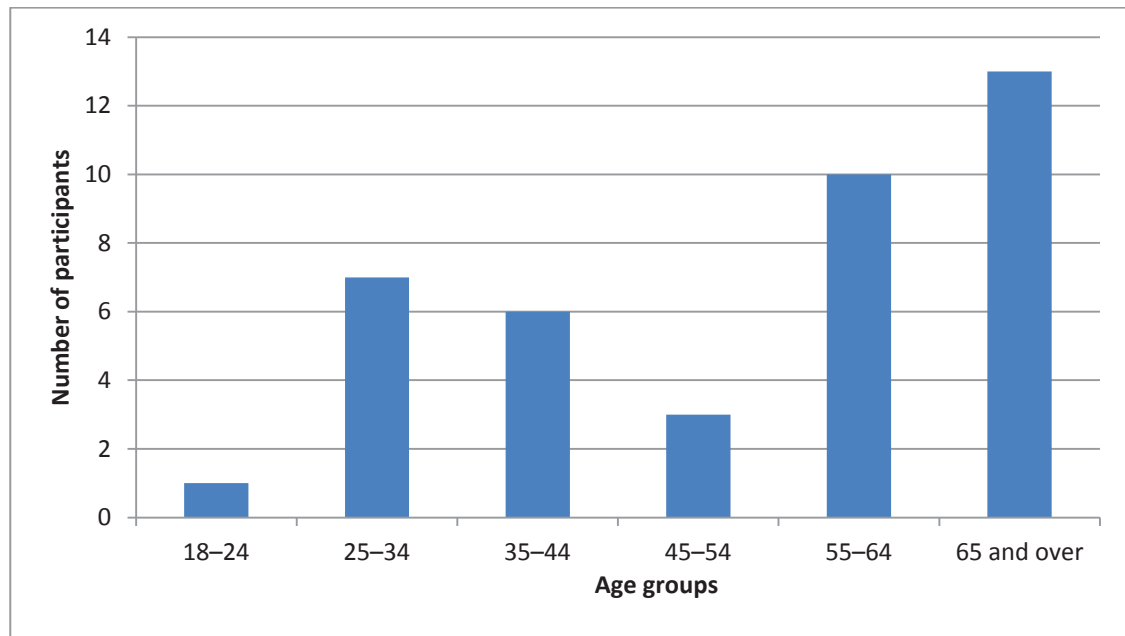


Figure 4: Age groupings of focus group participants

Process

Participants were selected by the groups; that is, each CAG invited to participate was asked to provide a group of 5–8 active members. As moderator I had no role in selecting group members, as this was the role of the CAG contact. This was to facilitate CAG members’ involvement in the focus groups as it was more likely they would attend voluntarily if the approach was from a trusted member of their group. It also assured a degree of anonymity of focus group participants as all contact between myself as the researcher and the participants was conducted through the CAG contact.

Focus groups were conducted in the setting provided by the CAGs. This included several people’s homes and community meeting rooms. This enabled the focus groups to be conducted with the CAGs in settings that they were familiar with in order to get a

sense of how they normally operated as collectives while recognising that the focus group situation is always a bit contrived.

Each focus group was conducted to a series of focus questions.⁵⁰ Participants were asked to discuss the following:

- what motivated them to take voluntary action around climate change;
- the types of voluntary actions undertaken both individually and collectively;
- their perceptions of their individual and collective agency;
- what enabled and/or constrained their ability to act;
- how they perceived the scale of influence of their actions and vision for change;
- and
- how they communicated climate change to others.

The focus group questions were developed from my research questions and aimed to draw out findings relevant to the themes of my research around the individualisation of responsibility; individual vs. collective agency; and constraints and enablements to action. The table below (Table 6) shows the focus group questions mapped to the research questions and the primary themes. These themes are discussed in more detail in Chapter 6.

Research Questions	Focus Group Questions	Primary Themes
<i>How do members of Australian CAGs perceive their responsibility for climate change?</i>	1. Why did you decide to get involved in climate change action ? Why is it important to you?	(Personal journey/ motivation)
<i>In what ways do Australian CAG members act responsibly to mitigate climate change?</i>	2a. What types of things are you doing ? What types of actions are you taking?	(types of voluntary action)
<i>How do CAG members acquire agency (that is, become actors with authority) within voluntary action?</i>	<i>In taking action on climate change:</i> 2b. What allows you to act? 2c. How do these actions make you feel ?	(individual engagement/agency)
<i>What motivates members of Australian CAGs to join these</i>	3a. Can you describe what led you to join this group?	(individual vs. collective agency)

⁵⁰ After the first focus group conducted in 2009 the focus questions were modified and refined for the following focus groups.

<i>groups and take collective action?</i>	3b. How does your involvement in this group change the way you act on climate change? 3c. What do you think stops other people from taking action like you have?	(individual constraints – others)
	4a. In what ways are you &/or your group limited in taking action on climate change? b. In what ways are your actions made possible ?	(individual & collective constraints) (individual & collective enablements)
<i>How can actions on climate change at the local level link-up to create global level change?</i>	5a. Who are you trying to influence through your actions? Why? b. What's your vision for how local level action can make a difference to climate change?	(scale of action)
<i>What kinds of narratives, storylines, images and metaphors of responsibility for climate change do people relate to?</i>	6a. How do you communicate climate change to others? 6b. What types of stories/ images/ words do you find successful?	

Table 6: Focus group questions mapped to research questions

Detailed handwritten notes were taken during the group discussions. The discussions were also digitally audio recorded and then transcribed by me. Transcripts from each group were initially coded according to themes drawn from the focus group discussion questions (see Appendices B and C for the focus group discussion guides employed). The development of the primary and secondary themes is discussed further in the section on reporting below and in Chapter 6.

My role was primary moderator (or facilitator) for the groups. This entailed putting forward the questions for discussion and then allowing the participants to respond and

interact around each question theme. As moderator my role was to guide the participants through the set of questions, ensuring that each participant had the opportunity to discuss their views, both individually and in group discussion. At times prompts were given in order to clarify or elucidate participants' responses.

Transcript development of the eight focus groups followed both the “abridged transcript” and “full transcript” methods (Krueger & Casey 2001, 2009; Cameron 2005). The abridged transcript method involved preparing a written report for each focus group based on: “an abridged transcript after listening to tapes, and consulting field notes and moderator debriefing” (Krueger & Casey 2001, p. 15). According to Krueger and Casey (2001, p. 15) this method allows: reporting of each group within a reasonable timeframe (4–6 hours per group); with a low risk of error; and moderate to high level of rigour. After the first three focus groups I abandoned the abridged transcript method in favour of full transcripts as I found that the timeframes were similar for both approaches and the full transcripts provided a better data set to work from.

The following steps were undertaken to develop the transcripts for each focus group which then became the basis for each case study report:

1. I made handwritten notes during each focus group and noted observations on each group immediately after the group. I set up Word documents for each focus group and wrote up emerging themes.
2. Handwritten notes were reviewed and secondary themes (Kryzyzanowski 2008) noted from each focus (primary theme) question and across the focus group discussion as a whole. These secondary themes were derived from what the participants said in response to the primary focus group questions or otherwise arose spontaneously during the discussion. Primarily this initial level of analysis focused on “what was said” (Macnaghten & Myers 2006); that is, it focused on the **content**.
3. Digital audio recordings were loaded into NVivo 8 (Bazeley 2007) for listening and transcribing. The handwritten narrative was cross-checked against the audio transcript and potential quotations for direct referencing were identified under the primary themes.

4. As the audio was played, details of “how it was said” (Macnaghten & Myers 2006), that is, the **conversation** were noted and where relevant, additional (secondary) themes were documented.
5. Each focus group was then written up as a case study narrative (The case study narratives are included at Appendix F) with the primary and secondary themes identified.

Reporting

The case study narratives developed for each focus group are included at Appendix F of this thesis. Some general considerations regarding the reporting of the focus group discussions are noted below.

- The first focus group conducted, NSW1 (reported as Case Study NSW1) used a set of questions derived from my research questions that related to the following four primary themes:
 - motivation for voluntary action on climate change
 - ways and means of collective (group) action
 - responsibility for climate change
 - relationship between local action and global action.

Responses related to the first three themes were obtained through a series of questions whilst the fourth was addressed through inviting participants to take part in a creative activity to map out their responses by creating a “rich picture” (Avison et al. 1992). The discussion from the first focus group revealed important insights around these themes however the rich picture exercise was time consuming and not everyone in the group wished to participate. Also it appeared that the questions were not structured enough to provide consistent depth within the group discussion. The rich picture exercise was abandoned for future groups and the focus group discussion guide was revised to develop a more detailed set of questions which were applied to the remaining seven focus groups.

- The revised focus group questions covered the following six primary themes:
 - motivation for voluntary action on climate change
 - types of individual and collective (group) action taken

- individual and collective agency around climate change
 - constraints and enablements for action
 - scale of influence and action
 - communicating climate change.
- Due to time constraints the final theme was not discussed with some groups. Often this theme was addressed throughout the course of the group discussion and where relevant the discussion is reported.
 - The transcription of focus group participant quotations used in the case study narratives is worth noting. I made the decision to document the participants' words verbatim, incorporating any hesitation and 'thinking noises'. This was a deliberate transcription choice and not necessarily the prescription that all researchers follow. However I found the hesitations, in terms of recording the participants' conversation (that is, how things were said) were important for how I approached the analysis of the discussion. In particular, in listening to the transcripts and reviewing the quotations I was immediately connected back to the particular focus group situation and the more tacit emotional elements at play that were often underpinning the participants' words. I also consider this transcription practice as consistent with Yin's (2009) "chain of evidence" validation requirement (discussed in section 5.3.1).
 - The final point of consideration in the focus group reporting relates to Yin's (2009) third validation requirement (see section 5.3.1). Copies of the case study narratives were sent to each of the CAG contacts for distribution to the focus group participants for review and feedback (see Appendix E). Minor comments were received from two groups and these have been incorporated.

5.5.3 Case Study Analysis

I utilised an approach from Blaikie (2010) in my case study analysis. Drawing on Dey (1993), Blaikie (2010, p. 211) describes three circular or looping processes of: describing, classifying and connecting. Describing involves the development of thick descriptions or detailed narratives that position the cases within their context. I applied this process to the development of my case study reports (see Appendix F). Classifying is the process of grouping data in categories and then splitting or splicing the categories.

The classifying process in my case studies was undertaken in two ways: firstly by categorising according to the focus group discussion questions (which define the primary themes in the case study narratives) and secondly through additional categories that arose from the discussion itself (which define the secondary themes in the case study narratives). The development of the primary and secondary themes is elaborated further in section 6.5. Dey (1993, pp. 44–5 cited in Blaikie 2010, p. 211–2) notes that at the point of classifying a process of conceptualisation is already underway with the researcher making decisions about what categories may be more important than others and how the categories are framed within the research. The final process involves connecting, the aim being, according to Blaikie (2010, p. 212), “to discover regularities, variations and singularities in the data and thus to begin to construct theories”.

The formation of the multiple case study of Australian Climate Action Groups is therefore a result of these three processes as they were applied through the development of the case study narratives. How these three processes were incorporated within the research progression is discussed below.

The three processes were not undertaken in isolation but rather were layered within several procedures undertaken within the thesis. The development of the case study reports featured in Appendix F formed an important initial component of this process. The primary purpose of the case study reports was the development of descriptive narratives of the outcomes of each of the CAG focus groups along with contextualizing information drawn from other data sources (for e.g. CAG websites). Each case study report thereby initially fulfilled the function of *describing*. However the case study reports also served a broader purpose as they became an important component of the data analysis process itself. Each report drew on the primary themes (drawn from my research questions) and secondary themes that emerged from each individual CAG focus group. The development of these two sets of themes throughout each case formed the initial *classifying* process. Several of these themes emerged as important in light of the literature and were therefore brought forward into the discussion chapters (chapters 7 and 8) and prompted the development of a theoretical model for voluntary climate action (Figure 7). As discussed in the introduction of Appendix F, each case study report was written up in the sequence that the focus groups were conducted. This process allowed each case to be examined individually in terms of the primary and

secondary themes (described in section 6.5) but also allowed themes to be developed, embellished and *connected* with other cases, the multiple case study as a whole, and theoretical elements. This iterative process was continued in the writing of the thesis where reflection on the multiple case study in association with literature examined in my literature review revealed deeper layers of meaning and resulted in the development and extension of theoretical understandings of the nature of individual and collective agency in relation to voluntary action on climate change (Chapter 7) and the potential of CAGs in broader social change processes (Chapter 8).

5.5.3.1 Theory building

Theory building from my case studies involved an abductive research strategy (Blaikie 2010, p. 156). Blaikie (2010, p. 156) describes an abductive research strategy where:

data and theoretical ideas are played off against one another in a developmental and creative process. Regularities that are discovered at the beginning or in the course of the research will stimulate the researcher to ask questions and look for answers. The data will then be reinterpreted in the light of emerging theoretical ideas, and this may lead to further questioning, the entertainment of tentative hypotheses, and a search for answers. Research becomes a dialogue between data and theory mediated by the researcher.

In developing my case study narratives, such a process became a natural extension to my research strategy. Each focus group provided a new set of responses, which built up over time. Rather than answering the same set of questions, the dialogue generated in the focus group discussions often prompted new questions or highlighted varying aspects of theory uncovered in my literature review. The case study reports therefore do not represent singular accounts to be read in isolation. Rather, they have a developmental progression that builds a richer understanding. Blaikie (2010, p. 156) describes this “iterative process” as:

the central characteristic [of the abductive reasoning approach]... involves the researcher in alternating periods of immersion in the relevant social world, and periods of withdrawal for reflection and analysis. This alternating process means that theory is generated as an intimate part of the research process; it is not invented at the beginning nor is it just produced at the end.

This iterative process was also applied in the writing of the thesis and resulted in the development of my theoretical model for voluntary climate change action (Figure 7) discussed in Chapter 7. In Chapter 8 I develop further theoretical understandings on the role of CAGs in wide scale social change based on a set of questions that arose out of the research data and in light of the sustainable transitions (and related) literature. The final example of iteration can be found in Chapter 9 where I continue to reflect on questions that arose from my research which, when linked to the literature, provide additional research direction for future consideration.

5.5.4 Case Study Reporting

Each of the case studies is reported as a case study narrative (Patton 2002, p. 450; Flyvbjerg 2006, p. 237) (see Appendix F), the relevance of which is discussed above in section 5.3.1. The case study narratives employ “thick description” (Geertz 1973 cited in Blaikie 2010, p. 211). Blaikie (2010, p. 211) observes that:

The first step is to produce 'thick' or thorough descriptions of the phenomenon being studied (Geertz 1973; Denzin 1978). 'Thin' description merely states 'facts', while 'thick' description includes the context of the action, the intentions of the social actors, and the processes through which social action and interaction are sustained and/or changed.

It is appropriate then in a case study presentation of CAGs to adopt thick description to provide the necessary depth and nuance of understanding as well as contextual considerations so that the results are not only meaningful to a wider audience but are also authentic.

In my research I believe that using case study narratives allowed me, as the researcher, to be deeply immersed in the ‘case’ (that is, with each CAG). Developing the narratives provided important insights into the affective responses of participants. Listening and re-listening to the audiotapes of the focus groups, along with reflecting in writing on what was said and how the discussion unfolded, contributed to the creative process. There was a desire to allow the CAG participants to speak on their own behalf through the use of verbatim quotations. There was also the potential to become familiar with the “ethos” of the research participants and to allow participants to engage in the research process (Mabry 2008, p. 220). This was important for providing a platform for an

ethical engagement with my research cohort, allowing for trust to build and the CAG participants to claim ownership in the results. Mabry (2008, p. 219) suggests that case study narratives form an important validation function as they allow others to consider the researcher's subjectivity.

5.6 Conclusion

In this chapter I have established the empirical research design for my investigation into Australian Climate Action Groups (CAGs) and the development of a multiple case study on Australian CAGs. I established early in the chapter the unique focus of my research in an area that has only attracted academic interest recently. Little previous empirical work has been conducted with CAGs. This is unsurprising given their recent emergence in Australia. Internationally, there is a small but growing scholarship around community-based grassroots collectives taking voluntary action on climate change which my research aims to contribute to.

I outline above the rationale for the selection of my methodological framework and detail the methodology employed. In particular I describe the case study methodology and focus group method as the two essential underpinnings of my research design. I discuss the analysis of the case study which adopts an abductive approach. This approach allows the development of theory in association with the empirical outcomes of my research.

In the following chapter (Chapter 6) I establish the background to and context under which the multiple case study of Australian Climate Action Groups should be read.

CHAPTER 6: CONTEXT FOR A MULTIPLE CASE STUDY OF AUSTRALIAN CLIMATE ACTION GROUPS

6.1 Introduction

In Chapter 5, I established Australian Climate Action Groups as a distinct type of grassroots climate action collective that presented an ideal focus for my empirical research into grassroots voluntary action on climate change. I outlined my qualitative research framework and the process undertaken to formulate a multiple case study of Australian CAGs. In this chapter, I describe the historical and political context in Australia during the period of this empirical work. This has important bearing on understanding my multiple case study. Climate change as a social, political and cultural phenomenon is dynamic. Many significant events occurred during the development of the multiple case study. I draw from my review of the literature, personal observations from my involvement in civil society climate change action and interviews conducted with eNGO and CAG stakeholders active across local, national and international climate change advocacy, policy and campaigning. (A list of the data sources is included in Appendix A and the methods employed are described in Chapter 5: Research Design.)

6.2 Background to the case study

The rise of CAGs was particularly marked in the period from 2006 to 2007 which coincided with heightened national and international public concern regarding climate change (Climate Institute 2007; Lowy 2010; Neilsen & Environmental Change Institute 2007). This period also saw: the release of the Intergovernmental Panel on Climate Change's (IPCC's) fourth report (Krakoff 2011); the *Stern Review on the Economics of Climate Change* (2006); the aftermath of Hurricane Katrina (McGaurr & Lester 2009); and in Australia, it coincided with a severe drought (Tranter 2011). One hundred thousand Australians participated in Walk Against Warming⁵¹ in November of 2006 (Hall et al. 2010). Drawing on the multilevel perspective (Geels 2005), these trends occurred at the landscape level. Their coalescence gave climate change “significance, a sense of urgency, a symbolic power that helped it emerge from the murkiness in which

⁵¹ Walk Against Warming (<http://www.walkagainstawarming.org/>) is an annual event held throughout Australian cities and towns and aligned with the Global Day of Climate Change Action (see <http://www.globalclimatecampaign.org/>).

it had remained engulfed for two decades” (McGaurr & Lester 2009, p. 175). The majority of CAGs that participated in my research formed around this time.

An Inconvenient Truth created a media surge around climate change (Boykoff 2007, p. 481) and has been credited with widespread elevated levels of awareness of the scientific basis for human-induced climate change as well as with motivating people to moderate their carbon producing behaviours (Nielsen & Environmental Change Institute 2007). Many of the focus group participants noted the film as an inspiration for their own actions and as a strong incentive to seek out others taking climate action, thus prompting the formation of the majority of CAGs in my study. By June 2007, 75 CAGs existed across all states in Australia (Hall et al. 2010), coinciding with a flowering of grassroots climate action in other developed nations such as the UK⁵² and the USA (Krakoff 2011).

The Australian political situation provided additional momentum to the creation of CAGs. According to Hall et al. (2010), CAG formation can be linked to the dominance of resource extraction and other market-oriented pressure groups on Australian government policy at the expense of established environmental NGOs. The development of local and community-based groups occurred within a climate of “moral failure” within Australian politics (Jones 2010), which came to a head in late 2007 with the defeat of the incumbent Liberal-National coalition party following 12 years of conservative government. The number of CAGs increased rapidly at this time, primed by the perception of government inaction on climate change and as a foil to displacement of NGOs in the formation of public policy. With public concern regarding climate change at its highest (Lowy Institute 2010), the incoming Australian Labor Party (ALP) government prioritised climate change as a key policy platform (Rootes 2008) and on election, the new Prime Minister, Kevin Rudd moved to ratify the Kyoto Protocol, something which the previous government had failed to do (Hall et al. 2010).

Over 100 Climate Action Groups have formed throughout Australia and can be found in major cities (inner urban and suburban areas), regional cities and small towns.⁵³ Their

⁵² See http://www.grassrootsinnovations.org/Grassroots_Innovations/Briefings_files/GI%206%20LCCN.pdf accessed 21 June 2011.

⁵³ See <http://www.climatemovement.org.au/groups/> and <http://www.environmentvictoria.org.au/content/join-climate-action-group> for listings

membership ranges from a few people to several thousand⁵⁴ and they engage in different forms of action, including: holding local talks and information stalls; coordinating bulk buying of renewable energy technology (such as solar panels and hot water systems); developing community renewable energy projects (such as local wind farms); political advocacy; direct action; and civil disobedience. Groups can be considered to be as varied as the communities that they draw their members from and their activities tend to align with the motivations of their core, active membership.

In the last few years, CAGs have taken measures to better organise and build their movement on a regional, state and national level in an effort to increase their influence, effectiveness and political power. National climate summits⁵⁵ have been held annually since 2009, and in 2010 the Community Climate Action Network was established to “build a diverse, participatory grassroots climate action movement” through better coordination of groups’ activities on a national basis, promotion of communication amongst groups, support for existing state and regional networks and coordination of national activities.⁵⁶

Some CAGs have also joined the peak national non-government organisation responsible for climate change action within Australia, the Climate Action Network Australia (CANA). CAGs represent a significant component of the CANA membership⁵⁷ and their influence on CANA policy development and direction has become more evident in recent years. CANA is a member of Climate Action Network International (CAN-I)⁵⁸, which is the peak global climate change NGO that contributes to international climate change policy, primarily through the United Nations Framework Convention on Climate Change (UNFCCC) negotiations and related fora.⁵⁹

⁵⁴ BREAZE for example has over 2,000 members. <http://www.breaze.org.au/> accessed 29 April 2011.

⁵⁵ See <http://climatesummit.org.au/> accessed 29 April 2011.

⁵⁶ See <http://climatesummit.org.au/network> accessed 29 April 2011.

⁵⁷ At 24 June 2011 CAGs made up 23 of the 75 listed member groups of CANA - <http://www.cana.net.au/hot-topics/cana-member-organisations> accessed 24 June 2011.

⁵⁸ See <http://www.climatenetwork.org/>, accessed 1 February 2012.

⁵⁹ <http://www.climatenetwork.org/sites/default/files/CANCHARTER.pdf>, accessed 1 February

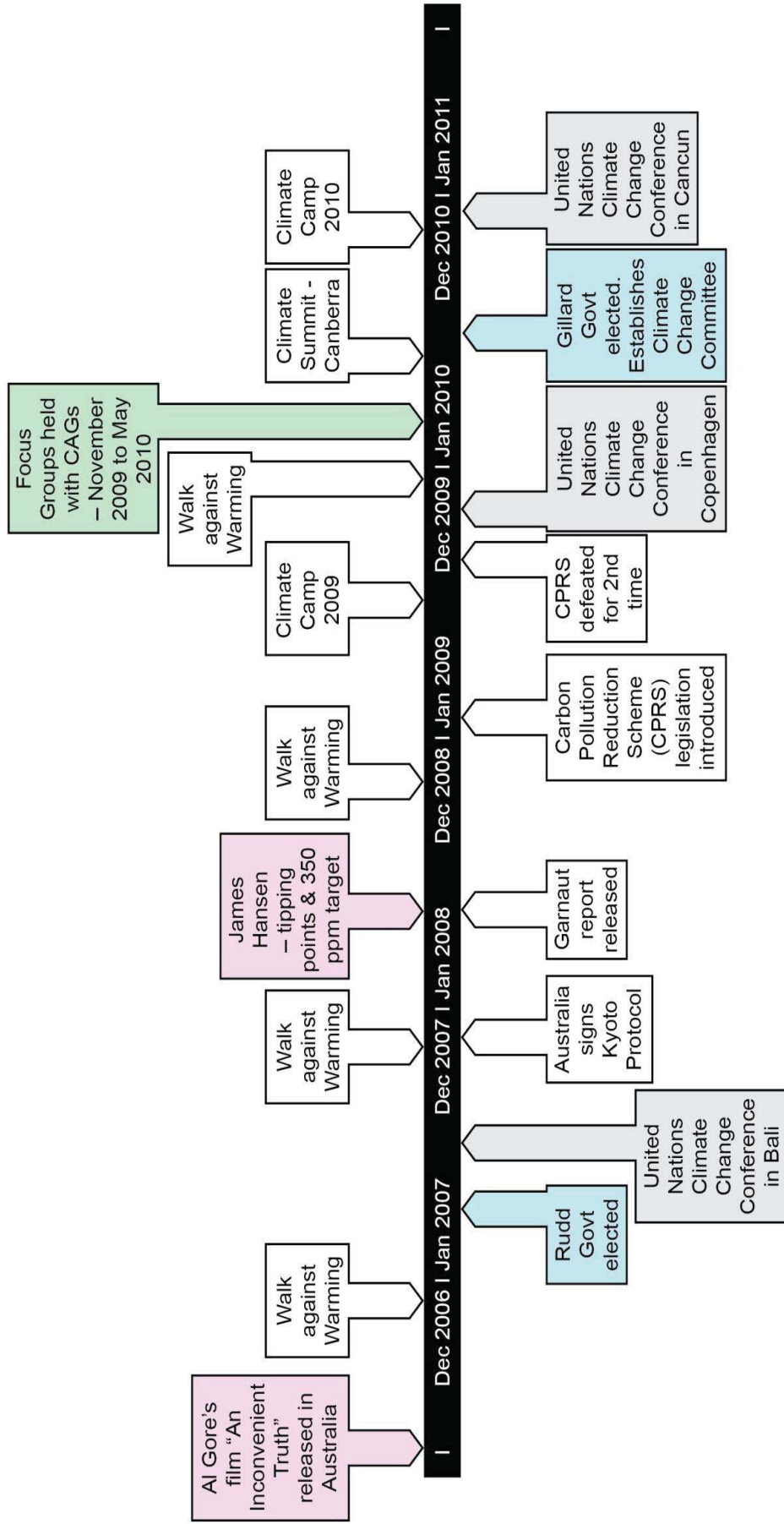


Figure 5: Timeline

6.3 Case study context

The focus groups, which form the prime data source for this multiple case study of Australian CAGs, were held between November 2009 and May 2010 in a period of considerable flux in climate change politics both within Australia and internationally (see Figure 5 – Timeline). The sections below discuss several significant events that occurred around this time and which have a bearing on the research outcomes.

6.3.1 2009 Copenhagen Climate Conference

Soon after the election of the Rudd Government in 2007, the Australian Prime Minister moved quickly to ratify the Kyoto Protocol, a significant pre-election promise (Hall et al. 2010). The release of the Garnaut Review (Garnaut 2008) recommending concerted Australian action to reduce greenhouse gas (GHG) emissions and the subsequent development of the Carbon Pollution Reduction Scheme (CPRS) (Australian Government 2008) heralded a new era within Australian climate politics. After 12 years of conservative government and relative inaction on climate change (Hall et al. 2010; Jones 2010; Rootes 2008), this period saw the Australian government taking climate change seriously and it became an issue of hot political debate.

Following increasingly dire warnings from the scientific community regarding the potential risk of catastrophic climate change before the end of the century (e.g. University of Copenhagen 2009); the United Nations Climate Change Conference in Copenhagen (COP15) in December 2009 represented the pinnacle of hopes for action on climate change, particularly for eNGOs and concerned sectors of civil society (Fisher 2010). For many, Copenhagen offered the promise of tangible emission reduction commitments from the major GHG polluting nations (Doelle 2010; Dimitrov 2010).

Midway through the climate talks on 12 December 2009, an international day of climate action saw civil society actions across the world – 100,000 people marched in Copenhagen whilst approximately the same number gathered at events held throughout Australia in capital cities and major towns.⁶⁰ The hopes of many within civil society

⁶⁰“Massive turnout for Walk against Warming”, <http://www.abc.net.au/news/stories/2009/12/12/2769874.htm> accessed 24 June 2011.

rested on achieving a fair, ambitious and binding⁶¹ international agreement that would lock in action to limit the rise in global temperatures to below two degrees.

Illustrating the perception within grassroots groups of the importance of the Copenhagen Climate Conference, several members of Australian CAGs attended the Conference and gained access to the formal negotiation venue through their CANA membership. I also attended and interviewed three CAG members for this research (see listing in Appendix A). Two of those interviewed were involved in an inner city CAG and had attended Copenhagen with the view to creating a positive public image of activists and activism and to contributing to broader outcomes by advocating for a binding treaty and finance for mitigation and adaptation measures targeting developing nations. Their focus was on civil society engagement and on influencing Australian delegates to COP15 as well as the Australian public more broadly. The other CAG member interviewed was from a rural CAG involved in developing a community solar farm. Her motivations for attending were related to developing knowledge and networks that would assist her group in their project, and to civil society engagement in Copenhagen and on return within Australia, particularly with local communities involved in the solar farm project.

Rather than representing a particular and/or united civil society presence in Copenhagen the presence of these CAG members at Copenhagen was indicative of the local, community and Australian-focused interests of CAGs within a broader global civil society sphere. As Penelope⁶² (46, NSW CAG member) states:

I think we need to do what we can as individuals, also as a community and we can't let government off the hook to play their part.

The outcome of the Copenhagen Climate Conference was a disappointment to eNGOs and civil society organisations campaigning for a fair, ambitious and binding global treaty. Despite the unprecedented attendance of 120 political leaders (McGregor 2011) in the final days of the conference (including the President of the United States of

⁶¹ Naidoo, K. "A fair, ambitious and binding deal", <http://www.nytimes.com/2009/12/11/opinion/11iht-ednaidoo.html>. Accessed 24 June 2011. The major contingent from civil society (primarily representing environmental NGOs and social justice NGOs) present at the Copenhagen Climate Conference came together under this slogan.

⁶² Not her real name.

America, Barack Obama), the majority of commentators described the conference as a failure (Christoff 2010; Dimitrov 2010; Doelle 2010; Rogelj et al. 2010). The outcome of the Copenhagen Climate Conference was the non-binding Copenhagen Accord. It had been hoped that COP15 would secure binding commitments to GHG reductions which would ensure that global warming in the 21st century did not exceed two degrees (den Elzen et al. 2010). The Copenhagen Accord failed to deliver this outcome.

For some months following Copenhagen there was considerable soul searching amongst attending Australian eNGOs regarding the outcomes of the international negotiations. CAGs, in contrast, appeared less directly impacted. Consistent with their local and community based concerns they focused their attention on matters of local, regional, state and national significance. This was consistent with the prevailing mood that I found among those who attended Klimaforum⁶³ in Copenhagen. At Klimaforum there was little faith in a positive global outcome being reached through the formal negotiations. Instead, people's optimism lay with the capacity of the many local and community-based actions from around the world being showcased at Copenhagen.

A number of circumstances led to a dramatic reduction in the number of civil society representatives admitted to the Copenhagen Climate Change Conference venue, the Bella Center, in the final days of the talks. The unprecedented level of interest in the Copenhagen talks led to high numbers of registrants. Fisher (2010), for example, notes that for the first time in Copenhagen "more than two-thirds of those registered (20,611 individuals) were NGO observers" (p. 12). However the venue was capable of holding only 15,000 delegates, and further restrictions put in place in the final days meant that a mere 300 representatives from NGOs attended (McGregor 2011). Direct actions by some NGOs within the Bella Center resulted in the revocation of accreditation of several high profile international NGOs (Fisher 2010). According to Fisher (2010), the heightened presence of an international, coordinated, climate justice movement (Jamison 2010; Doherty & Doyle 2008) in organised protests, direct actions and civil disobedience outside the venue and in the city of Copenhagen more broadly, created

⁶³ Klimaforum was a free grassroots "People's Summit" held at the same time as the United Nations Copenhagen Climate Conference. Klimaforum attracted in the order of 50,000 people in Copenhagen in 2009 and has been held at subsequent climate change conferences. <http://klimaforum.org/>, accessed 5 March 2012.

“disenfranchisement”.⁶⁴ Fisher (2010) asserts that this will trigger diminished participation in future UNFCCC negotiations⁶⁵, a harbinger of the future role of civil society both ‘inside’ and ‘outside’ the formal United Nations processes.

Whilst the United Nations formally recognises civil society representatives as valuable actors in environmental decision making (Principle 10 of the [Rio Declaration](#) states that “environmental issues are best handled with the participation of all concerned citizens”), in effect the participation of citizens beyond the purview of the nation-state is limited. Civil society participation may be encouraged in theory but in practice there are practical and structural limitations that prevent “all concerned citizens” (United Nations 1992) from engaging discursively with the formal United Nations negotiations on climate change or even from attempting to ensure that their individual or national interests are represented (Saward 2008).

The final days of the Copenhagen climate talks, and in particular the final negotiation of the Copenhagen Accord where the majority of civil society observers were ‘locked out’ of the conference venue, generated a high degree of criticism. As a result, Climate Action Network International, which represents a coalition of 500 environment and development NGOs, called on the COP President to ensure better engagement of civil society in future negotiations. The President of Bolivia, one of the six dissenting nations to the Copenhagen Accord (Houser 2010), established the World People’s Conference on Climate Change and the Rights of Mother Earth (held in Cochabamba in April 2010). The aim of the World People’s Conference was to challenge the dominant ecological modernisation discourse (Bäckstrand & Lovbrand 2007; Dryzek et al. 2003; Dryzek 1995; Hajer 1995) under the UNFCCC and to propose an alternative grassroots and indigenous-focused “green radicalism” (Stevenson & Dryzek 2010). These examples highlight that citizen engagement in the global governance of climate change needs to overcome the significant privileging of participation by well resourced states and other powerful stakeholders with the most to lose through ambitious action on climate change. They also highlight that citizen engagement needs to involve a broader

⁶⁴ Fisher (2010) defines disenfranchisement as “being deprived of the capability to participate and to influence agenda-setting and decision-making (Fisher and Green 2004: 69).”

⁶⁵ Fisher implies that this will result from a form of punitive action from the UNFCCC, a claim which cannot be supported with current UNFCCC statements.

range of audiences and deliberation mechanisms to ensure that differing perspectives and worldviews are heard.

The level of public protest in Copenhagen also raises questions about the types of discursive engagement civil society should legitimately initiate within the global governance of climate change negotiations. How, for example, can the dual role of civil society as both participant in, and critic of, the climate regime be reconciled? How can the exclusionary power of selective discourses and epistemologies framed within the prevailing scientific understanding of climate change be challenged by other ways of knowing such as indigenous, sustainable and local forms of knowledge? These questions arose for me from my attendance and involvement in civil society events in Copenhagen (see Kent 2010) but are not specifically addressed in my research. Rather, they form part of the context for my engagement with CAGs.

6.3.2 After Copenhagen

Following Copenhagen, the UNFCCC processes came under some criticism, with several commentators questioning whether the UN processes are amenable to developing a global treaty that can curb dangerous climate change within the timeframe required (Dimitrov 2010; Doelle 2010; den Elzen et al. 2010). The unprecedented scale of interest and involvement from civil society in the global climate change negotiations also calls into question the capacity of the current mainstream negotiations to adequately address the concerns of global citizens on the most pressing social issue of our time, and in this sense the 2009 Climate Change Conference represented a turning point in the relations between civil society and the current regime.

For the most part, the Copenhagen climate talks were considered a failure by civil society (Dimitrov 2010; Fisher 2010; McGregor 2011). The Copenhagen Accord, the non-binding agreement noted by COP15, established a less than ambitious range of national commitments to reducing greenhouse gas emissions. In particular, combined national commitments remain insufficient (Climate Analytics & Ecofys 2011) to avoid dangerous climate change, a stated commitment of the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the more recent Copenhagen Accord. At the emission reduction rates contained in current national pledges, global

warming of at least 3 degrees could be expected by the end of this century.⁶⁶ The conference therefore failed to achieve its aim of developing a pathway to rapidly curtail emissions and ensure that those most at risk from the impacts of climate change are protected from harm.

The results of the international talks were not only a disappointment in terms of failing to reach a binding international agreement but also cemented for civil society groups a heightened distrust in national governments' commitments to curbing business as usual pathways of economic growth and increasing greenhouse pollution. Australia's retreat from its aspiration to be a leader and 'game-changer' in the Copenhagen talks (Jones 2010) was disappointing for Australian climate action advocates. Australia's Copenhagen Accord pledge of an unconditional 5% reduction in greenhouse gas levels by 2020 based on 2000 levels (or 15% by 2020 if a global agreement is reached, or 25% if additional conditions are met) (McKibbin et al. 2010) remains government policy. However, these targets are insufficient to produce the GHG reductions required to limit global warming to two degrees by the end of the century (see footnote 3).

As Kelly (2009) notes, Australian eNGOs closely involved in the Copenhagen Climate talks held substantial hopes for a binding and ambitious agreement. Despite the bitterly disappointing result, the grassroots movement was largely sheltered from the processes of 'demobilisation' (Kelly 2009) post Copenhagen and turned its attention to the shifting landscape of Australian climate politics.

6.3.3 The Changing Australian Political Landscape

Climate change as a political issue has probably had a greater effect in Australia than any other nation (Jones 2010, p. 4).

The issue of climate change helped the Australian Labor Party to sweep into government in 2007 following 12 years of conservative rule (Rootes 2008; Jones 2010). It was also the primary cause of Labor's near defeat in the elections just three years later (Rootes 2011). The Carbon Pollution Reduction Scheme (CPRS) legislation which would have established an Australian emissions trading scheme was a key plank of

⁶⁶ <http://climateactiontracker.org/news/116/Durban-Agreements-a-step-towards-a-global-agreement-but-risk-of-exceeding-3C-warming-remains-scientists.html>, accessed 1 February 2012

Labor's climate change policy platform but failed to win parliamentary support. The CPRS legislation was rejected twice in the Australian Senate.⁶⁷ Opposition to the CPRS came from a hostile, sceptical and industry-supporting Coalition which argued that the legislation went too far (Jones 2010) and from the Australian Greens who decided not to support the legislation because it did not go far enough. The Senate's failure to pass the legislation gave the Labor government under Kevin Rudd a trigger for a double dissolution⁶⁸ and a new election around the issue (Rootes 2011). Instead, in what was perceived as a betrayal of public trust on the "great moral, economic and social challenge of our time" (Jones 2010, p. 9), Rudd deferred the CPRS until 2013. Stepping back from this election commitment was seen as a huge betrayal of trust by CAG members. As David (63, VIC4) said:

I'm an old Labor voter and they promised this was, this is the issue of our times and they promised and they lied and I'm furious at the Labor Party, absolutely furious, so I'm compelled by that.

The deferral of the CPRS, considered Rudd's "worst mistake" (Rootes 2011, p. 412) contributed to a haemorrhaging of electoral support for the incumbent Prime Minister, largely to the Australian Greens (Rootes 2011). With an election looming, Rudd was dumped from the leadership to be replaced by Julia Gillard in June 2010 (Rootes 2011). It is in this climate of eroded public trust and failure of government leadership on climate change that the majority of my research was conducted. Seven out of the eight focus groups were undertaken during this time.

Climate change rated barely a mention in the 2010 election (Jones 2010). Labor's major climate change policy proposal centred on the creation of a "much-derided citizen's assembly to generate consensus on measures to address climate change" (Rootes 2011, p. 412), indicative of the "near-pathological risk-aversion" (p. 412) evident in government policy making around climate change at this time. The election resulted in a

⁶⁷ The Australian Senate is one of two Houses of Parliament. The Senate consists of 76 senators elected from each Australian state and territory under a system of proportional representation. Together with the House of Representatives the two houses share the power to make laws. Under Australia's Constitution both houses are required to pass any new legislation. <http://www.aph.gov.au/senate/pubs/brochure/index.htm>, accessed 13 January 2012.

⁶⁸ "The Constitution provides a method for resolving deadlocks which might arise in the event of a disagreement between the houses. If the Senate twice fails to pass a bill from the House of Representatives, under certain specified conditions, the Governor-General may simultaneously dissolve both houses, in which case elections are held for all seats in both houses." <http://www.aph.gov.au/senate/pubs/brochure/index.htm>, accessed 13 January 2012. This is known as a double dissolution.

hung parliament⁶⁹ with Labor managing to remain in government only by gaining the support of the Australian Greens and three independents. One of the conditions for their support was the implementation of a climate change policy, including a price on carbon. In October 2010, the government established the Multi-Party Climate Change Committee (MPCCC) to investigate options for establishing a price on carbon and to build community understanding and support (Jones 2010).

From 1 July 2011, the Senate gained additional Green parliamentarians, who together with key independents established a more favourable environment for progressive climate change policy in Australia. The Clean Energy Legislative Package passed into law on 8 November 2011.⁷⁰ The main features of the Package⁷¹ are: the *Clean Energy Act 2011* which establishes a carbon pricing mechanism due to come into force from 1 July 2012; the establishment of the Climate Change Authority which will be responsible for setting carbon pollution caps and reviewing the carbon price mechanisms and other climate change laws; and the establishment of the Clean Energy Regulator for administering and enforcing the carbon price, and for overseeing a national energy reporting system, and for other initiatives targeting renewable energy and GHG emissions from agriculture.

6.4 Summary

In summary, the development of my multiple case study of Australian CAGs occurred during a period of significant flux in climate change politics both in Australia and overseas. CAGs demonstrated considerable resilience in the face of the less than favourable outcomes of the United Nations Copenhagen Climate Conference in late 2009. Whilst many Australian eNGOs advocating for ambitious climate change policy entered a period of serious soul searching and sought a new direction for their advocacy work, CAGs continued to focus on their local campaigns.

⁶⁹ “A hung Parliament results when no party has more than half the MPs in the House of Representatives, which means no party can pass laws without gaining support from other parties or independent members of the House”, Liddy, M. (2011), “Australia's hung Parliament explained” ABC News, 17 November 2011, <http://www.abc.net.au/news/2010-08-23/australias-hung-parliament-explained/954880>, accessed 13 January 2012.

⁷⁰ See <http://www.climatechange.gov.au/media/whats-new/clean-energy-legislation.aspx>, accessed 18 December 2011.

⁷¹ See <http://www.climatechange.gov.au/en/government/clean-energy-future/legislation.aspx>, accessed 13 January 2012.

Given the more community-focused grassroots concerns of CAGs, the national climate policy upheavals have likely weighed more heavily than the failure of COP15 on Australian CAG members. The perception of the “moral failure” (Jones 2010) of successive Australian governments to act decisively and with a strong intention to curtail carbon emissions has fuelled public distrust. The lessening of public concern regarding climate change within Australia over recent years is a concerning trend. It is within these social and political landscapes that my research with CAGs was undertaken. Before discussing the Australian CAG case study in the light of my literature review, theoretical frameworks and the social and political trends that background the conduct of my research (Chapters 7 and 8), I outline the primary and secondary themes from my multiple case study.

6.5 Themes from a Multiple Case Study of Australian CAGs

As discussed in Chapter 5, my multiple case study of Australian CAGs was developed around two sets of themes (summarised below). The primary themes listed in section 5.5.2.4 were defined by my research questions (see section 1.3.4) that have guided my research. A series of focus group questions was derived from these research questions. The secondary themes (outlined in brief below) emerged out of the focus group discussions themselves. These vary across each case: some themes arose in several of the focus groups; others were triggered from particular group discussions, or were otherwise prompted by some aspect of my literature review.

6.5.1 Primary Themes

Motivation for voluntary action on climate change

Participants reported varying reasons for taking voluntary action on climate change. These ranged from concerns for: their children or grandchildren; nature and the environment; resource conservation; and social justice. For the most part participants demonstrated a high degree of knowledge of the science of climate change which fed their motivation for action. In most groups participants mentioned Al Gore’s film, *An Inconvenient Truth*, as important in generating their awareness of climate change as an issue. Underpinning their concerns was a strong desire to “do the right thing”, indicating that their actions were based on a sense of moral obligation.

Types of individual and collective (group) action undertaken

The types of action taken by participants varied considerably across the groups. In terms of individual actions, participants were engaging in such activities as: retrofitting their homes for lower carbon emissions; using public transport or cycling rather than driving a car; becoming vegetarian; and turning off their hot water systems. The types of actions undertaken by CAG participants both individually and collectively were distinct from those of the general public (see section 3.2) in that CAG members are taking actions requiring significant investments in time and money. Some of the lifestyle practices adopted by CAG members go well beyond what would be considered normed social behaviours as they involve a considerable degree of discomfort. Group activities included: overt political campaigns, lobbying and direct action; community education and awareness raising; and bulk buying of solar panels.

Individual and collective agency around climate change

Participants stressed the importance of their individual responsibility for action on climate change but understood that this responsibility needs to be shared with other social actors, and in particular with government. According to the CAG participants, governments hold the power to create the changes required to transition to a low carbon emissions pathway. Most groups were highly politically engaged and saw their role in collective action in influencing government policy and practice. The groups worked to support and enhance their individual agency by increasing confidence; providing skills in their political practices and fostering reflexivity.

Constraints and enablements for action

Participants identified many different reasons why others in the community failed to get involved in action on climate change. These included: apathy, denial, fear, ignorance, feeling disempowered, lack of immediate danger and an increase in individualism within society. On the other hand constraints for the participants were almost universally expressed as a lack of time, money and energy. Enabling aspects of the groups were mostly associated with their providing support, skills and confidence.

Scale of influence and action

For the most part, participants sought to influence their families, members of their local communities and their local politicians. They sought to expand their influence by recruiting more members to their groups and by linking with other local community organisations, including other CAGs in their region, state or Australia-wide. Participants were often involved in other community initiatives related to the environment or social justice issues. Several participants noted the importance of building greater community resilience as a type of insurance against the prospect of future climatic catastrophe.

Communicating climate change

On several occasions time ran out in the focus groups when they were discussing the question of how groups communicate around climate change. However, throughout each group discussion mention was often made of the different communication tools that groups use and the nature of their communication with their local community audiences. For some groups, their focus was on encouraging community members to undertake small and simple steps towards a more sustainable and less carbon intensive lifestyle. Others took on a more overt political role through, for example, being involved in actions to publicly shame their local political member. Influencing public opinion was another strong element of their communication strategies and involved letter writing to the local newspaper and use of the internet and social networking.

6.5.2 Secondary Themes

As mentioned above, secondary themes arose out of each focus group discussion. Significant themes that I draw from in my discussion in chapters 7 and 8 are outlined below. Appendix F includes the case study narratives developed for each CAG focus group.

Climate change as a reflexive heuristic

Climate change brought together a range of complex and multifaceted issues and concerns for CAG participants which resonated with their post-materialist concerns. For some CAG participants climate change was representative of a continuing social trend towards *unsustainability*. Climate change operated as a “reflexive heuristic”, focusing

their interests and concerns regarding a broader range of environmental and social concerns.

People like me

It quickly became evident that the focus group participants were representative of a particular 'elite' – mainly middle class, white, highly educated and financially secure. Groups were mostly cognisant that their active membership was not particularly diverse and that they attracted similar, 'like-minded' people to their CAGs. However, the fact that group members shared similar values, lifestyles and backgrounds offered advantages in terms of group cohesion, identity and a sense of common purpose. Participants also noted that this resulted in less conflict and enhanced collective action.

Emotional toll of action

Often there came a point in the focus group discussions where participants reflected on their emotional engagement with climate change as an issue. This arose spontaneously on several occasions after the formal questions and often revealed deep feelings of sadness and despair. Participants expressed the difficulty of engaging with climate change as an issue given their knowledge of its potentially catastrophic consequences.

Importance of place

CAGs arise out of their particular community contexts. One theme that emerged from several of the focus group discussions was the influence of their specific community to the type of action that they were involved in. This was particularly telling for groups that emerged from communities that displayed greater levels of community cohesion or social capital. There was a strong association of place for the CAG participants of these groups that matched their communities of interest (i.e. their community consisted of many 'like-minded' people). It was not clear whether the type of geographic location was particularly relevant here as the importance of place was expressed by both rural and inner city CAGs alike.

Metaphors for change

Some interesting metaphors emerged when groups considered their visions for change. Often the metaphor reflected an idea of diffusion from CAG action into a wider public acceptance and involvement in climate change action. These types of allegories included: a ripple, knock-on effect, scattering seeds. Others expressed an idea of replication, for example: catalysts, inoculants, “virus for good”. Probably my favourite though is the use of a tapestry as a metaphor for social change. This expresses to me something rich, colourful, complex and beautiful.

6.6 Conclusion

The aim of this chapter was to provide important background and context to my multiple case study of Australian Climate Action Groups. The case study narratives developed from focus group discussions conducted with eight CAGs are provided in full in Appendix F. I have provided a brief overview of the primary and secondary themes that emerged from each CAG case here. These themes are examined and discussed in detail in the following chapters.

CHAPTER 7 – THE ROLE OF AGENCY IN CLIMATE ACTION

7.1 Introduction

A constructivist position on the social conditions that surround community-based climate action (section 2.2.1) considers the essential co-dependent nature of the relationship between actors (individual entities, organisations and the like), and structure (the rules and resources that shape human behaviour). In Chapter 3, I argue that there is an inherent emphasis in developed societies on locating responsibility for climate change, both in terms of its causes and effects, with individual actors. The expectation is that, through their “personal private-sphere” behaviours (Stern 2005), actors possess the ability to effectively reduce their greenhouse gas emissions. This “individualization of responsibility” (Maniates 2002) for climate change mitigation takes place in the context of a neoliberal discourse that is dominant throughout the developed world (Harvey 2006; Maniates 2002; Matravers 2007) so that the political ideology of individualism now extends into each person’s lifestyle choices and behaviours (Matravers 2007, p. 73).

This raises significant questions around the promotion of individualised responsibility for climate change mitigation in the context of broader social change. In particular, it raises the question of whether the adoption of individual ‘carbon conducts’⁷² (Paterson & Stripple 2010) will lead to the collective uptake of social practices of carbon reduction or indeed whether individual action will challenge structurally embedded high GHG emitting behaviours. I argue therefore that due to a range of constraints on personal actions, individual agency is being significantly thwarted and that broad social change demands concomitant changes to social (collective) and cultural practices. I addressed these matters in my literature review in Chapter 3. Chapter 3 responds to my first research aim, namely to determine why and how individuals take responsibility for climate change through their voluntary actions.

⁷² Paterson & Stripple (2010) describe five ‘carbon conducts’ commonly promoted for individual and/or household uptake: carbon footprinting, carbon offsetting, carbon dieting, carbon reduction action groups (CRAGs) and personal carbon allowances.

In this chapter, I address more directly the question of whether the individualisation of responsibility for voluntary climate change action will lead to broader processes of societal change. I do so by drawing on the results of my empirical research with community-based, grassroots Climate Action Groups. In particular, this chapter addresses my second research aim (RA2): to determine how the shift occurs from individual agency to collective agency in grassroots climate change action.

Prior to more detailed discussion on the results of my research on Australian CAGs, I offer a brief recap of some of the key understandings that I developed in Chapter 3. This is critical to the development of a model that aims to describe how individual responsibility for climate change action is enhanced through forms of grassroots collective action and can lead to broader social change processes. This final element, related to my third research aim (RA3), is considered further in Chapter 8.

I made the argument in section 3.6 that individual responsibility for climate change action needs to be understood within the context of what Giddens (1984) describes as the “duality of structure”. As structures are both enabling and constraining, they provide “both the medium and the outcome of action” (Grin et al. 2010, p. 42). In accordance with this position, the predominant approach to climate change action promoted at the individual and household scale is flawed as it encourages atomistic and inconsequential action and does not address the structural limitations that reinforce continuing cycles of *unsustainability* (section 3.3.3). Further, I argue here that people like those that form the basis of my research (i.e. members of community-based collectives such as CAGs), are able to take voluntary action to mitigate the effects of climate change because CAGs possess particular characteristics and are able to surmount the constraints that reinforce the status quo. In this way, CAGs represent one potential model for community-scale climate action success.

Middlemiss (2010) has recently taken up this point. Her interest is in the relationship between agency and structure in theoretical approaches to sustainable consumption. Middlemiss (2010) sets up a theoretical framework that focuses on the tension between an *agency-oriented* (which she calls “individualist”) perspective of individual responsibility (consistent with Scerri (2009) and Maniates (2002), for example) with an approach borne out of *structuration* (which she calls “situated”) where individual

agency is conditioned by structural enablements and constraints (consistent with Beck 1992), Giddens (1984) and Spaargaren & Moll (2008), for example). This lends an important perspective to my understanding of the tension in the two positions described above. I employed Middlemiss’s theoretical framework to develop the diagram below.

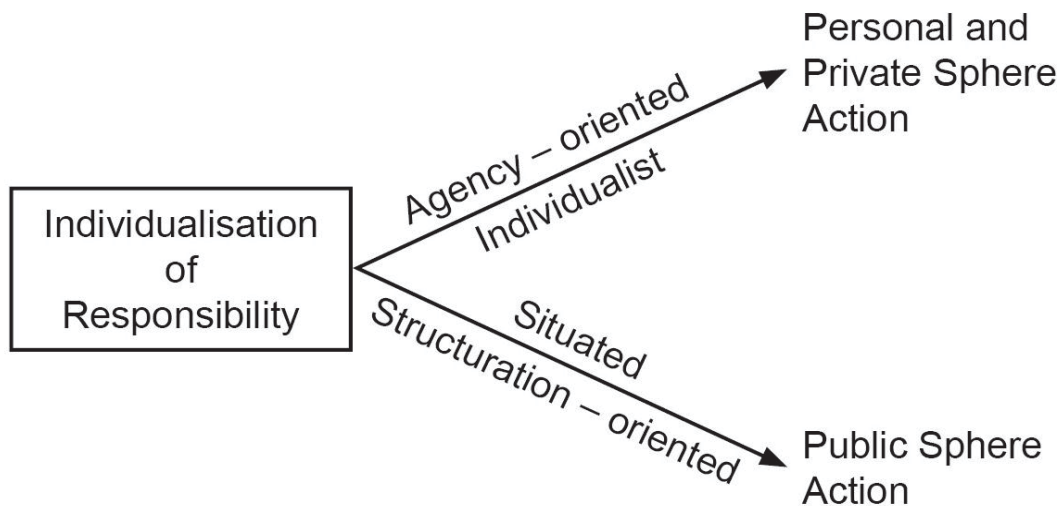


Figure 6: Individualisation of responsibility (developed from Middlemiss (2010))

The important point here is the differences between an agency-oriented (individualist) approach and a structuration perspective on the individualisation of responsibility. An agency-oriented approach leads to the individualisation of responsibility played out in personal and private sphere behaviour or otherwise leads to disempowerment and denial. In contrast, a structuration perspective on the individualisation of responsibility suggests that individual actors undertake action within their personal and private spheres but remain reflective of the systemic conditions that both structure and restructure their respective interplay. Based on this understanding, actors come together in collective, public sphere action.

In what ways then are members of CAGs expressive of agency on climate change? Firstly, my research reveals that CAG memberships consist of a particular type of person (section 7.7.1) – one who not only enacts their responsibility for climate change in their personal and private spheres of behaviour but is also aware of the limitations of this action. Their action is ‘situated’ (Middlemiss 2010) within its social context where it is understood that to be effective, action needs to be politically focused, collective and conducted in the public sphere. Secondly, the constraints to agency (discussed in section 3.6.1) of individuals who join CAGs are overcome through their involvement with their

group. They are personally empowered and reflexive around their action on climate change. CAGs are therefore expressive of a collective agency where the whole is greater than the sum of its parts. In other words, individual agents active on climate change within their local communities realise the advantages of group actions that cannot be explained on the basis of their individual agency alone. My research therefore agrees with Lorenzoni et al. (2007) who find that:

The majority of individuals consulted in our studies accepted that individuals play a role in causing climate change and that they should be involved in action to mitigate it. On the whole however they felt that individual action would have little effect in comparison to other, large scale emitters. Participants generally argued that it was not worthwhile taking action at this individual level given its limited efficacy. They certainly saw climate change as a collective problem to be tackled at a collective level (pp. 452-3).

But beyond this I propose that my research generates an understanding of a developmental process at play that determines why certain people join with others in collective climate change action, and others do not. This process is mapped in the diagram below and explained throughout the following sections.

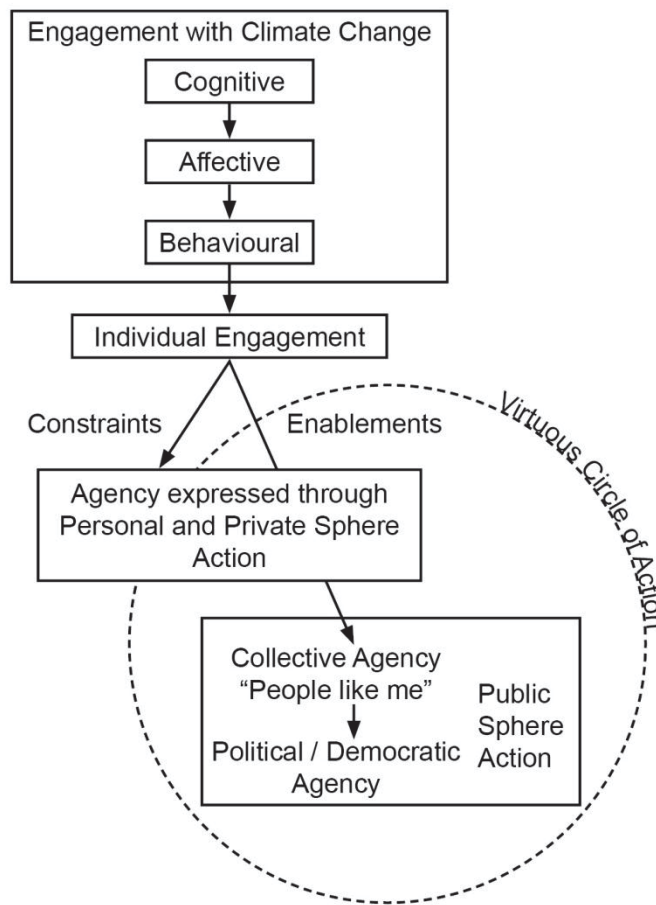


Figure 7: Process model for voluntary climate change action

7.2 How do members of CAGs express their responsibility for taking action on climate change?

In Chapter 3 and in section 7.1 above, I establish that the individualisation of responsibility for action on climate change can be considered to follow one of two distinct pathways (Figure 6). I argue that the individualisation of responsibility acted out through personal private-sphere behaviour (where the focus is on changing individual practices, for example, changing household lightbulbs or taking public transport rather than driving a car) represents ‘agency-oriented’ behaviour (Middlemiss 2010). Whilst an individualisation of responsibility acted out through political and public sphere action represents ‘situated’ (Middlemiss 2010) behaviour, where actors link their behaviour to the “social determinants of practice” (Middlemiss 2010, p. 152). In other words, they acknowledge the structural enablements and constraints to their individual and collective agency.

Middlemiss found that her research participants (members of a church-based ecology group focused on sustainable consumption) tended to express their responsibility for sustainable consumption in individualistic rather than collective terms. In particular, they separated their individual responsibility from politics and “rarely linked the responsibility for sustainable consumption to structural players (e.g. business and government)” (Middlemiss 2010, p. 151). In contrast, CAG members expressed their responsibility for taking climate change mitigation action in terms of a shared responsibility where government has a significant role, expressed in the words of Bill and Bernadette below:

We're all responsible, in the sense that we've all contributed to climate change, and we all do what little we can ourselves, but solutions in the sense we're looking at whose responsible for changing it, its gotta be broader large-scale political change (Bill, 60, NSW1).

It's gotta come from the government, its gotta come from above and just, this is an emergency and we really need to, and that's what our job is to try and open the government's eyes and ears and minds to what the people are saying: this is an emergency, get on with it you know (Bernadette, 72, VIC3).

CAG members described their responsibility for taking action on climate change in both individual and collective terms. However, for most (like Bill above), responsibility for climate change extended well beyond the individual’s private sphere actions into the public and political arenas. Given the non-partisan nature of CAGs, their focus on political action may be representative of the perceived failure of the political process, as indicated by Bernadette.

CAG members possess individual agency, complemented by the benefits the group provides. As David (63, VIC4) states:

Mmm, well I think that's right being part of a group is certainly part of it, umm, ahh, I think though I would act anyway ineffectively, ineffective as it might be and unconfident as I may be, probably would be, I would still be giving it a go. I know I was, I did before, you know.

The group facilitates individual agency through: enhancing member confidence and commitment to take action (particularly political forms of action); building trust between group members; development of a group profile that provides legitimacy, authenticity and authority for their actions; and contributing to a public good. In several cases, participants noted that they would not have been confident in taking political action alone and that the group provided a supportive and safe environment for testing their convictions through riskier forms of activism.

Well that's what we're in it for, that's what we join a group for so we can take community action. A person on your own you wouldn't be motivated or you wouldn't be feeling up to it or you'd feel shy or, you know, but when you're with some other people it makes all the difference (Bernadette, 72, VIC3).

According to Louis (2009), collective action “can be psychologically motivating when it expresses group emotions such as anger, moral outrage or guilt” (p. 729) and can work in “a virtuous circle of action and reinforcement even in the absence of movement “success”” (p. 730), expressive of the reinforcing effect described above. The group as a “real-life social group” (Simon & Klandermans 2001) provides an avenue for convergence around a shared opinion or common cause. The issue of climate change forms the basis of moral concern and responsibility to take action. Areas of conflict are reduced and the group comes to share similar ideas, which also ‘make things possible’.

Group members also learn from each other and from their actions (both individual and collective) so that the group becomes a place for social learning. Members gain a greater understanding of climate change but also the opportunity to discuss and reflect within the group setting. In this way, CAGs demonstrate “social learning in practice” (Moloney et al. 2010; p. 7622).

According to Reed et al. (2010, p. 5) *social learning* consists of the following three elements: it demonstrates that a change in understanding has taken place in the individuals involved; it goes beyond the individual to be situated within wider social units or communities of practice within society; and it occurs through social interactions

and processes between actors within a social network. This type of citizen engagement “schools” (Hendriks 2006) CAG members in a view of democracy that is allied with a generative notion of power (‘power-with’) that comes from association with others and sharing something together (Hendriks 2009, p. 178).

Members of CAGs express their responsibility for taking action on climate change both individually and collectively. They perceive responsibility as something which is shared between a government and its citizens. Moreover, in the face of government inaction on climate change, CAG members express legitimacy, authority and authenticity. The group enhances each individual’s agency, providing confidence, skills and a place for shared learning and reflection.

7.3 What motivates CAG members to take action on climate change?

Individual participants were motivated to take action around climate change for varying reasons. These included: a primary concern for nature and the environment; perceived government inaction; concern for future generations (older participants in particular noted concern for their grandchildren); a response to overconsumption and wastefulness; a concern for social justice; and as an expression of community service, caring and resilience. For some participants climate change is representative of a broader more holistic problem characterised by human *unsustainability*.

For the most part, participants were well informed regarding the science of climate change, believed that it is anthropogenically produced and agreed on the need for urgent and concerted action to mitigate its effects. How they ‘know’ climate change was a key motivation for group involvement (section 2.3).

Further, their knowledge increased over time about the risks that climate change poses and this worked to create even greater motivation to act.

.... for me, I feel like I didn’t really, really understand the problem until two years after the climate group had already been running and my ... my personal motivation went to a whole new level after that. It was just like that this, I, you know, have to devote my life to this now (Lenore, 28, NSW2).

Not all participants however were convinced of global warming; two positioned themselves as sceptical of the science but otherwise concerned more generally with issues of local and global environmental sustainability, exemplified in Jerry's words below.

I suppose I look at it more as sustainability not climate change ... (Jerry, 63, VIC2).

Underpinning the cognitive awareness of climate change evident in the focus group participants' responses was a deeper moral attachment to the issue which created a strong sense of individual responsibility and willingness to take action. For some participants understanding the science of climate change had become obsolete in the face of government intransigence and the level of inaction around the issue. The more salient issue was the moral basis to act.

the other thing for me that I feel is a moral thing, it's tied up in so many different philosophies and religions and lessons in life (Jackie, 39, NSW4).

CAG members were motivated to take action on climate change for varying reasons, such as a concern for: family, nature and the environment; overconsumption and wastefulness; political inaction; or social justice. For the most part their motivations around climate change stemmed initially from an understanding of the science on climate change but it is a sense of moral obligation that drives them in their personal action and their decisions to seek out and join with 'like-minded' others.

7.4 How do CAG members engage with climate change as an issue?

Lorenzoni et al. (2007) offer three preconditions for effective individual engagement, which they define as:

a personal **state** of connection with the issue of climate change, in contrast to engagement solely as a **process** of public participation in policy making (p. 446).

Engagement with climate change, according to the authors, requires the concurrent aspects of the *cognitive, affective and behavioural*.

In other words it is not enough for people to know about climate change in order to be engaged; they also need to care about it, be motivated and able to take action (Lorenzoni et al. 2007, p. 446).

These three aspects of engagement are reflected in the CAG focus group data discussed below.

7.4.1 Cognitive

The thing is if you look at the Goddard Institute of NASA look at the, look at the data coming through and there's no argument the data's there. So people need to look at the data (Jeffrey, 64, VIC3).

I just feel that I've got too much knowledge to ignore it. I couldn't live with myself if I didn't do anything about climate change (Mandy, 32, VIC1).

Irrespective of the constructed nature of climate change knowledge (section 2.2.1), members of CAGs in general displayed great confidence in the scientific underpinnings of climate change. The science of climate change initially alerted participants to the scale, magnitude and consequences of the issue and formed a strong motivator for their action. This understanding was evident within each of the CAGs included in the research and arguably extends to the climate action movement within Australia more generally, as much of the climate movement expresses its concerns around climate change in line with the dominant scientific discourse (Baer 2011). Many of the CAG participants indicated they had formal education in disciplines that gave them either a detailed knowledge of climate science (through science, geography, engineering, agriculture for example) or otherwise, as highly educated people, an ability to grasp the complex nature of the subject. In this way, CAG participants distinguish themselves from the general public based on their ability to understand the implications of scientifically constructed climate change knowledge.

Of particular interest to policymakers is what the public knows about climate change and the motivations underlying their actions. Social research surveys have been used to track these trends over time. They reveal that, whilst in general community understanding of the commonly held scientific explanations of the causes of global warming and the role of humans in contributing to it (Garnaut 2011; Robinson et al. 2011; IPCC 2007) has risen, a significant percentage of the adult Australian population remains confused, misinformed or otherwise ignorant (as discussed in section 3.2). Contributing to public confusion and uncertainty around the climate issue, there is a concerted campaign being waged to discredit both climate science and the credentials of climate scientists more generally (Garnaut 2011; Hamilton 2007; Jones 2010; Pearse 2009).

Most CAGs were established following the Australian release of Al Gore's film, *An Inconvenient Truth*, coinciding with the time of greatest levels of public concern regarding climate change (Nielsen & Environmental Change Institute 2007), and many participants cited the film as a key motivator for the formation of their group. *An Inconvenient Truth* aimed to translate the complex science of climate change, both in terms of its causes and effects, into a readily understood and actionable global problem. Apart from Al Gore, other academic and popular writers have been influential: the writings of James Hansen (2007, 2008) in particular were cited by CAGs. James Hansen, of NASA in the USA and a distinguished climatologist, is a long-term advocate for strong climate change action. He argues for an atmospheric CO₂-equivalent target of 300 ppm (parts per million) and several focus group participants mentioned his discourse on climate tipping points (Hansen 2008; Hansen et al. 2008). For some, 'tipping points' generated a new or renewed sense of urgency around climate change action:

I went to the climate summit at the beginning of last year and heard David Spratt who was talking about tipping points and I'd never really got my head around tipping points before and what that actually meant, like if we hit those points there was no point, there was no way we could return from that, and that's when I really, .. my ..my personal motivation went to a whole new level after that (Lenore, 28, NSW2).

Clive Hamilton (an Australian political economist, philosopher and critical commentator) has also contributed to how CAGs understand climate change. He has published several books on climate change both from a political and philosophical perspective and has spoken at community climate change summits. He gave a keynote address at the 2011 Community Climate Network summit (Hamilton 2011). In *Requiem for a Species: Why We Resist the Truth about Climate Change*, he presents a dire assessment of the ability of the human species to survive ‘runaway’ climate change (Hamilton 2010).

Climate Code Red: the case for emergency action (Spratt & Sutton 2008) influenced the creation of the Climate Emergency Network (CEN) in Victoria. CEN is a coalition of community-based climate action groups “concerned that groups taking climate change science and solutions seriously needed a way to coordinate” (BZE, n.d.). One of my research groups (VIC3) is a member of CEN.

All of these authors (amongst others) posit a climate change-as-catastrophe discourse (Beck 1992, 2006; Hamilton 2010; Hansen 2007; Hulme 2008; Spratt & Sutton 2008). I argue that for the CAG participants this message has contributed to generating a “social scare” (Ungar 1995 cited in Rosa & Dietz 1998) or “moral shock” (Pearse et al. 2010), precipitating their action. According to Rosa and Dietz (1998), issues such as global warming which are communicated through scientific discourse, through scientific elites, require associated “dramatic real-world events” in order to reach lay publics. Ungar (1995), argues that these real-world events “unleash authentic social scares” related to scientific claims. Ungar provides as an example the droughts of the summer of 1988 which first aroused public concern on climate change despite decades of scientific understanding. In my research, the year 2006 arguably provides the same conditions that Ungar describes for creating a “social scare”. Pearse et al. (2010, p. 90) describe “moral shocks” as moments of “awakening” or “disjuncture” where individuals reflect on particular events, creating new forms of understanding and mobilising them towards activism.

In other words, CAG members’ ability to understand the science communicated on climate change, their *cognitive* ability, led to their *affective* engagement with the issue.

7.4.2 Affective

I still thought there was hope ... (group laughs) (Trevor, 39, NSW2).

Whilst a cognitive awareness of climate change may have been the initial inspiration for people's action on climate change, the emotional engagement of CAG participants was a particularly important underlying motivation. There was an affective stimulus at the root of most participants' involvement in climate change action. For some, this related closely to their 'circle of care'.⁷³ Children and grandchildren were an important *raison d'être* for taking action on climate change.

I think the main thing for me is that my kids, I've got four kids and, you know, I'm worried about their future and what it will be like for them so I guess that's one of the main reasons why I do it but also just because I care about what happens to our planet (Raelene, 42, VIC1).

I have seven grandchildren ... but, for the grandchildren I want to set, or my wife and I wish to set some sort of example in the hope that they will become more aware than their parents of the need to ... to act. So it's terribly altruistic (Ken, 74, VIC2).

Family members, however, could also be the most poignant critics of participants' involvement in the group's actions on climate change, creating alienation of some participants from their families. Some participants felt they have more in common with their CAG than their own families. This alienation precipitated some emotional anguish and it was the common identity forged amongst the collective as well as the emotional support of other members that appeared to provide some salve to this situation:

I have a similar problem with my sister who umm I feel, 'cause she lives in Sydney, I feel also because of her attitude it's a denial of me as well. Umm in the sense that, umm, you know just as your family don't want to talk about it, umm, 'cause well it spoils the social situation but then, I mean, a lot of my life is involved with it, and I mean, if they say to you what have you been doing, you're

⁷³ Peter Singer 2011 refers to the "expanding circle" in arguing that an ethical approach should expand our circle of concern from those near such as family and close friends to distant others.

telling them, and they don't want to hear it because it's uncomfortable for them, umm, and it does cause a difficult situation, umm yes (Joan, 62, NSW1).

... there is that danger that I'm noticing, I sometimes need to say to some of the older people we probably won't solve this in our lifetime, and we shouldn't allow our emotional involvement here to destroy us in the process, we've gotta take seriously our sense of passion but not let us, not let us, let it sort of destroy us (James, 67, NSW1).

For many participants the emotional toll of engaging in climate change action related to a deep sense of despair regarding this 'diabolical' problem and the unfolding uncertain future:

... it's incredibly hard what we are doing and its incredibly emotional and we all, like every single person in the movement struggles with that all the time and struggles with, is it worth putting our energy into it and we do just want to give up and umm, not keep going, and so, yeah, as we've said, the group's really important in dealing with that ... We don't actually talk about how we deal with that great uncertainty of the future and the...the .. . the deep sadness that we feel about the future of the planet and its people and the worry and the despair and it's important, like I don't want to leave on a depressing note, but it's just important to acknowledge that (Michele, 28, NSW2).

This sense of desolation could lead to disempowerment, denial and "choosing not to choose" (Macnaghten 2003) to take action around climate change. Instead, this emotive force contributed to the "moral shock" (Pearse et al. 2010) experienced by CAG members and became a 'call to action' – in other words, a strong disincentive to apathy and inaction. An important distinction is revealed here on how CAG members differ from the majority of the community:

... the difference between us, who try to do something and people who think it's important but don't, you know, that's.. that's complex but I mean someone I know or people I know say that they're not frightened enough yet and I think there's something in that, I think there's something in that it suggests to me that

even though intellectually that they know this is a serious issue, they don't actually know this is a serious issue yet. But people will, the penny will drop (David, 63, VIC4).

An important point is revealed here. CAG participants, based on their knowledge of climate change and their emotional responses to it, choose to engage in action and to accelerate their capacity to act by working within a group. Others within the community, though potentially equally knowledgeable, display a different affective response. Much has been written about this, particularly within the psychological literature (see section 3.3.3.2). However, I suggest that the lack of motivation for individual and collective advocacy around climate change expressed in apathy or denial, for example, represents a point of critical bifurcation (see Figure 8).

Even during periods of high levels of stated public concern around climate change, people have failed to take concerted action (The Climate Institute 2010; Hulme 2009). Norgaard (2006, 2009) observes that denial of climate change and inaction by the public can be attributed to “the social organization of denial”, and that there is both a psychological and sociological basis to inaction, conceived as “the mental processes of attending and ignoring” (Norgaard 2006, p. 374 citing Zerubavel 1997, p. 11). The social organisation of denial occurs in the contexts of the individual, of social norms of behaviour and of the broader political and economic situation. She further argues that rather than a deficit in knowledge about climate change leading to “... the failure to integrate this knowledge into everyday life or transform it into social action” people not only *don't want to know* but *don't know how to know* (Norgaard 2009, pp. 28–29). I find this a fascinating observation that resonates specifically with David (VIC4) who said that people “... know this is a serious issue, they don't actually know this is a serious issue *yet*”, implying a sense of both knowing but not knowing how to know, a disconnection that separates emotion from action.

Inaction therefore needs to be understood in the context of people's belief that they are unable to effectively act on an issue as complex, all-encompassing yet intangible as climate change. This belief is based not only on their factual knowledge but also on their inability to overcome their feelings of deep despair (Macy 1996). Norgaard

considers peoples’ feelings of helplessness to be symptomatic of inadequate political and economic structures and the realisation that “one's government and/or the world community at large could not be relied upon to solve this problem” (Norgaard 2009, p. 30). In this sense, despondency is matched with a lack of trust in those who should be most capable of resolving ‘wicked’ global problems such as climate change. So, in response, people turn to those matters most readily within their control. As one of Norgaard’s (2009) respondents states:

I suppose that's why my family has become more important to me, my everyday life, that which is near (Nilsen, 184, 1999) (p. 32).

This also supports my argument that a bifurcation occurs in response to the “moral shock” of climate change. Members of CAGs for example, express their agency as *moral agents* (section 3.4.4) able to enact their collective agency through their political actions. Others turn to their closest circle, their family, and devote their efforts to lowering their carbon emissions within their personal and private spheres.

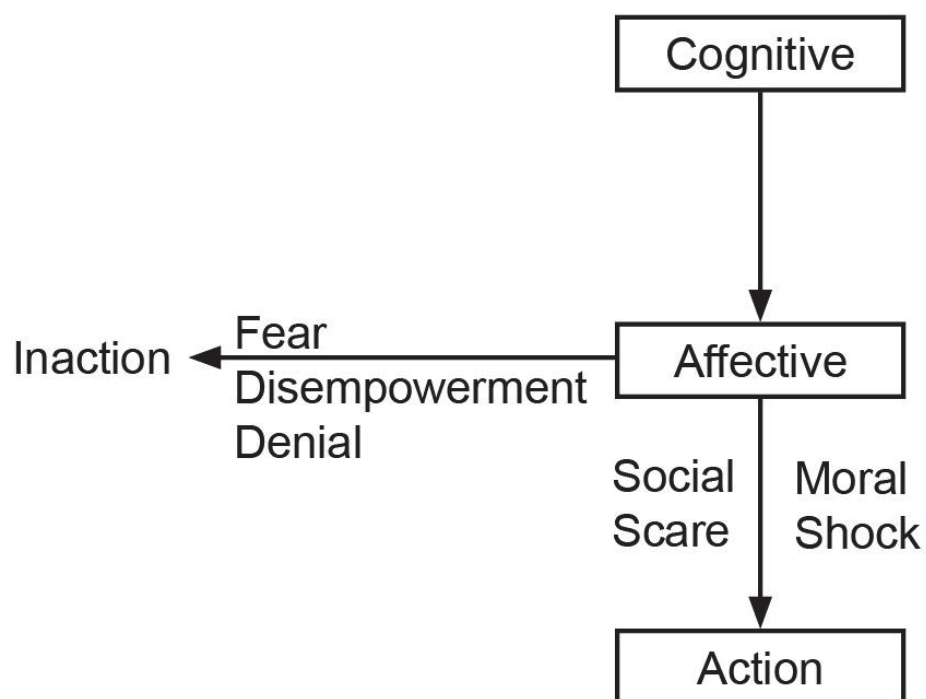


Figure 8: Bifurcation in action

7.4.3 Behavioural

The third co-existent prerequisite for engagement on climate change (Lorenzoni et al. 2007) is people's motivation and ability to act. CAG participants described an extensive range of actions that they were taking within their homes and lifestyles but in addition to this, participants undertook various forms of collective and political action.

Types of action undertaken

All participants were engaged in individual and/or household level actions to mitigate climate change as well as forms of collective (group) action. Individual actions ranged from household level behaviour such as switching off standby power, purchasing energy saving equipment and retrofitting homes with renewable energy items. Lifestyle level changes included changing their diets, growing their own food, adopting alternative transport practices such as downsizing from a car to a motorbike, using public transport, or riding a bicycle. For some CAG participants, individual action involved a high degree of personal sacrifice. Examples include: moving from paid to volunteer work; giving up flying, described as the "Achilles heel" of carbon footprint reduction according to Krakoff (2011, p. 38); constructing a home aquifer for a water supply; turning off the home hot water supply; and showering only every second day, thus demonstrating a high level of individual responsibility matched with the personal capacity to undertake such action (Middlemiss & Parrish 2010).

I think there is a place for every type of action or protest, there's a scale [murmurs of agreement in the background] and it's about what purpose they serve, they don't all, like people say, what's the point, you know, if somebody.. if for example doing a hunger strike is not going to change the climate, but that's not the point of the hunger strike, maybe it's to get publicity and it's not about changing the climate as such, so I think everything has a place on the spectrum and things appeal to different people, you know, in what they want to do and I mean how people ahh react to those things (Bethany, 20, VIC4)

Collective actions focused on: developing broader community networks and alliances to support climate change action at the community and wider scales (state and/or national); enhancing the capacity of other community members through awareness raising activities and by making available specific tools or equipment for generating lower

carbon households (bulk purchase PV or solar hot water, home energy audit kits etc.); forms of political/ citizen-based action including petitions, letters and phone calls to politicians and more direct action focused at sites of political power such as protests, sit-ins and rallies; and more radical forms of civil disobedience such as blocking coal infrastructure.

Both individual and collective forms of voluntary action provided a sense of empowerment to participants, which increased their involvement in both individual and collective actions. The group provided a secure and emotionally supportive space for individuals to experiment with expressions of agency around climate change mitigation and provided a place where shared knowledge, values and beliefs around climate change could be expressed. Furthermore, volunteering with groups allowed participants to develop and enhance skills in areas such as media, event organisation, political lobbying and advocacy, and non-violent direct action and civil disobedience.

Evidence from the focus groups suggests that for some groups the normed behaviour and shared values resulted in quite significant changes in lifestyle practices. These included some of the more committed personal behaviour such as reducing personal showering routines or, for one participant, taking up cycling for personal transport in her seventies. These actions go beyond incremental changes in lifestyle and may indicate a more directly political counter to dominant cultural norms. However some tensions were revealed for some group participants who felt that their personal actions were secondary to more political forms of action geared towards agitating for more broad scale societal level change:

.... I guess, around the time the group formed the Howard government was running that campaign "Be Climate Clever", you know, change your light bulbs or whatever it..it was. And I think over the ten years of his government we had, umm, a message that was put out to the public constantly which was taking action on climate change looks like individual lifestyle behavioural change that's, and there was no sense that actually our governments have a responsibility in taking action, umm, on these issues and ... and making the structural changes required to really deal with them. Umm, so I guess when the group... formed, I think being aware of that and ..and looking to change those ...

those bigger you know the bigger political landscape, umm, was really important and it still is, to me (Lenore, 28, NSW2).

CAGs may be non-partisan but they are for the most part engaged in political processes (though not powerfully I would argue) and are better described as geographically based “communities of interest” (Seyfang and Smith 2007, p. 597) or ideological niches which set themselves apart as ‘other’ or ‘alternative’ to the mainstream. In this sense, CAGs demonstrate their position in “public spaces” (Dryzek 2009) where they can act in ways that are informal, unstructured, communicative and strategic but which may also be outside and against the state (Hendriks 2006, p. 487).

In summary, CAG members undertake significant actions ranging from: changes in social practices quite removed from accepted degrees of comfort (Shove 2003) and extant social norms (some participants for example reduced their energy use by bathing only in cold water); to enacting novel forms of collective political action through direct action and civil disobedience. The adoption of these more radical lifestyle practices by some CAG members are examples of the desire ‘to make the personal political’ and is reflective of Spargaaren and Moll’s (2008) notion of lifestyle politics.

This reinforces Lorenzoni et al.’s (2007) contention that engagement in effective mitigation of climate change requires more than citizen *participation* in democratic processes and that it must be *enacted* by them. Dobson (2006) describes this as a “thick cosmopolitanism” (section 3.4.4), which he defines as a recognition of each person within “a common humanity” (p. 169). Thick cosmopolitanism requires not only an acknowledgement of the principles of cosmopolitanism (section 3.4.4)⁷⁴, but also that people carry out political action. In other words, they need “to ‘be’ cosmopolitan” (p. 169). In this sense, CAG members *are* cosmopolitan as they act out their deep concerns regarding climate change and human survival through their political expression (Kent 2011). As Bethany (VIC4, 20) states:

⁷⁴ The three principles of cosmopolitanism are: individualism, universality and generality (Dobson 2006 quoting Pogge 2002). “Three elements are shared by all cosmopolitan positions. First, **individualism**: the ultimate units of concern are *human beings*, or *persons* - rather than, say, family lines, tribes, ethnic, cultural, or religious communities, nations, or states. The latter may be units of concern only indirectly, in virtue of their individual members or citizens. Second, **universality**: the status of ultimate unit of concern attaches to *every* living human being *equally* - not merely to some subset, such as men, aristocrats, Aryans, whites, or Muslims. Third, **generality**: this special status has global force. Persons are ultimate units of concern *for everyone* - not only for their compatriots, fellow religionists, or suchlike” (Pogge, 2002, page:169).

As in compelled, as in I have this information how can I not do something? ... I have an obligation, how can I not? It would be selfish of me not to.

As summarised in Figure 7, CAG members are engaged in a progression of voluntary collective climate change action. CAG members engage with climate change cognitively, affectively and behaviourally. They have come to know climate change as a catastrophic problem through an understanding of scientifically constructed climate change knowledge. CAG members were influenced by Al Gore's film, *An Inconvenient Truth*, with many groups forming around the time of the film's release. This coincided with significant landscape level real-world events, generating a 'social scare' (Ungar 1995) and prompting CAG members to reflect on these socially situated conditions. Rather than leading to despair and inaction however, this 'moral shock' (Pearse et al. 2010) precipitated CAG member action both within their personal private spheres and through collective public sphere action.

7.5 Alternative pathways to public sphere and collective agency

At this point, I turn to consider some questions that arose for me from my focus groups and in particular my presumption (as laid out in the sections 7.4.1, 7.4.2 and 7.4.3) that an understanding of the problem of climate change is a precursor to action. Working through these questions has greatly assisted my understanding of why certain individuals decide to act collectively on climate change and is also reflected in the development of my process diagram (see Figure 7 above).

7.5.1 Climate change and sustainability

... if CO₂ turns out not to be true, then what we're doing could be damaged. If CO₂, global warming turns out not to be true, then what we're doing and what we necessarily must do to make this Earth better for everybody could be damaged by that not being true ... Because you talk about the denialists and the believers, well, we shouldn't have the denialists and believers, we should be focused on what we need to do to make this a better Earth and whether CO₂'s the culprit or whether the sun's the culprit or what's going to happen next, I don't know, but that doesn't alter all ... all the actions taken by people around this table have been toward a sustainable future, umm, and whether, so that ...

that if we did, if everybody did that then the big political argument wouldn't really matter (Jerry, 63, VIC2).

Jerry's statement above prompts the question: Do people have to be engaged with climate change as an issue to effectively address the causes and effects of *unsustainability*? In other words, is climate change the subject that needs to be addressed? It is apt to consider the relevance of my research findings beyond this specific problem set. To place Jerry's quote in context (see Case Study Report 4 in Appendix F) at this point I draw on two elements for discussion. Firstly, VIC2, a Carbon Rationing Action Group or CRAG⁷⁵ was included to allow some comparison with the Climate Action Groups (CAGs), which were my main research focus (section 5.5.1.2 discusses the selection of the CRAG). Secondly, I draw from a body of literature that considers groups of people who come together collectively to act on issues of sustainability (outside of a specific focus on climate change) as "grassroots innovations" (Seyfang & Smith 2007), which has been influential on my thinking (discussed previously in section 4.3).

In selecting a CRAG for study, I hoped to extend the range of types of participants and the range of climate action groups in my research in order to generalise more broadly. VIC2 demonstrated a number of features which diverged widely from those of the other groups. Firstly, it was evident from the focus group that the members of the CRAG were not operating according to the general understanding of a carbon rationing group. CRAGs aim to support and facilitate both individual and *collective* reduction in personal and household carbon emissions. In VIC2 however this was not the case, with members considering themselves as individual advocates for carbon reduction behaviour, not collective agents.⁷⁶ Secondly, there was considerable tension within this group, specifically around understandings of the scientific basis for climate change. In particular, Jerry (63) held sceptical views on whether global warming was occurring and whether humans were contributing to it. This generated significant debate amongst the participants and raised particular questions for me: do people have to be concerned specifically about climate change in order to act on it? What are the specific elements of

⁷⁵ Carbon Rationing Action Groups (see www.crag.org.au and <http://www.carbonequity.info/crags/index.html>) are community-based groups that come together to measure, reduce and potentially trade their personal and/or household carbon emissions. There are hundreds of CRAGs internationally (especially in the UK) but there are less than half a dozen active within Australia.

⁷⁶ Personal communication, B. Pemberton, convener of VIC2 CRAG. He states: "In setting up a CRAG I did not set out to form a group as such but to empower individuals to act and become advocates", email dated 12th October 2011.

climate change that cause individuals greatest concern? Finally, if your approach to taking climate change action is based on an ‘agency-oriented’ individualisation of responsibility, why get involved in a group at all? I consider these questions in light of my research in the following section.

7.5.2 Climate Change as a heuristic

The question: Do people have to be concerned specifically about climate change in order to act on it? and the question: What are the specific elements of climate change as an issue that cause individuals greatest concern? resonate widely throughout my research. Several CAG participants commented on how climate change brings together a range of long-term issues and concerns for them. Climate change then becomes a problem set, a way to synthesise and filter concerns that might extend beyond the environment to capture more broadly their concerns about the economic system, politics, social justice, food and water security – matters that have increasingly become captured under the expression ‘sustainable development’ or ‘sustainability’. In this way, climate change works to “connect the dots” on other issues and provides a *reflexive heuristic* for group members. As Hulme (2010) describes, climate change is:

Both a resourceful idea and a versatile explanation which can be molded and mobilized to fulfill a bewildering array of political, social and sociological functions (p. 267).

Whilst for many of the research participants their initial focus on climate change was mediated through their knowledge of climate change science, the phenomenon of climate change itself (for example as a result of increasing greenhouse gas emissions) was over time becoming less central to their actions. Climate change came to represent, as stated by Michele (28, NSW2): “everything that’s wrong with society coming to a head” or otherwise for Randall (70, NSW1):

It's quite extraordinary really that all the things that have interested me and concerned me for the last twenty years have come together and relate in some way to climate change.

Thus climate change becomes a coda for the root causes of societal *unsustainability* and a motivation that surpasses the disempowerment brought on by the fear of catastrophic

climate change. There was diminished interest here in personal and household carbon mitigation behaviours or in calculating carbon footprints and a much greater emphasis on community engagement, direct action, social movement building and political change. Climate change in this way becomes a tool for focusing energy and honing skills around a broader social and political project. As Hulme (2009, p. 322) observes:

Climate change is everywhere. Not only are the physical climates of the world everywhere changing, but just as importantly the idea of climate change is now found to be active across the full parade of human endeavours, institutions, practices and stories. The idea that humans are altering the physical climate of the planet through their collective actions, an idea captured in the simple linguistic compound 'climate change', is an idea as ubiquitous and as powerful in today's social discourses as are the ideas of democracy, terrorism or nationalism. Furthermore climate change is an idea that carries as many different meanings and interpretations in contemporary political and cultural life as do these other mobilising and volatile ideas.

For others, another pathway is suggested. There is also the potential for the mundane, routine and natural to render the intangibility of climate change into a more accessible and understandable phenomenon, one which could be extended to a broader audience. Hulme (2010) portrays this as the “banal cosmopolitanism” of climate change suggesting that human experiences of climate and weather are “losing their place-based character”, assuming a new, powerful and global storyline of climate change (Hulme 2010, p. 272).

As Jasanoff (2010, p. 235) observes:

Science is not the only, nor the primary, medium through which people experience climate. We need no warrant other than our senses and memories, supplemented by familiar recording devices such as the calendar or the gardeners' almanac, to register the vagaries of the weather, the changing of the seasons, the fertility of the soil, the migration of birds, or the predation of insects.

Here, Jasanoff conveys the constant reminder of the natural world to our state of being. In this way, the weather becomes the universal language of climate and climate change (as I discuss in section 1.1) separate to our cognition. Weather binds the unbounded nature of climate change to a specific place and thereby grounds individual and

collective imaginations to tangible, observable and felt local phenomena (Jasanoff 2010, p. 237). This is also reflected in Kirsten's (62, VIC4) statement below:

*Perhaps it's to do with the sort of people who have, I don't know, the more active imagination? ... so whether it is just somehow to do with the sort of personality people have that leads them then to think yes, I really **feel**⁷⁷ this ... (my emphasis).*

In considering both Hulme and Jasanoff above, it could be argued that there are both localising and globalising tendencies in human responses to the real potential of catastrophic global warming. In the local lies the capacity for people to make real something that seems ephemeral and boundless; in the global lies the certainty of climate change as a universal phenomenon grounded in the everyday humdrum nature of our experience of the weather.

Yeah it's in the everyday but you know everyone talks about the weather but you kind of think how boring but it's central to how we live and you know it's that whole "God the weather today! O, Melbourne weather!" But it's not normal, it's not normal to have a massively long summer and no rain but it's, yeah, it's ... it's not concrete at the same time (Bethany 20, VIC4).

According to R athzel and Uzzell (2009) (as noted in section 3.3.3.2), people experience a spatial biasing between the local and global in relation to issues of global environmental concern that creates a disjuncture for individual action and may explain why people fail to act around issues such as climate change. Through a closer engagement with how we know, feel and experience the weather, the issue of climate change changes from being from an abstract global issue to a tangible local concern (McGee et al. 2010). I see potential within this conundrum for linking up and accelerating wider scale citizen action on climate change.

⁷⁷ In the EU-China Civil Society Forum publication: "I could feel climate change." Climate change and China: Civil Society Perspectives" one of the author's reflects on a conversation regarding climate change with his mother from rural China. "I asked my mother, "have you heard of climate change?", as her comment interested me. "I don't need to hear it. I could feel it ..." (p. 3), http://www.eu-china.net/web/cms/upload/pdf/materialien/eu-china_2010_climate_change_and_china.pdf, accessed 11th February 2011.

7.6 Summary

To summarise my argument to this point (also represented in Figure 9 below): Firstly, individual agency for climate change action requires a “moral shock” or “social scare” to precipitate a high degree of individual concern and responsibility. Secondly, in order to engage with the issue effectively (i.e. cognitively, affectively and behaviourally), individuals must be able to overcome feelings of denial and despondency and this is achieved through coming together in groups to produce collective agency. Thirdly, whilst climate change has been the prime focus of my research I make the case that it represents a potent heuristic or “focal point” (Parks & Roberts 2010a) for collective political action on a broader range of issues relating to sustainability and justice. (I draw this point out further in the next chapter in section 8.3.) Fourthly, I suggest that the construction of climate and its confluence with our understanding of weather or other natural phenomena can provide an alternative to the positivist scientific and technological framing of climate change. Translating a global intangible into a local, concrete and observable phenomenon may address individual inaction based on feelings of disempowerment and where appeals based on the plight of distant others fail. My findings, I argue, therefore have a broader application and can inform the social transition to a wider sustainability agenda.

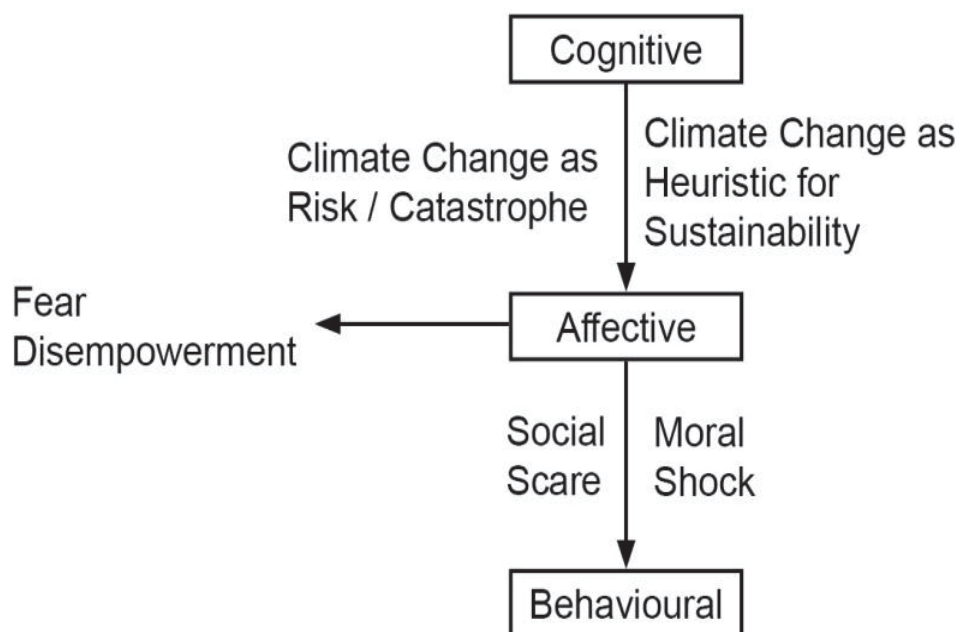


Figure 9: Engagement with climate change

There remain some gaps in the logic of this progression, which I now seek to explore and further explain. One gap relates to whether there is a particular type of person who engages in collective voluntary climate change action. This is an important consideration as, if wider scale change is to be achieved, it is essential to recognise how the influence of this sub-group can be extended throughout the broader community. The second concern is whether the broader activation of these particular traits can be harnessed and if so, how. These questions are taken up in sections 7.7 and 7.8 respectively.

7.7 People like me

Members of CAGs represent a particular subset within society. Many of the characteristics that distinguish CAG members – they tend to be well educated, middle class and financially comfortable, for example – are indicative of their capacity to undertake climate change action. These characteristics also form the basis of their group identity.

7.7.1 CAG individual and group characteristics

A key feature of the CAGs is their bi-modal age profile (see Figure 4 in section 5.5.2.4). Whilst the age of participants of the eight focus groups can't be held to represent the age characteristics of people in Climate Action Groups more generally, observations from some focus group participants and other climate action group gatherings indicates that this bi-modal age distribution may be more broadly representative of people who participate in CAGs. George (62, NSW1), for example, when commenting on the participants of the first national Climate Summit⁷⁸ held in Canberra in 2009, noted they were “either old or young and big difference between them”.

For members of some CAGs there was a sense of frustration around the inability of their group to attract younger members. For NSW1, younger people were also characterised as more individualistic, fatalistic regarding climate change and more resigned to either blunt regulatory approaches or technological solutions:

⁷⁸ See <http://climatesummit.org.au> accessed 29 April 2011.

I was involved in teacher education at the Uni and, umm ... it does seem the university, uh, that's the segment of youth that I've had the most to do with, I guess, they're pretty apathetic in terms of, well they're not joiners, I think they're quite, I think they think the issues are over, they accept climate change, they accept it's personally caused, they accept that somebody should stop them driving a bit more, and somebody should make them use less electricity, and they, there seems to be a willingness to, I mean, if someone said you, sorry you can't drive to university they'd whinge for a while and ..and, umm, you know probably think.. think that's it's, it's a reasonable decision but they're not going out there campaigning ... (Rod, 60, NSW1)

I think, ahh, I think we, from when I was younger I think we've become so much more consumerism [sic] .. and individualistic and I ... I think our young people show it (Joan, 62, NSW1).

Other groups also commented on the age of their members as mainly older people and wished that younger people would become involved:

On the other hand when I went to that ... presentation last week. I walked in and I thought "whoah", grey heads across the whole room. I was one of the youngest people there. So it's quite interesting, it's ...[Livia, 61, asks: what age group do you call older?] We don't ask people in [CAG] when they join what age they are so we don't really have a I can't tell you, you know, what the demographic is in [the CAG] because we don't ask that question. But I would suspect there's more older than younger people who are members (Raelene, 42, VIC1⁷⁹).

I would like more young people to come to these sort of meetings, like [CAG] and all of that. When you look around at people who come to the meeting, there are lots of people they are retired you know. Young people are active andthey can make a difference ... (Alfred, 65, VIC2).

⁷⁹ VIC1 has the largest membership of any Australian CAG.

Tranter (2010) describes membership of environmental organisations in Australia in terms of active and passive membership and notes that older people are not only more likely to be involved in environmental organisations but are also more active members. He states that: “one's stage of the lifecycle might be important here, as many older people with relatively greater autonomy from family and work responsibilities are able to devote more time to participation” (p. 421). This was reflected in the comments of older participants across the focus groups exemplified in the quotation from David (63, VIC4) below:

I decided when I retired that I would involve myself again with what seemed to be and still seems to be the big issue of our time.

Apart from time and autonomy, older participants offered other benefits to groups. In NSW1, for example, participants noted that their members were not only actively engaged with their local community, but they were also respected members of the community that held (or have held) positions of relative power and authority. Older participants were for the most part, tertiary educated professional people, though mostly retired or semi-retired from their professional work. These participants fall within what Inglehart (1990 cited in Tranter 2010) calls the ‘cognitively mobilised’ – that is they are “highly educated, articulate, politically skilled and informed” (Tranter 2010, p. 417). Tranter (2011) more recently characterises this group as a particular ‘elite’ who are not only highly educated but who also possess post-materialist values:

In general terms, consistent predictors of environmental concern in Australia include holding postmaterialist values, engaging in eastern spiritual practices (perhaps reflecting alternative lifestyles and consumption practices), professional occupation and, to an extent, tertiary education. Gender differences are also apparent, with men less likely than women to favour environmental protection over economic growth, to claim they would pay extra tax to protect the environment, or to believe global warming poses a serious threat to their way of life (p. 92).

According to Inglehart (1997, p. 4), *post-materialist* values, that is, those that prioritise self-expression and quality of life, are demonstrative of post-war generations who have emerged from the industrialisation era with unprecedented levels of economic security. Inglehart and others have tracked this phenomenon throughout nations for thirty years

through the World Values Survey.⁸⁰ Amongst the catalogue of findings from the survey, cultures of modernity/ postmodernity are characterised by a shift from survival to self-expression values, which create higher levels of personal empowerment amongst citizens. CAG members therefore are representative of a particular subset within Australian society who tend to eschew a mainstream consumerist lifestyle to adopt alternative and more sustainable ways of living. CAG members, according with Inglehart (1997), display post-materialist values.

These characteristics however were shared by the younger cohort of participants, as stated by Michele (28, NSW2) below:

We're ... middle class people, you know that have spare time and have professional jobs and we have intellectual histories and we have supportive families and so there's a whole lot of social factors that allow us the time to think about these problems and divert, divert energy to them. I mean if I'm from a working class family and I have three kids my biggest problem is the mortgage, you know, I don't have any of that so I have the luxury of being able to think about and acting on broader issues ...

The CAG participants presented as “a very particular group, not representative of the general public” (Howell 2010, p. 9) in that they are middle class, highly educated people often freed up from immediate family responsibilities who have higher levels of risk-perception regarding climate change and high levels of motivation to take action. In this respect, they share characteristics with the members of Transition Towns, who were found by Seyfang and Haxeltine (2010) to be over-represented by a particular type of person: female, aged 45–64; “extremely well educated”; professionally employed but not highly paid. The Transition Town members display characteristics of “‘post-materialists’ who eschew high-status jobs and consumption in favour of personal fulfillment and (in particular environmental) activism” (p. 8).

7.7.2 Summary

In summary, CAG participants in Australia are representative of a particular ‘elite’: mostly white, middle class, highly educated and comfortable financially. They are

⁸⁰ See <http://worldvaluessurvey.org/>, accessed 28 June 2011.

drawn to others with similar backgrounds and values – they are “like-minded people” who can forge a collective identity around the issue of their greatest concern: climate change. ‘People like me’ was a consistent refrain amongst the CAG participants, nuanced in several different ways as illustrated below.

1. Grouping together with similar others created group cohesion, conflicts were minimised and decision making simplified. Within the collective, trust can flourish, confidence can build and learning is facilitated: in other words, there are many social advantages to collectives that contain like-minded people.

Yeah I guess ... in some ways it's nice to all think the same way about things and ... and ... and, you know, in other ways that's a limitation because you kind of, you're coming from the one place so you end up having the same kinda ideas about things (Michele, 28, NSW2).

As noted in section 7.2, collective action can work in “a virtuous circle of action and reinforcement even in the absence of movement “success”” (Louis 2009, p. 730). The reinforcing action described above appears to be an example of this. The issue of climate change forms the basis of moral concern and responsibility to take action. Areas of conflict are reduced and the group comes to share similar ideas which also make collective action possible.

2. There are on the other hand potential disadvantages to group uniformity. CAGs found it difficult to increase their membership and to expand their influence and commitment to voluntary political action into the broader community. In almost all cases, stagnation in group membership was cause for significant frustration amongst CAG participants.

Most of the meetings and rallies and things we go to consist of the converted and that is, that is very frustrating and it hasn't changed over the last couple years ... (Bernadette, 72, VIC3).

Yeah, absolutely, we had a huge, we had a huge non-renewal rate last year ... (Raelene, 42, VIC1)

[Jack interrupts]: *So once they'd got their PVs [photovoltaics] on the roof ... they didn't renew their membership. It was purely to get that and then that was it* (Raelene, 42, VIC1).

Seyfang and Haxeltine (2010) similarly note Transition Towns have difficulty in attracting a newer and broader membership. Their outreach activities attract “principally ‘insider’ activists, rather than ‘newcomer’ members of the public” (Seyfang & Haxeltine 2010, p. 14). They suggest that to broaden the appeal of Transition Towns beyond “a small group of like-minded [environmental] activists” (p. 15) will require diversifying membership through effective communication with wider audiences (Seyfang & Haxeltine 2010, p. 15).

3. The age of CAG participants was also raised by several groups. As discussed at section 7.7.1, CAG participants fell within two main age groupings that align with different life stages. Younger participants were largely single, without children or otherwise significant financial or family responsibilities; older participants (making up the majority in my research cohort) in the main were retired or close to retirement with time to spend on voluntary community activities. Groups consisting of older members (NSW1, VIC2 and VIC3, for example, all consisted of participants aged 55 years and older) lamented the lack of younger members.

There is another discriminating factor potentially at play. The older participants in NSW1 were proud of the respect that they generated within their local community. The group's position within their regional town lent both credence to their work and by inference, a sense of authority, power and influence to the participants themselves.

One thing about this group that I noticed is, is that it's older and has a lot of expertise (George, 62, NSW1).

We know people too and linked to this age group there's a lot of people in [CAG] who are very well connected in this, umm, community. We can draw on people, umm, we can be accepted by the ... the council, we're not regarded as ratbags, if we raise an issue it's dealt with with respect. If we call a meeting, I

mean some of the meetings that you've called over recent years, umm, yeah, an impressive group of people come to public meetings about issues like you know water and things like that, umm. So there..there's a distinct advantage in this group of people (George, 62, NSW1).

VIC3 participants, on the other hand, were proud of their 'ratbag'⁸¹ status. Participants in this group also commonly described themselves as outsiders, that is, outside the mainstream. Some of the descriptors noted were: odd, ratbag, troublemaker, a 'nut'.

I think they are, being, having a small group of people, it would be nice maybe if we had more, but having a small group of people at least you have, you have a sense of solidarity in a very conservative society where if you say, people say, you know, you're the odd man out. It ... that ... I mean I ... I'm the odd man out anyway... (Garry, 65, VIC3).

The lack of diversity in CAG membership therefore provokes questions regarding the role of CAGs in social movement development around climate change. For example, can social movements build from particular community 'elites' which can generate cohesion and expertise but may also alienate other sectors of the community? Archibugi and Held (2011, p. 18) note that: "the English, American, French and Russian revolutions, all fought in the hope of empowering the bourgeois, the citizen, and the proletariat, were led by elites". However this would appear to be the antithesis of theoretical proposals for wide-scale social change progression that relies on diversity, inclusion and egalitarianism such as rendered in Torgerson's Green Public Sphere, Dryzek's deliberative democracy (Dryzek 2001, 2008, 2009) and Beck's cosmopolitan vision (2006). The potential tension between the collective identity of CAG members and broader social engagement in climate action is explored further in Chapter 8.

⁸¹ The Macquarie Dictionary defines ratbag as: "a person of eccentric or nonconforming ideas or behaviour"; "a person whose preoccupation with a particular theory or belief is seen as obsessive or discreditable", <http://www.macquariedictionary.com.au>, accessed 26 October 2011.

7.8 Constraints and Enablements

Earlier in my literature review (section 3.6.1), I outlined three constraints to individual agency that I put forward as contributing to inaction around climate change: lack of personal empowerment, lack of trust and lack of reflexivity. A key question that my empirical work sought to answer was: in what ways do CAG members overcome constraints to individual agency? At this point I should make it clear that I don't suggest that these three factors alone delimit climate action. Rather, I have applied them as an empirical 'test' to determine how actors who come together in collectives in order to undertake voluntary activities around climate change demonstrate the ability to surmount barriers to action.

Following from my argument in section 7.7 above, I suggest that there are two elements that may determine why those who become CAG members differ from citizens of the wider community in terms of their individual agency. In section 7.7: *People like me*, I propose that those who join community-based climate action groups are from a particular 'elite'. In the following section I argue that members of this 'elite' are enabled to act on climate change as they are both individually and collectively empowered. They develop interpersonal trust through the membership of the group and their collective processes, but apart from this maintain trust in the political processes that allow structural change to occur. Finally, they are reflexive agents, able to utilise their engagement (cognitive, affective and behavioural) on climate change as *cosmopolitan* agents⁸² who can link aspects of their individual agency to creating global climate change solutions.

In the following section, I first discuss how CAG members perceive others' inaction around climate change, that is, what they see as the constraints preventing others in the community from taking action in the way that they do. I then discuss how CAG members overcome disempowerment, lack of trust and lack of reflexivity, identified in Chapter 3 (section 3.6.1) as the three constraints to individual agency around climate

⁸² Archibugi and Held (2011) distinguish between collective groups "having a personal cosmopolitan lifestyle and holding cosmopolitan values" (p. 13). They argue that a cosmopolitan democracy relies on support from those that hold cosmopolitan values. I use the term cosmopolitan agents to represent actors who hold cosmopolitan values.

change action. Finally, based on these understandings I propose some of the preconditions for activating agency within the broader community.

7.8.1 Constraints to individual and group agency

Participants put forward a range of reasons for why they thought people didn't get involved in action on climate change: lack of knowledge or education about the scale of the problem and level of action required; ignorance, laziness and apathy driven by feelings of being powerless to act and a sense of despair; and lack of immediate danger and uncertainty about the impacts of climate change were all identified as contributing factors.

For some, the culture of powerlessness and disengagement evident in the broader community was held to be contributing to a lack of political agency, so that disempowerment, rather than an acceptance of the status quo, is perceived as a reason for a lack of resistance. In a similar way Lash and Wynne (1992) describe people's failure to voice dissent over the actions of the institutions that exercise control over them:

They may not have expressed their criticism or dissent in public form, but that does not mean they were not chronically mistrustful of, skeptical of or alienated from those institutions supposed to be in control. They may simply have been resigned to dependency on that institutional or political nexus, with no perceived power to influence it or make it more accountable (p. 6).

The lessening of community cohesion, increased individualisation and reduced social capital were also seen as contributing factors.

Fear and denial also featured significantly amongst the participants as an explanation for the lack of engagement of others. CAG members often referred to non-members as either ignorant or lacking knowledge around climate change. They believed that others simply weren't afraid enough or that they were knowledgeable but too afraid to act. As Melissa (32, VIC1) states:

Fear. I've got a friend who's just fearful of it. Very intelligent girl but just doesn't want to know about it, buries her head in the sand. 'No, you're doing that bit for me. I don't want to know about it'.

This raises the question of why those who are perhaps the most knowledgeable on the issue within their communities, with the most to fear from climate change in terms of what they understand, are empowered to act whilst so many aren't.

In terms of what CAG members thought constrained their own ability to act, these largely came down to the practical elements of time, energy and money. They felt limited by conflicts in lifestyle choices, which set up a series of tradeoffs and a sense of guilt, such as choosing to fly rather than catch the train interstate due to time constraints, or flying overseas to visit family members. For some participants their involvement in climate action was largely motivated by their concern for their children and grandchildren and yet their activism created conflict with the values of other family members. This resulted in an additional emotional burden around their actions.

7.8.2 CAGs and Empowerment

Personal empowerment plays an important role in determining how individual agency around climate change can enact broader scale change, yet it remains under-researched in relation to collectives (Drury et al. 2009). Much of the literature concerning community climate change action has tended to focus on people's feelings of disempowerment as a core reason for their inaction (Moser 2009; Norgaard 2009). Paterson and Stripple (2010) go further and propose that power is deliberately set by capital and the state as a structural impediment to collective agency. They state that:

[there] is no preexisting collective political community which can be invoked, and which needs to 'act'; rather, it is a collectivity which has to be constantly made and remade (p. 344).

Individual carbon reduction practices within the "*private sphere*" are exploited as a collective "*public good*" (Paterson & Stripple 2010, p. 347), creating not only the individualisation but also the privatisation of action aimed at lowering global carbon emissions. Under the "conduct of carbon conduct" (Paterson & Stripple 2010) such

action precludes any political challenge to the structural propensities towards unsustainability but rather acts to channel the desires of individuals through, for example, the carbon market (Paterson & Stripple 2010, p. 344).

Paterson and Stripple (2010) argue that individualised forms of climate change action expressed through a range of “carbon conducts” (here however they include collective forms such as CRAGs) are both “inadequate environmentally ... and regressive socially” (p. 342). They describe the 'conduct of carbon conduct' to mean:

... a government of people's carbon dioxide emissions that does not work through the authority of the state or the state system, but through people's governing of their own emissions. Different regimes of 'carbon calculation' operate so individuals either work on their emission-producing activities or to 'offset' their emissions elsewhere. The conduct of carbon conduct is therefore government enabled through certain forms of knowledge (measurements and calculations of one's own carbon footprint), certain technologies (the turning of carbon emissions into tradeable commodities), and a certain ethic (low-carbon lifestyle as desirable) (Paterson & Stripple 2010, p. 347).

Paterson and Stripple (2010) characterise five “carbon governmentality” practices that individuals adopt in governing their own emissions; they act as “counters, displacers, dieters, communitarians, or citizens” (p. 359). These practices operate to mould individuals “as particular types of subjects” and because they emphasise personal responsibility for carbon management they are reflective of the power dynamics that operate under neoliberalism (p. 359). Individual freedoms read as these types of ‘carbon conducts’ act to depoliticise citizens (they are in effect disempowering) and channel individuals’ energies into “increasingly elaborate practices of self-monitoring and management” (p. 359). The power of the state in its *unsustainability* is thereby reproduced and reinforced through the conduct of these actors. Further, the role of the group in developing *collective agency* is questioned in this interpretation as the group simply enables individuals to enact their personal carbon lowering behaviours without challenging the regime state.

So how then are CAGs empowered around climate change? The question of power was not so much spoken but implied within the CAG focus groups. However, it became clear that CAG participants could be distinguished from their broader communities by

the fact that they were empowered to take action and specifically sought out a collective of like-minded people to do so:

I think you've got an action side and you have a socialising side and giving you that, giving you that confidence that you can do something bigger than the individual (Rod, 60, NSW3).

and there's the ... the germane perhaps the more germane issues for the general community is what power do we have or can we fix it umm how do we wield some power umm to.. to bring change (Solomon, 52, NSW3).

Hendriks (2009) describes such generative notions of power (illustrated in the quotations above) as “power-with” or “power-to” and as “a community conception of power” (p. 178). Drawing on Arendt, Hendriks states that such power comes from collectives that engage in communal action. Power of this type is not directed towards domination but rather seeks to overturn or resist it (Kahane 2010).

This power is generative, it involves sharing something or becoming something, not just giving or demanding or consuming. It expands in its exercise. It finds a way to call on people to connect with something larger than themselves (Guinier and Torres 2002, p. 141 cited in Hendriks 2009, p. 178).

Certainly, CAGs acknowledged that their group played a core facilitatory function, with individual group members extending themselves beyond their individual agency. As Linda and Lenore stated:

When I first got involved in the group I started to be more, umm, political, politically active. I started to go to protests and, umm, meetings, and umm, you know sit-ins and things which I've never done before and heard about people doing protests at uni for various things and always kind of thought I should go along 'cause it sounded like fun, but, umm, I think now when people say, hey let's go chain ourselves to something I'm much more likely to go 'Yeah, OK, why not?' (Linda, 27, NSW2).

I think for me personally one of the really critical things, umm, that allows me to act is knowing that I have the support of other people around me and that I'm not doing it alone, and that makes me far more brave and gutsy than I ever would ... (Lenore, 28, NSW2).

Implied in this notion of 'power-with' is participation in democratic processes. Hendriks (2009, p. 179) suggests a central role for deliberation and discourse in this expression of 'people power':

The deliberative process provides the powerless (for example, marginalized groups, everyday citizens and so on) with a degree of autonomy to collectively reconsider policy issues, and in some cases, the possibility to redefine the 'problem' itself.

Further, the deliberative processes played out in the informal and unstructured spaces of social life (Hendriks 2006, p. 497) such as CAGs, have been shown to reinforce the ability of actors to engage in political procedures by building self-confidence, knowledge and awareness (Hendriks 2009, p. 180). The empowerment of CAGs and their members thereby becomes a counterpoint to state power. It assists community co-determination around important concerns such as climate change, fosters virtues of trust and reciprocity and cultivates social learning in democracy (Hendriks 2006, p. 490; Moloney et al. 2010, p. 7622). In other words, CAG members become individually and collectively empowered through their action and develop skills in the practice of democracy. They act as *democratic agents*.⁸³

7.8.3 CAGs and Trust

... the impression I get is that most people just don't know, they are mistrustful, they don't know what to believe, umm, it probably, umm ... sympathetic and you know, you ... you ... you find some kindred spirits every now and then, umm, and I think that perhaps the people who have gone into it in more depth and who are very committed are, you know, you can perhaps see them working around in the community as heads of different lobby groups or things like that (Terry, 55, VIC2).

⁸³ List & Koenig-Archibugi (2009) define democratic agency as: "The collection of individuals in question has the *capacity* (not necessarily actualised) to be organized, in a democratic manner, in such a way as to function as a state-like group agent" (p. 91).

Of the three constraints to individual agency that I have argued for, the issue of trust resonates the strongest for me. The discourse of trust–distrust is pervasive within contemporary politics, no less within Australia where a distinct political partisanship is being displayed around important issues such as climate change (Tranter 2011).

Since the 1960s there has been a continual decline in citizen engagement and participation in democratic politics in its traditional forms, fuelled by a reduction in citizen knowledge and interest in politics and increasing distrust of government (Hetherington 1998; Saward 2008; Schyns & Koop 2010). Decline in civic engagement remains a fundamental problem for contemporary democracy (Höppner & Whitmarsh 2010). Supporting evidence for this position is found in both politico-economic (Hetherington 1998; Nye et al. 1997; Saward 2008) and psycho-social (Blake 1999; Höppner & Whitmarsh 2010; Lorenzoni et al. 2007) research. Political distrust is so pervasive within present-day society that it extends beyond an individual attribute to be adopted as a social and cultural norm. Distrust of politics presents as systemic and endemic to the modern social condition, leading to a lessening of social capital which is widely considered as essential to the effective and efficient functioning of modern societies (Schyns & Koop 2010, p. 151).

The phenomenon of rising levels of citizen distrust in both political institutions and political actors within contemporary western democracies, according to Mansbridge (1997, pp. 148–9) leads to: increased cynicism; decreased interpersonal trust; reduced optimism; increasingly negative media coverage of the government; and more publicity on corruption. Mansbridge’s list of consequences is surprisingly reflective of contemporary Australian politics and of the regard that citizens currently hold for politicians and governments of all persuasions (Jones 2010; The Climate Institute 2010). Perhaps, frighteningly, it describes a set of societal conditions that are distinctly unhealthy for a modern democracy.

Declining political trust has significant implications for democracy as it can lead into a cycle of further political and democratic dysfunction as “without public support for solutions, problems will linger, will become more acute, and if not resolved will provide the foundations for renewed discontent” (Hetherington 1998, p. 804). Schyns and Koop

(2010) argue that this will lead to a lack of support for and legitimacy of democratic governments.

Underlying this disengagement is a perceived lack of agency:

People increasingly do not feel inspired by what the politicians propose that society collectively could and should be. Likewise, citizens do not embody a sense of popular efficacy that they can, via democracy's institutions and mechanisms, impact on societal development (Dahlgren 2009, p. 70).

Against the prevailing social norm, members of CAGs spoke repeatedly of taking political action around climate change with the specific aim of generating action by politicians and governments. For example, Polly (25, VIC4) said:

I've become more political I think ... I suppose I ... I'd written letters to politicians and the like before but I suppose like I'm not naturally a political, a particularly political person I don't think and I suppose being involved in [CAG] has kind of one.. one convinced me that.. that more of that is necessary and more people have to get involved in that even if initially it's not something that they are particularly comfortable with and umm yeah I think so more prepared to ... to yeah act in an overtly political way.

It is appropriate here to consider in what ways the actions of CAG members demonstrate trust in political institutions. Earlier (section 5.2.1), I contrasted Australian environmental NGOs active in climate action campaigning and CAGs, suggesting that eNGOs tend to become more mainstream and bureaucratised as a condition of their engagement with institutional practices. CAGs on the other hand tend to be located on the more radical end of the scale of climate action. CAG responses to political structures demonstrate that whilst they may sit *outside* of the state, they do not necessarily position themselves *against* it (Dryzek et al. 2003). In other words, their belief in the legitimacy of government remains. If anything, CAGs set themselves as *legitimising agents*, their role being to ensure that governments remain accountable, transparent and authentic to their citizens (Dryzek 2009). I suggest this is not an agenda of radicalism that seeks to create wholesale social change. Rather, CAGs are operating here as cosmopolitan agents in order to legitimise state power, with the hope that in turn the state will bring

about a social ‘good’ (Archibugi & Held 2011), such as a concerted effort to mitigate against dangerous climate change. Bethany (20, VIC4) expresses this well:

*We have **legitimacy**. This is a science based issue so we are trying to, using the science that we have available and that is available. Umm, we're just ... not just raving lunatics with our own agenda, trying to force other people to change because we believe that is the way it should be ... (my emphasis).*

It is wrong to suggest here that CAGs are purely focused on political action. They also strongly believe that their collective action needs to be directed towards influencing public opinion and attracting the mainstream community to their ‘cause’, namely climate action (Louis 2009). This was evident in the emphasis of CAGs on community outreach, awareness raising and education.

In summary, I have argued that CAG members surmount the constraint of lack of trust by demonstrating that, through their actions they are cosmopolitan, democratic and legitimising agents. They are “actors with authority” (Biermann et al. 2009) undertaking political action despite heightened community distrust in existing government and political arrangements for mitigating the effects of dangerous climate change.

7.8.4 CAGs and Reflexivity

The third enablement for agency is reflexivity. Archer (2007) defines reflexivity as: “the regular exercise of the mental ability, shared by all normal people, to consider themselves in relation to their (social) contexts and vice versa” (p. 4). According to Archer (2007, p. 5) the modernising conditions of our fast changing, globalising world requires increasing levels of reflexivity.

In asking “what exactly do people do?” Archer (2007) suggests that there is a need to examine the “*variability* in the actions of those similarly socially situated and the differences in their processes of reflexivity” (p. 6, emphasis in text). In other words, what is the relationship between people deliberating on an issue of concern and the action people take in their social lives? (Archer 2007, p. 37)

So in what ways do CAG members display reflexivity in relation to their actions and how is this different from the attitudes of those who choose not to take public sphere action on climate change? CAG participants were quite literal in demonstrating their role as reflexive agents in climate change action:

I just want to be able to look myself in the eye in the mirror and say well at least I tried, at least I spent, you know, my energy and my, whatever time I had in a good, in a constructive way (Linda, 27, NSW2).

Those inactive on climate change within the community were otherwise characterised as people who “don’t want to look”. CAG members in fact suggested that a lack of personal responsibility for climate change action is linked to the failure to employ reflexive thinking on the part of those that choose not to act:

they are so focussed on their lives and living day to day ... it’s just about survival, they’re not looking at ... at, umm, other aspects of their lives (Jerry, 63, VIC2).

... but you know this sort of, it divides. That’s quite difficult they’re saying well they oughta do something about it and its shocking what’s happening, but don’t want to look (Kirsten, 62, VIC4).

I have already shown (section 7.7.1 above) that CAG members are highly educated people who are often less burdened with the concerns of managing their day-to-day lives. As a particular ‘elite’ within their communities, it could be expected that they possess the capability and the time to critically think and reflect on the problem of climate change. Bethany’s statement below supports this contention:

Well it’s my upbringing. The privileges I’ve had, umm, perhaps my education, where I’ve gone to school, perhaps where I fit into society, has given me the ability to not think about direct things like, umm, financial things are not so much of a worry for my family so therefore I’ve been able to think about other things beyond those immediate to do’s, have to cover those first and therefore yeah it’s just that extra knowledge and then I’ve got the time to be able to do something about it as well. So it’s like that, you’ve got to be able to cover all

those personal bases first and then you think about the wider world and how you can effect it (Bethany, 20, VIC4).

CAG members perceived others within their community who were not overtly active or otherwise concerned about climate change as lacking reflexivity. According to CAG participants, others are disempowered, overly individualistic, hedonistic, ignorant, failing to connect issues, not affectively engaged or morally outraged enough. I expected the CRAG members (VIC2) who were initially drawn to their group by the free gifts and subsidised solar panels provided by their council to demonstrate not only more individualistic but also less reflexive tendencies. However this was not the case:

But it could ... cause wars. War. If one part of the earth became unsustainable and they say we're going to live here now, it's on (Jerry, 63, VIC2).

Part of it for me, umm, was just the whole social justice thing, umm, I'm involved with a social justice group too, but, umm, you know, there's an understanding, a realisation I suppose, so much of what we have we waste and we ... we over consume and people in other developing countries would probably like the same basic essentials that we take for granted (Terry, 55, VIC2).

Other CAG members equally demonstrated the ability to link their local and community-based concerns with broader notions of unsustainability:

back in the sixties and seventies we thought that, ahh, it was going to be, you know, so much leisure by year 2000 because technology would improve productivity, but we all chose not to just to take leisure but to take more consumption, we all worked far more. Why did we do that? I've never understood that. Why didn't we just say, let's work half as much with the technology productivity improvements. Let's just have half the wages but we never said that. We said no, no, we'd have more trips, more furniture, more new cars, more everything that's where we went wrong, tsk, damn it we should have done something about it (Wayne, 68, NSW4).

They made links, for example, between climate change and consumption; climate change and population; and even climate change and (resource) wars, demonstrating the distinct ability of CAG members to apply “critically reflexive systemic thinking” as the basis for their “ethically and morally grounded” actions (Gregory 2000, p. 493). The collective again both supported and enhanced individual reflexivity, providing a safe space for dialogue and debate, and aiding mutual learning.

Earlier (in section 3.6.1), I argued that disempowerment, distrust and lack of reflexivity constrain individual agency for environmental problem solving. All are potentially potent inhibitors of political engagement that must be overcome to extend the potential of citizen participation in climate change governance. I argue that CAG participants, on the other hand, display enabling characteristics as cosmopolitan, democratic and legitimising agents.

I illustrate this process in Figure 10 (see below). Figure 10 demonstrates how members of CAGs respond to the three constraints to individual agency that I developed initially in my literature review (section 3.6.1). As discussed previously, I took these three constraints forward as an empirical “test”. The question of what constrains and enables individual and collective agency on climate change was taken forward into my CAG focus group questions (Table 6) and is identified as one of the primary themes detailed within each of the case study reports (Appendix F). In section 7.8 I discuss the data related to the question of constraints to individual agency drawn from across my multiple case study and together with the literature build my theoretical argument for how CAG members overcome the three constraints to individual agency that I identified earlier in the thesis.

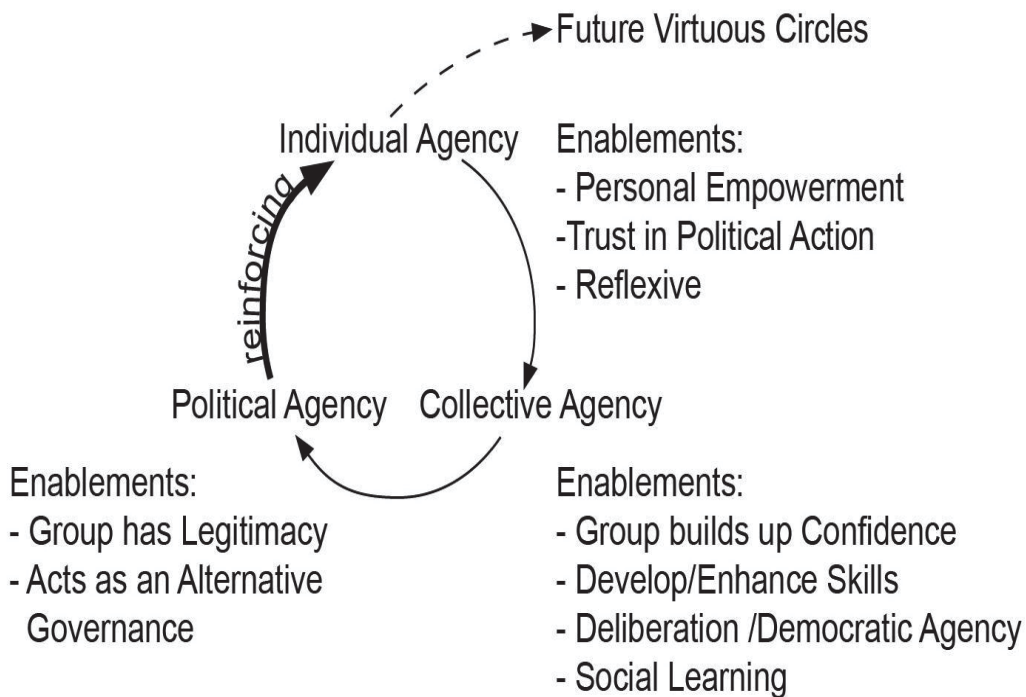


Figure 10: Virtuous circle of agency

I represent this process as a virtuous circle (Louis 2009 – see section 7.2). The Oxford Dictionary defines a virtuous circle as “a recurring cycle of events, the result of each one being to increase the beneficial effect of the next”.⁸⁴ As the CAG members in my research cohort have expressed above, members possess individual agency. They have overcome the constraints to agency of disempowerment, lack of trust in political institutions and political actors and a lack of reflexivity required to address the global risk issues of modernity, specifically, climate change. Their individual agency is enhanced by their involvement in the group. Their CAG enables the development of collective agency. Involvement in the group bolsters individual members’ confidence around their voluntary actions. CAG members have the opportunity to develop and practice skills that contribute to both their individual and collective agency in climate change action. They act as political agents and in the process of group dialogue and deliberation, they practice democracy. This political agency acts to further enhance their individual agency and emboldens CAG members in fulfilling both their individual and collective responsibility for climate change through their voluntary actions. Linda (27, NSW2) expresses this well in the quotation in section 7.9.1 below. The groups consider

⁸⁴ Oxford Dictionary Online, *oxforddictionaries.com*/, accessed 31 January 2012.

their collective political and democratic agency as providing a form of legitimacy that under the conditions of Beck's organised irresponsibility positions them as a type of alternative governance for legitimate grassroots climate change advocacy and action.

It remains to consider how these traits and capabilities might be harnessed to activate agency in the wider community. This is the focus of the next section.

7.9 Enabling Agency

I include this quotation from Hall et al. (2010) again to reinforce the many resonances with how participants in my CAG focus groups described their motivations for taking climate change action and how working collectively strengthened their personal ability to act.

Unifying our concerns as a group emboldened us and ensured that tasks were shared out to those who had time and energy, preventing us from individually 'burning out'. We discovered how working together as a pressure group increased the legitimacy and lobbying power we would not have had as individuals. We maintained our energy and enthusiasm in the project through the foundation of social support that we mutually provided to each other as we worked on the project. Beyond the election outcome, the skills we have each gained and agency we have developed since joining CAC and writing the Bill have given us the confidence to remain powerful and effective advocates for action on climate change in our community (Hall et al. 2010, p. 88).

The advantages of working collectively are clear. Whilst participants were individually empowered to act the group enhances personal agency, providing emotional support, burden-sharing (i.e. sharing tasks), establishing group authority, extending expertise and contributing to social learning.

Apart from the voluntary creation of coalitions within local communities consisting of active individual agents passionate about climate change, what other potential models for group engagement exist? How might these enhance understanding of what enables collective agency for climate change action? At this point I turn to consider a related model, Climate Camps. As I noted in section 5.5.2.2, I attended two Climate Camps in NSW during the period of my research. I was interested in observing how CAGs,

representing grassroots community-based collectives, participated in Climate Camps and the role of the camps in mobilising CAG members and their contribution to building a broader coalition around climate action.

7.9.1 CAGs as models of group engagement

The role of Climate Camps in developing collective agency around climate change has been of particular interest (see section 5.2.2). Doyle (2009) particularly identifies the “Camp for Climate Action” as seeking to enhance individual agency through collective action (p. 110):

The weeklong camp is intended as a means of collective action, “to overcome feelings of isolation and helplessness by bringing people together to create a community of resistance” (Camp for Climate Action, 2008). Collective action is achieved through commitment “to bringing diverse groups and individuals together to live in an ecologically sustainable, cooperative way” (Camp for Climate Action, 2008). The experience of the camp is then intended as a platform to inspire individuals to adopt these ways of living in their local communities.

Pearse et al. (2010) describe CAGs as “groups ... often populated by people mobilized for the first time, or in a much more intense way than previously” (p. 91), contrasting with the majority of their Climate Camp research participants who “were considerably involved in one or more environmental organisations or autonomous collectives” (p. 90). This indicates that in the progression towards climate activism, community-based collectives such as CAGs may represent a stepping stone or stepping off point in a process of intensified or otherwise more formal engagement in environmental politics and action. Linda provided some evidence for this process:

... so you start off being nervous about coming along to a meeting and you do it and it doesn't kill you and it actually was quite fun and ... you realize you can survive through that and then the next step is OK, well, come along to ... an event of some sort and then a couple of months later you're being interviewed on national radio or, standing in front of some building waiting for a policeman to take you away [general laughter]. It's ... not a very gradual process (Linda, 27, NSW2).

Climate Camps contribute to movement building by enhancing individual and collective knowledge around climate change, and developing skills and experience in climate activism in a highly charged political context. Because of this, Camps potentially fail to attract, or may otherwise alienate, members of CAGs who may have only recently made a commitment to climate change action. Camps are considered temporary model communities of alternative and sustainable lifestyle practices (Doyle 2009; Pearse et al. 2010). Central to their operation are deliberative and participative processes that aim to be wholly inclusive and non-hierarchical (Doyle 2009). Camps incorporate a particular model of modified consensus decision making, group deliberative processes and support that derives from anarchist practice⁸⁵ and can be observed in other contemporary social change movements, in particular the World Social Forum⁸⁶ and more recently the Occupy movement.⁸⁷

Climate Camps may not be the best representations of the power of deliberation and their movement building potential has been the focus of recent serious reflection.⁸⁸ However I found their consensus building and group support processes powerful and transformational, readily able to accelerate individual motivation, commitment and action through collective agency. Seeing large scale decision making that was inclusive, democratic and could incorporate disparate views non-violently was indeed inspiring.

I see a linkage here between the deliberations that occur at Climate Camps and the discursive elements of the focus groups that formed the primary data for my research. I return to VIC2 where, as I describe above (section 7.3), several times throughout the focus group tensions rose among group members around differing opinions on the science of climate change and different forms of response. For example, questions were raised regarding whether global warming was actually occurring (see exchange below) and the benefits (or costs) of nuclear power. This raised questions for me of whether in fact these four individuals had sufficient common ground on which to base collective group action.

⁸⁵ <http://www.rantcollective.net/article.php?list=type&type=29>, accessed 12th February 2012.

⁸⁶ <http://www.forumsocialmundial.org.br>, accessed 12th February 2012.

⁸⁷ <http://occupywallst.org/>, accessed 12th February 2012.

⁸⁸ Camp for Climate Action in the UK have decided to no longer hold annual climate camps and have embarked on a process of reflection on the future strategy for organizing and action. <http://climatecamp.org.uk/>, accessed 12th February 2012.

I would argue the other side that ... that... (Jerry, 63, VIC2)

No, I disagreed with you when you said that actually (Ken, 74, VIC2)

OK. You can disagree but I can show you the data (Jerry, 63, VIC2)

Well I mean I can show you counter data, umm, so I mean let's not have an argument between ourselves (Ken, 74, VIC2)

However, entrenched positions tended to fall away through the process of deliberation around the focus questions and related discussion (Smithson 2008). Under these circumstances, these four men were able to negotiate their positions on climate change and sustainability in a cooperative manner. The value of a deliberative process amongst strangers with differing value sets around a contentious issue was thus revealed in practice. As Fischer (2009) states:

Discourse is essential to the basic human yearning for social recognition and identity and the related desire for a sense of agency. Essential to the facilitation of empowerment ... is the creation of institutional and intellectual conditions that help people pose questions in their own ordinary or everyday language and decide the issues important to them.

However I would add here: and the way that they wish to *enact* them.

As Walter suggests (below), it is the conversations within CAGs that form the underpinning for shared learning and action and which can result in transformative outcomes in CAG members.

.... yes so I think sometimes just linking up with people is really important and when you think about a society learning so much of it happens in conversation so umm you know all those little learnings when people exchange information and ahh learn from kind of reflecting from each other's points of view can add to large ... larger learning ... (Walter, 40+, NSW3).

Certainly, I felt this was the case even within the limited setting of the focus groups. There was usually a time within each group where some new shared learning was revealed, a tacit understanding that grew out of the conversation itself rather than the performance by CAG actors played out in front of me (Goffman 1959).

This could be described as a form of transformative learning⁸⁹, where action creates learning or “learning by doing”. CAG participants are gaining practice in citizen skills (Hendriks 2006), which are “at the heart of learning democracy” (Fischer 2009). But more than that there is something simply good in taking action within the collective setting. As Rod (60, NSW3) observes:

‘just act because it is beautiful’ ... but within the action itself there’s ... there’s goodness and spirit

7.10 Conclusion

In this chapter I have brought together the results of my analysis of focus group discussions with eight Australian Climate Action Groups with my findings from the literature. In particular I have addressed questions raised in my literature review in Chapter 3 where I note the conundrum raised by Beck (1992): can the individualisation of responsibility create the conditions for social change on climate change? Or, faced with the threat of catastrophic climatic risk, will people be personally disempowered, in denial or, otherwise ineffective in their action? I have drawn on Middlemiss (2010) who captures well this tension by differentiating between an individualisation of responsibility that is derived from an individualist (agency-oriented) approach and an individualisation of responsibility that is derived from a situated (structuration-oriented) approach (illustrated in Figure 6). My investigation of Australian CAGs lends empirical weight to Middlemiss’s theoretical framework and extends her work further.

In particular I have addressed questions related to how the CAG focus group participants define their individual and collective agency in climate change action and the types of action that they are taking. The CAG participants in my focus groups presented as a particular type of person. They demonstrated a set of personal characteristics that set them apart from people in the wider community who feel personally disempowered around climate change as an issue. CAG members do undertake actions related to their individual responsibility for climate change through their personal and private sphere behaviours – adopting significant changes to their

⁸⁹ According to Cranton (2006) transformative learning is: “the process by which people examine problematic frames of reference to make them more inclusive, discriminating, open, reflective and emotionally open to change. It can be provoked by a single event – a disorienting dilemma – or it can take place gradually and cumulatively over time. Discourse is central to the process.”

lifestyle practices. However, beyond this, they have overcome the structural constraints of disempowerment, political distrust and lack of reflexivity to enact collective agency through their public sphere actions. Moreover they see themselves as moral agents, describing a legitimate role for their grassroots groups in making the Australian government accountable for climate change action.

In undertaking action towards mitigating climate change, the CAG participants described a process of increasing individual and collective agency. In this sense, the group expressed a capacity that was greater than the sum of their individual actions. They understood the group as enhancing their political agency, portraying their CAGs as justifiably bringing political actors and governments to account in the face of their inability to take strong action to prevent dangerous climate change. This process reinforced their individual agency and allowed individual CAG members to take further and more challenging action. I portray this process as a virtuous circle (Figure 10).

In the next chapter I consider questions related to my third research aim, that is, how collective grassroots action can lead to broader social change.

CHAPTER 8 - CAGS AS NICHE WITH REGIME CHANGE POTENTIAL

8.1 Introduction

In Chapter 7, I argued that CAG members undertake voluntary activities on climate change both as individual and collective agents. They are both personally and collectively empowered, have overcome feelings of political distrust and have built trusting relationships with their CAG peers. They approach their climate action reflexively, reflecting on their individual and collective motivations and they position climate change within its broader social context. CAGs have legitimacy; they represent an alternative governance derived from the grassroots. In coming together in collectives in mutual learning and deliberation, they develop skills in democracy and they practice democracy. In Chapter 7, I laid out a model (Figure 7) that sets out the determinants for this process based on my research outcomes.

In this chapter, I consider my third research aim (RA3), that is: to determine how collective grassroots action can lead to broader social change. I address this research aim by returning to the literature on sustainable transitions that I discussed in Chapter 4. The aim of this chapter is to discuss how CAGs realise their potential to influence public opinion and political action, both within and beyond their local community context in order to infiltrate wider society. In particular I address the following questions:

1. Can CAGs be considered niches? And, if so:
2. Do CAGs represent a niche that could affect the regime?

These questions are considered from the perspective of the recent but growing scholarship that seeks to understand the role of grassroots community-based action on climate change and sustainability, supported by a burgeoning of local and community-based sustainability initiatives (Buchs et al. 2011; Hielscher et al. 2011; Hoffman & High-Pippert 2010; Krakoff 2011; Middlemiss 2011; Middlemiss & Parrish 2010; Peters & Jackson 2008; Seyfang 2010; Seyfang & Smith 2007). For the most part this scholarship seeks to extend sustainable transitions theory from its historic interest in demand side socio-technical innovations into areas of civil society concern (Geels 2011;

Grin et al. 2010; Hielscher et al. 2011), such as citizen engagement and participation in sustainability initiatives, social learning, governance and community collectives' contributions to social capital (Hoffman & High-Pippert 2010). Furthermore, the multiplicity of sustainability initiatives that are central to these grassroots movements is occurring counter intuitively, according to Middlemiss and Parrish (2010). Grassroots initiatives are supported by volunteers with little power or influence, and few resources for creating change (p. 7559). The concept of change arising from the 'bottom up' is not universally supported and in many cases, particularly when considering hegemonic power interests, is treated with hostility (p. 7560). This chapter in particular addresses the emergence of community-based groups from the grassroots seeking to entrench low carbon pathways and to establish alternative energy systems and practices counter to the structural power of extant regimes (Hielscher et al. 2011).

8.2 Can CAGs be considered niches?

Firstly, I take up the question of whether community-based grassroots collectives can contribute to broader scale social change and if so, how. I am interested here in how other scholars have applied transitions frameworks in order to understand pathways for social change that emerge from the grassroots and how this reflects on my claim that CAGs operate as niches, that is, pockets of radical innovation with regime change potential.

The role of collective agency within groups such as CAGs has only recently become a focus of academic research. According to contributors to a special issue of *Journal of Social Issues* (Volume 65, number 4, 2009) dedicated to collective action research and theory, the nature of collectives in terms of their member characteristics, individual and group agency and social change potential remain largely under researched. My thinking around collectives has been further stimulated and informed by the current turn in the sustainable transitions literature to consider the role of community-based collectives in innovation and change. As Shove (2010, p. 278) observes, this literature creates and exploits the "intellectual space" in order to: "Think ... seriously and systemically about how environmentally problematic ways of life are reproduced and how they change".

In particular, the notion of “grassroots innovations” (Seyfang & Smith 2007) has been instrumental, I believe, in expanding ideas around how radical changes at the grassroots may translate into regime spaces. This notion has been taken up more recently by researchers in their theoretical and empirical work (Hargreaves et al. 2011; Hielscher et al. 2011; Middlemiss & Parrish 2010; Moloney et al. 2010; Seyfang & Haxeltine 2010) and applied to collectives active on climate change and low carbon transitions.

In Chapter 4 (section 4.2.1), I set out one of the leading principles of socio-technical transition theory, the Multi-Level Perspective (MLP) (Geels 2005) which has been influential in characterising grassroots innovations (Seyfang & Smith 2007; Geels 2011). According to Geels (2011), regimes support incremental change, possess stabilising patterns and are path dependent. Niches, in contrast, sit outside of the regime, often as “protected spaces” (Geels 2011, p. 27) which “work on radical innovations that deviate from the existing regime” (Geels 2011, p. 27). Just like research and development laboratories (Geels uses these as an example), CAGs consist of particular social ‘elites’ or ‘enclaves’ (Dryzek 2009) ripe with the potential to explore new forms of action within their local communities in order to influence both public opinion and political actors. As CAGs sit outside of the state, often distinct from more mainstream eNGOs active on climate change campaigning and advocacy, they are not beholden to mainstream practice. They have the capability of working outside the hegemony. Or perhaps, drawing from Middlemiss and Parrish (2010), grassroots initiatives may simply go unnoticed, given that they generally consist of small groups of volunteers active within their local communities.

Geels (2011) makes another important observation on the application of the MLP to sustainable transitions in acknowledging that the MLP itself is useful as a “heuristic device” that assists in guiding researchers through questions and problems (p. 34) rather than a distinct object of truth. This also applies to the application of the MLP to my analysis of CAGs. I’m interested in the process of change and I am not wedded to a particular mechanism. As Geels (2011, p. 29) states:

An important implication is that the MLP does away with simple causality in transitions. There is no single ‘cause’ or driver. Instead, there are processes in multiple

dimensions and at different levels which link up with, and reinforce, each other ('circular causality').

In other words, the MLP assists in conceptualising messy change progressions (Ostrom 2009).

8.2.1 Structuration and niches

To further explore whether CAGs are grassroots niches it is important to draw on the critical role that structuration theory plays in the transitions literature (see section 4.2.2). Geels (2011) illuminates this by exposing a more nuanced explication of the relationship between the different levels of niche, regime and landscape. A noted criticism of the MLP has been the perception that these three levels operate as a nested hierarchy (Geels 2011). Geels (2011) clarifies that, rather, they are differentiated by their different degrees of *structuration*. At the niche level there is least structuration, or 'stickiness', of actors to the prevailing structural conditions which explains why grassroots sustainability initiatives have proliferated across local communities.

In effect structural change forces social actors to become progressively more free from structure. And for modernization successfully to advance, these agents must release themselves from structural constraint and actively shape the modernization process (Lash & Wynne, in Beck 1992, p. 2)

I return to Lash and Wynne's words (noted above) as they have acted as a recurring mantra throughout my research. If the vision here of social change premised on individualisation is to be realised, then the question of if and how actors are freed from structural constraints becomes the chief consideration. So in what ways are CAG members freed from structural constraints? In the previous chapter I argued that CAGs are enabled through overcoming the constraints of disempowerment, distrust and lack of reflexivity (sections 7.8.2, 7.8.3 and 7.8.4). Accordingly, as agents are most free from structure in niches and as niches are the least structured elements in the MLP, new ways of local level community-based practice (actions/ behaviours), governance (political processes) and deliberation (democratic processes) can be developed and trialled. CAG members, as I have shown, adopt social practices that go against accepted social norms to directly address unsustainable behaviours (section 7.4.3). They actively engage in

political processes even though they take a non-partisan approach to their climate action and may not be schooled in politics (section 7.4.3). Through their conversations and group deliberations they develop their skills in localised democracy and make localised democracy a reality. CAG niches act as the loci of social learning and experimentation which can be replicated across other communities with the potential to translate into wider scale regime change.

8.2.2 Niche formation

As discussed earlier (section 6.2), Al Gore's film, *An Inconvenient Truth*, was a significant marker for CAG formation (five of the eight groups specifically referenced their formation around the time of the film's release). The film was released in Australia on 14 September 2006 to coincide with a visit from Al Gore and corresponded with high levels of public concern about climate change (Climate Institute 2007). All except two of the groups formed around this time (late 2006 to early 2007) with one group forming later in 2007 and another re-formed in 2009.

... we asked for people who were concerned about climate change and that was just around Al Gore, when Al Gore's film was coming out and we had 50 or 60 people come along (Walter, 40+⁹⁰, NSW3).

*I think I must have seen Al Gore's film, called, what was it? [Garry intercedes: *An Inconvenient Truth*] *An Inconvenient Truth*, yes that's what first drew my attention to climate change so when I saw the advert about this group I went along 'cause I realise this is a very new but important topic (Daphne, 65, VIC3).*

Whilst a town or community meeting or other gathering (for example Walk against Warming⁹¹) precipitated CAG formation for some groups, preceding this was often a more informal series of conversations or discussions held in someone's home or the local pub where people could exchange their views and ideas around the issue:

.....when J[acob] and I were talking about climate change and we thought that the conversation was really, kind of an important aspect of social change, so we felt, OK, part of what we'll do is, we'll just set up a sort of a regular

⁹⁰ This participant did not provide his actual age.

⁹¹ <http://www.walkagainstawarming.org/> accessed 12 May 2011.

conversation with some other people we knew well ... and we just met ohh once a month or so and it was almost that the discussing of things you sort of sorted out a bit of, umm, knowledge and it was also like the natural progression was then to take action on that knowledge and, yeah, and then it sort of, that's how [CAG] was, umm, begun (Walter, 40+, NSW3).

These conversations contributed to a shared understanding of group members' beliefs, values, concerns and motivations around climate change.

What prefigures a niche, and is this important to consider when differentiating community climate action? I have argued that CAG formation is precipitated by a *moral shock* or *social scare* (section 7.4.1). Part of my reasoning relates to the surge of CAG formation following the Australian release of Al Gore's film, *An Inconvenient Truth*. According to Neilsen and the Environmental Change Institute (2007) the international impact of the film coincided with the period of greatest concern regarding the threat of dangerous climate change. Does this equate with a niche creation 'moment'? A poll of 32 community groups active on climate change in the UK undertaken by the Grassroots Innovations⁹² project showed a wave of group formation between 2005 and 2010 which peaked in 2007 and has since waned (Park 2011). Middlemiss and Parrish (2010) note that one of their two study groups, the Bollington Carbon Revolution⁹³ commenced in September 2006. The Transition Towns movement also began in September 2006 (Scott-Cato & Hillier 2010, p. 874). These examples exhibit strong parallels with the formation of Australian CAGs (as discussed in section 6.2) which occurred during a period of high public concern and political attention and in the aftermath of a catastrophic natural event (section 1.3). I suggest that it is no coincidence that grassroots niches active on climate change formed around this time, coalescing around these landscape level trends.

Since their peak time of formation in late 2006, there has been a decline in the numbers of CAGs commencing and this is matched with the Grassroots Innovations project findings, associated with a steady reduction in mainstream community concern on climate change (Lowy 2011). The multi-phase perspective describes different phases of socio-technical transition: emergence, take-off, acceleration and stabilisation (Geels

⁹² See http://www.grassrootsinnovations.org/Grassroots_Innovations/GI_Home.html, accessed 2 May 2011.

⁹³ See <http://www.bollingtoncarbonrevolution.co.uk/index.html>, accessed 16 November 2011.

2011, p. 29; Grin et al. 2010, pp. 126–131) (see Figure 1). This idea is useful when considering the role of niches in transitions as not all innovations will succeed and result in new forms of stable regimes. Rather, as Geels (2011) explains, a process of change can be conceptualised whereby:

(a) niche-innovations build up internal momentum; (b) changes at the landscape level create pressure on the regime, and (c) destabilisation of the regime creates windows of opportunity for niche-innovations. These can be related to the multi-phases: emergence, take-off, acceleration and stabilization (Rotmans et al. 2001) (Geels 2011, p. 29).

Whilst niche success can lead to stabilisation in new regime conditions, in Chapter 4 (section 4.2), I noted the alternative pathways to stabilisation laid out by Grin et al. (2010) (illustrated in Figure 2). Extant regime situations can lead to system lock in, which makes them resistant to the forces of change; to backlash where the forces resisting change are reinforced; or otherwise to system breakdown.

This brings me to consider whether new waves of grassroots action around climate change are evident that can contribute to the building of civil society action and regime destabilisation or, otherwise, potentially lead to stagnation.

A current example is the significant grassroots action which is coalescing around the issue of coal seam gas (CSG) development. This is an issue that extends beyond Australia with an aggressive industry push evident in the UK, the USA, South Africa and Europe to rapidly develop and exploit accessible gas resources with the justification that they replace coal which has higher GHG emissions.⁹⁴ Groups such as the Lock the Gate Alliance⁹⁵ have established and multiplied rapidly in recent times, in response to the socio-technical advance of the CSG threat which is quickly taking advantage of a short-term market demand for gas. The collectives forming around the CSG issue in Australia are responding to different landscape conditions than those which precipitated the development of CAGs. For a start, this issue has more recently attracted attention but is gaining rapid momentum. Rather than a *moral shock* or *social scare* of a global nature, group formations are motivated around more localised threats, for example, to

⁹⁴ See <http://www.campaigncc.org/node/1185#global>, accessed 17 November 2011

⁹⁵ See <http://lockthegate.org.au/>, accessed 16 November 2011.

agricultural land and the pollution of local water sources. I suggest that these grassroots collectives arising around CSG are therefore forming under different conditions than those that were relevant and activating for CAGs. In particular, the discourses of concern in the CSG debate relate more to locally relevant conditions such as farm heritage and local water resources than the ‘climate change as catastrophe’ discourse common in my CAG group discussions. There is a considerable display of self-interest here too. CSG is a distinctly local issue with the Lock the Gate campaign successfully exploiting the ability for farm owners to close their gates to gas company exploration on their land.

There are similarities between the CSG and community climate change action campaigns and the issues are being linked to strengthen the movement generally, however differing motivations are evident in the more “cosmopolitan” (Hulme 2010) concerns of CAGs. This opens another area for future fruitful investigation (see section 9.6), that is: what are the differing routes of niche formation? How are different niche actors characterised? What motivates their collective action within their local communities?

To this point I have considered CAGs as niches with sustainable transition potential. I have discussed their formation in relation to a particular historical and political ‘moment’. The concatenation of decades of scientific evidence (for example, through the IPCC) and numerous serious events and natural catastrophes focused climate change as the “celebrity” issue of the time (Ungar 1995). I have also raised questions (above) regarding what might precede the formation of a niche, whether the formation of niches relies on certain actors and whether niche formation is dependent on local community conditions and contexts. In the next subsection I consider the latter question in the light of some recent scholarship.

8.2.3 Community capacity and niche formation

Earlier I made the statement that CAGs are as diverse as the communities that they emerge from. Indeed CAGs can be found in communities across Australia and through my research I sought to draw from CAGs in different geographic locations and community settings (section 5.5.1.2). My purpose was to develop a more generalisable

sample. However, recent scholarship raises the question of whether the formation of CAG niches is dependent on their local community contexts.

Middlemiss and Parrish (2010) make an important distinction regarding the characteristics of the communities that grassroots innovations emerge from. They use community capacity as a descriptor, arguing that communities require both social capital and resources in order to effectively host “low-carbon” niches. Incorporated within their notion of successful community capacity building are the requirements of increased social capital, resource availability, which they note is “lower in places experiencing poverty and [social] exclusion” (p. 7560), and democratic decision-making or deliberative capacity:

As such taking responsibility for one's ecological impact means agents acting according to the capacity that is afforded to them by their contexts (Middlemiss & Parrish 2010, p. 7561).

It is possible that only certain types of communities possess the conditions which support the development of grassroots innovations. This needs to be acknowledged in a similar way to the ‘elite’ status of CAG members, when considering the potential for niche formation and transition into regimes spaces. Earlier (section 7.9) I alluded to the benefits that collectives provide to their members, and it may be expected that some of these are likely to penetrate CAGs’ local communities, thereby “changing the capacity of the communities in which they are active” (Middlemiss & Parrish 2010, p. 7561). My research was not specifically formulated to determine the characteristics of the communities that CAGs are situated in. This represents a potential area for further research on community-based climate change action (section 9. 6).

In Chapter 4 I outlined sustainable transitions theory, noting the importance of the multilevel perspective (MLP) which sets out the three levels of niche, regime and landscape. Socio-technical innovations, according to the theory, emerge from niches of radical innovation and these possess the potential to bring about changes to the extant regime. More recent scholarship has extended this theory to consider grassroots innovations, which include groups such as Transition Towns, as niches. CAGs adopt social practices that counter unsustainable behaviour, involve social learning in

developing the skills to effect their campaign objectives and enact democracy through their group deliberations. I therefore consider CAGs as grassroots innovations; that is, they are sites of radical innovation in collective political action on climate change that emerge spontaneously from the grassroots of their local communities. However CAGs, in a similar way to other ‘grassroots innovations’, have failed to replicate and grow further in recent years. Rather, their influence has spread through linking with other grassroots networks. In the following section I expand upon some recent scholarship that contributes to an understanding of CAGs as niches with regime change potential.

8.3 CAGs as Niche Projects

One of the more salient features of CAGs is that their membership consists of a particular group of people, largely middle class, highly educated and comfortable financially who possess post-materialist values (Tranter 2010, 2011). I use the term *people like me* to describe this group (section 7.7). Whilst collectively CAGs across Australia have been acknowledged to possess diverse characteristics, the question arises whether a larger climate action movement could grow from groups which individually represent a select few within their local communities. CAG members were also cognisant of this, commenting on the difficulty they had in attracting new members to expand their groups (section 7.7.1). They also believed much more extensive engagement with climate change throughout the broader community would be required in order to achieve the level of change necessary to mitigate against dangerous climate change, especially within the timeframe required:

Ahh, but how do we increase, uhh, the people who are receptive to this? We are always banging on to those people who are converted, converting the converts you know. Can we bring more people into the fold? (Alfred, 65, VIC2).

... it's got to be a pretty amazing grassroots action and that can do that but if it happens it's gonna be along the scale of Vietnam Moratorium stuff before it is succeeding (Solomon, 52, NSW3).

I think influencing individuals within the community you know local community like getting the community galvanised around the issue so it's not just a few individuals scattered around (Marcia, 36, NSW4).

CAG members are reflecting here on the difficulties involved in expanding their group membership and diversity which they recognise is essential for successfully translating climate change concern into the public and political arenas. In section 4.3 I described the three mechanisms of niche diffusion set out by Seyfang and Smith (2007). To recap briefly here, these are: replication, for example by CAGs forming in more communities; growth, for example by individual groups attracting more members; and translating CAG influence into the mainstream. As illustrated above, CAGs are experiencing difficulty in diffusing from their grassroots niche into the regime in order to affect broader social change. CAGs are failing to grow the scale and influence of their grassroots niche by attracting more participants and effectively broadening their appeal through engaging with mainstream audiences.

Based on this evidence, I came to wonder whether CAGs were capable of, or indeed required to, expand beyond their membership in order to effect change. Was there some other means whereby niches could grow and translate in order to bring about change? Are there similar groupings of 'like-minded people' involved in other issues rather than specifically engaged in political action on climate change? For example, there are people who are involved in voluntary community tree planting in New York State (Fisher et al. 2011, unpublished), or in sustainable rangelands development in Western Oregon (Gosnell & Robinson 2011, unpublished). What about people involved in the development of eco-villages and co-housing or community gardens and community supported agriculture, Transition Towns and community renewable energy developments (Hargreaves et al. 2011; Hielscher et al. 2011; Middlemiss 2011; Haxeltine & Seyfang 2010; Middlemiss & Parrish 2010; Seyfang 2010; Seyfang & Haxeltine 2010; Seyfang et al. 2010; Seyfang & Smith 2007)? Arguably these different grassroots groups consist of 'like-minded people' that coalesce around post-materialist values (Inghelhart 1997) that are similar to those of my CAG research cohort. Recent scholarship has come to light which supports this contention.

Raven et al. (2010) develop the idea that niches consist of a number of *local projects* (p. 65), where each project represents a particular type of radical innovation or sustainability experiment:

These experiments can exist simultaneously and build on each other over time through a social learning process. Sequences of local projects can gradually add up to a new trajectory. In this process, rules and institutions that are initially diffuse, broad and unstable, become more articulated, specific and stable. The transformation of local outcomes into generic lessons and rules does not occur automatically, but requires dedicated 'aggregation activities'. Typical aggregation activities include standardisation, codification, model building, formulation of best practices, etc. Also, circulation of knowledge and actors is important to enable comparison between local practices and formulation of generic lessons. Conferences, workshops, technical journals, proceedings and newsletters play a major role therein...*Transition experiments, carried by local networks, provide space for local activities. The outcomes give rise to learning processes that may be aggregated into generic lessons and rules. Outcomes are also used to adjust previous expectations and enrol more actors to expand the social network* (Raven et al. 2010, p. 65, my emphasis).

Further to Raven et al.'s (2010) notion of sustainability niches as multiple and varied local projects, Hielscher et al. (2011) have adapted Raven et al.'s (2010) niche project idea and suggest that this extension to niche theory captures a local-to-global mechanism:

Raven et al. (2010) have illustrated how a collection of local, innovative projects, at first without any real connection, gradually develop into a niche ... The projects start to network with each other and exchange learning, and then begin to develop a range of niche activities such as standardisation, shared learning, conferences, networks and so on, which then make it easier to set up subsequent projects, thereby growing the niche. They note that niche theory has gradually shifted in its focus and its understanding of niches from individual projects and initiatives which are seen as 'carried by local networks and characterised by local variety' towards the 'global level'. *This distinction allows for the assumption that instead of regarding individual community initiatives as numerous niches, it is a number of them or even the totality of groups that create the 'global level' niche* (Hielscher et al. 2011, p. 12, my emphasis).

Utilising this theoretical frame, CAGs can be conceived, then, as a local *niche project* or subset of a much broader sustainability niche. This foregrounds the potential for CAGs to aggregate with other groups of like-minded people, thereby developing broader networks and expanding into much wider social coalitions. Amongst CAGs nationally such “aggregation activities” have certainly occurred through the development of state and national organising bodies and a national summit held now for the last three years. Expanded social networks can also be seen with the more recent incorporation of issues related to health and climate change and the interest of some trade unions. As noted earlier (section 6.2), CAGs have also become more active in national campaigns and advocacy work through membership in CANA; joining the 100% Renewables campaign⁹⁶; and the Lock the Gate Alliance, thus providing evidence for these aggregating tendencies.

So it can be seen how this newer theoretical perspective on niche projects can be related to ‘community innovations’ emerging from civil society. Specifically Hielscher et al. (2011) explore the concept of niche projects through community-led sustainable energy projects in the UK. They state, as:

groups aim to develop holistic approaches to climate change that could potentially drive a more systemic change. It might therefore make more sense to conceive of all the diverse community-led energy initiatives together as one niche, as they share a common focus on 'sustainable energy' (Hielscher et al. 2011, p. 13).

These recent evolutionary perspectives on niche formation, niche projects and sustainability transitions are reminiscent of Torgerson’s notion of the Green Public Sphere (section 4.4.1). I argue that local grassroots niche projects develop and expand as “issue-linkages” (Pattberg & Stripple 2008) are recognised and adopted. For example, the National Climate Camps⁹⁷ that I have attended in the last few years demonstrate such issue-linkages that operate to expand climate change action beyond a narrow band of grassroots interests. Grassroots organisations concerned with forest issues Australia-wide were well represented at the 2010 Climate Camp (which was situated close to the Bayswater B power station in the Hunter Valley, NSW), and so was the nascent national Lock the Gate Alliance campaigning against the development of

⁹⁶ See <http://www.100percent.org.au/>, accessed 19 December 2011.

⁹⁷ See www.climatecamp.org.au, accessed 1 September 2011.

coal seam gas. It should be noted the Lock the Gate Alliance could be considered as a niche project on coal seam gas which has more recently coalesced into a niche, as in response to the rapid escalation of the issue, the alliance now consists of 122 grassroots groups⁹⁸, many of them CAGs. These types of coalitions are consistent with the “aggregation activities” described by Raven et al. (2010) and incorporate a diversity of grassroots initiatives engaged in discursive deliberation and collective action. These aggregations and social learning activities are also described by Seyfang and Smith (2007) as essential processes for translating niche issues into the mainstream regime (section 4.3). The conceptualisation of multiple and aggregated niche projects formulating into a “global” niche thereby extends the normative power of sustainable transitions theory in ascribing local grassroots collectives (such as CAGs) with regime change potential. In the same way I propose that given the nature of climate change as representative of “everything that’s wrong with society coming to a head” (Michelle, 28, NSW2) and the nature of CAGs as representative of community members with strong moral and political concerns, these types of common political ‘projects’ can be harnessed from the grassroots in order to develop a ‘global’ sustainability niche.

Hielscher et al. (2011) suggest however that the concept of niche projects still fails to account for notions of politics and power, a specific critique of STT (see for example Grin 2011; Grin et al. 2011; Meadowcroft 2011). Hielscher et al. suggest that social movement theory may fill this gap. They state:

What political roles do community energy niches need to play in order to influence these reform processes? This is where social movement theory might inform transitions theory and reveal the political roles niches must adopt in sustainability transitions. How do community energy niches develop collective identities and interests; what repertoires of activism press for reforms? (Hielscher et al. 2010, pp. 16-17)

My research focus differs from that of Hielscher et al. (2010) as they have specifically addressed “community energy niches”, an example of which would be a community wind farm initiative. Their questions raise several issues and points of departure from my research which I consider below.

⁹⁸ See <http://lockthegate.org.au/groups/>, accessed 28 November 2011.

Firstly, it appears that the political roles of community innovations may be played down in Hielscher et al.'s (2011) account or, similar to their critique of Transition Towns, Hielscher et al. believe these community energy niches possess a certain political naivety or a lack of interest in politics (Scott-Cato & Hillier 2010; Seyfang et al. 2010). This contrasts to my research findings on CAGs as in almost all cases there was an acknowledgement by participants of their roles as political agents in grassroots climate change action. As I've argued in Chapter 7, CAG members are further enabled and empowered through their individual, collective and political engagement, creating a virtuous circle of increasing capabilities. To the extent that CAG members are empowered and claim legitimacy in political engagement (see VIC4 for example) I consider CAGs do fill a political role in reform of climate change policy within Australia. This has been evident in the recent passing of climate action legislation which contains support for renewable energy development, a specific focus driven through grassroots campaigning.⁹⁹

Secondly, whilst I don't discount the importance of including social movement theory to the notional understandings of grassroots climate action, I have suggested that the development of "collective identities and interests" may be counterproductive to the creation of an alternative governance built on grassroots innovations. I have drawn on the scholarship of Dryzek, Torgerson and Ostrom to argue for a more open and diffuse notion of grassroots-initiated social change based on a diversity of discourses; on widespread discussion and debate; and on positions of group trust and cooperation.

Thirdly, regarding Hielscher et al.'s (2011) fundamental question expressed above regarding how reform succeeds from the grassroots: I have no argument with it – this remains an essential question for investigation which I take up below.

Developments in the sustainable transitions literature have recently addressed questions regarding how a "political orientation" (Meadowcroft 2011, p. 70) can be applied to sustainable transitions and the role of power in this process (Grin et al. 2010; Grin 2011; Avelino 2009). Meadowcroft (2011) asserts that politics is manifest on each level of the multi-level perspective (MLP). At the niche level he identifies the role of governments

⁹⁹ <http://www.climatechange.gov.au/~media/Files/minister/combet/2011/media/october/mr20111012.pdf>, accessed 12 February 2012.

in either protecting or exposing niches. In doing so, governments encourage or discourage innovation (p. 71). (Notably, this bears some similarity to the processes of state inclusion and exclusion proposed by Dryzek et al. (2003).) I take this to be a rather narrow view of the political potential of sustainability niches as it assumes that the state will be the primary if not the sole arbiter of grassroots innovation and does not consider the role of sustainability niches outside of the state, where in fact they may have greater political change potential (Dryzek et al. 2003). Meadowcroft (2011) in fact concludes with a similar tranche of questions to Hielscher et al. (2010), but focuses on “institutional reform” rather than “repertoires for activism” (Hielscher et al. 2010, p. 17) asking:

... what institutional contexts are favourable to orienting and accelerating sustainability transitions; which reforms to democratic institutions can improve their capacity to negotiate sustainability transitions; and what sorts of institutional innovations focused on the environment and sustainability can make a difference (Meadowcroft 2011, p. 73).

Again a distinct tension is revealed between the role of the state and the grassroots in regime change. To what extent does the state play a mediating role in regime change and how does it reinforce structural constraints to change? Can grassroots niches only encourage regime change by putting pressure on the state through, for example, galvanising favourable public opinion? Or is there a role for grassroots niches outside the state that complements the role of other actors that work within the state? Grin et al. (2011) in addressing some of these thorny questions concerning state power and grassroots collective agency state:

At the basis of the understanding of the politics involved in strategic agency is the realisation that the regime embodies power: the rules, resources and actor configurations which are part of the regime will privilege practices over others. Arts and Van Tatenhove (2005) have designated this dispositional power. While thus the incumbent regime tends to generate resistance and inertia vis-a-vis experimental practices, it is also true that regime changes will lead to changes in dispositional power. Similarly, the dominant discourses that are part of the regime have significant structuring effects on struggles for legitimacy. Thus, transitions both presuppose and bring about a shift in standards of legitimacy. Seen this way, the challenge for strategic

agents thus becomes to make transition dynamics and the political dynamics associated with it reinforce each other sufficiently so as to gradually tilt the balance of power and legitimacy between incumbent and sustainable practices. This is essentially a diffuse, distributed process that may lead to convergence through common visions or through the graduate, self-reinforcing structuring of practices (p. 80).

Whilst much of this is consistent with my thinking, the process they describe illustrates a type of minimal or inconsequential regime shift (Smith 2007, p. 430) to achieve niche success, where niches are required to compromise on their original visions (Smith 2007, p. 442) and consequently there is a “wider diffusion of a more shallow sustainability” (Smith 2007, p. 446). This is unlikely to provide the conditions for rapid, wide scale change in energy and societal transition required to prevent catastrophic climate change.

The notion of niche projects therefore nuances my understanding of CAGs as niches with regime change potential. CAGs represent a particular type of grassroots political collective taking action on climate change. They possess similarities with other types of community-based collectives active around issues pertaining to sustainability. The linkages that CAGs create contribute to the development of a sustainability niche. Here the potential of Torgerson’s green public sphere may be realised as coalitions develop between diverse groups of actors emerging from the grassroots. Questions remain however in relation to how niches gain and assert power.

In considering the above I now shift to discuss how CAGs seek to influence political actors in order to achieve their sustainability aims and their perceptions on how change occurs.

8.4 CAGs as niche grassroots innovations that influence the regime

If CAGs are to successfully negotiate beyond their innovative niche to influence other state and non-state actors and disrupt the dominant market driven economic rationalism of contemporary politics, their influence and power will need to grow. In section 4.3 I discussed the key change processes for successful niche growth and regime influence proposed by Seyfang and Smith (2007) and taken up more recently in the sustainable

transition scholarship interested in local community-based grassroots innovations. The success factors for niche growth and translation are noted below.

Niches are “cosmopolitan spaces” which can influence regimes through:

- Replication – that is, niche ‘cells’ can develop in different locations and aggregate to create change (Seyfang & Haxeltine 2010, p.5).
- Grow in scale – that is, niches can increase their influence by networking beyond their niche to attract a greater range and diversity of actors (Seyfang & Haxeltine 2010, p. 5).
- Ideas and practices can be translated into mainstream settings (Seyfang et al. 2010, p. 5; Smith 2007).

Successful niche emergence and growth (see section 8.2.2 on niche formation above) require the following three key processes (Seyfang & Haxeltine 2010; Seyfang et al. 2010):

- Grassroots niches need to have widely shared, specific, realistic and achievable goals. In other words, niches need to live up to their promises on performance and effectiveness (Seyfang & Haxeltine 2010, p. 5).
- Niches network with many different stakeholders who can support niche emergence.
- Learning processes go beyond “everyday knowledge” to “second-order learning” (or reflexive learning) wherein “people question the assumptions and constraints of mainstream systems altogether” (Seyfang & Haxeltine, p.5).

I’ve found this a very useful reflective tool for engaging in thinking around my multiple case study and have applied five elements of this framework to my analysis of CAGs in order to define their emergence and growth within the wider climate action movement in Australia and their regime change potential. The five elements are: replication, networks, growth, translation, and social/ reflexive learning. I have excluded niche performance in my analysis as my research has not specifically addressed measures of CAG performance and effectiveness. The elements are discussed below.

8.4.1 Replication through fragmentation

CAGs emerged and replicated rapidly following the surge of public concern around climate change promulgated by Al Gore's film, *An Inconvenient Truth* and within the context of national political inaction. Unlike Transition Towns, CAGs are not based on a particular centralised and standardised model of development, and their potential for wider adoption and spread may be limited by this fact. There appears to be a hiatus in the growth of CAGs. Seeding groups in new areas has proven difficult and some have suffered decreased membership or have disbanded. Unless more widespread replication of CAGs can be stimulated across and within communities their potential to influence political actors at the local, state and national levels will be limited.

As CAGs arise from within their own communities, subject to their particular identities, values, contexts and capacities this could lead to more widespread replication of evolving grassroots collectives. The Lock the Gate Alliance provides a relevant example here. Coal seam gas development is focused around particular, mostly rural communities and has generated significant, recent community concern resulting in the development of grassroots groups. Although there are coalitions with CAGs based on issue linkages, Lock the Gate members were initially drawn from these distinct community groups facing threats to their property through CSG exploration. The emergence of different grassroots community-based groups forming around newer and more immediate threats, therefore, such as coal seam gas extraction, creates the potential for diversity and fragmentation at the grassroots (Ostrom 2010). This indicates a potential for the incorporation of other climate discourses that can create more widespread political action and influence on climate change-related issues. The fragmentation, replication and issue linkage of differing climate change-related issues offer greater prospects for shifting the established regime towards a lower carbon emission trajectory.

8.4.2 Scale of influence and how change occurs

For the most part it is engaging with their local community in order to build support for political action that is most important to CAGs. Groups varied however to the extent to which their sphere of action extended from the local community level. For some groups,

action has come to focus more on national politics as they argue that it is at this level that major legislative and economic reform must be created. For others, the focus is on winning over more members from their local community to the climate change ‘cause’:

I'm trying to influence the political masters through, by showing that there is a consensus for action and they needn't be scared, they'd be voted in if they act on the environment and they'd be voted out if they don't. So it's a whole chain of people, you've got to influence the local community but that, the end goal is to get serious commitment, political action which means building big infrastructure and changing laws and take and.. and regulations and transport systems and everything else to make sustainability possible ... (Wayne, 68, NSW4).

CAGs that are more established and that undertake strategic planning¹⁰⁰ appeared to have a clearer notion of their targets for action, membership and advocacy. Groups without such plans may be tempted to try to achieve too much with their limited resources and often this became a point of frustration:

I feel that we have a very amateurish, amateurish approach, like we ... we spend enormous amounts of energy, say leafleting a neighbourhood, putting out hundreds of leaflets and getting two or three people to come that is, ahh, a huge waste of our energy (Jeffrey, 64, VIC3).

Trying to influence sceptics or people not attracted to the issue was perceived to be unlikely to succeed and as Daphne (65, VIC3) points out, bringing about social change by influencing public opinion is necessarily a long term endeavour:

... about the public education and changing public opinion I think that takes a long time. I've been a community activist in various areas for a number of years and I know that it takes at least ten years to turn public education, public ... opinion around ...

¹⁰⁰ Both NSW2 and VIC1 mentioned that their groups had engaged in strategic planning, for example.

For Louis (2009, pp. 773–4) collective action needs to influence the general public in order to influence public policy and create broader scale social change. CAGs may need to devise their strategies more in line with this view, that is, they may need to seek to develop a community consensus to drive political action on climate change as a precursor to their other political aims.

A few groups expressed ambitions to influence climate change at a global level but this was a minority view. The forms of influence stated included participating in international days of action (such as those organised by 350.org or Earth Hour):

I think one of the things that we also hope is ... is that we have a world presence 'cause we did things like the 350 day of action which we did with millions of people, the largest action concerted action in the world ever and we were part of that. I think we were acting on the world stage, I thought I was ... (Jacob, 53, NSW3).

However, as these are largely symbolic gestures, the effectiveness of CAG participation in achieving broader scale influence is likely to be minimal. As previously discussed, organising on a national level has now become more established amongst CAGs. National annual summits and other organising and skills building opportunities such as Climate Camps have contributed to a higher degree of national information-sharing and strategising. The development of the 100% Renewables campaign is one example of community organising with a national emphasis that has arisen from the grassroots with the potential to generate national political outcomes. However global networking, and the connection of issues around climate change between grassroots organisations transnationally were not significantly evident.

8.4.3 Grow outside their 'elite'

Grassroots innovations can influence the dominant regime by growing the spread and influence of their networks and increasing the diversity of actors involved (Seyfang & Hazeltine 2010). In all cases the researched CAGs demonstrated an involvement with a broader range of local community actors. Some CAGs with memberships bedded deeply within their local community institutions (government, business and third sector organisations) spoke of strong ties with local councils, churches, educational

institutions, other non-government community sector organisations and local businesses. This enabled the spread of ideas and collaboration on projects of mutual interest and benefit. In this sense, reformist rather than radical approaches might work better to influence regimes. However the lack of diversity of participants within and across groups was a compelling characteristic of the CAGs. Active and engaged members of CAGs represent a particular subset or ‘elite’ dominated as they are by middle class, well educated and financially secure citizens who hold post-materialist values. This limits the reach and penetration of CAG influence, within their own communities and also raises the broader question of whether other communities (based on locality, interest and capacity) will seek to actively engage with climate change as an issue.

I sense this could be highly problematic for generating the broad scale community involvement required to address an issue like climate change whose causes are ingrained in current systems that support unsustainability. I believe there is a role here for extending the notion of niche projects (section 8.3) which harbours the potential for the development of ‘global’ niches. Aggregation of diverse groups (acting as niche projects) into networks that support a pluralism of actors and opinions (reminiscent of Torgerson’s green public sphere) may break down or otherwise dilute the elite nature of current grassroots collectives active on climate change within Australia such as CAGs.

8.4.4 Translate their ideas into mainstream settings

The development of a national network of groups and annual summits since 2009 is an important development within the grassroots climate action movement for organising, strategising and mobilising amongst CAG members. However, CAGs face significant challenges in penetrating the extant politico-economic regime. Recent debates over the introduction of a carbon tax in Australia demonstrate the polarisation of community views around climate change both in the climate action movement and in the wider Australian society (Tranter 2011; Jones 2010). Given the power of entrenched ‘business as usual’ positions and organised scepticism (Moser 2009) this currently presents as a difficult obstacle to surmount.

However CAGs have proven to be flexible in taking up new national initiatives, especially those which portray a positive community vision and have political traction (such as the 100% Renewables Campaign¹⁰¹). As community organising and outreach skills develop within the climate action network there is greater potential for the grassroots climate action movement to broaden and diversify its membership and support base in order to shift public opinion and create more mainstream buy-in.

8.4.5 Social learning

One further element, social learning, determines the successful niche growth and emergence from the grassroots (Seyfang & Haxeltine 2010; Seyfang et al. 2010). Social learning refers here not to the acquisition of knowledge and skills but to the deeper, transformative and reflexive learning whereby people challenge the values and norms of present business-as-usual trajectories. Empirical evidence shows that CAGs enhance social learning (Moloney et al. 2010). CAGs support members' abilities to learn about climate change within its collective (local and community) and social (national and international) contexts. CAG members also develop and extend their skills in a number of important arenas: for some groups the emphasis may be to understand how innovative technology can be effectively applied to their local community setting; for others skills relate to community organising, awareness-raising, networking, promotion and communication; others still are engaged in developing the confidence and skills of activism and coordination of high impact non-violent acts of civil disobedience that directly challenge state hegemony. CAG members displayed their reflexive learning ability tangibly within the research focus groups, demonstrating their capacity to evaluate the effectiveness of their voluntary acts and commitment to climate change actions both strategically and affectively.

8.5 Conclusion

So we've got to get some runs on the board and to get runs on the board we've gotta do it as a community, it's gotta be, you know, have an impact across the community and.. umm.. but, then yeah, you want to say you don't have to wait for government to work out what the hell they're doing and you know, umm, for

¹⁰¹ <http://www.100percent.org.au/>, accessed 12 May 2011.

the global, you know, for ... for nations to work out between them what's happening. You do it at a local level and it's easy to actually just encourage other, you know, through the network of councils or whoever, umm, and I think that's empowering because the people at a grassroots level can say yep, we can do something (Marcia, 36, NSW4).

Australian Climate Action Groups (CAGs) act as grassroots innovators for regime transition; that is, they are locations of radical innovation and alternative practices that emerge from civil society at the grassroots (local/ community scale). CAGs consist of a particular elite and their potential to disseminate wider into the mainstream of their local communities may be limited by this fact. They come together under specific formative conditions and, therefore, only certain communities will have the capacity to support CAG creation. Their impact and longevity follow a phased development pattern stimulated at a particular historic/ social 'moment' into action. It may be that CAGs in their current form are short-lived. However, this does not mean that their influence in creating regime change is negligible or insignificant.

When CAGs are conceptualised as niche projects, within a broader-scoped sustainability/ energy transition niche, the potential for regime change may be realised. Five possible means by which CAGs can influence the extant regime were discussed. Firstly, through replication, niches can bring about aggregate changes. Secondly, through growth in scale and influence niches can attract more participants. Thirdly, diffusion occurs through translation of niche ideas to broader mainstream audiences. Fourthly, niches (as aggregates of niche projects) can build networks of wider support throughout their local communities and facilitate broader stakeholder engagement. And finally, through processes of "social learning" (Seyfang & Smith 2007, p. 589) knowledge is built and shared, and deliberative skills and practices are nurtured in groups. This accelerates both individual and collective political agency on climate action and creates the conditions for these niche practices to translate into regime change.

CAGs, as discussed in section 8.2.2, are currently failing to grow. My research indicates that CAGs are failing to spawn new groups, and the number of members within existing groups is not increasing. Nor are they replicating by emerging from different

communities, though there has been an expansion of other, similar groups such as Transition Towns. CAGs are characteristic of niche projects in this regard; they are one type of grassroots innovation within a broader sustainability niche. Should another significant ‘moment’ arise (as it did in 2006) to generate a social scare and/ or moral shock around climate change, there is no doubt potential for future CAG growth and replication.

CAGs are developing linkages with other groups and organisations, extending their influence beyond their local communities. The 100% Renewables campaign is one example where CAGs are now working together across Australia with an ambitious policy agenda and influencing national political outcomes. The Lock the Gate Alliance provides another example, demonstrating the aggregation of niche projects. The Alliance has grown rapidly through the involvement of CAGs that see the links between their climate change campaign objectives and the rapid development of coal seam gas within Australia. This evident coalition of interests between groups has also enhanced opportunities for social learning so that deliberation, campaigning and advocacy skills are being developed and shared.

CHAPTER 9 - CONCLUSION

9.1 Introduction

To conclude my discussion I briefly recap my research objectives and the argument I have developed throughout my thesis. I discuss the contributions that my research makes to the scholarship concerned with climate change, grassroots community-based action and social change. I then consider some of the unanswered questions from my research and in particular put forward some ideas on how CAGs can be conceptualised within a more comprehensive change framework as having the potential to grow in influence and power and to act as an alternative form of governance. Finally I propose a future research agenda.

9.2 Climate Change in Risk Society

I have positioned my thesis within the meta-theoretical framework of Beck's Risk Society (1992) thesis. Beck's work attends to global 'bads' such as climate change under contemporary societal conditions. Contemporary society is full of contradictions that Beck delights in exposing, ridiculing and critiquing. Beck's work acknowledges the centrality of risk and the individualisation of responsibility. It is with this framework that I developed my central research aims:

1. To determine why and how individuals take responsibility for climate change through their voluntary actions;
2. To determine how the shift occurs from individual agency to collective agency in grassroots climate change action; and
3. To determine how collective grassroots action can lead to broader social change.

At the core of Beck's thesis is that for social evolution to occur, society must proceed to a second reflexive modernity. Modern scientific and technologically mediated risks and man-made catastrophes underpin this modernity, epitomised by climate change. According to Beck (1992, p. 24): "Risk society is a *catastrophic* society". Yet it is under these conditions that hegemonic power and authority can be disrupted and the vision of a reflexive modernity and cosmopolitan society can be realised, as: "political

modernization disempowers and unbinds politics and politicizes society” (Beck 1992, p. 194). Risk and individualisation break down the extant institutions and structures, opening fractures in the regime and exposing the contradictions of individualised responsibility where: “one can do something and continue doing it without having to take personal responsibility for it” (Beck 1992, p. 33).

Evident in Beck’s thesis is the central role of citizens in addressing state irresponsibility in the face of contemporary global risks. Nowhere is this more evident than in the issue of climate change where growing citizen distrust in politicians and political institutions has been matched in recent years with the emergence of grassroots collectives active around climate change. Within Australia where the politics of climate change has attained a special significance (Jones 2010), a community-based movement for action on climate change has recently developed. Climate Action Groups (CAGs) fill a particular position within Australian climate politics. They have risen from local communities across Australia to undertake various forms of voluntary action with the intention to generate widespread community awareness and support. They target their political action towards governments in order for them to take responsibility for climate change through strong action and to diminish the threat of dangerous climatic change.

Before I summarise my research outcomes in terms of the objectives that I posed at the beginning of the thesis (section 1.3.3) and that I took forward into my research on CAGs, I discuss the contribution of my research in light of my three research aims.

9.3 Contribution of my research

My research provides the following contributions to the scholarship around the three research aims that I brought to my doctoral research.

Firstly, to determine why and how individuals take responsibility for climate change through their voluntary actions, I conducted a transdisciplinary review of the literature concerning the individualisation of responsibility (Chapter 3). My literature review encompasses five areas of theory: social, political, psychological, philosophical and cultural theory. Each of these theoretical perspectives provides an important context for understanding why the individualisation of responsibility for environmental action (and

in particular, action on climate change) has become pervasive in Western discourse and government policy. Together with more recent scholarship (Middlemiss 2010), I conclude that the individualisation of responsibility for voluntary climate change action emphasises an individualist (agency-oriented) approach rather than a situated (structuration-oriented) approach. An individualist approach relies on people taking action on climate change irrespective of the significant structural constraints embedded in the current regime that perpetuate *unsustainability*. Further, an individualist approach emphasises personal and private sphere action reflected in individual lifestyle choices and household carbon reduction actions. A structuration approach engages ‘authoritative actors’ in voluntary action on climate change within the public sphere. I therefore argue that for social change on climate change to be successful, individuals need to come together in collectives and overcome the prevailing structural constraints of lack of empowerment, lack of trust in governments and political actors, and lack of reflexivity.

I undertook my empirical investigation into Australian Climate Action Groups (CAGs) in order to further test these normative hypotheses. Little prior research has been conducted with Australian CAGs and my research contributes significantly to: understanding the motivation of members of these groups (as individual agents) for undertaking voluntary action on climate change; understanding why they join grassroots collectives; understanding the nature of their individual and collective actions; understanding how working together assists them in overcoming constraints to action; and understanding how their actions contribute to broader social change. I developed a model for voluntary climate change action (Figure 7) to explain the processes whereby CAG members shift from their personal agency through to collective agency and as political agents undertake their voluntary action within the public sphere.

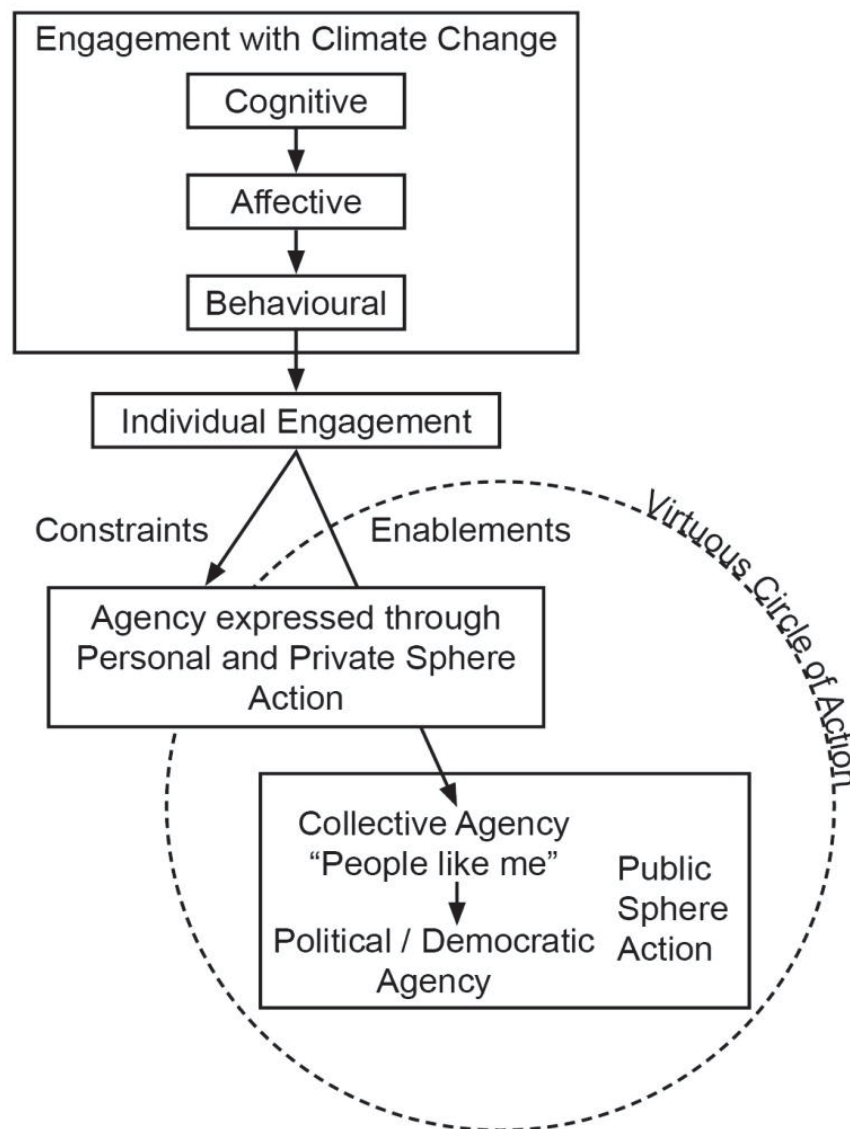


Figure 7: Process model for voluntary climate change action

My third research aim required a further theoretical framework, sustainable transitions theory, to draw out understandings of how grassroots collective action can lead to social change. A further extension of this literature examines sustainable transitions in relation to grassroots community-based collectives engaged in sustainability projects, such as climate change action. This literature has only recently been taken up by scholars in Australia and little empirical work is evident (Moloney et al. (2010) provides one exception). My research therefore contributes to the sustainable transitions scholarship and applies it uniquely to a study of the social change potential of Australian Climate Action Groups.

In the next section I consider the research objectives that I established early in my research and which have guided both my normative and empirical investigation.

9.4 Research outcomes against research objectives

In section 1.3.3 I set out the following research objectives, to determine:

- RO1 How people perceive their responsibility for climate change.
- RO2 In what ways individuals act responsibly to mitigate climate change. In other words, how individual actors acquire agency (that is, become actors with authority) within voluntary action.
- RO3 Whether the individualisation of responsibility is creating the conditions for social change on climate change.
- RO4 How people understand the institutional and personal conditions for responsibility in climate change action. (Note this objective was not specifically taken forward into my research with CAGs.)
- RO5 How individuals' actions on climate change at the local level link-up to create global level change.
- RO6 What kinds of narratives, storylines, images and metaphors of responsibility for climate change people relate to.

Drawing from my research findings I explain the outcomes of my research in light of each of these objectives.

How do people perceive their responsibility for climate change?

People understand that they have a personal responsibility for climate change and express high levels of concern about the impact of climatic change (section 3.3.3). However people are failing to engage with climate change and to take social action on the issue as they perceive the disparity between their individual empowerment and their capability in light of the enormity and complexity of the problem (section 3.3.3.2). They believe that responsibility needs to be shared with other actors and see a greater role for government action. In fact there is a chain of responsibility, a thread which I argue links local and personal action with the global. Singer (2011) calls for this expanding circle of responsibility that emanates from the central layers of human concern to encompass all human beings (and life) as an essential societal goal.

I identified five distinct aspects of responsibility (section 3.5) drawn from the literature that enrich this understanding. The five aspects are: spatial; temporal; moral/ ethical; relational and behavioural. Actors possess a spatial responsibility for climate change that creates a link between local actions and global effects. Climate change creates an intergenerational responsibility as its reach extends from past emissions into future impacts. Both these aspects require a cosmopolitan responsibility for climate change as they expose important ethical mores of fairness, equity and justice. Responsibility rises in relation to social risks and creates allied rights. Actors at all levels have an obligation to change their behaviour in response to climate change.

CAG members who participated in my research understood that they have a personal responsibility for climate change but that this responsibility is shared with governments (section 7.2). Based on an understanding of the science of climate change, CAG members were motivated to take action but this was underpinned by a strong sense of moral obligation. In “doing the right thing”, CAG members came together in their collectives to influence governments and politicians to take concerted action and work to prevent dangerous climate change. CAG members perceived their forms of voluntary action as legitimate in the face of government inaction and that their role extended to making governments accountable for climate change mitigation.

In what ways do individuals act responsibly to mitigate climate change?

Citizens are tangibly demonstrating their acceptance of their responsibility for climate change through their actions in their personal and private spheres, in their households and lifestyle choices (section 3.3.3). They also act in the public sphere as economic actors or citizen-consumers and through their political actions as democratic agents. Individual actors moreover preference their local action over global action as they perceive that this is the level at which they can effect change (section 3.3.3.2).

CAG members demonstrated their responsibility both through their personal and private sphere actions but also within the public sphere (section 7.4.3). They are undertaking significant actions around their households and lifestyle practices that often extend well beyond current social norms of behaviour. These actions include: no longer flying, reducing personal showering routines and turning off their hot water systems. CAG

members are leading by example as one tangible expression of their individual responsibility, linking their lifestyle choices to a critique of social *unsustainability*, such as overconsumption and social injustice through inequitable access to a share of the global atmospheric commons. They come together in groups in order to express their collective and political agency by: lobbying their local politicians; taking direct action at the sites of carbon pollution such as coal mines and power stations; buying solar panels in bulk; and raising awareness within their local communities.

How do individual actors acquire agency within voluntary action?

People perceive their responsibility for climate change as a shared obligation with governments. However, they also express strong feelings of distrust of governments' ability and willingness to undertake the actions required for global warming to be addressed and dangerous climate change averted (section 3.3.3.2). People see a lack of political conviction around climate change action and the incapacity of nations to come to a global agreement. This has led to disempowerment, denial and apathy in the general community (section 7.4.2). I argue that only certain people acquire individual agency through their voluntary actions in order to engage with climate change (section 7.7). Actors moreover acquire agency by overcoming the societal constraints proffered by the structural conditions of disempowerment, political distrust and lack of reflexivity (Chapter 3, section 3.6.1 and Chapter 7, sections 7.4–7.5).

CAG members have overcome the constraints to individual agency expressed in broader community apathy and inaction. They believe that their constraints to taking action on climate change lie in the more practical limitations of lack of time and money (section 7.8.1). CAG members are individually and collectively empowered to take action on climate change. Their involvement within their group creates a virtuous circle of increasing capability (section 7.8.4), enhancing their individual and collective agency so that they enact political agency (see Figure 10). They see their role as being in political action which is outside but not against the state (section 7.4). CAGs perceive themselves as possessing legitimacy and their actions operate to ensure government accountability, authenticity and transparency (section 7.9).

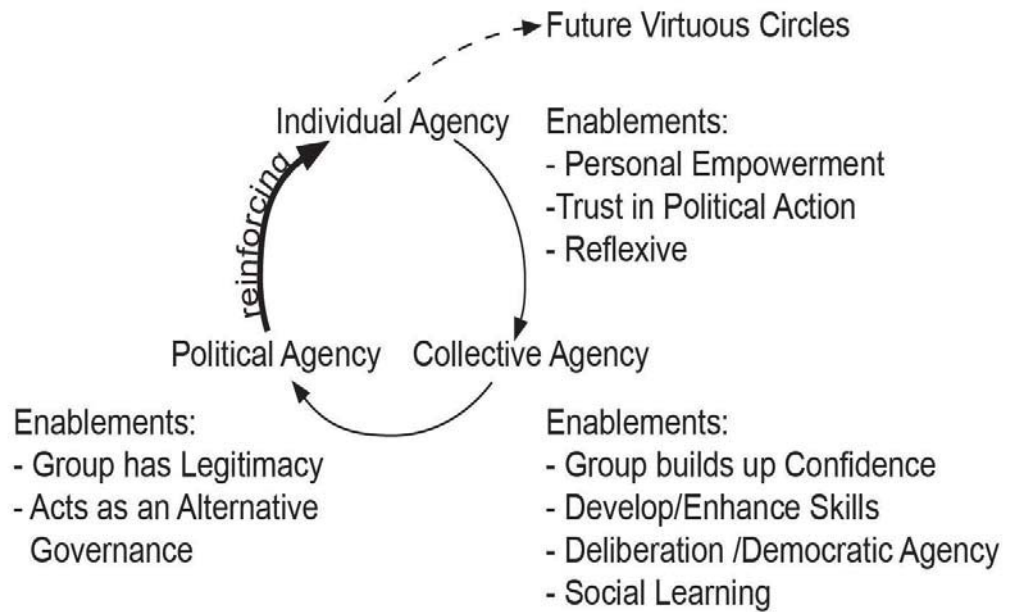


Figure 10: Virtuous circle of agency

Can the individualisation of responsibility create the conditions for social change on climate change?

In Beck’s thesis, the individualisation of responsibility under the conditions of global risk create the conditions where sub-political entities operate as counter-agents to extant state authority and institutions (section 2.3). According to Beck (2010), climate change “releases a cosmopolitan momentum” as risk conditions break down and subvert the prevailing institutions of modernity creating an “interconnectedness” between people. As life situations become increasingly cosmopolitan, the progression to social change becomes realised. Drawing on the evidence from my research I argue that the “social scare” (Ungar 1995) of 2006 created a set of conditions that complement the social forces identified by Beck. A series of coalescing events (section 6.2) led to widespread and heightened public concern on climate change which permeated societies internationally (Neilsen & Environmental Change Institute 2007). This ‘cosmopolitan moment’ shifted the political, economic and social landscape, opening the potential for change in the prevailing regime. Grassroots niche activity in the form of collectives such as Australian Climate Actions Groups (CAGs) grew rapidly at this time (section 6.2).

Three potential pathways for the individualisation of responsibility to create social change under the conditions of risk were exposed through my research. Firstly, faced

with impending catastrophic climactic change, actors become fearful and disempowered, leading to inaction (see Figure 8).

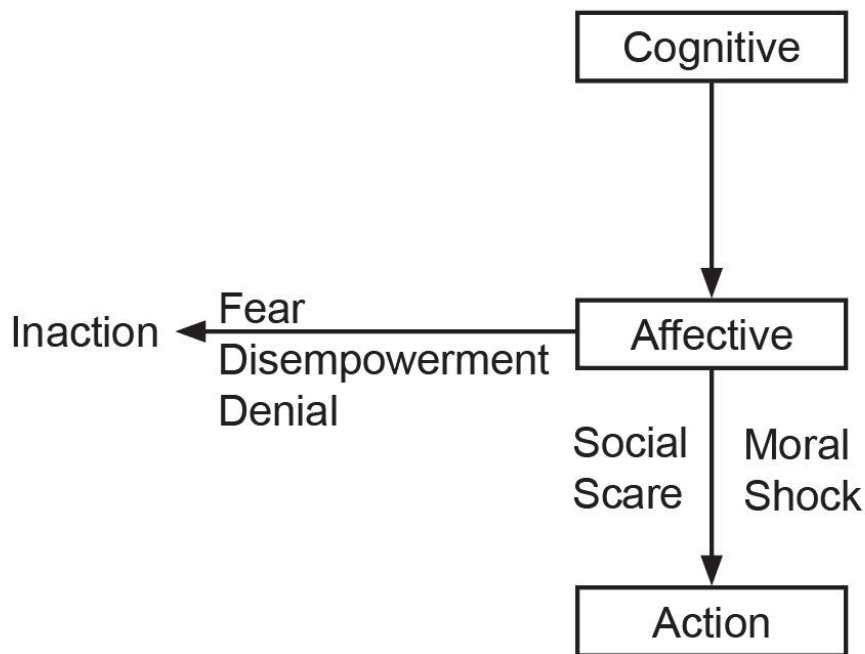


Figure 8: Bifurcation in action

Secondly, “agency-oriented” (Middlemiss 2010) actors undertake action in their personal and private spheres, making lifestyle choices and undertaking actions around their households to mitigate against climate change (see Figure 6). However, in this “thin cosmopolitanism” (Linklater 1998) actors fail to connect to, or otherwise challenge, the structural constraints that embed the continuing unsustainable regime. Thirdly, actors that come together in groups such as CAGs demonstrate a collective agency and are able to take action within the public sphere (Figures 6 and 7). Such collectives are thus a sign of “thick conceptions of cosmopolitan citizenship [that] attempt to influence the structural conditions” (Linklater 1998, p. 206).

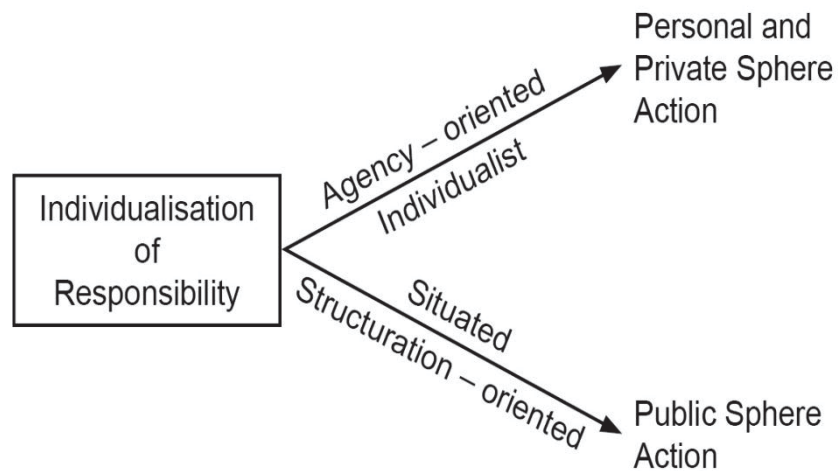


Figure 6: Individualisation of responsibility (developed from Middlemiss (2010))

If these different pathways are acknowledged, it can be seen that the individualisation of responsibility is creating the conditions for social change but only where agents are able to overcome the significant structural constraints to their individual agency. My research supports the view that CAG members are individually empowered to take voluntary action on climate change. They are ‘actors with authority’ that base their action on a personal and moral obligation. They come together with like-minded people to form collectives that express collective agency. The group supports and enhances their individual and collective agency, creating a virtuous circle of increasing agency.

Drawing on evidence from my research, I argue that CAGs act collectively on voluntary climate action as grassroots niches with the potential to influence the hegemonic regime (section 8.2). I further suggest that Beck’s cosmopolitan vision may be better realised if CAGs are conceptualised as one niche project within a sustainability niche (section 8.3). A sustainability niche harbours the ability to transition into mainstream regime behaviour and progress social change (section 8.4).

How can individuals’ actions on climate change at the local level link up to create global level change?

My empirical research focused on local community-based climate action groups. I have created a detailed argument through my research on how individual agency is commuted to collective agency in climate change engagement, facilitated through group involvement (see Figure 7). I argue that CAG members as individual agents have overcome the structural barriers that face individual actors in climate change mitigation.

The ability of CAGs to move from their grassroots niche into regime change has been explored (section 8.4). I argue that CAGs are grassroots innovations with social change potential (section 8.2).

The CAG ‘niche’ however consists of a certain ‘elite’; that is, only certain ‘privileged’ communities (Middlemiss & Parrish 2010) have formed CAGs and only certain members of those communities become active CAG members. Based on Seyfang and Haxeltine (2010), I proposed five ways that CAGs as a niche of voluntary grassroots climate action can influence the existing regime: by replication resulting from fragmentation; through their scale of influence and development of networks; by growing outside their ‘elite’; by translating their ideas into mainstream settings; and through social learning.

What remains uncertain from my research is the linking mechanism, the “in-between substance” (Hoyer & Aall 1995 cited in Lindseth 2004, p. 327) that would realise the connections from local-level action to the global. Smith (2007) argues there is a bewildering number of potential points of connection and synchronisation for the change required in the extant regime to achieve the normative goal of sustainability (p. 429). Current understandings moreover consider such linkages “to be ‘haphazard and coincidental’” and there remains no “theory of ‘linking’” to draw on (Smith 2007, p. 431). Change needs to be conceptualised as a “messy” process (Bulkeley & Newell 2010; Garnaut 2008).

I have utilised a recent conceptualisation of individual sustainability initiatives as *niche projects* to explore this notion. CAGs represent one example of a sustainability niche project. Many sustainability niches are evidently emerging in contemporary Western societies. Examples include CAGs, Transition Towns, community gardens, local currency schemes and community energy projects such as local wind farms. I propose, therefore, that CAGs can be considered as one type of *niche project* within the broader ‘movement’ of sustainability initiatives. This opens up the space, I argue, for achieving regime change when a coalition of sustainable niche projects is conceived.

I’ve sought to frame a ‘bottom up’ grassroots initiated appreciation of climate governance from the more fluid and expansive examples of sustainable transitions

theory, the ‘Green Public Sphere’ (Torgerson 2008) and polycentrism (Ostrom 2009) (Chapter 4). In the next section (section 9.5) I sketch out my thoughts on this and I admit that they are decidedly incomplete. However they go some way towards developing a better understanding (at least for me), of the continuing question of what links personal and local level action to the global action on climate change.

What kinds of narratives, storylines, images and metaphors of responsibility for climate change do people relate to?

The final question that guided my research was not specifically picked up in my empirical investigation. However within the focus group discussions CAG participants occasionally drew on rich images and metaphors to describe their vision for change. I note these in section 6.5.2 and draw on them in the next section.

9.5 Horizontal versus vertical transition

Related to the above is the question of how change that comes from the ‘bottom up’, that is, from the grassroots, links to ‘top down’ processes evident in the global governance of climate change. I propose that an account of regime change requires translation across two planes: horizontal and vertical (see section 4.2.2). According to Giddens, horizontal *social systems* are distinguished by deliberative processes and vertical *social structures* by more formal institutional practices that, for example NGOs might engage in, and are focused on challenging extant power and social norms.

Accordingly, to take advantage of both horizontal and vertical transition potentialities, “social movements should operate both inside and outside the state” (Dryzek et al. 2003, p. 155). In a similar way, Lidskog and Elander (2010) call for a cosmopolitan democracy as an alternative global governance as it distributes power horizontally through greater civil society involvement and possesses far greater potential for the type of horizontal linkages required in transnational decision-making (p. 36). Acknowledging the need for both horizontal and vertical governance pathways, Lidskog and Elander suggest dual climate change governance arrangements: vertically-aligned formal institutions such as now exist in the current global climate governance system; and informal horizontal and transnational networks drawn from civil society (p. 38).

This provides another potential avenue for conceptualising sustainable transitions from the grassroots to the global. In the horizontal plane informal grassroots organisations can replicate through growing their networks and coalitions across their local communities whilst the engagement of more politicised actors occurs through more formal and bureaucratised organisations (Lidskog & Elander 2010; Doyle 2009; Dryzek et al. 2003) which can operate on the vertical plane of shifting established social norms and political constituencies. Dryzek et al. (2003) note that environmental movements derived from the grassroots are often “self-limiting” (p. 15) because they tend to operate outside of the state and thus outside of regime power, but their influence may nonetheless have an indirect impact through their ability to influence public opinion, enhance social learning and change power distributions:

Social movements, as Habermas (1996a) points out, do not just try to appropriate a share of 'administrative power'; they also embody diffuse and pervasive 'communicative power'. Part, but not all, of the causal mechanism here involves public opinion. As Torgerson (1999: 140) puts it, “the public sphere does not directly govern, but influences government in an indirect fashion through the communicative power of opinion”... The collective outcomes that social movements can influence are not confined to public policies. Changes in the terms of political discourse can take effect not just in the state, but directly in society's political culture. Movements can be educational, and change the distribution of power in society (Dryzek et al. 2003, p. 133).

For Dryzek (2008, 2009) it is not so much the *form* of such institutional arrangements as the *processes* involved that link the local and global in the governance of climate change. Discourses are for Dryzek (2009) the horizontal social structures that enable or otherwise constrain political agents (p. 480). It is in discursive democracy, “a species of deliberative democracy” (p. 483), that people come together to discuss and debate “problem sets”. These deliberations do not need to be structured but can form freely across horizontal and vertical scales and where matters of common identity or ideology bear no importance (p. 483). I have seen these potentialities both in my focus group discussions and in the CAGs themselves and I see such small group deliberations as an important focus for future and more detailed research.

Arborescence and Rhizome

The application of the horizontal and vertical allegory for transition processes that incorporate grassroots and institutional actors is further provoked by the work of Deleuze (as cited in Scott-Cato & Hillier 2010). Deleuze also plays with the tension between the vertical and horizontal scales through the imagery of arborescence and rhizome (Scott-Cato & Hillier 2010, p. 872). I particularly like the use of these analogies drawn from nature, a device markedly missing from the more structured diagrammatic representations of transition theorists. Arborescence according to Deleuze is “a tree-like structured hierarchy, epitomised by institutions of the State” whilst the rhizome is the “antithesis of arborescence”, consisting of “a horizontal underground plant stem with lateral shoots and roots, such as ginger”, a “decentred set of linkages between, multiple branching roots and shoots, i.e. ‘a proliferating, somewhat chaotic, and diversified system of growths’ (Grosz 1994, p. 199)” (Scott-Cato & Hillier 2010, p. 872). This creates a rich picture of an underground root system connecting and binding together to form a mat-like impenetrable mass:

Arborescences are hierarchical, stratified totalities that impose limited and regulated connections between their components. Rhizomes, in contrast, are non-hierarchical, horizontal multiplicities that cannot be subsumed within a unified structure, whose components form random, unregulated networks in which any element may be connected with any other elements (Bogue 1989, p. 107) (Scott-Cato & Hillier 2010, p. 872).

Deleuze and Guattari (1987) (as cited in Scott-Cato & Hillier 2010) further explicate the role of rhizomes as providing the “in-between substance” (Hoyer & Aall 1995, p. 327) in processes of change that may link the local to the global. They connect social struggles and when broken can start up again so that ideas incorporated within a protest movement, for example, will remain after the protest is disrupted and so the cause can be taken up by others:

The fabric of the rhizome is the conjunction – ‘and’ – connecting elements, issues and ideas. “AND is neither one thing nor the other, it’s always in-between, between two things ... (Deleuze 1995, p. 45).”... To think rhizomically is to reveal the multiple ways possible to assemble thoughts and actions in immanent, always-incomplete processes of change and innovation, or becoming (Scott-Cato & Hillier 2010, p. 872).

This is a particularly pertinent idea for me as it provides some explanatory weight to what Hoyer and Aall (1995) describe as the “in-between substance that links the local and the global” (p. 327). As Scott-Cato and Hillier (2010) propose, these courses of innovation and change are not necessarily realised through a steady process of movement building over time but rather there are disjunctions where movements may wax and wane but the ideas continue. This is an exciting revelation when considering climate change action as a niche project within a broader sustainability niche. It extends the potential of grassroots innovations over time to seed bigger change as post-materialist values are taken up by wider publics, expressed through their local community concerns. It also allows for future landscape-level changes or “social scares”, to stimulate the re-assembly of disparate movement elements around the increasingly complex global “problem sets” (Dryzek 2005) that are a feature of the second modernity (Beck 1992).

In fact, the possibility of a more fluid interplay between niches and regimes has been taken up more recently within the transitions literature. Grin and others (Grin et al. 2011; Grin 2011, forthcoming) have set up hybrid notions of “niche to niche-regime”, “niche-regime to regime” and “regime to niche-regime” (Grin et al. 2011, p. 79) to presumably break down some of the rigidity, singularity and hierarchy of the traditional niche-regime-landscape patterning and provide more empirically relevant understandings:

.... Transitions essentially become a matter of (1) redirecting the co-evolution of structure and agency towards (2) an orientation that goes beyond the control-mode orientation characterizing ‘first’ or ‘simple’ modernity (Beck, 1997) and takes sustainable development as a normative orientation, (3) amidst the turbulence of exogenous trends, such as Europeanization, individualization and privatization (Grin 2011, forthcoming, p. 5).

Is there empirical evidence to suggest that grassroots climate action collectives such as CAGs are taking on some of these niche project and transition characteristics? I have already identified that climate change is conceived by CAG members as an idiom for the prevailing conditions of societal unsustainability. Yet in recent times there have been calls to expand the “problem set” (Dryzek 2005) of climate change to incorporate

broader sustainability concerns.¹⁰² The rise of the Occupy movement, for example, has prompted transnational organisations such as 350.org to call for linkages between the Occupy and the grassroots climate action movements.^{103,104} These examples of global “issue-linkages” between grassroots climate action and more widespread sustainability concerns possibly presage the acceleration of niche project activity into a “complex contagion” (Centola & Macy 2007) (note in section 6.5.2, CAG participants describe their vision for change in similar metaphorical terms). Central to this “contagion” is the ability to ‘rhizomically’ proliferate through social learning (Reed et al. 2010) and discursive deliberation (Hendriks 2006; Dryzek 2008, 2009). Discursive deliberation is exemplified by inclusive and non-hierarchical decision making of the type popularised in the World Social Forum and Climate Camps (Doyle 2009) and which is now being taken up by the Occupy movement.¹⁰⁵ I have shown that CAGs, apart from creating collective agency, enhance social learning amongst their members in the democratic skills that allow political engagement. Through their deliberations CAGs develop shared meanings and values around climate change and sustainability more broadly. Grassroots community innovations thereby have a critical role in building a *complex contagion* that can lead to widespread social change.

9.6 Questions for future research

Several questions arise from my research that deserve further attention. Firstly, in section 9.5 above, I suggest a research agenda for examining the role of small group deliberations in social change. In particular I suggest research into the role of group processes such as focus group discussions that I utilised in my research, or group democratic decision-making processes exemplified by the type of inclusive democratic deliberative process utilised by the World Social Forum, Climate Camps and Occupy movement, discussed above.

In section 8.2.2, I posed the following questions: what are the differing routes of niche formation?; how are different niche actors characterised?; and what motivates their collective action within their local communities? I have considered one type of

¹⁰² ‘Need to broaden the conversation’, CANAchat thread, canachat@cana.net.au, 28 October 2011.

¹⁰³ Buckland, K., ‘History in motion’, 350.org, organizers@350.org, 27 October 2011.

¹⁰⁴ Zizek (2011) notably describes the Occupy movement “as the “horizontal organisation” of protesting crowds with egalitarian solidarity and open-ended free debates”

¹⁰⁵ ‘Liberty Square Adopts a Spokes Council’, 3 November 2011, <http://occupywallst.org/article/occupy-wall-street-adopts-spokes-council.html>, accessed 20 November 2011.

grassroots innovation, Australian Climate Action Groups, as my research focus and have identified a recent and evolving literature that considers different types of grassroots collectives involved in various sustainability projects (exemplified in the work of Seyfang, Smith and others). This opens up the potential for comparative investigations into the different routes of grassroots niche formation and whether, for example, niche formation characteristics differ across different societal and cultural contexts.

In the same way that niches may possess different formation pathways, what characterises individual niche actors? In my research it was evident that a particular type of person is attracted to becoming a CAG member and Tranter's (2010, 2011) research extends this notion to characterising people who get involved in environmental action more generally. Further evidence from the work of Seyfang (with others), Howell (2010) and Krakoff (2011) for example, indicate significant similarities in their research cohorts. However this does not preclude other types of grassroots innovations attracting different niche actors. Moreover, determining different groups of actors with the capability to form sustainability niches will be an important precursor for generating broader scale social change targeted towards a future sustainable society.

The question arises whether different types of grassroots innovators are similarly drawn to their issue of concern as a heuristic for a more expansive concern. In my research CAG members often pursue their interest around climate change as it represents an idiom for the wider existing societal conditions of unsustainability. This opens up the question of what motivates grassroots collective action around different sustainability issue niches.

As I noted in section 8.2.3, my research was not specifically formulated to determine the characteristics of the communities that CAGs are situated in and this represents a potential area for further research on community-based climate change. As grassroots niches are unique to their local communities, the questions raised by Middlemiss (2010) around the varying capabilities of communities to support niche formation and what capabilities grassroots niches may offer to their local communities are relevant. There are complementary framings and research endeavours within the field of third sector research (see Onyx & Edwards (2010), for example) that raise questions around the role

of such collectives in building and/or extending social capital and contributing to community resilience. This line of questioning will be of particular importance to researchers interested in the capacities of communities to adapt to climatic change.

9.7 Conclusion

There are examples of individuals becoming responsible citizens through collective action. Whether these movements are also able to transcend the local context within which they are embedded, take issues of environmental justice and the North-South divide into consideration and proceed to a responsibility for global development remains to be seen (Rathzel & Uzzell 2009, p. 334)

Early in the thesis (Chapter 1), I positioned climate change as a complex ‘wicked’ problem which presents as not only potentially the greatest challenge to humankind but the greatest moral challenge. At the core of the climate change issue are deeply moral considerations such as fairness, equality, justice and democracy, all of which I have touched on in this thesis. Therefore, how we respond to climate change as individuals, collectively and globally goes to the very root of the human condition itself. Or in Beck’s words “how do we wish to live?” becomes the critical question for contemporary society facing the impacts of human-induced global ‘bads’.

The challenge of unsustainability that faces the planet sits well beyond the purview of science, technology and the market. As Marshall (2011, p. 3) states, climate change “is already part of our inner lives and dreams ... our inner awareness and unconsciousness” and “we cannot feel dispassionately about it” (Marshall 2011, p. 3). Perhaps that’s part of the problem – when we see things rationally, we understand that we are creating a dangerous and potentially catastrophic future, but psycho-socially we are largely failing to come to grips with this fact.

I have argued that CAG members, prompted by a “moral shock”, choose to come together with like-minded people in order to take collective action for climate change mitigation. CAG members distinguish themselves from others within their local communities as empowered, trusting and reflexive agents able to overcome structural constraints to collective and political action. I have argued that in this way CAG

members act as political, legitimate and cosmopolitan agents who enact the skills of democratic citizenship enhanced through their group trust and cooperation and through their group deliberations act out a discursive democracy. Moreover CAGs, as singular niche projects of community-based collective climate action, can develop into broader coalitions of climate action, clustering with other niche projects in order to develop rhizomically. This coalition of niche projects has the capacity to become a *complex contagion* of grassroots concern that promulgates an alternative sustainable societal vision.

CAGs for the most part show an essential faith in the political system, despite the fact that they are highly concerned about its effectiveness and doubt whether it has the political willpower to enact strong climate change mitigation reforms. CAGs do not seek overtly to overthrow the state, nor are they proposing a radical reorientation of society. In this sense they do not act as an ideologically driven grassroots social movement. They differ from similar grassroots movements such as Transition Towns that direct their collective agency towards building skills in local provisioning, turning their efforts more inward towards a re-localisation. Instead, CAGs direct their action outwards towards the political orientations of the state.

CAGS are not concerned with re-localising, but neither do they demonstrate any significant globalising affinities through a concern for global climate justice. CAGs do not appear to have a radical reform agenda. Although CAG members are taking up sustainability initiatives which sit outside current social norms, for the most part they do not challenge capitalism and the role of market mechanisms in carbon emissions reduction. Nor are they seeking political alternatives that sit outside of the state.

Under the individualisation of responsibility model of climate change agency (as expressed by Paterson & Stripple (2010)), the extant regime makes adjustments solely to take continued advantage of the economic and political imperatives of “unsustainability”. It merely translates individual practices in ways that continue to support regime power and dominance (p. 344). An essential dilemma then for grassroots community-based CAGs is that they need to change the extant regime conditions without being co-opted within them. I find this a particularly difficult problem to decipher, because for CAGs to remain outside the state but not against (unsustainable)

state objectives would seem to defeat their regime change prospects. CAGs do have a role, nevertheless, in addressing the continuing erosion of public trust in governments and politicians, opening the way for CAGs, as cosmopolitan agents, to bolster state surety in a future cosmopolitan regime (Archibugi & Held 2011; List & Koenig-Archibugi 2010).

Despite the normative potential for regime shift, grassroots initiated social change faces concerted barriers. Meadowcroft (2011) observes that changes towards sustainability face significant locked-in and path-dependent resistance from embedded political institutions and power structures that support current societal unsustainability and underpin the existing global climate governance regime:

The politics of sustainability transitions requires a redefinition of societal interests and this implies political engagement to build reform coalitions, create new centres of power, buy off powerful lobbies, isolate die-hards, compensate losers, and so on. These struggles involve not only established political actors (such as political parties and major economic groups) but also emergent forces associated with new technologies, experimental practices and social movements. And since sustainability transitions may take decades, there will be repeated cycles of interaction, with all sides drawing lessons from previous rounds (Meadowcroft 2011, p. 73).

Whilst no doubt this lag in achieving sustainable transitions will not suit the need and desire of grassroots climate action organisations to see rapid change in order to prevent the worst effects of a warming world, the “political lives” (Dryzek et al. 2003, p. 134 citing Torgerson 1999) cultivated through the collective action of CAGs can be celebrated.

APPENDICES

APPENDIX A: SUMMARY OF RESEARCH DATA COLLECTION

Interview type	Date of interview	Reference Code	No. of participants	Notes
Scoping interviews	Various throughout August 2009		12	Informal interviews conducted in person and by telephone with stakeholders across local, state and national/ international non-government organisations engaged in action on climate change.
Focus group 1	17 November 2009	NSW1	7	First focus group undertaken with Climate Action Group (CAG). Conducted in regional NSW.
Interview	25 November 2009	F25	1	Female 25, CAG member. Interviewed in person – Sydney.
Interview	17 December 2009	F & M	2	Female and male (ages not recorded), CAG members. Interviewed together in person – Copenhagen (during Copenhagen Climate Conference).
Interview	13 January 2010	F46	1	Female 46, CAG member. Interviewed by phone post Copenhagen Climate Conference.
Focus group 2	14 April 2010	NSW2	6	Focus group with CAG. Conducted in Sydney, NSW.
Interview	24 April 2010	M34	1	Male 34, CAG member. Interviewed in person – Melbourne.

Focus group 3	28 April 2010	VIC1	5	Focus group with CAG. Conducted in regional Victoria.
Focus group 4	29 April 2010	VIC2	4	Focus group with CRAG. Conducted in Melbourne, VIC.
Focus group 5	29 April 2010	VIC3	5	Focus group with CAG. Conducted in Melbourne, VIC.
Focus group 6	30 April 2010	VIC4	4	Focus group with CAG. Conducted in Melbourne, VIC.
Focus group 7	1 May 2010	NSW3	5	Focus group with CAG. Conducted in regional NSW.
Focus group 8	16 May 2010	NSW4	5	Focus group with CAG. Conducted in Sydney, NSW.

APPENDIX B: FOCUS GROUP DISCUSSION GUIDE¹⁰⁶

Item	Timing (mins)	Resources	Notes
Welcome/ Introduction	5	Whiteboard, butchers paper, pens, name tags	
Overview of research & focus group session	5		
Housekeeping/ Ground Rules	5	Write up ground rules on butchers paper	
Intro total	15		
QUESTIONS			
Opening	5		
Introductory	10		
Transition	20		
	35		
Key questions	10		

¹⁰⁶ The original focus group discussion guide developed for the CAG focus groups. Following the first focus group the questions were refined for use with subsequent groups (see Appendix C).

				summary
	Is there anything that we should have talked about but didn't? Can you suggest any ways that I can improve the questions we have discussed?	5		Recast overview to purpose of research in more detail
		10		

APPENDIX C: FOCUS GROUP DISCUSSION GUIDE2

Item		Timing (mins)	Resources	Notes
Welcome/ Introduction		5		
Overview of research & focus group session		5		
Housekeeping/ Ground Rules		5		
QUESTIONS				
Opening	<i>To start with I'd like to find out a little about each of you. Can we go around the table so that each person can say their name and how long you've been involved in (climate action group)?</i>	10		
Introductory	1. Why did you decide to get involved in climate change action ? Why is it important to you?	10		(Personal journey/ motivation)
Transition	2a. What types of things are you doing ? What types of actions are you taking? <i>In taking action on climate change:</i> 2b. What allows you to act? 2c. How do these actions make you feel ?	10		(types of voluntary action) (individual agency)
Key questions	3a. Can you describe what led you to join this group? 3b. How does your involvement in this group change the way you act on climate change?	20		(personal vs. collective action/ agency)

	3c. What do you think stops other people from taking action like you have?			
	4a. In what ways are you &/or your group limited in taking action on climate change? b. In what ways are your actions made possible ?	10		(structural &/or cultural constraints) (structural &/or cultural enablements)
	5a. Who are you trying to influence through your actions? Why? <i>(Prompt to see if they are trying to get people in their local community to act, or local politicians, or state MPs or Aus Govt or something else.)</i> b. What's your vision for how local level action can make a difference to climate change?	20		(locus/ scale?)
	6a. How do you communicate climate change to others?	10		
Ending question	6b. What types of stories/ images/ words do you find successful? <i>Before we finish</i> , can each person sum up in their own view (<i>in one or two sentences</i>), the most important aspect about responsibility and climate change discussed today?	10		
Summary	How well does that capture what was said here?	5		Present verbal summary
	Is there anything that we should have talked about but didn't? Can you suggest any ways that I can improve the questions we have discussed?	5		Recast overview to purpose of research in more detail

APPENDIX D: DATA COLLECTION - SUPPORTING INFORMATION

1. Consent form
2. Research project outline
3. Field note sheet

Day Month Year

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CONSENT FORM

I _____ (*participant's name*) agree to participate in the research project *Climate Change: Whose Responsibility? From the personal to the global (UTS HREC REF No. 2009-189A)* being conducted by Jenny Kent, Institute for Sustainable Futures, Level 11, Building 10, 235 Jones Street Ultimo NSW 2007; (*email: Jennifer.C.Kent@student.uts.edu.au; contact mobile: 0417 455 644*) of the University of Technology, Sydney for her Doctor of Philosophy degree.

I understand that the purpose of this study is to reveal how and why people and institutions are motivated to take responsibility for climate change; and the governance mechanisms that link personal and community level voluntary action into global climate change policy and implementation.

I understand that my participation in this research will involve up to 3 hours of my time and I will participate in a focus group discussion conducted at a central location.

I am aware that I can contact Jenny Kent or her supervisors, Dr Chris Riedy (*email: criedy@uts.edu.au; phone: 02 9514 4964*) or Dr Simon Fane (*email: simon.fane@uts.edu.au; phone: 02 9514 4962*) if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason.

I agree that Jenny Kent has answered all my questions fully and clearly.

I agree that the research data gathered from this project may be published in a form that does not identify me in any way.

_____/_____/_____
Signature (participant)

_____/_____/_____
Signature (researcher or delegate)

NOTE:

This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: 02 9514 9772, Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Climate Change: Whose Responsibility?

From the Personal to the Global

Climate change represents one of the greatest threats to humankind and is the most significant challenge of the 21st century. The impacts of climate change will reach out not only across the globe but across future generations so that no-one on Earth will fail to be touched by its effects.

Yet despite the evident dangers of a warming planet and the increasingly urgent calls for action, there has been little willingness for either governments or the communities that they serve, to adopt the necessary low carbon pathways.

The Australian and global political community largely present the solutions to climate change in technological and economic terms whilst the social implications of climate change (for example how it will impact on people's lifestyles and wellbeing) appear less central. This is despite the deep moral concerns of equity and justice that underpin the climate change debate.

Aims of my research

The broad aims of my research are to reveal:

- how and why individuals take responsibility for climate change mitigation; and
- what are the governance mechanisms that link personal and community level initiatives into global climate change policy and implementation.

Specifically, my research aims to determine how notions of moral responsibility at both the individual and collective level are understood and practiced within Australian non-government organizations (NGOs) working on community-based climate change action.

The results of the research will be made available to the climate action movement and may help to identify new ways to motivate voluntary action on climate change.

Research design

My research will employ qualitative research methods and build a multiple case study drawing from Australian community-based climate action groups (CAGs). Case study evidence will be drawn upon to explain how people's perceptions of their individual responsibility for climate change motivates voluntary action in non-governmental organizations (NGOs) within Australia; their perceptions of their authority in contributing to broader level structural change; and how linkages between local level climate change action and the global level is conceived and practiced.

Contact details

This research is being conducted as part of my Doctor of Philosophy (PhD) degree through the Institute for Sustainable Futures, University of Technology, Sydney. If you have any questions or require further information, please do not hesitate to contact me.

APPENDIX E: CASE STUDY REPORT FEEDBACK REQUEST



Day Month Year

[Recipient Name]

[Title]

[Company Name]

[Street Address]

[City St Postcode]

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<insert CAG name> **Focus Group Follow Up**

Dear [Recipient Name]:

I am writing in regard to my postgraduate research project: *Climate Change: Whose Responsibility? From the personal to the global* (UTS HREC REF No. 2009-189A). Your climate action group took part in a focus group conducted <insert date>.

For my research I have transcribed/ (annotated transcription) the focus group discussion and developed a report (see attached). The report represents my analysis of the focus group discussion along with my interpretations based on other research I have conducted and in light of various theoretical perspectives that I am interested in. I will be drawing on the transcripts, reports and other material within my written thesis.

The purpose of this letter is to invite your review of the attached report and any feedback you (or other participants) would like to provide (note that copies of the transcript and consent forms can also be provided, if required). I am aware that some time has elapsed since the focus group and there have been considerable changes and challenges facing climate action groups. I consider the focus groups I undertook for my research as 'a snapshot in time' and this will be emphasised within my thesis. There may well be elements within the report that may no longer apply. You are welcome to provide comment where this applies.

Finally, I would like to reiterate my thanks to you and your group participants. I feel very privileged to have been given the opportunity to undertake a focus group with your climate action group. I found the experience of the discussion and especially the dedication and passion of participants inspiring and enriching. If you have any comments on how you or your group found the experience that you would also like to provide in feedback it would be much appreciated.

Thank you again

Sincerely,

Jenny Kent

APPENDIX F: CASE STUDY REPORTS

Introduction

Eight focus groups were conducted with Climate Action Groups (CAGs) across two states of Australia (NSW and Victoria) over the period November 2009 to May 2010 (see Table 1). Detailed information on the selection of CAGs, the organisation and conduct of the focus groups, and the process of analysis is provided in Chapter 5: Research Design. The focus group guides¹⁰⁷ employed are provided in Appendix X.

One of the key elements of the analysis was the development of case study reports on each of the CAGs. Each report was developed as a narrative combining both empirical information derived from each focus group and related sources (for example, the CAG websites) and interpretation of the findings in the light of theoretical considerations. As the reports were developed sequentially, over time, comparative observations between CAGs were also introduced. The consolidated record of the case study reports (included here as Appendix F) informs the CAG multiple case study (see also Chapter 6) and the subsequent discussion chapters. The order of the case study reports reflects the order in which they were conducted.

Situational conditions

Over the period of time in which the CAG research was conducted, significant events occurred locally, nationally and internationally around climate change which arguably impacted on the case study outcomes. The case study context is discussed in Chapter 6, section 6.2.1 and a timeline is included (see Figure 5) in order to situate this research within its broader context.

Development of primary and secondary themes

The first focus group conducted, NSW1 (reported as Case Study NSW1) used a set of questions derived from my research questions that related to the following four major themes:

- Motivation for voluntary action on climate change

¹⁰⁷ An initial focus group guide was developed which drew on my major research questions and was used for the first focus group (NSW 1). Following this the guide was revised and the questions finessed for future focus groups.

- Ways and means of collective (group) action
- Responsibility for climate change
- Relationship between local action and global action

Following the first focus group the focus discussion questions were reviewed and revised to more closely follow my research questions and to draw out further elements of the discussion revealed from the first group. The focus group discussion guide was revised to develop a more detailed set of questions which was applied to the following seven focus groups. The revised focus group questions related to the following six themes:

- Motivation for voluntary action on climate change
- Types of individual and collective (group) action taken
- Individual and collective agency around climate change
- Constraints and enablements for action
- Scale of influence and action
- Communicating climate change.

Due to time constraints the final theme was not discussed with some groups. Often this theme was addressed throughout the course of the group discussion and where relevant the discussion is reported.

In each focus group session the conversation diverged away from the content of the major themes. Conversations emerging from these digressions often provided a richer, more nuanced understanding of the motivations and experience of the participants. These constructed discourses are considered an important insight into the group dynamics, indicating how social realities are co-constructed within the group context and how the group may construct a collective identity (Smithson 2008, p. 365). A set of secondary themes were developed based on these constructed discourses and discussed within each case study report.

Presentation of quotations

The transcription of focus group participant quotations used within the case study narratives is worth noting. I made the decision to document the participants' words verbatim incorporating any hesitation and 'thinking noises'. This was a deliberate transcription choice and not necessarily the prescription that all researchers follow. Further rationale for my transcription choices is presented in Chapter 5, section 5.6.2.3.

In order to protect the privacy of individuals, pseudonyms are used throughout the reports and references to group name and/or location have been removed.

CASE STUDY NSW1¹⁰⁸

Description of case

This group is located in a regional city of NSW and has been actively engaged in action on climate change since 2007. The group formed following the showing of Al Gore's film, *An Inconvenient Truth* in the town. Following the film a public meeting was called to discuss the formation of a climate action group. The meeting was attended by about 50 people and the group which formed now has about 100 members. The group is a registered association and is structured into eight action planning teams: Community Awareness; Buildings and Urban Planning; Electricity and Renewable Energy; Food Production and Marketing; Fuel and Transport; Population and Economic Growth; Vegetation and Carbon Sequestration; and Water and Waste Management.

The focus group was held in November 2009 prior to the much anticipated United Nations Copenhagen Climate Conference. It was the first focus group conducted within this research program. The participants of the focus group consisted of five men and two women. All were active members of the climate action group and were all 60 years of age or older. This age distribution was representative of the group, and they noted with some frustration the lack of younger members. Their motivations for becoming actively involved on climate change related to their interest in the land, agriculture, and water security as well as a concern for their children and grandchildren. Most indicated that their engagement on the issue was an extension of a long-held interest and/or activism around matters related to the environment, the land and social justice.

Case context

The group is characterised by its active engagement with its local community, enhanced perhaps by the fact that as the majority of members are older, they are respected within the local community and hold (or have held) positions of relative power and authority. They are for the most part tertiary educated professional people, though mostly retired or semi-retired from their professional work, leaving more time to be involved in voluntary action on climate change. The participants of this group fall within what

¹⁰⁸ Case studies are coded to ensure the anonymity of groups. A listing of group types is provided at ...

Inglehart (1990 cited in Tranter 2010) calls the ‘cognitively mobilised’; that is, that they are “highly educated, articulate, politically skilled and informed” (Tranter 2010: 417).

The group’s activities are strongly integrated with the local and regional community, particularly with local environmental, agricultural and sustainability initiatives. However, reflecting the nature of a rural/ regional community these initiatives tend to be linked with broader social and economic aims. The group has links with the local council; the local catchment management authority; the Department of Agriculture; local and state politicians; the university, the local TAFE college; local schools; the agricultural and farming community; local business; and the local print and television media. The group’s eight action planning teams have been working to incorporate further local expertise through the development of expert reference groups.

There appeared to be strong cohesion amongst the participants of the group, even though opinions could be divided, at times quite significantly. For example, opinions differed about the science of climate change, with one member drawing on literature by the climate denialist, Ian Plimer, to support some of his views. Even though views sometimes differed, a high level of mutual respect was observed. The overriding impression was that participants are strongly supportive of each other and this became particularly evident when the emotional burden of being a passionate advocate for climate issues surfaced.

Relation of case to research questions

The following additional themes emerged from the constructed discourses (Smithson 2008) which took place in this focus group:

1. Climate change as a coalescing issue
2. Intergenerational change
3. The role of the group in the community
4. Family relations and the emotional toll of action

Detailed accounts based on the primary and secondary themes are provided below. Direct quotations, where relevant, are provided to support claims, supply context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

For individuals in this group, reasons to take action around climate change were multiple and varied. In general, participants didn't express a single motivating factor but drew on several and often applied a holistic or systems view of the conditions that precipitated climate becoming an issue for them.

The penny really dropped for me that, that climate change was, umm, provi.. provided, some rationale for just about everything else I, I wanted to be involved in and you know I had this sort of systemic, holistic approach to things and I, I thought well, if we could, if we can tackle this climate change issue, issue it would be a ..a ..a really nice one 'cause everything I might do or want to do would be contributing to this, umm, problem (Randall, 70¹⁰⁹).

Specific motivations related to an interest in the environment and the land along with an awareness of climate science. Perhaps not surprisingly for a rural community, a number of the participants' interest in climate change was expressed as an extension of their interest in natural processes such as the weather, the water and carbon cycles, carbon in the soil and agriculture. For others their interest was overtly political, generated by the absence of what they perceive as appropriate political action or the need for an alternative politico-economic system. For several participants, being active within their local community was an important motivator, as was the influence of members of their families and spiritual beliefs.

But I really have a strong sense that politically we are still being ruled by a minority elite in the world through our current western economic system which I don't believe is ultimately sustainable. Umm, we're faced with issues of expanding population, umm, we are doing huge damage to the planet, umm which I don't think is sustainable certainly under the present system. And so my .. my view is that we've actually got to generate people movements to .. but I, but I don't think that we're gunna actually bring about the change without a spirituality that frees people ... (James, 67).

¹⁰⁹ This participant did not provide his age, an estimate has been provided.

Ways and means of collective (group) action

This group is typical of many community groups in that whilst it has a significant membership (over 100 members) there are about 20–25 members who are actively involved. Tranter (2010) describes membership of environmental organisations within Australia in terms of active and passive membership and notes that older people are not only more likely to be involved in environmental organisations but are also likely to be among the more active members. He states that: “One's stage of the lifecycle might be important here, as many older people with relatively greater autonomy from family and work responsibilities are able to devote more time to participation” (p. 421).

As indicated above the activities of the group are focused through eight action planning teams that encompass a broad range of interests, from community education and awareness-building, to vegetation and carbon sequestration, and fuel and transport. To cover all these issues appears to be a broad and ambitious objective for a community climate action group.

Participants described several types of actions being undertaken. These consisted mainly of significant projects that bring together sectors of their community (for example schools, university, council, agriculture). One example was an action plan that aimed to rebuild biodiversity in an agricultural area within the region. The action plan aimed to bring together 15–20 farmers who were neighbours in this area in a collaboration with the local catchment management authority and other groups. In this way the group acts to network with community sectors and “broker” projects in order to facilitate action.

We pull together people and let them drive that sort of process, so we really are not trying to be an organisation that takes over climate change but rather a network that brings and facilitates... (James, 67).

Responsibility for climate change

I think everyone's got to take responsibility (Andrew, 75¹¹⁰).

¹¹⁰ Age estimated as this participant did not provide his age.

We're all responsible, in the sense that we've all contributed to climate change, and we all do what little we can ourselves, but solutions in the sense we're looking at whose responsible for changing it, its gotta be broader large-scale political change (Bill, 60).

Participants described both an individual responsibility and collective responsibility for climate change, however, for most (like Bill above), responsibility for climate change extended well beyond the individual's private sphere into the public and political arenas.

There is also guilt, a sense of responsibility for the actions of the (older) generation of people as distinct from younger people. But what overwhelmingly distinguishes the participants from others is that their concern is converted to action through a sense that they have the desire, power and means to act. This was tempered at several points in the focus group with a sense of the difficulty of bringing about the level of change required but there was no sense amongst these participants that they were powerless in the face of the enormity of the challenge that climate change presents.

Along with a sense of responsibility I also have a sense of guilt which my children and grandchildren don't seem to understand very much. I sort of think this is a problem that me and my cohort of citizens have created and, ahh, my grandchildren don't seem, sort of, seem to me to recognise the seriousness of it, ahh, my children even you know who are now in their forties are sort of saying well, you know, look it will be OK, we will sort of work it out and, umm, and in any case Dad, you know, you are only burning up a whole lot of energy concerning yourself about something you're not going to make any difference, umm, it's too big a problem and we're all too powerless to do anything individually or collectively... (Randall, 70).

Relationship between local level action and global action

The majority of the group's actions are firmly placed within their local region and within their sphere of influence (which as noted above extends significantly throughout this rural community). However there was an acknowledgement of the connection between this group and other state, regional and national climate action groups (CAGs)

facilitated by the internet. Information was available to be both shared and harnessed and for a group in the country this contact facilitates participation in activities beyond their local area.

I think, I think the internet, the web, is a great force for democracyUmm and I think the other thing is too that we, we use the internet with the CAG group so, I mean, we get emails through, the climate action group network. We, we get emails through if not daily at least weekly and they'll sometimes come as greater force than others when someone is working on a submission and we've done this ourselves we just post the submissions to the CAG network and ask other people to come back with ideas or comments or other things we should put in a submission.. (James, 67).

The globalisation of information flows was perceived as also providing those working on climate change action with the ability to both influence policy makers and make them accountable.

So, the politicians can't lie to us as easily now and say, you know, for instance, we're leading the world and as you've just been telling us about all the things you saw overseas that they've been doing ages before we started doing them in the ... the agricultural field. So that all feeds down there and feeds back to the politicians at all three levels because there is nothing like public opinion to make politicians think about what they're going to say and it all feeds back into the world stage (Joan, 62).

Secondary themes

Climate change as a coalescing issue

It's quite extraordinary really that all the things that have interested me and concerned me for the last twenty years have come together and relate in some way to climate change (Randall, 70).

Several participants commented on how climate change brings together a range of long-term issues and concerns for them. Viewed in this way climate change becomes a problem set, a way to synthesise and filter concerns that might extend beyond the

environment to capture more broadly concern about the economic system, politics, social justice, and food and water security. In this way climate change operates to “connect the dots” with other issues and provides a reflexive heuristic for group members.

The broad spectrum of interests captured under the notion of climate change (and represented in the diversity of the group’s eight action planning team areas) becomes a focal point for drawing group members from varying professional backgrounds and life experiences together, creating common ground and perhaps forming a common identity. The group becomes a place therefore where differing interests, opinions and worldviews can be accommodated.

Intergenerational change

One of the most significant emerging themes from the group grew out of comments related to the age range of active members and how they perceived themselves within their broader community. These observations became a reflection on changing cultural mores where the participants contrasted their own active community engagement around climate change with what they perceived as more passive and potentially disengaged sectors of the community. Some of the participants commented on this by specifically referencing the rise of individualism within society.

I also think our culture has ... has changed a lot to individualism (Joan, 62).

The rise of individualism was positioned as a point of difference, particularly between the participants who represent the older generation and younger people whom they have found to be less interested in becoming active members and less interested in becoming participants in climate change mitigation projects.

I think, ahh, I think we, from when I was younger, I think we've become so much more consumerism [sic] and individualistic and I ... I think our young people show it (Joan, 62).

The rise of individualism and the consumer society as reflected particularly in youth, in the eyes of some group members, provided an explanation for their lack of involvement and action in local climate change mitigation actions. This failure to adequately engage

younger people clearly created frustration for the group as many of their projects are focused on local schools, the local TAFE college and the university.

I was involved in teacher education at the uni and, umm ... it does seem the university, uh, that's the segment of youth that I've had the most to do with, I guess, they're pretty apathetic in terms of, well they're not joiners. I think they're quite, I think they think the issues are over, they accept climate change, they accept it's personally caused, they accept that somebody should stop them driving a bit more, and somebody should make them use less electricity, and they, there seems to be a willingness to, I mean, if someone said you, sorry you can't drive to university they'd whinge for a while and ... and, umm, you know probably think ... think that's it's, it's a reasonable decision but they're not going out there campaigning ... (Bill, 60).

Role of the group in the community

Another theme that emerged from the focus group was the central role the group played within the local community that lent both credence to their work, and by inference, a sense of authority, power and influence to the participants themselves.

They identified that members of their group are respected, senior members of the local community (not “ratbags”), who possess expertise across a range of disciplines and that this contributed to their credibility.

One thing about this group that I noticed is, is that it's older and has a lot of expertise ... (George, 62).

We know people too and linked to this age group there's a lot of people in [CAG] who are very well connected in this, umm, community. We can draw on people, umm, we can be accepted by th . . the council, we're not regarded as ratbags, if we raise an issue it's dealt with with respect. If we call a meeting, I mean some of the meetings that you've called over recent years, umm, yeah, an impressive group of people come to public meetings about issues like you know water and things like that, umm. So there ... there's a distinct advantage in this group of people (George, 62).

Also due to the nature of the group's membership, the group has influence within their community. This influence extends to major community stakeholders, such as the local council and one member writes a regular column in the local newspaper on the group's behalf. The group has called well-attended public meetings on important local issues, such as water security and mining and these meetings have influenced local planning decisions. The participants acknowledged the essential role of the group in linking and networking with other individuals, groups and organisations within their region to both facilitate and take advantage of opportunities for collective projects and outcomes. Again the credibility of the group was exemplified by what participants described as the group's role as an honest broker that could, for example, promote an alternative technology to the region, such as pyrolysis, that would benefit the economic and social conditions of their community whilst at the same time achieving climate change mitigation.

Family relations and the emotional toll of action

Participants' motivations for actively engaging in the group's activities were most often related to their close relationships, in particular with their families. Children and grandchildren were an important *raison d'être* for taking up action on climate change. In this sense their families provided them with a moral conscience for action, a reminder that although they might not live long enough to experience the worst impacts of climate change, their children and grandchildren would.

For some, their children are a source of inspiration and acted as role models, so that their children's commitment to environmental action has developed their own conscience and motivation to act. Family members, however, can also be the most trenchant critics of participants' involvement in the group's actions on climate change. For some participants this alienated them from their families and they sometimes feel they have more in common with the group than with their families. This alienation creates some emotional anguish and acts as a reminder of the emotional toll that their commitment to climate action can take.

I have a similar problem with my sister who umm I feel, 'cause she lives in Sydney, I feel also because of her attitude it's a denial of me as well. Umm in the sense that, umm, you know just as your family don't want to talk about it, umm,

'cause well it spoils the social situation but then, I mean, a lot of my life is involved with it, and I mean, if they say to you what have you been doing, you're telling them, and they don't want to hear it because it's uncomfortable for them, umm, and it does cause a difficult situation, umm yes (Joan, 62)..

The role of the group can be important in dealing with these emotions. Apart from the sense of cohesion and active support of group members who presented as strong and assertive in their beliefs, motivations and commitment around climate change, the role of a retired minister (James, 67) was in the researcher's judgement instrumental in making it possible for these emotions to be both expressed and dealt with within the group.

There is that danger that I'm noticing, I sometimes need to say to some of the older people we probably won't solve this in our lifetime, and we shouldn't allow our emotional involvement here to destroy us in the process, we've gotta take seriously our sense of passion but not let us, not let us, let it sort of destroy us (James, 67).

CASE STUDY NSW2

Description of case

This group is situated in the inner-city region of Sydney and has been working on climate change action since 2007. A number of the original members took part in the focus group and described how the Al Gore film, *An Inconvenient Truth*, inspired a meeting in a local pub where the group was formed. Other focus group members joined the group more recently but have become quickly engaged in the local, state and national climate change campaigning work.

The focus group was held in April 2010 following the second national climate summit of community climate action groups held in March 2010 in Canberra at which several members of the group were closely involved in organising and conducting sessions. This was the second focus group conducted within the research program and the first where a revised set of focus questions was used.¹¹¹

The focus group consisted of, for the most part, young urban adults (two males and four females) ranging in age from 27 to 40 years, mostly professionals, who are tertiary educated. The group acknowledges that they represent only a subset of their local community in terms of their demographic profile however they have strong links with other local community organisations within their region. Their motivation for joining the group was, for the most part, based on their knowledge of climate change, several members having a professional background in science and geography.

Case context

This group consists of a core of committed and passionate inner city community members who aspire to become “community organisers” for action on climate change. Two of the group members resigned from their full-time work this year to work voluntarily on climate change-related community campaigning. One of the more evident characteristics of this group is how over the three years they have been operating that there has been an accelerating focus on political campaigning, direct action and movement building. The group works on a number of levels: at the local level on community-based action; and at state and national levels lobbying politicians and

¹¹¹ Following the first focus group the discussion guide was revised and, in particular, the questions finessed for future focus groups.

campaigning around climate change-related matters such as renewable energy and coal-fired power. There is also a strong emphasis on movement building with several of the group members active in national and state-based climate action networks such as the Climate Summit Network Facilitation Group, Climate Action Network Australia (CANA) and the 100% Renewables campaign.

The participants of this group fall within what Inglehart (1990 cited in Tranter 2010) calls the ‘cognitively mobilised’ – that is that they are “highly educated, articulate, politically skilled and informed” (Tranter 2010, p. 417).

Relation of case to research questions

The focus group was conducted around the revised focus discussion questions that fall within the following six major themes:

1. Motivation for voluntary action on climate change
2. Types of individual and collective (group) action taken
3. Individual and collective agency around climate change
4. Constraints and enablements for action
5. Scale of influence and action
6. Communicating climate change.

These major themes form the primary themes discussed within this and the following six case study reports.

The following additional themes were identified:

1. Climate change as a coalescing issue.
2. The journey of climate activism
3. ‘Like-minded people’
4. The emotional toll of action

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are provided to support claims, provide context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

I've got an interest in it for other reasons I guess that, you know it shows a big gap between science and policy generally it's just something I'm interested in professionally as well ... (Michele¹¹², 28).

Like many people active in climate action groups (CAGs), the founding members of this group were influenced by Al Gore's film *An Inconvenient Truth*. The film features prominently as a major motivator for initiating the group and taking action on climate change. About half the participants of the focus group have a professional interest in science, leading to an understanding of climate change science and impacts.

Members of this group described how their motivations for action evolved over time. All have an individual commitment to taking steps in their personal lives to reduce their carbon footprint, however, over time this has proven not to be enough. Participants were largely drawn to come together with other members of their social networks to form the CAG in order to take action collectively. Newer members may not have been part of the founding members' original social group but the social aspect of working on the problem collectively was an important motivator for group involvement.

Individual agency and responsibility for climate change

When I first got involved in the group I started to be more, umm, political, politically active. I started to go to protests and, umm, meetings, and umm, you know sit-ins and things which I've never done before and heard about people doing protests at Uni for various things and always kind of thought I should go along 'cause it sounded like fun, but, umm, I think now when people say, hey let's go chain ourselves to something I'm much more likely to go 'Yeah, OK, why not?' (Linda, 27).

The focus of this group is on community-based political action. The motivation for action has changed over time for the majority of active members and this has resulted in politically motivated advocacy, campaigning and direct action. At least one of the

¹¹² Not her real name. Names have been changed throughout for anonymity of the focus group participants.

participants indicated that they were also active in a political party; however, for the rest it appeared that the type of action undertaken with the group represented the first type of overtly political action they had taken. Whilst the direction taken by the group is something that has evolved over time and is not actively forced on new members, the “norm” of political action now appears to be central to the group’s dynamic.

I really think that, umm, it’s a problem that needs to be solved by governments because only they have the power to, you know, to create the change to renewable energy... (Mike, 40).

Consistent with the political focus of this group, responsibility for action on climate change was understood to be primarily within the purview of government. Taking action personally and/ or on a household scale is important too however – participants were generally strongly committed to reducing their personal carbon emissions through, for example: becoming vegetarian, retrofitting their homes, not owning a car and commuting by bicycle instead. But they perceive an inequality in terms of their personal effort and commitment when compared to government action. One participant expressed this as personally expending energy but not seeing the reward for their actions through governments playing their part.

There was a shared sense that governments were not facing their responsibility for taking action on climate change, particularly in facilitating structural changes that would shift people towards an alternative (less carbon intensive) future. Two of the participants have given up their paid employment to work in a voluntary capacity on the national 100% renewable energy campaign.¹¹³

Individual agency and enablements

It’s about what happens when you come together with other people. Like what changes from coming together with other people (Lenore, 28).

What is it about the group that motivates people to take action on climate change? This group facilitates action by providing members emotional support and confidence and by diminishing their fears. Members were empowered to take on “risky” behaviours such

¹¹³ See <http://www.100percent.org.au/>, accessed 4th October 2011.

as direct actions where they may have been arrested. Members expressed a sense of exhilaration from having the courage to undertake risky actions and the group's support lent them the motivation to undertake further similar actions (creating in effect a virtuous circle of action reinforcing action).

Building confidence

I think for me personally one of the really critical things, umm, that allows me to act is knowing that I have the support of other people around me and that I'm not doing it alone, and that makes me far more brave and gutsy than I ever would ... (Lenore, 28).

It's ... it's ... it's the support of other people, the fact that you're not there standing alone and that you're not the only one who's concerned about this thing. That is really big, really important and it really helps me keep going (Mike, 40).

... but it gives you great confidence. I feel like I've, umm, I feel like I've done a lot of things in the last six months or nine months or whatever that I wouldn't have done, umm, due to confidence previously (Linda, 27).

Enabling reflexivity

... I think there is a level of questioning the effectiveness of every action now that I do and which makes it, yeah, which is good but it also makes it, umm, harder to enjoy them sometimes (Michele, 28).

... I often feel emotional afterwards [laughing] ... just because you think about everything that still needs to be done or ... I don't know, it just brings all of that back to the fore again which is important (Inga, 31).

Action for participants is reflexive action. Perhaps because several participants of this group are becoming more seasoned climate change campaigners, they have a growing sense of how effective their actions are and are striving to make a positive impact. They are more critical of the type and effect of their actions, again with a view to influencing

the situation at a political level. For example one participant exclaimed they'd be disappointed if an action they were involved in didn't make the news; for another when a sit-in at Parliament House was misrepresented in the news, rather than becoming despondent she became more determined and personally engaged around that action. So action for action's sake may provide a certain amount of personal satisfaction but evident within this group was an expectation that as campaign tactics become more sophisticated and potentially risky, the resultant impact should be greater.

Constraints to individual and group agency

People act when they are in immediate danger and that's what we're working against (Michele, 28).

Participants put forward a range of reasons why they thought people didn't get involved in action on climate change. Lack of knowledge or education about the scale of the problem and level of action required; ignorance, laziness and apathy driven by feelings of being powerless to act and a sense of despair; and lack of immediate danger and uncertainty about the impacts of climate change were all acknowledged as contributing to this lack of agency.

One participant commented on a culture of powerlessness and disengagement evident in younger people who had grown up during the reign of the Howard government as contributing to the lack of political agency. Another commented on her parents in the same light.

We don't have a culture of active citizenship in Australia and people are pretty complacent and I think ... just because people will take those first steps doesn't mean that they'll go on that ... that bigger journey we're talking about, civil disobedience or whatever [laughing] (Lenore, 28).

Constraints on action were due to practical considerations, particularly the amount of time members had available outside their other commitments (such as work) to spend on the issue. Skills in campaigning were identified as valuable assets, and a lack of campaigning skills was considered to be a major handicap on an individual or group level. Several members of the group are actively engaged in movement building and

campaigning at a state and/or national level so skills in political campaigning were identified as being important.

The small number of active members and a lack of diversity among members, were also seen as limitations.

Enabling group agency

For participants in the group, being able to call on a core number of active members with a range of knowledge, skills and experience is important. The cohesion of the group was also seen as a positive attribute as it acts to support members in what they are doing, reduces conflict and creates common goals. The support of the group was also acknowledged as being critical for developing trust so that members could take action that they might not otherwise be confident doing.

I think we're quite positive and we keep [a] positive mindset even if we do get down and we're all mates and we try to keep things balanced (Inga,31).

Sphere of influence – scales of action

I feel like we're trying to activate those who, or for me, I'm personally trying to activate those who maybe know and care and might be inclined to do something about it (Lenore, 28).

Participants are interested in mobilising people to take action at different levels. They are interested in getting more people from their local community involved in action through direct contact (e.g. for street stalls) and building alliances with other local community organisations, schools, businesses and the like. The group has developed a strategic plan which addresses targets for campaigning, in particular for lobbying their local state and federal politicians. One participant expressed interest in engaging with skeptics in order to shift perceptions about climate change, but for the majority this didn't appear to be the focus, indicating that their main concern was to get more politically active people on board. Two participants are working on a national campaign on renewable energy and another is involved in building the network of grassroots CAGs both on a state and national level.

For the most part it is engaging with their local community in order to build support for political action at the local, state and national levels that is considered the most important form of campaigning. On another level there is recognition that having support of your local community is essential in a world threatened by catastrophic climate change and that community resilience can assist people in dealing with the impacts.

For me it's about building community so even if we're completely stuffed, building those relationships and communities that will sustain us at least in the short termwhen the shit hits the fan that you've got people ... you know how to work with people and .. which is a very selfish sort of preservationist kind of way of looking at things but and certainly not the only motivation by any means ... (Lenore, 28).

Communicating climate change

An important aspect of communicating for this group is to ask questions and find out where people's interests lie. For several participants the language of their communication has become less about the impacts of climate change itself and more about more positive messages such as renewable energy as an alternative. There was an acknowledgement that crafting communication messages is quite difficult, requiring not only an awareness of why different people might resonate with a particular message or not, but also the requisite skills for effective communicating.

One participant is an artist so within the group there was an appreciation of how visual language can be used to powerful effect either to raise awareness and interest in matters related to climate change or to engage people further with the group. For example the artist created a model of a longwall shearer to raise awareness about how coal is mined in Australia for use in energy production.

Secondary themes

Climate change as a coalescing issue

Climate change is everything that's wrong with society coming to a head ... (Michelle, 28).

For many of the participants in this group their focus on climate change was mediated through their knowledge of climate change science, but the phenomenon of climate change itself is becoming less of a focal point for their action. There is less interest here in personal and household carbon mitigation behaviours or calculating carbon footprints and a much greater emphasis on community engagement, direct action, social movement building and political change. Climate change in this way becomes a tool for honing skills and focusing energy on a broader social and political project.

The journey of climate activism

There were many mentions of the journey participants were engaged in regarding their personal actions, and their involvement in the climate action group, as well as the climate movement more generally. Participants conveyed a sense of how quickly their participation and commitment accelerated, as a result of their membership of the group.

One of the newer members of this CAG at one point described her journey:

... so you start off being nervous about coming along to a meeting and you do it and it doesn't kill you and it actually was quite fun and ... you realise you can survive through that and then the next step is OK, well, come along to ... an event of some sort and then a couple of months later you're being interviewed on national radio or, standing in front of some building waiting for a policeman to take you away [general laughter]. It's . not a very gradual process (Linda, 27).

Even for those committed to action and working within the group for some time, different ways of “knowing” climate change accelerated greater commitment and forms of involvement.

.... for me, I feel like I didn't really, really understand the problem until two years after the climate group had already been running and ... I went to the climate summit at the beginning of last year and heard David Spratt who was talking about tipping points and I'd never really got my head around tipping points before and what that actually meant, like if we hit those points there was no point, there was no way we could return from that, and that's when I really, ... my ...m ... my personal motivation went to a whole new level after that. It was just like that this, I, you know, have to devote my life to this now (Lenore, 28).

Like minded people

Yeah I guess ... in some ways it's nice to all think the same way about things and ... and ... and, you know, in other ways that's a limitation because you kind of, you're coming from the one place so you end up having the same kinda ideas about things (Michele, 28).

Similar to many CAGs, this group, though based in an area representing a diverse community in terms of age, socio-economic status and ethnicity, is largely representative of a particular 'elite': white, middle class and well educated. The group was aware of this but they also acknowledged that their homogeneity accorded a certain cohesion to the group which in turn led to low levels of conflict and a sense of common purpose which undoubtedly has led this group to rapidly escalate their skills and impact in political campaigning and advocacy work.

The emotional toll of taking action

I still thought there was hope ... [group laughs] (Trevor, 39).

In the focus group, at the end of the set questions, participants were asked if they had any further comments. This drew out a series of statements related to the emotional toll of working on the issue of climate change.

... it's incredibly hard what we are doing and its incredibly emotional and we all, like every single person in the movement struggles with that all the time and struggles with, is it worth putting our energy into it and we do just want to give up and umm, not keep going, and so, yeah, as we've said, the group's really important in dealing with that ... We don't actually talk about how we deal with that great uncertainty of the future and th..th..the deep sadness that we feel about the future of the planet and its people and the worry and the despair and it's important, like I don't want to leave on a depressing note, but it's just important to acknowledge that (Michele, 28).

The role of the group again comes to the fore, this time as enabling members to deal with their personal grief and despair when faced with the enormity of the problem that climate change presents (Pearse et al. 2010). Rather than these emotions creating a

sense of powerlessness and apathy however, action becomes compelling, based on a sense of moral suasion.

The alternative is that you don't act and how can you live with yourself then becomes a moral issue (Lenore, 28).

I just want to be able to look myself in the eye in the mirror and say well at least I tried, at least I spent, you know, my energy and my, whatever time I had in a good, in a constructive way (Linda, 27).

The motivation for taking action is founded on a deep sense of personal moral obligation that underlies the perception that governments for example should be taking greater responsibility for responding to the challenge presented by climate change.

CASE STUDY VIC1

Description of case

This group is situated in a regional township in Victoria. The group was formed late in 2006 following a ‘Walk Against Warming’¹¹⁴ in their regional city. This community group now boasts one of the largest memberships of a Climate Action Group (CAG) within Australia and is an incorporated non-profit organisation.

The focus group was held in April 2010 and was the third focus group conducted within the research program and the first within Victoria. The focus group consisted of a mix of paid employees and volunteers (one male and four females) ranging in age from 15 to 67 years.

Case context

The participants in this focus group are involved in their CAG either as volunteers or paid employees. The youngest participant (aged 15 years) is the daughter of another volunteer and has been involved in the organisation for about a year, largely through her mother. Two of the members became involved at the commencement of the group and the others more recently. There were varying motivations amongst the participants for engaging with this group. Apart from their concern regarding climate change generated for some of the original members through the Al Gore film, *An Inconvenient Truth*, participants were also motivated by a sense of community service, and caring and concern both for their local environment and the planet more generally. Given the range of ages, motivations and levels of involvement in the CAG, the participants of this focus group were not so much working together as a group as coalescing around the goals and activities of the organisation.

This CAG has a very large membership base – according to their website at 13th May 2010 there were approximately 670 paid members and 1,949 subscribers. The organisation is incorporated and has a management board and several paid staff members. In CAG terms this group is well established, well organised, supported strongly by its local community. It is active on several fronts – ranging from providing

¹¹⁴ Walk against Warming (<http://www.walkagainstawarming.org/>) is an annual event held throughout Australian cities and towns and aligned with the Global Day of Climate Change Action (see <http://www.globalclimatecampaign.org/>)

advice on and supplying bulk purchased solar panels; education and awareness raising; and advocacy and campaign work. The focus of the organisation is on supporting individual and community-based action with an emphasis on renewable energy (particularly solar) and local sustainability. The organisational structure consists of a management committee and four volunteer-led action groups involved in: retrofitting and renewable energy; community engagement; engaging government; and local food production.

Relation of case to research questions

The following additional themes were identified:

1. The organisation
2. The role of emotion
3. The people

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are included to support claims, provide context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

I just feel that I've got too much knowledge to ignore it. I couldn't live with myself if I didn't do anything about climate change (Mandy¹¹⁵, 32).

I think the main thing for me is that my kids, I've got four kids and, you know, I'm worried about their future and what it will be like for them so I guess that's one of the main reasons why I do it but also just because I care about what happens to our planet (Raelene, 42).

Individual motivations for getting involved in climate change action varied for members of this group. For some it was the compelling knowledge of the science of climate change. Other participants were motivated by a connection to nature or concern for their own or their children's future. The opportunity to spend time on the issue after retirement was important for some.

¹¹⁵ Note not her real name. Pseudonyms are used throughout.

Individual agency and responsibility for climate change

Them doing the research on your behalf and getting discounts and it just makes it easier to ... to get involved in those things. So mind boggling sometimes to do it all yourself, isn't it? (Livia, 61).

Participants in this group were able to list substantial actions that they are undertaking in their personal, private sphere to reduce their carbon impact. All the participants had taken some action in retrofitting their homes, for example through fitting solar panels, solar hot water, and energy efficient lights. The CAG has a role in researching products and helping members to select and purchase such products. The group offers members discounts through bulk purchasing programs. Many members have become involved in the organisation through these programs. There is also a strong emphasis on pursuing sustainable lifestyles. This is evident in the range and nature of personal behaviours undertaken and is consistent with a semi-rural lifestyle. For example, most grow their own vegetables, have water tanks and have made other lifestyle changes around personal transport, such as shifting to a more fuel efficient vehicle. For one, her involvement with the group commenced in a voluntary capacity utilising her professional skills which over time shifted into paid work with the organisation.

The organisation of this CAG, consisting of a management committee and four sub-groups, provides a structure through which voluntary action is facilitated around the organisation's broader aims concerning renewable energy and sustainability. Participants expressed their individual motivations in varying terms: as a result of frustration at the lack of concerted government action on the issue; based on their knowing about climate change and in terms of having information that they felt confident in ("knowing the science is right"); feeling strongly about the issue; being consistent with their ethical beliefs; as an extension of a country lifestyle and growing up with an appreciation of nature and the environment.

Individual agency and enablements

... you do influence people either positively or negatively with what you do. So, but I think for me, you know, as long as I am doing something it's better than doing nothing. But I don't always feel like it's much but, it's like that's, I can only do what I can do, that's all, I can't change the world. But if I do what I can

do and encourage someone else to do that, then, gradually, you know, maybe there's a bigger change (Jack, 67).

Participants felt a sense of doing 'good' through their actions and also leading by example so that their actions influence (or may influence) others. However, participants in this group tended to perceive their involvement in climate action in somewhat individualistic terms. One member described how living in the country, where the local impacts of climate change may appear more real, seemed to be important to her level of awareness of climate change as her friends in the suburbs don't seem to share her concern. Another participant saw this as an extension of her sense of community service and for another he contrasted his engagement with the issue as a scientist with other scientists who shunned involvement.

I think too it is a bit personality based. It's, you know, some people do just take action and some don't, I mean it's just partly your personality. I know for me, my background, my parents always were involved in community things and so, perhaps that's you know, I've grown up thinking you know, that's what you do. You get involved and so partly I think that's it as well for me. That's the right thing to do because yeah it's what you were taught to do, yeah (Raelene, 42).

Constraints to individual and group agency

Fear. I've got a friend who's just fearful of it. Very intelligent girl but just doesn't want to know about it, buries her head in the sand. 'No, you're doing that bit for me. I don't want to know about it' (Mandy, 32).

Participants put forward a range of reasons why they thought other people didn't get involved in action on climate change: apathy, fear and denial; lack of awareness of the extent of the problem; and a sense that it's something that governments should be doing something about, rather than individuals.

Participants felt conflicted about some of their choices, which involved compromise and a sense of guilt. One example was choosing to fly rather than catch the train interstate due to time constraints, or flying overseas to visit family members. There is also the financial cost involved in embracing a more sustainable lifestyle through expensive home retrofits.

Enabling group agency

Well how do I feel about it? Well, uh, I suppose I feel that at least if you can get with like-minded people, that's something isn't it? (Livia, 61).

I think its, umm, the passion of everyone as a group, you know, they're passionate about doing something in that you ... you all then encourage each other to take action and because you all want to do something (Raelene, 42).

Apart from their individual motivations, involvement in the group helped participants to take action by building confidence and a sense of collective identity. A certain sense of pride was evident amongst participants in their association with the organisation. As noted above the participants in this action group don't necessarily work together cohesively but are involved in varying capacities within the organisation, either as volunteers or as former volunteers who have moved into paid work. Their sense of identity with the organisation is illustrated in the quote below.

I used to wear one of those badges all the time ... Yeah, these badges, they're great, M[andy] designed these badges, and I think they're marvellous and I think that well we should all wear them more because you get a lot of comments. But it's interesting I've lost one at the moment ... and my, I'm in a few groups and they all, you know if anything environmental comes up they look at me, you know, I don't need the badge back. But you know it's quite a nice thing to be, I suppose, associated (Jack, 67).

Sphere of Influence

The group discussion revealed some tension around the nature of change, that is, the type of influence the organisation aimed to have and how the participants perceive their role in creating or facilitating this change.

How change occurs

... trying to get to the ... the mass of people who are not real believers or not doing anything at the moment is the ... is a lot harder than working with people who already have some sympathy with these ideas and maybe they have a bit more money so that's where we have probably operated mainly (Jack, 67).

Although the organisational goals include influencing the broad spectrum from the local community through to the national government, for participants their work is mostly involved in engaging people who have already expressed some interest in climate change or are otherwise attracted to becoming members of the organisation to access solar rebates and incentives. In their view, membership offers the first step to potential further engagement and involvement of people.

And then there's people probably volunteering who have done nothing before now but are now doing something. If you get them in on the first rung then you can, you know, at least you have the chance to build that up with those people (Raelene, 42).

Yeah as someone said it's an evolution not a revolution. That's a really important thing to remember. You can't push people, they need to take their own little steps and find their own journey (Mandy, 32).

However, as another participant noted, active members represented only a small subset of their large membership base and this was of the situation in most voluntary, community-based organisations.

You know you're not going to get passionate, you know, mad person getting involved in every level from every person that joins, that's the minority and it is in every single group, the minority does the majority of the work in every service group and committee known to man and it's just how it is (Raelene, 42).

Vision of how change occurs

In contrast to how members understood their actions influencing others in the community and the ability of the group to facilitate broader scale change, as indicated in the quotes above, their vision for the organisation was much more ambitious.

... the [CAG] logo, it's about a ripple, so yeah, our community working locally, then nationally and globally and having an impact (Mandy, 32).

The group noted that the logo for their organisation is based on a ripple, the idea being that the ripple grows out from the local grassroots level to national and the global scales.

I think it's that umm multitude of umm communities in different parts of the country, different parts of the world making a difference, like, it's just a little ... but I hope we get bigger and bigger and bigger (Mandy, 32).

Well basically that's the vision, isn't it, to get that we're growing, a really big movement growing (Livia, 61).

Communicating climate change

There was also an evident difference between the group's stated vision of change with how they saw their role in communicating to others on how they could take action against climate change. There were a number of references to the idea of people starting off with small, simple steps that the organisation encourages through an emphasis on buying and producing locally, home retrofitting and purchase of solar panels and hot water systems.

Letting them know that change doesn't have to be big and hard, a lot of the changes are small and easy (Mandy, 32).

Yeah I think there is a lot of feeling, you know, 'this issue is so huge, I can't do anything', if we can make them feel empowered in a s., the, yeah, as you say, in the small ways (Raelene, 42).

There was an emphasis on communicating with people about climate change by starting the conversation on territory that is familiar to them and within a context that may be less threatening to their personal values.

I'm just thinking of my own family for instance like I've got, umm, a couple of cousins who are just absolutely not aware of climate change and I wouldn't even try to talk to them but the solar in schools thing could be a really easy way to yeah start them thinking about it just start that process, you know, baby steps. Because their, yeah it's within that school community their three kids go to school so yeah and I think that might work (Mandy, 32).

Secondary themes

The organisation

Yeah and it's got a pretty amazing structure compared to a lot of other groups as well. Some don't even charge membership fees and people are blown away to know that we have staff members and money and bulk buys and ... (Raelene, 42).

As mentioned above the participants in this focus group are engaged in climate action through either their paid or volunteer involvement with the organisation. It is of interest then to consider how they perceive the operation of the organisation itself as well as their own relationship to it. Again as referenced above there was a strong degree of pride expressed in what the organisation had achieved to date from humble beginnings and the success in growing the organisation to now be one of the largest CAGs in Australia. However despite the success of the organisation in terms of its size, financial base and influence within the local community, for some people the attraction of membership dissipated once they had accessed cheaper solar panels.

Yeah, absolutely, we had a huge, we had a huge non-renewal rate last year ... (Raelene, 42)

[Jack interrupts]: *So once they'd got their PVs on the roof ...*

.....they didn't renew their membership. It was purely to get that and then that was it (Raelene, 42).

The role of emotion

That's what I used to get from that guy at work, yeah. And he just kept laughing at me, and then one day I cried and that's what made him change. He was boasting how he had four fridges at home and I just, yeah, 'Don't talk to me' and I had to put my headphones on and I was working and I was, had tears coming

down my face and I thought this world is just messed up. And uhh he called his wife that day and got her to turn one of the fridges off and then that weekend they reorganised everything and turned the other two fridges off so they were running on one fridge and that was the turning point for him. Yeah [laughing] so sometimes tears help (Mandy, 32).

Whilst much of what is said about climate change is phrased in terms of the science and developing knowledge and understanding of climate impacts through climate science, it may be equally important to dwell on what moves some people to take action on climate change and in what ways that they may influence others to change their behaviour in some way. In other focus groups there often came a point in the discussion where the emotional toll of taking action on climate change was expressed. This often emerged from the discussion rather than as a response to the questions asked. In the above case, the emotion expressed in the participant's story was deeply moving. She had spoken about her former co-worker several times during the focus group session as an example of a hard case to change. But here it appears that rather than rational explications, it was more the participant's raw emotion that persuaded her co-worker to change his behaviour.

The people

You've got to get down to the people (Livia, 61).

You do, and it's always been that way ... The people have to speak (Raelene, 42).

Despite the organisation's ambitious vision for change, group members did not discuss a strong political role for the group or a role in specifically influencing government. Rather, group members saw a movement of people as more important. How such a movement of people would come to influence and establish change was not really explored.

Well I think any government is only looking three, four years ahead to when the next election is so you have to get the people saying this is what we want now because, you know, no ... no government's gonna care about what's going to happen in twenty years it's, well I don't think they do, it's all about getting elected I think it's ... it's the most important thing is to get to people, 'cause only they can influence what happens (Raelene, 42)

Similar to other focus groups, several group participants described their transition from a sense of individual concern around climate change to group involvement in terms of getting together with 'like-minded people'. How the group participants distinguish themselves from others that are not taking action has been explored above. The quote below however provides additional insight, in that the speaker indicates that taking individual responsibility for climate change is somehow linked to understanding broader notions of connectedness with distant others, brought about through globalisation.

It's like when people say it's all China's fault, well I say, 'so where does most of your stuff come from?' 'Oh, China' and I say, 'why do you think they're making all that stuff, they're making it for you, so you can't say that you're not partly responsible for what happens there because you're buying the stuff that comes from there', so they don't think about it that way, they don't actually connect themselves with ... with the rest of the world in that way, they just don't see the connection (Raelene, 42).

CASE STUDY VIC2

Description of case

This group is situated in an outer suburb of Melbourne and is associated with a local council as a Carbon Rationing Action Group (CRAG).¹¹⁶ The focus group was held in April 2010. It was the fourth focus group conducted in the research program and the second in Victoria. The participants were four men all aged 55 years or older who have been involved in the CRAG for between 18 months and three years. The group is supported by a local council officer who facilitates the group's activities, which consist of a mix of practical advice on measuring household carbon production and measures to reduce carbon emissions. The measures to reduce emissions include subsidised purchasing of technology such as solar panels, and monthly talks, films or information evenings.

Case context

Several of the participants were attracted to this group due to the offers made by the local council for subsidised purchases of solar panels as well as other water and energy saving incentives. All members were retired or close to retirement, aligning with Tranter's (2010) "active environmentalists" whom he found were often older Australians with more time to devote to volunteer action around their environmental interests.

There were varying motivations amongst the participants for engaging with this group. Some, as mentioned above, became involved through generous council subsidies and giveaways. Most hold an active interest in the science of climate change: one participant lectures in environmental science at a Melbourne university so his involvement was related to his professional interest but also with the belief that he should be taking action around the subject; another is a retired civil engineer who remains actively engaged with several professional associations which he wishes to influence on climate change policy; another also comes from an interest in the science; and the final participant became involved through an interest in the environment more broadly. The participants of this focus group were clearly not working together collectively as a group; rather they

¹¹⁶ Carbon Rationing Action Groups (see www.crag.org.au and <http://www.carbonequity.info/crags/index.html>) are community-based groups that come together to measure, reduce and potentially trade their personal and/or household carbon emissions. There are hundreds of CRAGs internationally (especially in the UK) but there are less than half a dozen active in Australia.

were engaged through their local council CRAG which supports and feeds their desire to take individual action on climate change and sustainability.

Relation of case to research questions

The following additional themes were identified:

1. Climate change as a subset of sustainability
2. Deliberation amongst the group
3. Age and ‘active’ environmentalists
4. People like me.

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are included to support claims, provide context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

I first came to the group because they were offering solar panels. We got involved from that side ... I've got an interest in the science of climate change, umm, but if you're interested in the science you have to have some idea what's playing with the politics. So I suppose I maintained my interest for that reason and to stay in touch with the way things are going (Jerry¹¹⁷, 63).

As one who has always been interested in the environment, ahh, not only from a scientific point of view but also as a general interest, I became interested in joining the CRAG, and also because of the solar panels (Ken, 74)

Members of this group demonstrated a strong pre-existing interest in the environment which led to their taking action on climate change. For most there was also a link to sustainability, so although they demonstrated an interest in the science of climate change and were knowledgeable in this regard, they linked their interest in climate change with a range of issues such as ecological footprint; world population growth; and over-consumption. Whilst the science of climate change was part of what attracted them to this group, they did not always agree on what the prevailing scientific view of

¹¹⁷ Not his real name. Pseudonyms are used throughout.

climate change was. This led to several lively exchanges between some of the participants during the focus group.

Taking action provided a sense of satisfaction amongst participants, a feeling of being “lifted up and pleased” (Terry, 55). Ken (74) said “I feel it’s just the right thing to do”, which implied a sense of moral obligation. Alfred (65) expressed two conflicting emotions: a feeling that as one person how can his actions have an impact, and secondly, “why more and more people can’t do that, like what I’m doing?”

Individual agency and responsibility for climate change

... we use the water from the roof ... we use in the garden, we do composting. We grow our own vegetables ... I have the city council planting trees... I also thought I'd join a group on retrofitting houses in Carlton ... These people have got a grant and I'm part of that group renovating a neighbourhood house which is more than a hundred years old ... we only have one car for a family of five people ... (Alfred, 65)

I'm probably doing more ... some minor things, I guess, but I'm interested in a sustainable lifestyle as well ... so I've been concentrating on minimal usage of, you know, water and power, umm, so I've actually ... a couple of years ago I turned off my off-peak hot water supply which, it had one of those old tanks in the roof, and I'm just basically use cold water. Umm, you get used to it, not that hard (Terry, 55).

Members of this group were partly attracted to it due to the opportunity to purchase solar panels and water saving items offered by their council. However, in addition, all had undertaken significant investment in actions to retrofit their homes, for example through fitting solar panels, solar hot water, energy efficient lights, and insulation. These measures were undertaken as part of their commitment to a sustainable lifestyle but in addition may offer the opportunity to influence family and friends. Apart from these types of measures there were some extreme elements of self sufficiency at play. For example, Jerry, the civil engineer had converted a home swimming pool into a 10-15,000 litre ‘aquifer’, to allow him and his wife to be totally self sufficient in water for

their garden. Another member (quoted above) turned off his electric hot water supply and doesn't heat his home, "I just put on another jumper if I need to" (Terry, 55).

Individual agency and enablements

I think it's really a lifestyle choice, umm, a lot of people, umm, are happy living in a flat and going and doing their thing, but it's really a lifestyle decision. I think it's where your interest lies, if you're not interested in it, you're not going to do it (Jerry, 63).

You asked what enabled us to do it? Having money [facilitator laughs], no, I'm not joking [Jerry: I almost gave that answer] ... I mean if ... if my wife and I didn't have the money we couldn't, couldn't carry out these alterations (Ken, 74).

Part of it for me, umm, was just the whole social justice thing, umm, I'm involved with a social justice group too, but, umm, you know, there's an understanding, a realisation I suppose, so much of what we have we waste and we ... we over consume and people in other developing countries would probably like the same basic essentials that we take for granted (Terry, 55).

Participants engaged in action on climate change and sustainability because they had both the desire and means to undertake significant investments of money and time. This is part of a choice (or as Alfred described it, a "trigger factor") that they recognise others may not make. However, what was quite striking in this discussion was not only the substantial investment that members of this group had made towards living a sustainable lifestyle, but also how many of their interests coalesced around other community ventures – for example, becoming involved in sustainable retrofitting of a heritage house, being a member of the sustainability street program, and other community organisations. This indicates that for at least several in this group, their actions took place within a context of broader civic engagement.

Constraints to individual and group agency

I think one has to, umm, perhaps, mandate changes and I think the current politicians are loath to do that (Ken, 74).

People they focus on money. Money, money, money. Give them money to do that thing, they will do that, you know. If you penalise them for doing certain things, we don't do that anymore ... I know my friend who ... does not come to any meetings because the government is giving them free and he spend only \$400 to set up solar panels in his home. But the other thing, where is all the laws? ... It's more focussed on what he can save by giving the power to the peak so it was more an incentive to do that rather than to save anything on the power ... (Alfred, 65).

I guess it comes down to money again, doesn't it? ... And I don't have any political clout so I can't influence a politician – our local politician is, I would say, a denialist. And no matter what one does you can't achieve anything with him (Ken, 74).

There was a sense from participants that change needed to occur from the top down and be led by government and yet a corresponding cynicism that government would not undertake such action. There was also a certain critique of others, which held that they were not disempowered but rather, that even though they were armed with information and/or concern about climate change, they were not willing to take action as this group does. Money, or at least monetary incentives, were noted earlier as an enabler. But it is also, according to Alfred, not necessarily a motivator of behaviour change. So even if money assists people to retrofit their homes with solar power, for example, it may not be inculcating an ethic of carbon emissions reduction or broader sustainability. According to some in this group, this is a role which regulation must play. The motivations of participants in this group for retrofitting their homes are clearly not so much to save money but rather, they are indicative of their broader commitment to a sustainable lifestyle.

Enabling group agency

The thought that there's much more connectivity between like minded people these days because of different media channels. Umm, I think there are government incentives.

[Facilitator: So when you say media channels, what do you mean?]

Internet, internet certainly in terms of organising and disseminating information, umm, there are, you know, government incentives. Even the CRAG group here tonight, it's a local government initiative, umm, which sort of facilitates people to come along and get information and what have you (Terry, 55).

This group didn't have much to say regarding group agency, perhaps because the participants of this focus group act more as individuals than as members of a group. Apart from the reference above to the role of the internet, members considered a particular community education and awareness raising campaign as a good example of what can motivate people to act. The Target 155 campaign by Melbourne Water was topical during my visit to Victoria. The '155' in the campaign's name was a target for per capita water consumption and the campaign relied on positive reinforcement. Free water saving giveaways, as well as weekly feedback on how the community was going against the target, formed some of the elements of the campaign discussed by participants.

Sphere of Influence

I have seven grandchildren ... but, for the grandchildren I want to set, or my wife and I wish to set some sort of example in the hope that they will become more aware than their parents of the need to ... to act. So it's terribly altruistic (Ken, 74).

I'm Indian, we talk to the Indian people in the community (Alfred, 65).

I'm seeking to influence people, family and friends I have personal contact with so it might be immediate family, friends, people from the place where I worship, work mates and probably even, ahh, candidates for government, especially when coming up to election time (Terry, 55).

...the Institute of Engineers, umm, and the Australasian Institute of Mining and Metallurgy – they are two professional organisations I'm in, umm. I just had a letter published in IOE this month so I'm trying to influence policy direction in

those areas, because the Institute of Engineers has 74,000 members and AusMM, 10, 000 (Jerry, 63).

Clearly, as identified above, the participants of this group consider their role in influencing others as an extension of their individual agency. Members of the CRAG had been involved for substantial lengths of time (up to three years), indicating more than a casual engagement with the group. Despite this there was no indication that they considered themselves to be involved in collective voluntary action on climate change. Given that one of the aims of CRAGs is to utilise collective goal making on carbon reduction as a source of motivation, it was interesting that such a degree of individualised responsibility was demonstrated by the participants.

Their individual spheres of influence ranged from family and friends and the local community to more ambitious targets in the case of Jerry who is seeking to create broader-scale change in the professional engineering associations to which he belongs.

Vision of how change occurs

You're always going to get a few like-minded people and people acting together but I think unless it's something that really effects the environment of communities as a whole you won't get big numbers I don't think unfortunately (Terry, 55).

I'm very doubtful that local level action can achieve anything, not in the broad picture of things. You're only going to make people feel satisfied that they're achieving something in the local community but I'm doubtful it can achieve anything against vested interests (Ken, 74).

I'm not quite as cynical, but I agree. But I don't agree with the vested interests bit, umm. Local action brings up an awareness, how wide that awareness can spread, umm, is the question, umm, but if there's a ... if there becomes a community recognition that we need change, umm, then there will be change and ... but the change won't come at the pace that a lot of people will want and it will come too fast for another group (Jerry, 63).

Ahh, but how do we increase, uhh, the people who are receptive to this? We are always banging on to those people who are converted, converting the converts you know. Can we bring more people into the fold? (Alfred, 65).

Whilst this group appeared particularly confident in the actions they themselves were taking to mitigate against climate change and as part of a sustainable lifestyle, it is interesting that they are, for the most, doubtful that broader community change is possible. Their views here align with their perceived spheres of influence which relate primarily to the local and community scale and the sense of cynicism that top-down political change is required but unlikely to occur.

Perhaps not coincidentally, Jerry, who expressed the desire to influence opinion at a national scale through his professional organisations, had the most confidence in the potential for broader scale community change but with a practical edge. Jerry acknowledged that people will respond to calls for action on climate change in different ways depending on their values. Some, such as climate groups responding to the climate ‘emergency’ will want rapid change, whilst others who are dependent on existing energy production systems (such as fossil fuel-reliant industries) will resist change.

Communicating climate change

I’m thinking of writing a book. A friend and I have been researching, whether we’ll get to it ... (Jerry, 63).

And ... I tend to just write and say, heh, take the emotion out of this and take what you’d like it to be, look at what is, umm, and how ... how are we going to get to where we’re going ... (Jerry, 63).

I think I’m a little too academic in my writing. [Facilitator: So you think that’s what’s ...] I think it’s a put off (Ken, 74).

I suppose, umm, when I communicate it’s normally person to person by word of mouth. Umm, the impression I get is that most people just don’t know, they’re mistrustful, they don’t know what to believe (Terry, 55).

When communicating about climate change, several respondents reported that they tended to rely on their knowledge of climate change, that is, how they know climate

change through the science. This is a rational, knowledge-raising approach which most of the group had previously acknowledged as important in generating awareness and action in others. It may also be consistent with “taking the emotion” out of communicating climate change. This, however, raises some pertinent questions regarding the ability of individuals in this group to successfully motivate others about the climate and sustainability issues that are important to them based on information alone.

Secondary themes

Climate change as a subset of sustainability

If CO₂, global warming turns out not to be true, then what we're doing and what we necessarily must do to make this Earth better for everybody could be damaged ... Because you talk about the denialists and the believers, well we shouldn't have the denialists and believers, we should be focussed on what we need to do to make this a better Earth and whether CO₂'s the culprit or whether the sun's the culprit or what's going to happen next, I don't know, but that doesn't alter all ... all the actions taken by people around this table have been toward a sustainable future, umm, and whether, so that ... that if we did, if everybody did that then the big political argument wouldn't really matter (Jerry, 63).

One of the distinguishing features of this group was that their focus on climate change sat within a broader level of concern for sustainability more generally. For all participants their actions were set within a sustainable lifestyle frame and in a sense the CRAG¹¹⁸ supported this, as their local council takes an expansive view on carbon reduction action, supporting other environmental actions such as water saving and waste reduction through information and incentives.

Despite the evident tensions within the group there was a sense that those bigger questions around a sustainable future are, in the end, far more important than individual differences in their interpretations of the science relating to climate change.

¹¹⁸ During the discussion the participants in fact noted that the council had merged the sustainability group and the CRAG and was alternating their meetings.

Deliberation within the group

I would argue the other side that.. that... (Jerry, 63)

No, I disagreed with you when you said that actually (Ken, 74)

OK. You can disagree but I can show you the data (Jerry, 63)

Well I mean I can show you counter data, umm, so I mean let's not have an argument between ourselves (Ken, 74).

Several times throughout the focus group tensions rose among group members around differing opinions on the science of climate change and different forms of response. For example, questions were raised regarding whether global warming was actually occurring and the benefits (or costs) of nuclear power. This raises questions of whether in fact these four individuals had sufficient common ground on which to base collective group action, if indeed this was the purpose of the CRAG.

On the other hand, entrenched positions amongst these four articulate, knowledgeable, motivated and aware individuals tended to fall away through the process of deliberation around the focus questions and related discussion. This group provided for me the ideal exemplar of the value of a deliberative process amongst strangers with differing value sets around a contentious issue. Part of the richness in this focus group discussion was a result, I believe, of the need for these four men to negotiate their positions on climate change and sustainability in a cooperative manner.

Age as a factor for 'active' environmentalists

I would like more young people to come to these sorts of meetings, like CRAG and all of that. When you look around at people who come to the meeting, there are lots of people they are retired, you know. Young people are active and ... they can make a difference (Alfred, 65).

The participants in this case study (similar to case studies 1 and 5) were all aged over 55 years. As I have noted previously this is consistent with the empirical research conducted by Tranter (2010) who states that:

Even after controlling for other social background factors, older Australians are more likely than their younger counterparts to be active in environmental groups. ... One's stage of the lifecycle might be important here, as many older people with relatively greater autonomy from family and work responsibilities are able to devote more time to participation (p. 421).

People like me

..they are so focussed on their lives and living day-to-day ... it's just about survival, they're not looking at ... at, umm, other aspects of their lives ... I suppose one of the things that always got me was there is often a consciousness about, umm, whatever it may be whether it may be the environment or whether it may be climate change or ... or whatever and, umm, people say yes I believe in climate change and then just continue on as before. It's all very well just to come around and have a latte and talk about it but get them actually doing something about it and then you find the doers are a very small group and the talkers are a very big group (Jerry, 63).

Umm, the impression I get is that most people just don't know, they are mistrustful, they don't know what to believe, umm, it probably, umm ... sympathetic and you know, you ... you ... you find some kindred spirits every now and then, umm, and I think that perhaps the people who have gone into it in more depth and who are very committed are, you know, you can perhaps see them working around in the community as heads of different lobby groups or things like that (Terry, 55).

There was an acknowledgement by group participants that they represented a small subset (or 'niche'¹¹⁹) of the community who are active on climate change. Recognising "kindred spirits" or "like-minded people" as a motivation for group involvement has been a consistent theme across the focus groups as common identity is forged in collective forms of action. However for the four participants of this group, collective action was not a feature. It appears that their engagement with climate change (or sustainability more generally) was reason enough for them to continue being part of this group.

¹¹⁹ The idea of 'niches' is drawn from sustainable transition theory which has been more recently applied to voluntary collective action on climate change. (See for example Seyfang et al. 2010)

CASE STUDY VIC3

Description of case

This Climate Action Group (CAG) is situated in an outer suburb of Melbourne. The group was initially formed in 2006 following a talk on climate change given to the U3A¹²⁰ at a local university. The focus group was held in April 2010 and was the fifth focus group conducted within the research program and the third in Victoria. The participants in this focus group were all aged 64 years and older and consisted of two men and three women.

Case context

Several members of the focus group were foundation members of this CAG which formed in 2006 and was formally established in 2007. The group is also a member of the Climate Emergency Network (CEN).¹²¹ The youngest participant in this group was 64 and the eldest was 72 years. Most were either retired or close to retirement, aligning with Tranter's (2010) "active environmentalists" who he found were often older Australians with more time to participate in voluntary action around their environmental interests. This group was also highly educated. For example one member is a university academic and another is a doctor. Tranter found that tertiary education, political ideology and value orientation are also important predictors for active engagement with environmental organisations.

As Rootes (1995, p. 230) suggests, tertiary education 'has the function of upsetting old prejudices, imparting new knowledge, broadening social experience, developing new skills of critical analysis and enhancing the self-confidence of its beneficiaries ... to imagine alternative futures and, sometimes, to act to translate that imagination into reality (Tranter 2010, p. 421).

This group was found to very much align with this description as Daphne (65) states below:

¹²⁰ "U3A stands for University of the Third Age. There are U3As all over the world. U3A is a learning cooperative of older people which encourages healthy ageing by enabling members to share many educational, creative and leisure activities." <http://u3anetvic.org.au/> accessed 24th January 2011.

¹²¹ "Climate Emergency Network was established in February 2008 in response to, and in support of the publication of *Climate Code Red: the case for emergency action* by David Spratt and Philip Sutton." <http://www.climateemergencynetwork.org/> accessed 24th January 2011.

I suppose you could say we're all sort of middle class people who live in a fairly affluent suburb or the middle of the road so we have more time and probably better educated than the average as a group I mean (Daphne, 65)

There were varying motivations amongst the participants for engaging with this group. For most the science of climate change was compelling with the initial formation of the group following the Australian release of Al Gore's film, *An Inconvenient Truth*. Several in the group are grandmothers and this also presented as a strong motivation for action and the third key factor evident and associated with this, was a strong ethical concern.

Relation of case to research questions

The following additional themes were identified:

1. "People like me"
2. Knowing climate change

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are included to support claims, provide context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

Ahh I think I must have seen Al Gore's film, called, what was it? [Garry intercedes: An Inconvenient Truth] An Inconvenient Truth, yes that's what first drew my attention to climate change so when I saw the advert about this group I went along 'cause I realise this is a very new but important topic (Daphne¹²², 65).

... so it was always at the back of my mind and then it started, it really took off in, ahh, this century with, ahh, I saw more and more and more of the science and became pretty convinced with the data coming through from very reputable, from a huge number of very reputable scientists and, umm, I thought that, ahh, we need to take action, and I thought that, ahh, I'd work with a grassroots group

¹²² Note not her real name. Pseudonyms are used throughout.

and work at, ahh, local government, state government and federal level (Jeffrey, 64).

I'm a grandmother and I'm very concerned that, ahh, my grandchildren were going to not have a kind of, the kind of, umm, fortunate life that I've had and, umm, because of the, umm, the world was not going to be the same in fifty years time, and, umm, I felt if there's anything I can do to reverse the situation I would do it (Penny, 72).

... then in the late eighties as a scientist it became quite obvious to me that.. that global warming was now a problem, and that was recognised, I mean, because I read Science and Nature as a matter of course ... climate inequity and the other thing is species extinction they're for me they're lines in the sand (Garry, 65)

The formation of this group as Penny (72) describes it (see below) was the result of a U3A talk on the science of climate change. Perhaps not surprisingly for this group there is a high level of motivation for action based on group members' understanding of climate science. Several participants in fact demonstrated a detailed and sophisticated knowledge of the history and empirical basis for global warming which translated into strongly held beliefs and convictions. For others, as grandmothers, their motivation for action was related to a concern for the future that their grandchildren face. This moral concern also extended for several of the participants into a more general concern for people who are poor and are likely to suffer the worst effects of climate change, other non-human beings and a heightened concern for the environment and nature generally.

..... all this talk but are we going to do anything about it? Hands up anyone who wants to do something about it and I put my hand up and that was, and then we went, ahh, she convened a meeting and, ahh, went from there (Penny, 72).

Individual agency and responsibility for climate change

Well ahh, for a start I've been a vegetarian for many years. I wash everything in cold water. I flush the loo only occasionally [laughter] umm I have a shower only every second day ... I've given up flying, I don't fly anymore, and I use the car only sparingly only if I ... I really need to, otherwise I walk, catch the train, things like that, public transport, which uses electricity too (Bernadette, 72).

... I do all the things that B[ernadette] does because I belong to the local conservation society for many years and that's what conservationists do (Daphne, 65).

I mainly write all around the world not only about climate issues but significantly on climate issues and I do the website and ... and ... and comment if possible ... I was a relatively noisy academic and in retirement I'm vastly still but I do it in a sense writing articles that are documented and referenced and ... I can, umm, no longer research in a laboratory but I ... I do a lot of writing because I think you really, it's a responsible thing to do, so I'm I ... I do my responsibility in the same way as B[ernadette] does and D[aphne] do theirs (Garry, 65)

I stopped driving a car for my personal transport in sometime between 1997 and 2000 ... you can get around Melbourne incredibly easily on a bike and train and that's what I do for my personal transport. I can't impose that on other people but I think if I set the example well then show that people can have productive lives, productive lives and get to all sort of social events in this manner umm maybe some people will take it up particularly the younger, fitter people instead of driving their cars everywhere (Jeffrey, 64).

... when I joined this group at the very beginning my idea was I could best, ahhh, to, umm, contribute by writing letters to parliamentarians to local state and federal government, ahh, because I had, that was one of my fortes was letter writing political, in political arena and I did that for some timelike the others I try to minimise my car transport. I did start off riding a bicycle then I fell off and broke my ankle [laughter]. So that was sort of curtailed my bike riding activities a bit ... I come to meetings and do go to protests and you know and group rallies and things like that and I was at one time I was secretary of this group (Penny, 72).

Reminiscent of members of case study VIC2, several participants in this group are taking a very high degree of personal responsibility around climate change mitigation. Their individual voluntary actions largely sit within two main areas: personal

behaviours related to their households and lifestyle choices as part of a commitment to a “conservative society”; and using their communication skills to influence broadly and advocate on behalf of their cause.

In terms of their personal behaviours, it is interesting to note that there was less emphasis in this group than in others on household retrofitting as part of their action. Even though it was mentioned by some there was certainly more emphasis on changes in their lifestyle practices. As Penny reports, for example, for an older person to commit to cycling around the city for personal transport is not without its hazards, so committing to changes of this type is not an inconsequential step.

This group is exemplary in their use of media and other forms of communication in their personal (and group) efforts to influence a broad range of actors: politicians, the general public, primary, high school and university students for example. This is explored further below.

Individual and collective agency and enablements

Well that's what we're in it for, that's what we join a group for so we can take community action. A person on your own you wouldn't be motivated or you wouldn't be feeling up to it or you'd feel shy or, you know, but when you're with some other people it makes all the difference (Bernadette, 72).

You have to be thick skinned in this business like any other business I suppose because people will look down at you ... but yeah, thick skinned, is I think what you have to have (Bernadette, 72).

I think it would be widely agreed amongst the participants that involvement in the group facilitates their ability to take individual action on climate change but in the above quote Bernadette reveals another feature of her involvement, related more to personality than to identity. A number of the group repeated this refrain about being “thick-skinned”. In a sense there appears to be a setting apart, an almost “us and them” and a sense that members of this group are separated from the mainstream through their views and actions but the group provides them with a place where they can express their individual agency.

I think they are, being, having a small group of people, it would be nice maybe if we had more, but having a small group of people at least you have, you have a sense of solidarity in a very conservative society where if you say, people say, you know, you're the odd man out. It ... that ... I mean I ... I'm the odd man out anyway...

[Bernadette interrupts: *You're just odd*]

I'm just odd, [general laughter] I'm thick skinned and I come from a tradition of being yeah difficult in that way but I think if ... if ... if I ... I've certainly find it's useful to belong to a small group and we can go to the rallies together and we have our banner and we can have our position (Garry, 65).

I think what your question about what allows you to do it, is a ... a belief based on science and top science and ahh, and ... and ... and an obligation to your fellow ... fellow man and also fellow species in the world (Garry, 65).

Participants further felt that they needed to be cognisant of the science to be convincing around the issue of climate change and committed to action and for Jeffrey (64) the support of his wife and children was the most important factor as well as sympathetic friends and an extended social network.

Good. [laughter]..... it gives you a boost, it pushes up your morale (Bernadette, 72).

When participants take action around climate change they reported how this made them feel good, supported and re-energised despite the fact that they often felt unheard and it was often difficult to see the positive results of their actions.

Constraints to individual and group agency

.... I think ahh, it's quite a battle, battling against, umm, cynics and deniers and it's.. it's umm hard to go in socially and be the ratbag, you know, I mean and that's often. I mean, I often go in to groups and that's the it's ... it's hard to be the one who's, ahh, against, you know, that's the kind, that's the kind of the social ... social milieu that I'm in and, umm, that's, I think, that prevents, prevents action (Penny, 72)

The difficult elements of taking individual action around climate change related to the sense of separation or being apart from the mainstream on this issue. For Penny even her ‘social milieu’ or social circle would not necessarily be supportive of her commitment to voluntary action. Despite being a very committed and capable group of ‘active environmentalists’, there is also the enervation of constantly working against the tide to “turn the ship around”.

... it's very hard to turn the ship around, there's this climate ship takes a lot of turning around and it's not even half way there (Bernadette, 72).

But you see you mention support from the family. My family thinks I'm a bit of a nut actually. I get no support whatsoever from my family and that's hard (Bernadette, 72).

Further limitations to individual and/or group action reported by participants included lack of money and time; not having enough members (in the case of this group financial members would also contribute funds for the group); and the need for more family support. Additional limitations related to the group context: as Garry stated, the actions of individual group members were sometimes constrained by the need for compromise. Compromise was needed between the more radical and more conservative views individual members had, and was needed when group members differed in the forms of action they were willing to take. Extending this further, Jeffrey suggests that there are broader structural constraints at play in terms of limits to personal agency.

So you're limited by the democracy of the group (Garry, 65).

I think what limits me most is the national conservatism of ... of ... of, ah, human beings and societies umm, but that's a wonderful thing too (Jeffrey, 64).

The failure of other people to be involved in voluntary climate change action was described in terms of “greed” or “stupidity”. These were probably flippant retorts rather than considered opinions, however they were based on the idea that either people were uninterested or distracted from getting to grips with what the science revealed in terms of the looming climate ‘crisis’. Or they were based on the view that there was a concerted effort from conservative forces (expressed for example through the Murdoch

press or right-wing politicians) to confuse, obscure or ‘dumb down’ the truth. Comments by Penny and Bernadette suggest they felt that people are not fully aware, or perhaps not self-reflexive enough to translate what they know about climate change into some form of action.

Jeffrey also extends his view of societal conservatism to incorporate a systems view of responsibility reminiscent of Birnbacher (2000, p.18) and Singer (2009) for example, who describe the tendency for decreasing levels of responsibility moving out in concentric circles from immediate family and friends to distant others.

...[there is an] immense dumbing down of our society so it isn't just the greed and everything it's also a huge amount of ignorance and allowing people to ... to live in this fool's paradise (Garry, 65).

But they don't look at the data, they look at the ... they read magazines about all celebrities and Hollywood and they're not interested in anything but what celebrities are doing and how many people they've slept with and you know (Penny, 72).

I think people do see what goes on in the world. It's like TV, it's like it's not there, it's like those games that they play, you know, on TV and people get killed and blood flows and then, you know, they stand up and the next minute it's ... but if you do it in real life it's a bit different. I think people can umm, have a head in the sand attitude but still know what goes on (Bernadette, 72).

I think people are like that and partly it's where they've drawn their boundaries. A few have joined their boundaries around their immediate family and whatever, then climate change is not an issue for them its more family, income, make the house beautiful and that sort of thing ahh, driving a lovely car going on lovely holidays is ... You gradually increase your boundary to the community then you start to get more social concerns and if you increase your boundary of concern until you've got the whole planet well then you.. you ... you're on the money and I think the trouble is that people don't draw the wide boundary they just draw the narrow boundary (Jeffrey, 64).

Enabling group agency

I suppose umm boosting each other up when we get together and also umm, as we said attending marches and meetings and committee meetings and getting involved, getting involved ... I mean one person alone couldn't do it, you know, you need to be amongst like-minded people - strength in numbers (Bernadette, 72).

What about the support we mentioned? The support of various groups, tremendous support from various groups, and we mentioned family and your local circle of friends but also ahh, I like basking in the sunshine of those bright young people who are so committed you mentioned (Jeffrey, 64).

You can't sit around, I mean, the importance of this group is that you just do it and ... and that's, there are some surprising things that come out of it I think (Garry, 65).

This CAG is a member of the Climate Emergency Network (CEN)¹²³ which is based in Victoria and which members described as supportive of their individual and group action. They also mentioned the support they received from being involved in the grassroots community-based climate change network (formed in 2010) and through the annual Climate Summits (held over the last three years). The summits are forums specifically for CAGs and bring together groups from across Australia.

Further reflection by participants on how the group enabled their individual agency is illustrated in the interchange below. Here the group moderates the personality of one member and bolsters the personality of another. A common trait of participants in this group was their strong personalities and opinions and not being afraid to express them. For example there was lots of unprompted discussion within the group and sometimes participants fought to be heard over others. At times however this meant group members became strident.

¹²³ The Charter of CEN can be found at

http://www.climateemergencynetwork.org/index.php?option=com_content&view=article&id=59&Itemid=57, accessed 27 January 2011.

So you have to be in your demeanor, I've toned down quite a lot because I used to be very, umm, oooo, shall I say aggressive maybe, yes (Bernadette, 72).

.... being a member of this group has stopped that has helped that ... (Penny, 72).

Yeah, yeah it's, it's made you a bit more circumspect in how you try and convince other people that they should change their way.. ways ... (Bernadette, 72) [agreeing with Penny].

It had the opposite effect on me ... 'cause you know you've got some sort of core, you know, you know, there is all these normal people who ... who have the same passion as you and the same understanding as you and I think that there is strength in that base ... (Garry, 65).

For Daphne the group simply aligned with her long held conservation values.

... I came with my ideas already coming from the environment, the environment movement which I ah J[effrey] belongs to it as well, the local conservation society which started in 1972 and umm there's several other members too but they're not here tonight (Daphne, 65).

Sphere of Influence

... I don't think we're terribly sure who we're trying to influence. Some people are trying to influence the community and their families, other are the local politicians or the federal politicians (Daphne, 65).

I think we see ourselves as having to influence the politicians or at least trying to influence the politicians. They need to hear from us. They need to hear voices because if we're all quiet they won't take any notice so yeah we'd like to do both: get under the skin of the politicians and get the public onside but you know we're only a few people and it's always, it's mainly just the core people who do things (Bernadette, 72).

I think we need to cast our net wide if we could influence one person (Penny, 72).

Well I think the important thing is ahh, is to go to see your local politicians. He's gotta see you, she's gotta see you ... (Jeffrey, 64).

The thing I do, I mean apart from writing to try to get through the media wall of silence, in all kinds of ways and try to measure my success, is that I've got a definite policy of going in for older people and ... and ... that ... that's paid off because you know I've been invited now this year alone to about a dozen talks to community groups in Victoria (Garry, 65).

... nothing will happen until the men in suits move, until the men in suits do something, nothing will happen and it's not the women in suits, it's the men in suits, it's unfortunately still even though its changing. So how do you get a million suits, a man in a suit to move? You.. you make it incredibly attractive for him to move and incredibly painful for him to stay still, so you need, you need to have both approaches ... (Jeffrey, 64).

As illustrated above this group has an ambitious program which involves targeting a wide range of audiences that they wish to influence. These audiences include family members, the local community, older people, politicians, big corporations and businessmen. And they do have broad professional and social networks to tap into. Like many similarly active 'progressives', they are involved in a number of different professional and social groups and organisations. However, several members believed that the strategic or tactical approaches taken could be improved. In particular the appropriate targets for their group action were not clear and some members wondered whether their energy would be better spent on trying to influence the general public or political representatives. In this way, though it was strongly politically motivated this group differed from case study NSW2 in that they appear to lack a strategic plan that would more clearly identify the most effective focus/ foci for their actions.

I feel that we have a very amateurish, amateurish approach, like we ... we spend enormous amounts of energy, say leafleting a neighbourhood, putting out hundreds of leaflets and getting 2 or 3 people to come that is, ahh, a huge waste of our energy (Jeffrey, 64).

We have had discussions at our meetings ... about tactics and it seems to me that our group is not quite sure what, which way to go in regard to whether it's working in with the general community, which I'll call grassroots or whether it's trying to influence politicians as ... as it's been said it is difficult to get the general public interested but on the other hand pol ... politicians have their reasons on why they're not going to be interested and I don't think that's a problem we've solved yet (Daphne, 65).

Vision of how change occurs

... my vision would be that when we have a pub ... when we arrange a public meeting umm, that's standing room only, the walls are bursting and we can't, we can't accommodate any more (Penny, 72).

Well I've a vision of going, of catching the train and everyone in Melbourne is wearing my badge¹²⁴ (Garry, 65).

I'd like to see all the posters accepted by the shops and put in the shop windows and the ones I put on posts and the ones that you put up in Latrobe not to be pulled down (Bernadette, 72).

I think people are both ... well if you think of social systems they have persisted because they obviously have some integrity and power to them and they can deal with any attempt to change them in various ways. They're very conservative in many ways and umm when you try to change if you don't have the right levers to change a social system they'll ahh they'll resist the change and maintain their homeostasis if you like they'll maintain their existence their present existence (Jeffrey, 64).

Similarly ambitious are group members' of the changes they want to see. Their visions involve widespread community-wide social change around action on climate change that penetrates and totally engages the mainstream. There was some discussion about how such change may occur but largely group members were unsure how they would facilitate such a degree of social change, whether in the context of this group's activities

¹²⁴ The badge reads: "300 ppm CO₂". Garry (65) describes the significance of the badge: "But I wear this badge everywhere ... I plead the Climate Emergency Network ... that they should at least adopt this badge. You'd see people in the street wearing this badge. They'd have the ... they'd have the.. the badge, the accountability, some sort of hard, tough policy and they'd have the credo which for this is backed by top scientists ... 300 parts per million CO₂ ahh, for a safe planet for all people, all species ..."

or through their involvement with the broader grassroots climate change activist networks such as the Climate Emergency Network.

... about the public education and changing public opinion I think that takes a long time. I've been a community activist in various areas for a number of years and I know that it takes at least ten years to turn public education, public eye ... opinion around ... (Daphne, 65)

Based on her experience, Daphne (65) believes that there needs to be a long-term strategy for achieving social change around climate change. Several in the group disagreed with this view. They also argued that such a long-term approach would also be inconsistent with a 'climate emergency' analysis of climate change where action is urgently required, "on a war footing" and ten years is simply too long to wait if a climate 'catastrophe' is to be prevented.

Communicating climate change

Due to time constraints the final question referring to how the group communicates climate change to others was not formally discussed. However many unprompted responses to other questions and comments made in the course of general discussion revealed that this group uses varying forms of communication to engage with a variety of audiences. The group has a website which is maintained by Garry who regularly updates with articles and opinion pieces. Email was also mentioned as a 'rapid response tool' for communication amongst group members but also to facilitate communication with other climate action groups, politicians and the media. Writing for academia, the general public, letters to the editor, were also mentioned throughout the course of discussion and the group employs letterboxing and posters locally to advertise their meetings, rallies and other events.

But the networking thing is pretty important because October 24th last year was the 350 thing so in my tremendous conceit I wrote a letter to the world and one of the many climate action groups put it on the website and a socialist magazine in Europe published it but very rapidly that became number one in the world so if you looked you know 350 parts per million or 350 day you might get 330 million hits and my message to the world from this megalomaniac was number

one. That's semi-accidental but it's also because of this sort of networking (Garry, 65).

You put the meme out there and it affects a whole lot of people (Jeffrey, 64).

Yeah it's like a virus, a virus for good (Garry, 65).

As mentioned above the language and imagery employed by group members were commonly consistent with a climate change as crisis discourse and the language employed through the Climate Emergency Network.

It's gotta come from the government, its gotta come from above and just, this is an emergency and we really need to, and that's what our job is to try and open the government's eyes and ears and minds to what the people are saying: this is an emergency, get on with it you know (Bernadette, 72).

Secondary themes

"People like me"

A common refrain within this group as with others, is that people were attracted to the group because its members had similar backgrounds, experience and values (often expressed as "people like me" or "like-minded people"). Perhaps then, not surprisingly, this group struggles to draw in new members – an experience it shares with other climate action groups. Participants in this group also commonly described themselves as outsiders, that is, outside the mainstream. Some of the descriptors noted are: odd, ratbag, troublemaker, a 'nut'. There was a sense of frustration that other people could not see the sense of the science of climate change, did not accept that there was a moral obligation to act or were simply too entertained by their own hedonistic pursuits and lifestyles to bother themselves with the issue.

Most of the meetings and rallies and things we go to consist of the converted and that is, that is very frustrating and it hasn't changed over the last coupla years ... (Bernadette, 72).

... that's what a lot of other people find as well, that's why they're so resistant to learning about it because it's above their heads ... (Bernadette, 72).

... what you don't know is one thing but when you know and you keep persisting in doing it that is a crime, that's what people don't see ... (Bernadette, 72).

Knowing climate change

... the key things for me at a human level all men are created equal so there's a gigantic climate injustice essentially a racial injustice that's encompassed in the words climate genocide maybe 10 billion people will perish this century (Garry, 65).

Participants in this group are not only convinced of the science of climate change; they also understand climate change as urgent and catastrophic. Some of their views could be considered extreme and alarmist but are consistent with views promulgated by James Hansen, for example, who supports reducing atmospheric carbon dioxide equivalents to 300 parts per million (ppm) and the Climate Emergency Network (CEN) which believes that existing levels of CO₂ in the atmosphere need to be drawn down to pre-industrial levels (approx. 280 ppm). Along with the climate change-as-catastrophe discourse expressed by participants there was a certain didacticism, a perception of climate change as absolute certainty and truth. For example even Jeffrey, who throughout calls for greater inclusion of the social sciences and a more holistic systems view of climate change, becomes exasperated with others' lack of empirical understanding.

... The social sciences have, ahh, got something to offer in what we do to, ahh, get our community to umm be cognisant of the science, of the environmental science and ahh, to act upon it (Jeffrey, 64).

The thing is if you look at the Goddard Institute of NASA look at the, look at the data coming through and there's no argument the data's there. So people need to look at the data (Jeffrey, 64).

CASE STUDY VIC4

Description of case

This group is situated in inner city Melbourne and at the time of the focus group was a relatively recently re-formed climate action group (CAG). The focus group was held in April 2010 and was the sixth focus group conducted within the research program and the fourth (and final) in Victoria. The focus group consisted of four members: three women and one man. Two of the participants were aged over 60 years and the other two members were in their twenties, setting up an interesting cross-generational grouping. This group is engaged in voluntary action around climate change that consists primarily of political lobbying, local community engagement and awareness-raising, and direct action.

Case context

Three of the participants joined the group in February 2009; the fourth (who arrived late) didn't indicate exactly when she joined the group but from other comments her involvement would be slightly less than the others at about one year. The two participants aged in their sixties are retired and align with Tranter's (2010) "active environmentalists" whom he found were often older Australians with more time to devote to volunteer action related to their environmental interests. Both these members were former Labor voters who had become extremely disillusioned with the Australian Labor Party after they reneged on their 2007 election climate change promises. As David¹²⁵ states:

I'm sure like K[irsten] I'm an old Labor voter and they promised this was, this is the issue of our times and they promised and they lied and I'm furious at the Labor Party, absolutely furious, so I'm compelled by that (David, 63)

There were varying motivations amongst the participants for engaging with this group. For the two former Labor Party voters, their motivation was triggered by their anger and disillusionment with the Labor Party but was also consistent with their long-term interest in environmental issues and environmental activism and progressive politics more broadly. The two younger participants were not drawn to the group solely based

¹²⁵ Not his real name. Pseudonyms are used throughout.

on their concerns about climate change. They were introduced to the group through friends and acquaintances. For these younger members the group played a significant role in supporting them taking action on climate change.

Relation of case to research questions

The following additional themes were identified:

1. The importance of place
2. Individual vs. collective: rights vs. responsibilities
3. The amorphous and capricious nature of climate change

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are included to support claims, provide context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

It's the big moral issue of our times [laughing]... To me it seems incomprehensible that people are not involved and more concerned and I ... I think my interest in the environment goes back to the seventies and being involved in anti-uranium issues (Kirsten, 62).

Umm I'm like K[irsten] in some ... some respects in that many years ago I was involved in environmental issues and community issues and I decided when I retired that I would involve myself again with what seemed to be and still seems to be the big issue of our times. I started working with an NGO and got qu..quickly, ohh volunteering for them I should say not to make it sound too grand, and became quickly disillusioned with the way they were going so moved on to the local community group (David, 63).

... I think it's pretty scary if you look at the ... the projections and umm wonder whether we'll be around when some of it starts to happen, if nothing else and I think, just in terms of, yeah, implications for, umm, for future generations and umm and the like, umm. Yeah I, I think, umm, I kinda feel obligated to ... to at least try to do something, so this was the way of doing it (Polly, 25).

Quite clearly for the two older participants, engagement in action around climate change is an extension of long held values and falls within the frame of their active environmentalism. Both Kirsten and David employed what has become an iconic phrase: climate change as “the moral issue of our times” (based on a statement by former Prime Minister Kevin Rudd).¹²⁶ Perhaps due to her younger age, Polly’s concern is about what the future of the world will be under the conditions of a warming planet and the impact on future generations.

In contrast to other focus groups the discussion in this group paid little attention to the scientific basis of climate change. It appeared they did not question its validity and their focus was firmly on taking action on what they saw as the most important issue of their times.

Individual agency and responsibility for climate change

Umm I suppose we've got GreenPower and umm, yes, lucky I've like-minded housemates and ... I walk to work and I don't have a car and umm, I probably fly more than I should [laughing] but ... I do try and umm, minimise my own emissions, grow my own food and compost and that kind of stuff (Polly, 25).

Do drive but bought a Prius car, a hybrid car and try and do a lot of stuff locally, shopping and things like that and talk to people a lot [laughs] sort of, you know, really try and tell people until they're cross about it, about the issues, write letters make phone calls to talkback (Kirsten, 62).

... we have a collection of the same sort of household things as P[olly] and K[irsten] have spoken about. Ahh, we've put some PV cells on the roof a while ago and knocked the electricity consumption down, mmm, by between a third or a half I suppose and we've done the usual things with draught stripping and changing light bulbs and uhh, and I do drive but like K[irsten] I drive a Prius (David, 63).

¹²⁶ “Rule of reckless vows”, The Australian, 27th December 2008, http://www.theaustralian.com.au/news/opinion/rule-of-reckless-vows/story-e6frg6zo-111118413753?from=public_rss accessed 10th February 2011.

As in compelled, as in I have this information how can I not do something? ... I have an obligation, how can I not? It would be selfish of me not to (Bethany, 20).

Similar to members of other Climate Action Groups (CAGs), participants are involved in retrofitting their houses and altering their lifestyles by incorporating less carbon intensive behaviours. Perhaps as a reflection of the demographic of this inner city area two of the participants own Priuses and as Kirsten (62) notes: “There's a lot around here..... There's three in my street”. This shows that people who live in inner city and marginal Green seats such as this, are often not only more environmentally aware but also have more disposable income to allocate to environmentally friendly and less carbon intensive purchases. Whilst these participants are making some changes to their social practices, for the most part they see their voluntary actions in terms of raising awareness and motivating others to take political action. This was particularly evident for the two older participants.

Responsibility for voluntary action on climate change was expressed through members' individual actions, based on their values. For most of the participants the call to action on climate change was heightened by a sense of political abandonment, disillusionment or, as Polly expresses below, a perception that the federal and state governments are incapable of taking appropriate action. This lack of confidence in political action at all levels is emerging as a strong recurrent theme across groups.

.... I'm kinda, well, doing something that aligns with my values rather than something that doesn't and that is a good feeling I think. Umm, yeah and I suppose I'm quite aware that, umm, regardless of all the things I do I probably still have a much bigger environmental footprint despite a, umm, of the society we live in and the life that I lead I really want to reduce that as much as possible. So anything I can do but yeah I guess it's a feeling of responsibility I suppose to do that, yeah (Polly, 25).

I think yeah, if you are going to give up your time and energy and money and whatever that in itself I think reflects, umm, a lack of faith in the political process itself, yeah, or otherwise, you know, you felt confidence that they would

be able to deal with it, why would you bother? But there's no possible way at the federal or state level, I can't for the life of me see either major party doing anything to take action on climate change and therefore the logical conclusion is that you have to do something yourself (Polly, 25).

Individual agency and enablements

Being part of a group, I guess knowing there's other people around (Bethany, 20).

[Polly: Yeah, I'd agree with that]

.... being in a group its less daunting and that's the main, that's what gets you through I think because I wouldn't do it if I was by myself it's like busking, I wouldn't busk (Bethany, 20).

Mmm, well I think that's right being part of a group is certainly part of it, umm, ahh, I think though I would act anyway ineffectively, ineffective as it might be and unconfident as I may be, probably would be, I would still be giving it a go. I know I was, I did before, you know (David, 63).

Also I don't know maybe its misguided but I still have the belief that people can effect change individually or in groups that there is a possibility of making change that there's no point shrugging your shoulders and saying what can I do (Kirsten, 62).

Though they were empowered as individuals to undertake voluntary action, being a member of the group facilitates their actions, particularly those targeted at political change. David said he would have been taking action whether he was a member of a group or not. This may indicate that younger members of the group have a greater need to draw confidence from engaging in collective action and also that they need the knowledge and experience of others.

People's circumstances were important. For example, having a secure financial situation helped people commit to climate change issues, as did having enough time. Locality again emerged as important. In this group the culture of the area in which it works is supportive of environmental and other community-based campaigns.

*Perhaps it's to do with the sort of people who have, I don't know, the more active imagination? so whether it is just somehow to do with the sort of personality people have that leads them then to think yes, I really **feel**¹²⁷ this rather than [Bethany: Looking at it from a distance, it happens to somebody else] Yeah, yeah, yeah maybe it's something to do with that (Kirsten, 62).*

Well it's my upbringing. The privileges I've had, umm, perhaps my education, where I've gone to school, perhaps where I fit into society, has given me the ability to not think about direct things like, umm, financial things are not so much of a worry for my family so therefore I've been able to think about other things beyond those immediate to do's, have to cover those first and therefore yeah it's just that extra knowledge and then I've got the time to be able to do something about it as well. So it's like that, you've got to be able to cover all those personal bases first and then you think about the wider world and how you can effect it (Bethany, 20).

As Bethany's comments show, class, educational attainment and financial situation are important facilitators of individual agency around climate change. Life stage is also important: the participants of this group may not be representative of their broader group membership or of CAGs in general, but most of the participants from this focus groups were either older people or younger single people. There was only a very minor representation of people with families and in particular families with young children. This is perhaps not surprising given this group is less likely to engage in gatherings of this type.

The profile that Rootes (cited in Tranter 2010) presents also comes to mind. Rootes suggests that imagination and individual reflexivity are important predictors of personal agency:

As Rootes (1995, p. 230) suggests, tertiary education 'has the function of upsetting old prejudices, imparting new knowledge, broadening social

¹²⁷ (Note: my emphasis) Around the time of drafting this report I came across the EU-China Civil Society Forum publication: "“I could feel climate change.” Climate change and China: Civil Society Perspectives,” http://www.eu-china.net/web/cms/upload/pdf/materialien/eu-china_2010_climate_change_and_china.pdf, accessed 11th February 2011. The quote is from one of the author's mother from rural China. “I asked my mother, “have you heard of climate change?”, as her comment interested me. “I don't need to hear it. I could feel it....” (p. 3).

experience, developing new skills of critical analysis and enhancing the self-confidence of its beneficiaries ... to imagine alternative futures and, sometimes, to act to translate that imagination into reality (Tranter 2010, p. 421).

Constraints to individual and group agency

... the difference between us, who try to do something and people who think it's important but don't, you know, that's.. that's complex but I mean someone I know or people I know say that they're not frightened enough yet and I think there 's something in that, I think there's something in that it suggests to me that even though intellectually that they know this is a serious issue, they don't actually know this is a serious issue yet. But people will, the penny will drop (David, 63).

I think a lot of it is that kind of belief that well I can make a difference. I know a lot of friends who have quite similar political views to me who think it's a, you know, think it's a really important issue but completely, well certainly in terms of their, what they do personally, they don't really make any effort to reduce their emissions they know the issues, umm but umm, for various reasons and I think a lot of it is, well we can't do anything anyway, umm, there's no political will, you need major change from up above, what's the point of me being a bit of a martyr and choosing not to fly somewhere when that's not going to make a difference so I think, I think that's where a lot of people that I know at least umm that's where the barrier is to them to getting active either politically or personally ... (Polly, 25)

I think there is a belief still too that it was the population doing something about climate change does mean you know giving up stuff ... (Polly, 25).

An unwillingness to become more uncomfortable [laughing] (David, 63).

I think it's also the pro ... problem climate change itself. There's not really anything in history that's similar in magnitude. So, how do you approach that? And I think people have difficulty with that, so it calls for a different approach but people want to, so people know that but it's a question of then why don't they take action ? (Bethany, 20).

Participants put forward various reasons for why they think that other people don't get involved in climate change action. They expressed the view, not that these people were ignorant, but that they were selective about what they chose to acknowledge. This attitude, members of the group believed, is based on fear, because when immediate and known risks were not apparent people can discount the perceived future threat. If ignorance is not the issue, then is it a sense of disempowerment as amongst Polly's friends? If they are like her, it seems unlikely that they feel personally disempowered. Rather, it may be that because the state and federal governments are not taking responsibility, they feel that they too can ignore the need to take action.

For individual participants of this group, the things that constrained their actions were the same types of things restricting similar groups: lack of time, money and energy, for example, prevent people from making more concerted voluntary efforts. For the two younger participants a lack of confidence again featured as a barrier to action, something which they believed the group assisted them in overcoming.

I think for me it's definitely time but also ... also I think partly personality perhaps. I'm not actually the kind of person to say, oh yeah let's do this action and.. and drive something, I'm absolutely happy to follow but I'm, yeah, not, umm, driving things doesn't.. doesn't come to me in normal situations (Polly, 25).

And unfortunately with me it's still, it's still that lingering thing, oh is this making any difference? Is it worth it? Are we taking the right approach? What does it really matter? Aahhhh, that kind of, that bit inside me as well (Bethany, 20).

Enabling group agency

Joining something that's already in existence, so a wider movement or hearing about things that other people have started themselves and you're therefore joining in. There's a previous history of tried and tried experiences and efforts, I think gives me confidence (Bethany, 20).

I've become more political I think ... I suppose I ... I'd written letters to politicians and the like before but I suppose like I'm not naturally a political, a particularly political person I don't think and I suppose being involved in [CAG] has kind of one ... one convinced me that ... that more of that is necessary and more people have to get involved in that even if initially it's not something that they are particularly comfortable with and umm yeah I think so more prepared to ... to yeah act in an overtly political way (Polly, 25).

Well I suppose umm because it's a group you think more about where we're heading rather than doing a series of actions and just seeing what will happen, I suppose. [Kirsten in background: Being more strategic I suppose]. Yeah, yeah, I always think after a [CAG] meeting I'm really pumped and like I can do so many things, I can get involved in so many things it's really motivating I find (Bethany, 20).

And also quite good to have more information coming from the group and it's a good thing to talk to other people you know if the issue comes up. In the group I'm involved in, this is what duh duh duh. It ... it's a foc ... focusing mechanism I think (Kirsten, 62).

We have legitimacy. This is a science-based issue so we are trying to, using the science that we have available and that is available. Umm, we're just not just raving lunatics with our own agenda, trying to force other people to change because we believe that is the way it should be just because (Bethany, 20).

We are quite lucky to live in a democracy which enables us to take all sorts of actions ... (Kirsten, 62).

As mentioned above, the group provides members (especially the younger ones) with the confidence to take action and this leads members to act in ways that they may never have before. So the group instills a sense of greater individual as well as collective empowerment. There is also the understanding that the group provides a sense of authority and authenticity to their actions.

I think that's one of those perennial questions we keep asking ourselves: what is it with all these people who care but don't do anything? How can we change that? (Polly, 25).

The question remains for this group (as for the others) on what would motivate other people within their community who are concerned about the issue of climate change yet fail to take action.

Sphere of Influence

Politicians, government (Kirsten, 62).

Local and state... (Polly, 25).

But then also, umm, trying to influence individuals to influence politicians. Having direct appeals to politicians ourselves like the one standing outside our local member's office every Wednesday evening and waving, you know, no coal power signs so that's a direct trying to upset him but also you're trying to influence lots of other people who will perhaps take action themselves (Kirsten, 62).

... I think I feel a lot more optimistic that what we're doing can change votes than what we're doing can potentially change behaviour (Polly, 25).

Or change perceptions (Bethany, 20).

This group stated quite clearly where their actions are focused and who they are trying to influence. There is a subgroup within the CAG that works on lobbying local government whilst the wider group concentrates on their state and federal politicians. Consistent with several other Australian CAGs this group employs a tactic of “bearing witness” and public “shaming” of their state member. This is both a bringing to account and a type of public relations measure geared towards alerting others within the community to the group and their issues of concern. The group employs various methods (see Communication section below) but is clearly cognisant of what they want to achieve: political and electoral change.

Vision of how change occurs

.... it's not the sort of group that will go out and organise directly in the community and say OK let's start up, god I don't know, a veggie co-op for example [Polly: There's other groups that do that] There are other groups that do that. [Polly: There's a Transition Towns that have just started ...] that's right, that's right, that's right and we're connected to them but that's not what we do, it's about political action ... (David, 63).

Maybe the links between local to state to federal you know there are members on the council who are part of political parties who have presence in state and the federal parliaments and they make decisions so yeah it's that flow on of support for certain things and then they take that to the state people or federal or however it works (Bethany, 20).

I don't think that this is probably having any impact on our carbon footprint but what it's doing is building the sort of, ahh, community connections that we're going to need in the not too distant future when things start to get tough and I think that's, that's what I would say is the ... the real benefit of, ahh, local area action of that sort (David, 63).

I don't think someone going on a hunger strike is essentially gonna change do anything about politicians mindset and I don't think will necessarily change, umm, you know, public kind of attitudes towards it, umm, umm, whereas, umm, communicating the issue in a more sophisticated way or ... or, umm, or getting someone involved in a local group or sort of one to one talking to people about it I think that's probably a more effective way of ... of changing individuals kind of mindsets. I think mass political action or that sort of thing is a more effective means on a political scale (Polly, 25).

I have two points to make. The first one maybe I'm just an optimist but I think there is a place for every type of action or protest, there's a scale [murmurs of agreement in the background] and it's about what purpose they serve, ... so I think everything has a place on the spectrum and things appeal to different people, you know, in what they want to do and I mean how people, ahh, react to those things and you can't, you can't think well I don't think you can say if somebody does 'a' then if someone acts in behaviour 'a' then that will compel

person 'b' to do 'c'. That doesn't make sense but it's not a straightforward, it's not a linear thing. People are so complex and different it might, you know, you can't tell how someone will get onto one thing and you know it's almost like fate, ... so that's my first point and my second point even just from the discussion, you know, it seems it's more about not the action but how many people do the action and that almost has links to legitimacy so the more, imagine if 200 people did a hunger strike outside lo ... federal parliament it would get a lot more publicity than two people doing it and what D[avid] says if there are more people banging on [state politician's] office then there will be more publicity, more people will know about it and he will get more pissed off and scared for his own job, so they're my two points (Bethany, 20).

This group believes that political action at the local scale is the essential precursor to broader level change, particularly at the state and federal levels. Participants were also quite clear about the place of this group in the process of change as David quite plainly states, the group's *raison d'être* lies in political action at the local scale. Polly, reflecting on discussion regarding climate change hunger strikers, sees the emergence of a mass movement as essential for achieving political change whilst in contrast Bethany convincingly argues that a process of change requires multiple tactics to appeal to a multiplicity of worldviews and individual values. Finally the relationship between the different scales of action from the local to the global is enunciated by Kirsten who uses the metaphor of a tapestry to illustrate Bethany's point. But in the final quote below Polly raises some of those questions regarding what on a more movement-wide level are the most appropriate forms of action for CAGs to undertake and how these actions can be consolidated into more meaningful, lasting and effective forms of social change.

It's as you were saying before about people doing different sorts of action and all becoming part of the tapestry. I think this is the same sort of thing it's ... it's part of a total, yeah, tapestry of action and that Australia, even though we are tiny, I think we can be quite influential. We have a very high standard of living, we're a wealthy country, we're a peaceful country, all those sorts of things mean that I think we can have influence (Kirsten, 62).

I haven't been to any of the climate summits but I think there is, I suppose, in the climate community, a climate movement as a whole, I think, those kind of

struggles of, well should we be doing the bulk buying? Or should we be political? And, if so, how political should we be going? With 350? or is that too soft? or should we be going with 280? Like what I think at a, at a more macro level I suppose, that's certainly a divide, umm, [CAG] only has got involved in a fairly small but I suppose on a Melbourne-wide scale how do you, how do you make sure ... you're not hindering each other's efforts or you're helping each other? (Polly, 25).

Communicating climate change

Well humour has been quite good with the Kevin Rudd cut out. Umm that ... that ... that really was, it was funny (Kirsten, 62).

... do you have a leaflet with lots of scientific facts that people aren't going to read or do you have a couple of you know shock horror dot points or I mean I.. I think it's really difficult you know how to get people to take up the cudgels and march. So making them laugh might make them a bit more receptive to the next thing (Kirsten, 62).

I think the most significant thing we do, is we stand outside [name of state politician]'s bloody office for an hour, an hour, a couple of hours every Wednesday and it gets a bit of reaction from people going past and maybe it revs them up but it really makes him angry and nervous and I like that. I think that makes a difference, I think that makes a difference (David, 63).

I don't know how effective letters to the editor are but I'm sure they're not, they're not counterproductive, they help. People are writing letters and we have this dino-watch thing ...

[Facilitator: Can you just explain to me about this? The dino-watch is that what you call it?]

Well there are people from a number of climate groups ... and we're and there's an ... an article in a newspaper somebody just fies an email off and says someone oughta respond to this and then letters go orf and ahh we know who's talking to who about what [but] nobody else knows where they are coming from.

[Kirsten: Or somebody else will write a letter and say I've just sent this off to The Age in response to a denialist or an article or a comment or something]

And it works remarkably well and we get letters published (David, 63)

... I decided that instead of firing around emails and encouraging people to forward them that I'd write a blog so I write a blog. But I think that it's going the way of most blogs and I'm the only one who reads it! [laughing] (David, 63).

Participants described the varying avenues of communication that they utilise in their activism. They readily utilise online media through blogs for example. They write letters to the editor and in collaboration with a group of other Victorian CAGs they organise letter writing in response to negative (particularly climate denialist) articles in the press. From all accounts the “dino-watch” campaign has successfully generated published letters and is a savvy counter to potential reporting biases or campaigns from those opposed to action on climate change.

In terms of how they communicate in public forums about climate change, humour has been successfully employed in local actions and the counter-framing illustrated above appears to have accomplished success but the question of what form of language that will best motivate the broader community remains.

Secondary themes

The importance of place

I think too, being in an area like [suburb] where there is a lot of, lot of action on environmental and community things, a lot of like-minded people, there's plenty of information available so that makes it easier to think that you can do stuff (Kirsten, 62).

Umm and I suppose that it's the premise of the group, the [CAG] that it's local so you know people in your own local area that you live in rather than reading about people on the internet or about what other people are doing and then saying: right how do I fit into this? I'll write another letter or I'll attend a rally of people that I don't know, but we all believe in the same thing. So that forges a

stronger I suppose purpose or ... I don't know ... yeah, you're doing something and you're talking about it with people you know more well, well I suppose (Bethany, 20).

There was a strong association for the group members to where they live. This area of inner city Melbourne was noted as both a state and federal marginal seat which has in recent years been shifting towards the Greens. They see the suburb of being inhabited by “people like me”, people who share a range of perhaps more progressive values, who are well educated, middle class and financially secure. In this way these CAG members are representative of both a ‘community of place’ and a ‘community of interest’ (Pelling and High 2005).

According to Pelling and High (2005) (cited in Peters and Jackson 2008, p. 5):

the former concentrates on people within a defined geographical area (e.g. a particular neighbourhood, or a housing estate) while the latter (also called ‘interest groups’) focus on people who share a particular experience, demographic characteristic or interest (e.g. the working population, young people, disabled people, ethnic groups etc.).

Members of CAGs generally can be seen to lie along this spectrum, some groups demonstrating a stronger attachment to place whilst others showing a stronger attachment to shared group interest and values.

Individualism vs collectivism: rights vs responsibilities?

I think there's a basic mindset that resists any sort of umm compelling argument whether it's on that or.. or it's sensible to wear seatbelts when you drive, ahh, nanny state, nanny state, yabba yabba yabba yabba ... (David, 63).

Like it's an individual freedom I know what's best, yeah, and I'll decide it's my rights... (Kirsten, 62).

Yeah, I'll decide for myself thanks very much and I don't need, I don't need any sort of pointy headed experts telling me. I know what's best for me (David, 63).

And there's a lot of: "They oughta", I mean people, "someone oughta." You know a lot of people I know who really get frustrated ohh this is shocking John Howard, John Howard or Kevin Rudd, he's backed down and you know it ... it's sometimes hard, it's sometimes hard too with people that you know well, they're long time friends, that you don't want to say: 'Well hang on, I mean, how many times, how many airplane trips have you had in the last few years?', a lot more than you P[olly], I mean I do know some people who are quite well off now and just but you know this sort of, it divides. That's quite difficult they're saying well they oughta do something about it and its shocking what's happening, but don't want to look (Kirsten, 62).

And specifically I mean, personal changes that I make in my own life I find a lot easier, well not easier but its different in your confidence as opposed to in a group situation when you're focusing I suppose in [CAG]'s case on more political things where it's.. it's better to do it as a group because you know it's just easier ... to get stuff moving whereas on a personal level, riding your bike or turning lights off, anything like that, is a lot easier and achievable and you don't need a whole bunch of other people, it's a direct impact in action in your own sphere of being (Bethany, 20).

Individual freedoms or rights come with associated personal and/or collective responsibilities. Despite the hope of active CAG members that their actions will inspire family, friends or others, some of the group expressed doubts that this would be the case, painting the picture of others within the community as free-riders on climate action. In other words, they believed those that choose not to take action in asserting their individual rights, fail to accept concomitant obligations. These obligations are deferred onto others and in particular to government. Bethany (20) offers a possible explanation for this. "Small and painless" (WWF UK 2008) household and lifestyle changes undertaken at the personal/ individual scale are less challenging than undertaking the types of political action typically conducted by the CAG and which require the support of the collective.

Those inactive on climate change within their community are further characterised as people who "don't want to look". This raises the question: is a lack of personal

responsibility linked to the failure to employ reflexive thinking on the part of those that choose not to act?

The amorphous and capricious nature of climate change

I think it's also the pro ... problem climate change itself. There's not really anything in history that's similar in magnitude. So, how do you approach that and I think people have difficulty with that, so it calls for a different approach but people want to, so people know that but it's a question of then why don't they take action? (Bethany, 20).

I think it's a really, a really good point. It is different and it's so, it's not really concrete is it? It's not like seeing pictures every night on your TV of the war in Vietnam and you know it ... it ... it's not, it's a more amorphous problem that you have to, you have to make yourself aware of. You know it's sort of vaguely when we have these long hot summers now that people might talk "Oh you know the climate's changing", and then someone says, "oh no, we've always had .." So you but it's hard to pin down: look at this! (Kirsten, 62).

Yeah it's in the everyday but you know everyone talks about the weather but you kind of think how boring but it's central to how we live and you know it's that whole "God the weather today! O, Melbourne weather!" But it's not normal, it's not normal to have a massively long summer and no rain but it's, yeah, it's.. it's not concrete at the same time (Bethany 20).

This group was unique amongst the eight cases in that there was very little direct discourse regarding either the scientific basis for climate change or climate change as a metaphor for 'un'sustainability. Part of the problem with addressing climate change from the perspective of a local community group lies in how to engage others on something which is highly complex and uncertain. This perhaps relates to the difficulty groups experienced not only in engaging others in their community on climate action but also in how they created their own strategies for group action. The extent of the problem of climate change is demonstrated by how it permeates almost all levels of social life. Climate change is in essence an intangible phenomenon.

CASE STUDY NSW3

Description of case

This group is based in a regional inland town in NSW with a population of about 50,000 people. The focus group was held in May 2010 and was the seventh focus group conducted in the research program and the third in NSW. The participants of the focus group consisted of four men whose ages ranged from 40 to 60 and one woman in her twenties. The group is engaged in a range of voluntary actions around climate change, ranging from education and awareness raising through to advocacy and more overtly political direct action. The focus of this group is on local action but they have also been active in regional organising and have been involved in national campaigning.

Case context

Three of the participants were foundation members: the group formed in October 2006 around the time of Al Gore's film, *An Inconvenient Truth*. In the quotation below Walter¹²⁸ describes the circumstances leading to the group forming.

... .when J[acob] and I were talking about climate change and we thought that the conversation was really kind of an important aspect of social change so we felt OK part of what we'll do is we'll just set up a sort of a regular conversation with some other people we knew well and we just met ohh once a month or so and it was almost that the discussing of things you sort of sorted out a bit of umm knowledge and it was also like the natural progression was then to take action on that knowledge and yeah and then it sort of that's how [CAG] was umm begun (Walter, 40+¹²⁹)

These 'conversations' eventually led to a public forum which drew a significant number of local community members and signaled there was sufficient community interest to instigate a formal group.

The two others joined more recently. The youngest was the only female participant in the focus group. She was the newest member of the group and had joined some time in

¹²⁸ Not his name. Pseudonyms are used throughout.

¹²⁹ This participant did not provide his actual age.

the previous 12 months. Participants in this group are for the most part professionals who work in the environmental/ sustainability, engineering and community services sectors.

Relation of case to research questions¹³⁰

The following additional themes were identified:

1. The importance of community and networks
2. Theory of change
3. Balancing the enormity of the problem with the scale of change required

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are included to support claims, provide context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

Yeah I guess mine goes back a long way various causes back to the moratorium you know for Vietnam and Lake Pedder and the conservation foundation and whatever probably the thing that the Gaia principle and the Gaia atlas, the Gaia atlas influenced me ... (Rod, 60).

I started a PhD in 2005 and was very interested in, umm, sus ... sus ... sustainability issues, umm and ahh, J[acob] and I have spoken about this climate issue for some years and I think I, umm, pretty strong argument that climate change was really the fundamental environmental issue that if you didn't get that right everything else really didn't matter. So I ended up focusing my, umm, PhD on ... on community responses to climate change (Walter, 40+).

Well I guess I came across [CAG] because I was interested in learning about the environment more. I could see that it was a big issue and that not a lot was being done about it in the realm of politics. Umm so I wanted to do a lot more myself, umm and learn how I could make a difference and I wanted to meet other people who were like minded or had ... ideas so I in terms of, umm, climate

¹³⁰ This focus group dealt with five major themes. Due to time constraints, the question on how the group communicates climate change was omitted.

change being an important issue, umm and wanted to, wanted to get involved in the community more and make a difference to the community rather than just in my own little life (Alexis, 25).

I suppose, umm, my motivation came from the usual thing, concern for the future of humanity you know just my children so that's a basic thing but, umm, but there's another thread I get concerned about the treatment of science in the issue. My Dad's a scientist and umm, so how, in general, discourse can get so distorted away from decent science I guess that's what annoys me. So I try to, wanted to do something about that (Solomon, 52).

I've got originally got involved from the social side not the environmental well except I've had an interest in the environmental stuff but because those two things are so aligned (Jacob, 53).

Motivations for joining the group were mostly related to members' concerns about the environment and sustainability more generally. Several participants described climate change as the most important issue for the focus of their environmental/ social activism. For the most part participants professed a long-term interest in environmental and social justice issues both in their personal and professional lives. Acting on climate change therefore was a natural extension of this involvement but was also seen as the biggest issue to be addressed. For one participant the perception that science of climate change was being unfairly represented in the media was an important motivator for involvement. The role of community and social engagement for this group appeared equally important as their role in taking action on climate change, perhaps not surprisingly given that the group is situated in a regional city where, as Jacob points out below, there is a greater emphasis on social activities and group involvement.

... you're seven times more likely to be involved in some sort of social activity in a country town than you would be in the city. They are the old numbers, I don't know if that's still the case. But I heard that about 20 years ago when I first came to [town] and just about everyone I met was involved in something so umm I didn't dispute it (Jacob, 53).

Individual agency and responsibility for climate change

Well around the house we try to keep our energy use down. We put PVs on the roof but of course that's a drop in the ocean. We use bicycles and so on ... recently I've been writing a couple of letters to the paper, and letters to, well it's a long time since I've written a letter to a politician, will get around to it (Solomon, 52).

... I suppose I try to reduce my footprint. Umm we're producing our own vegetables and in a small way at home too you know I'm certainly not self sufficient but I aim to be if you can use stuff from your backyard then in terms of transport costs and stuff it's, that's one action ... if you have the privilege of the information and you trust the information then you have a responsibility to give it out so therefore you have a responsibility to act as well (Rod, 60).

I don't think I do anything too different from what everyone else said. Just try to reduce my energy usage and don't use the air conditioner much and use a blanket instead in winter. I grow my own herbs. I only have a rented place so I can't put in a big veggie patch like I'd love to. Try to do what I can. I did campaign to the landlord to put in insulation in the place (Alexis, 25).

.... we have yeah solar hot water and we just got some PV cells which is almost more like a hobby than, umm, you know large-scale action or influential or umm. Also looking at networks and just thinking where, where the leverage points are to.. to take action or you know maybe by getting a bit of information I would probably spend my a kinda hobby time or something like that as often meeting about renewable energy or climate action or something like that and then sending it off to people or something (Walter, 40+).

My walls are half a meter thick to keep out the heat. [Facilitator: What are they made of?] Earth and stuff ... so I've built a relatively energy efficient house and I've put some data loggers on it so I know what it's doing, umm, but apart from that, umm, I've deliberately not done too much else partly because I've got no money but also with the money that I do have I prefer not to work for money and do other stuff I suppose to do with climate change I suppose so umm so I spend quite a bit of time doing networking and stuff and because I've got more time I

can go to go off to conferences and stuff like that and find out stuff and hopefully bring stuff back (Jacob, 53).

Participants in this group are undertaking a range of actions in their personal, private spheres to mitigate climate change. For some a rural lifestyle lends itself to self sufficiency but at the same time comes with tradeoffs – living out of town means that a car is essential and commuting by bicycle is less viable, for example.

For two of the participants volunteering their time for networking, researching and communicating around climate change action was their most important individual contribution. Jacob in particular downplayed the fact that he'd built an earthen home preferring instead to focus on aspects of collective community-based action.

Rod believes that knowledge provides both power and privilege so that there is a responsibility to act not only as a right but as an obligation.

Individual agency and enablements

From my personal experience it was a long time coming before I did act because I lacked a lot of self-confidence for a long time and it took a lot of time to overcome that lack and feel confident enough to approach people and talk to them about how I was feeling and talk to them about my thoughts and opinions on various topics and to.. to go out into the community and find the groups, find the people that I wanted to engage with. So confidence is a big one but also another thing just know that there are other people out there that are, that do think the same way or at least similar way that you can then engage with ... (Alexis, 25).

The one of the good things I think that gives me confidence is just that there are so many good reasons to do something about the environment like umm even if you're not even if you don't believe in climate change you know there's plenty of good reasons to go over to renewable energy. There's plenty of good reasons to stop trashing the forests umm and there's a lot of those umm umm reasons are much more to do with social with social reasons for not doing those things or take them up I mean which ones you're going for (Jacob, 53).

I think umm umm being able to have interaction with people with like-mind enable me to act umm the chance to talk things through a bit and umm become also more comfortable with certain bits of knowledge and the consequences of certain aspects around climate change (Walter, 40+).

... allows me to act is being in a position in life that's pretty comfortable like I have struggled in the past and it was like there were lots of moments when I didn't know where my next meal was coming from umm but I've grown past that and now I have a steady job fulltime but and I'm healthy and I'm happy and I'm I'm in a position and I can go out and make a difference (Alexis, 25).

I think another things that enabling is that are all these mini networks around the world there's just so many, such a big effort happening so many research organisations and companies working on different technologies but particularly networks of people who are devoting so much time to umm trying to make change politically and amongst others and culture and stuff (Walter, 40+).

Confidence in self, in others and in the science of climate change were important for this group. Finding people with similar ideas and value sets increases individual confidence as it reinforces people's understandings and worldviews around climate change. Participants did not mention community support and social resilience as being important, although it can be assumed that these factors contributed to individual agency. The factor that the participants did emphasise was the general importance of belonging and feeling part of something bigger than yourself or your local group.

Life stage and leading a secure, "comfortable" life are also important predictors for enabling participants to act on climate change. Whilst for the most part the majority of participants of this group would fit Tranter's (2010) definition of "active environmentalist", none of these participants are yet retired and several had young or otherwise dependent children.

Constraints to individual and group agency

Feeling that it's useless. One person can't change much or that you can wear yourself ragged and get nowhere (Solomon, 52).

It's a confidence thing too I think a lot of people, the networks aren't there to give you necessarily confidence umm I think that things used to get done in the community ... (Jacob, 52).

I would say that one thing that transport, people changing places you know in societies technology is just sort of awash with all that sort of stuff and we're not so dependent on people or a community group. We can take off somewhere you know when we're more sort of focused on the individual (Rod, 60).

Some people are just ignorant of the issue because they don't want to know about it or they've just been living in a world where it just doesn't cross their paths but some people are just ignorant of the issue and don't act (Alexis, 25).

I think there's a time thing too, you know, society has gotten busier or at least it seems so and you hear about Australians in particular now on average working you know unpaid overtime the equivalent of four weeks holiday and that sort of thing and you've got two umm income earners in a lot of homes that have two people working instead of one so it's not kind of the time luxury to do things or there's a sense that people are afraid of going out and being more committed than they're going to be able to handle. They feel like that they just, just got their nose above water so if they take on more and more things you know take them under (Walter, 40+).

Apart from some feelings of hopelessness and powerlessness or ignorance of climate change, the lack of community and social networks is emphasised here as a constraint to others taking action. Again as the importance of community was highlighted, participants indicated that the loss or weakening of community and the concomitant rise of individualism contributed in their view to others' failure to act.

In terms of what constrained them as a group, many common refrains are evident. Lack of time and money were the most commonly cited in this focus group and in all the others. Two other elements were described in this group: firstly, the difficulties of communicating climate change as an issue that will motivate action without enervating people due to fear. This problem emerged as a common dilemma amongst groups, for some groups believed that other people are not driven to act because they are ignorant,

and so they simply aren't afraid enough. In the view of others, people are knowledgeable but too afraid to act. This raises the question of why some people, who are among the most knowledgeable in their communities, are empowered to act whilst so many aren't.

Time and membership and money and membership (Walter, 40+).

Yeah it's that time allocation, time and commitment to work and paying income, supporting family members (Rod, 60).

... I don't know why they don't ... that's the major constraint I think is actually that for me, for our group is actually getting people to see that one, that it's you know that it is serious we've got to do something about it and we've got to get, we've got to do it fairly quickly without scaring the pants off everyone (Jacob, 53).

Secondly, Walter describes two structural constraints to group action; the lack of a governmental framework to support local and community-level action on climate change and powerful 'business-as-usual' forces which work against change.

I mean this feels as a group we could do more if the background environment was clear so if the government said look there are governments around the world, there are governments that this is a major issue this is, you know, this is like, you know, a war issue, we've got to commit you know like the ... or whatever it was to hand then it would be different it would be a whole different framework to work in. You could do things differently (Walter, 40+).

... it's probably I mean the business interests and stuff like that. The fact that business has tried to get such a big payout from the CPRS even though in other parts of the world the same bit of companies was sort of just going along with things ... that's upsetting too and the fact that their, some of those views, those skeptic views have been fuelled by businesses, I mean, now that's still effecting what we can do (Walter, 40+).

Enabling group agency

Connected ... I think it's given me more awareness of ways that I can act or things that I can help other people to act as well (Alexis, 25).

And that you're contributing something to the greater good ... you've got the collective, people working together for common, common cause (Rod, 60).

Well we did something, we did something (Solomon, 52).

... what enables us to act and I think having a few experiences enables me to act more because you think we were able to organise that or we did that so yeah it's a matter of experience (Walter, 40+).

I guess it sort of for me like an organised centre I can relate to so hmm yeah I'm thinking about if you were thinking about something or learned about something or wanted to know about something you might not know where to go to but as a member of umm [CAG] there's a point to touch in, find out more, pass on what you've learned and think together about something (Walter, 40+).

I think it probably focuses your commitment to or supports your commitment. As an individual you can read about and take some action and depending on how the individual comes to it, it could wax and wane more in the individual than in a group supporting the cause that's.. that's how I feel about it (Rod, 60).

Participants expressed a sense of achievement and connectivity and enhanced commitment from working on their actions together within the group. That sense of community was often expressed in this group's discussion. Again there is the sense that the group actions are a sum greater than individual achievements and that repeated action reinforces the strength of the group, giving a greater sense of satisfaction to group members. The act of doing itself increases the skills and experience of group members and contributes to both individual and collective learning.

Group action also provides greater credibility than solo action and legitimates action.

'Cause its sort of, umm, a name for your actions or a covering, umm, something to put your actions under, being labeled, a labeling for it I suppose

[Facilitator: And in what way does that help?]

Umm, I was I was thinking one thing we did recently was organise umm some little home energy audit kits for a local library and umm I don't think as an individ ... I don't think that an individual would, it was even more natural for a group to be putting this in, than an individual to propose that (Solomon, 52).

Yeah it gives you amazing credibility and it's the brand you know (Jacob, 53).

As illustrated in the quotes below, for Jacob and Rod there is both a visceral and spiritual sensation that accompanies group action and 'doing good', indicating that group action may facilitate transformative experiences within individuals.

It's just like that nice .. thing of actually doing something just the actual sensation.... at the sensation level there's just that, it's a pleasant sensation that you get through your, through your body you know vibrating through when you actually do something (Jacob, 53).

... 'just act because it is beautiful' ... but within the action itself there's ... there's goodness and spirit and ... (Rod, 60).

Sphere of Influence

.... we have focused some ... action on our local MP, federal MP so we've been to see her a few times and we write to her ... (Jacob, 53).

The [town] community, the street marches, Walk against Warming, and umm, Earth Hour ... (Solomon, 52).

And individuals with the energy toolkit service specifically targeted towards individual action so umm you know we always hope that they will their individual actions and they'll see bigger a bigger picture although you know it's pretty hard to follow up with that. You put out ... and you just hope for that. And I guess we expect to influence the federal government don't we? (Jacob, 53).

I think one of the things that we also hope is ... is that we have a world presence 'cause we did things like the 350 day of action which we did with millions of

people, the largest action concerted action in the world ever and we were part of that. I think we were acting on the world stage, I thought I was (Jacob, 53).

Despite a stated focus on local action this group expresses ambitions to influence more widely – in effect from the individual to the global. These forms of influence are also indicative of the targeting of the group's actions broadly from political lobbying, community awareness raising, education and direct action. How this group perceives their actions influencing wider level social change is discussed below.

Vision of how change occurs

*... I was thinking that like we might have connections and things and actions we're doing that sort of are, there is an **interpenetration** between what's officially [CAG] and all these other things that are also happening around (Walter, 40+, my emphasis).*

Well it's sort of the last things we were talking about all those Walk Against Warming, 350, Earth Hour, so it effects the local community and whatever reports from people incidentally hearing about it and related to people participating, it effects the local members when they hear about it ... federal members and its part of a larger international thing (Walter, 40+).

*I think it's that **knock-on** thing and there's also thing that I think W[ally] was talking about earlier where you don't know what you might send out some small piece of information, [CAG] might just run something some large thing that might have one little thing that gets one particular person going that starts a whole new industry or something you just don't know. It's like with teaching and stuff you just don't know whether the kids in front of you they're all geniuses, you just don't know which one will ... you don't, you don't know that one of those kids isn't going to do something a bit bizarre or amazing or you know ... (Jacob, 53, my emphasis).*

*I think you **plant lots of seeds** too you know. I I I think that's what we've done, we've done big range of things. Some groups just focus entirely on umm on advocacy and so they only do those things and that's what I thought we'd be*

doing originally but I'm sorta glad we're not, we're doing a bigger range of things I think it's actually worked for us much better (Jacob, 53, my emphasis).

Umm, everyone's kind of covered the things that I've thought of just that by having a community group and hopefully that community group can then educate people and those can convince other people and it will eventually grow into worldwide sources of community and caring about the environment (Alexis, 25).

There is not a clear picture presented by participants here on how they see change occurring. There is a sense though that almost incidental to their actions they believe that other people will start to take actions around climate change themselves. Some of them see the process of change as a diffusion effect. For others there is a randomness to this effect – you just don't know who will resonate with the group's actions and ideals. This is further expressed in the idea of spreading or scattering widely, a type of scattergun approach with an occasional hit of the target or a seed that sprouts. The *raison d'être* for the diversity of the group's targets and modalities are clear here.

Communicating climate change

Communication stuff you know emails and you know that's one of the main things ... modern communication (Rod, 60).

And also through the internet availability of information so I mean that the fact that there is scientific information out there that makes it possible. The fact that we can get access to all different sources of it and find out what other groups all over Australia or the world are doing (Walter, 40+).

And the fact that[town]'s actually quite a small place and so you're actually likely to come across the people that will be doing the actions like you might run into them, it's not like I would imagine in places, bigger places you might not see people for weeks unless you.. you specifically see them at a meeting or thing but we probably see each other you know quite a bit outside of [CAG] things (Jacob, 53).

Although not specifically addressed within this focus group due to time constraints, some indication of how the group communicates about climate change is indicated here.

Like other groups they utilise online communication tools such as email and the internet for creating and maintaining connections both for communication between group members and for facilitating broader state, national and even international connections. Despite the advantages of the World Wide Web there are benefits to being based in a small town where group members regularly see each other at other community events and social occasions.

Secondary themes

The importance of community and networks

... all the sort of small individual actions which are good things to do but they plainly can't fix the problem because the numbers don't stack up. Individual actions can't ... can't really do it so something like W[alter] was saying he and I were talking about it we thought it was a good idea if we had to address it as a community and so not as the Margaret Thatcher sort of there is only the family unit and no such thing as society that is what seemed to be the issue with most of the environment issues you know? Bizarre to me that you could deny that the community and the government have any responsibility (Jacob, 53).

[CAG] is linked up with groups down ... to central Victoria and we had a conference in was the end of 2006 [2007 yeah Kevin 07] ... yes so I think sometimes just linking up with people is really important and when you think about a society learning so much of it happens in conversation so umm you know all those little learnings when people exchange information and ahh learn from kind of reflecting from each other's points of view can add to large.. larger learning ... (Walter, 40+).

I think also giving people who are experiencing that family world the Thatcher thing there's no middle ground well it's like [CAG] gives a you know, an experience of community, ahh with other people who care about the environment, doing things about it and even like I go out in S[oloman]'s backyard and you know get a sense of you know arrrhh that the garden and that connection to the earth and you know there's your, their solar oven and so these things you know there's almost an interpersonal effect so umm ...

[Facilitator: So in what sense do you mean? So how do you see that interpersonal effect?]

Well ahh I guess it gives people an alternative sort of culture to umm to grow into or choose (Walter, 40+).

A sense of community was an important factor underpinning this group's collective action. This is perhaps not surprising given that this group is situated in a regional town where traditionally stronger ties to community are present. This group in particular emphasised the importance of social capital to their involvement in community-based climate action and the quotes above illustrate three forms of social capital (Schyns & Koop 2010). They are: bonding or family ties; bridging or 'thin' ties between similar social networks (such as CAGs within their region); and linking forms of social capital evident in the prominence of network building and conversations in this group.

This emphasis on community is also presented in opposition to individualistic approaches to climate change action and resonates with case study 1 participants from another regional NSW town who similarly shared strong community ties and critiques of individualism (in case study 1 though this was particularly addressed to younger people).

Theory of change

... sometimes there is almost certain little things like catalysts or inoculants that umm can make big differences in public debates like maybe the understanding about storage of renewable energy if we spread that out though that would make a big difference to some of the arguments that are put against renewable energy for example (Walter, 40+).

... its changing the, changing yeah well people the way people feel about themselves and the way society feels about itself and its, its role as an actor. It doesn't feel it has a role as an actor I think a lot of the time I think society and individuals they seem to have that, they feel like they haven't that role anymore it's been maybe they feel it's been taken off them. I'm afraid that they've probably given it away too easily, too cheaply (Jacob, 53).

I think you've got an action side and you have a socialising side and giving you that, giving you that confidence that you can do something bigger than the individual you know and I noticed you take one step up and it's not big whether its half a dozen people's houses or a dozen people's houses or more and three, four blocks of land that you plant trees on and those little things add up but bigger than that is changing the mindset of society if you can (Rod, 60).

... and there's the.. the germane perhaps the more germane issues for the general community is what power do we have or can we fix it umm how do we wield some power umm to.. to bring change (Solomon, 52).

Participants in this group understand change as a process that involves both individual actors and wider societal structures. They believe change needs to occur within individual mindsets and through individual actions as well as within collectives and throughout society more broadly. Here, themes within their visions of how change occurs are developed further. A rich imagery is created of how small actions (as catalysts or inoculants) can be replicated and have the potential to influence society more broadly.

Matters of power are raised within this context. Personal empowerment is gained through acts undertaken with others (collective actions) but the ability to influence wider society (a consistent refrain amongst the focus groups) requires additional forms of power, apparently not yet accessible to CAGs.

Balancing the enormity of the problem with the scale of change required

I suppose basically the scientific predictions or findings are from sort of commonsense point of view astonishing. I mean everybody here has grown up with the idea that the world's huge, umm, at least you know you sit around a camp fire and as a child and ask your Mum or Dad where's the smoke go? We all had campfires, and of course he says, look at the sky, it's huge, we can't change it, umm so what the science has found is pretty astonishing (Solomon, 52).

But that I think that's a bit like this global warming issue we ... we can't grab it you know and we can't say yeah, there's the enemy ... (Rod, 60).

.... climate change is huge [laughing] or haven't you noticed? [Facilitator: I had noticed] ... [Facilitator: so it's the extent of the problem?] It's the extent of the problem and ... and not ... not I don't think so much climate change itself, as fixing climate change itself is not that difficult I think but changing the way a community thinks about itself so that it can actually put itself in a position where it can change is much harder than actually going out and getting some turbines together (Jacob, 53).

Like other groups, this group struggles with the enormity of the issue of climate change when trying to conceive of their role in its solution. The most difficult aspect to conceive is the conditions under which social change can be achieved. At the end of the focus group (as with others) the group had an opportunity to identify anything that should have been raised and/ or discussed and wasn't. This often triggered a flow of conversation amongst participants such as that noted below.

... it's got to be a pretty amazing grassroots action and that can do that but if it happens its gonna be along the scale of Vietnam Moratorium stuff before it is succeeding (Solomon, 52).

Or maybe Indian Independence you know nobody thought that was going to get off the ground you know. A little guy who wasn't even, well Gandhi was from India but he'd spent most of his life in South Africa, you know, like he'd been there for years and years and years and then he came back (Jacob, 53).

*Apartheid falling in South Africa and the wall falling in Berlin... (Rod, 60)
[Slavery ending (Walter, 40+)]*

But it is a big one and a little group like [CAG] is not quite positioning itself as ahh as you know Berlin wall pushers, you know, not quite ... (Jacob, 53).

How many millions did they have on the salt marches? On Gandhi's salt marches? (Solomon, 52).

The scenarios described above are in marked contrast to the group's vision of change expressed earlier and there is a feeling here of a disjuncture between participants'

understanding regarding the enormity of the problem and their faith that local action such as the activities they are engaged in can achieve large-scale global social change. Jacob suggests below that this disjuncture is partly created by the lack of a known path or model for successful climate change action and community engagement. In contrast to the large-scale social movements described above, there is no single ‘enemy’ or ‘other’ to contend with and the nature of the moral stand required for effective and equitable mitigation of climate change remains murky.

... and maybe we don't have the model so much so people don't have the confidence in that model so you can tell the model exists but if they don't see it actually working anywhere then it would mean it's really difficult for them (Jacob, 53).

CASE STUDY NSW4

Description of case

This Climate Action Group (CAG) is located in an inner-urban area of Sydney. The focus group was held in May 2010 and was the eighth and final focus group conducted within the research program and the fourth in NSW. The participants of the focus group consisted of 1 male and 4 females ranging in age from 36 to 70. This group has an interesting relationship with a ‘sister’ CAG which is proposing to build a community solar farm and has strong links with the local council (one member being an elected councillor). The focus of this group is primarily on local education, awareness raising and political lobbying at the local government level. However they have also been, and continue to be, actively engaged in working with all levels of government in trying to negotiate the development of the community solar farm in southern NSW. The CAG therefore supports both personal level and government action around climate change.

Case context

The group commenced in August 2007 and three of the participants were foundation members. One of the other participants had been involved since August 2008, and the most recent member had become involved only 4–6 weeks prior to the focus group.

Members come from varying professional backgrounds, but for the most part are well educated professionals with a long-term interest in environmental, sustainability and social justice issues. This group is situated in a local government area with one of the highest carbon footprints within NSW¹³¹. An important motivation for involvement for these participants was resource conservation and a desire to live a sustainable lifestyle contrasting with the wastefulness they perceived in many people who live within their suburb.

Relation of case to research questions¹³²

The following additional themes were identified:

1. Quality of Life

¹³¹ “Yes I mean [suburb]’s got the biggest footprint of anywhere in Australia I think...” Wayne, 68. Note: not his real name. Pseudonyms are used throughout.

¹³² This focus group dealt with five major themes. Due to time constraints, the question on how the group communicates climate change was omitted.

2. Systemic constraints – getting to the root causes

Detailed accounts based on these themes are provided below. Direct quotations, where relevant, are provided to support claims, context and enrich the text.

Primary themes

Motivation for voluntary action on climate change

I was surrounded by a lot of people, they were using a lot of things, they were quite wasteful with what they were using and it started to give me a bit of a conscience (Jackie, 39).

... it's been something we grew up with appreciating and respecting our limited resources and the environment in which we live. My mother was very conscious all the time about conserving and conservation and not wasting (Marcia, 36).

I guess my parents were quite thrifty I mean concerned with not wasting stuff 'cause they'd been through the Second World War to a degree and my grandparents. But I wouldn't call them environmentalists (Debbie, 47).

For the majority of participants in this group excess consumption and wastefulness provides the primary motivation for their concern and action around climate change. Resource conservation was an important element, whether due to their upbringing or to a more recent 'awakening'. These participants hold post-materialist values and as Tranter (2011) observes:

In general terms, consistent predictors of environmental concern in Australia include holding postmaterialist values, engaging in eastern spiritual practices (perhaps reflecting alternative lifestyles and consumption practices), professional occupation and, to an extent, tertiary education (p. 92).

The emphasis throughout the discussion on what participants perceived as excessive consumption and waste within their locality is an appropriate juxtaposition given that people from their suburb have one of the largest carbon footprints within Australia (see footnote 25 above).

I think probably that the turning point as far as climate change goes for me is umm, and Al Gore's film An Inconvenient Truth which brought it home just how urgent the problem was (Debbie, 47).

Only one participant at this point mentioned an understanding of climate science as the prime motivation for engaging in action on climate change which makes this group distinctive in this regard. For Debbie, Al Gore's film highlighted for her the extent of the problem and the urgency for action.

... there was also Rachael Carson and Silent Spring and all those other issues and I got into organic food (Jodie, 70).

It's always struck me as highly inequitous we in the West consuming and its obvious this terrible need in other parts of the world and yet we don't seem capable of realising that and doing anything to deal with it so that's been an element ... the other element I guess is my engineering background ... look it's in a sense it's easy to solve some of these problems, there are technical solutions to these things, it's just a question of either finding the money to do it, basically that's all it is, it's money and behavioural change so there's nothing difficult about this problem (Wayne, 68).

The motivations of the two older participants differed slightly in that Jodie said that she had been involved in a series of environmental issues since her youth, coinciding with the rise of environmental consciousness of the 1960s and '70s. On the other hand Wayne identified two distinct influences: his initial upbringing in the church and later his engineering career which formed the basis for his concern around climate change as firstly, a matter of social justice and secondly, as a solvable technical problem.

Types of individual and collective (group) action taken

... I tried to measure my carbon footprint and continually monitor it and continually try to reduce it ahh and more locally think about offsetting what's left ... I focused on transport, I focused on energy usage in the home, focused on umm how much, what you buy, umm water use and all that sort of things and tried desperately to grow vegetables but remains ... [laughing] it requires a lot of time and dedication to do that (Wayne, 68).

... I write the occasional letter to people who I think might affect but I'm beginning to doubt whether they're taking any notice (Jodie, 70).

I have composted as long as I can remember and umm I've been a vegetarian or mostly vegetarian since I've twenty or so and umm I've been into organic foods since I was mid twenties and ahh and I think I've bought green energy since it started ... driving we didn't have a car for a long time my husband and I umm late in the last few years we've dropped off car use a lot and we both cycle and I take public transport to work ... I've been growing vegetables for a while and have got some good vegetables going for the last few years ... I recently pulled my superannuation out of the corporate scheme and I'm investing it ethically ... and we've put in solar panels but I don't think I would have done that without the financial incentive, the ... the gross feed-in tariff gave. Umm we're thinking of getting solar hot water (Debbie, 47).

... try to cut my emissions back hugely at home ... I'm now weaning myself off the car fairly successfully ahh umm and I've bought a motorbike ... on the project that I'm currently on myself and a work colleague have ahh managed to get some trees planted (Jackie, 39).

Similar to previous groups the participants of this group are undertaking a substantial array of voluntary actions to reduce their greenhouse gas emissions and to generally live a more sustainable lifestyle. For several these actions extended outside of their personal behaviour into the workplace where they aim to influence their workmates and, for some, their profession more broadly.

Some participants were cynical about the potential of their actions to make significant change, especially within the systemic restraints of say, Sydney's public transport system, and the recognition of the need for government involvement. However these barriers to action were overridden by the moral obligation to act. And whilst they believe their individual actions may not create significant change, as in other groups, they see themselves as model agents, providing an example or incentive for others.

Collective actions undertaken by the group were initially focused around their involvement with a solar farm development in southern regional NSW. Delays to this

project have created inevitable frustration and the group has turned to other smaller and achievable local and community-based projects. These include a free council bus service that connects to a series of short bush walks and community information on demystifying GreenPower.

Although this group has strong political ties with the local council and is engaged in state and federal political processes around the solar farm development proposal, they are less engaged in some of the more overtly political actions of other groups outside of their area. As Wayne (68) states:

we're not all that good at going on protest marches but we do our best.

Individual agency and enablements

Umm the science [laughs]. I'm a scientist. Umm the ethics [laughs] (Wayne, 68).

All the other people doing it with you like walking for the climate and things like that (Jodie, 70).

What makes me do it is because there's no choice (Marcia, 36).

I think just doing all the things you can do as an individual I don't actually, it doesn't make me feel good, I think it's just a way of living (Marcia, 36).

Yes well it's like being in the front of a train and seeing in which you're heading straight for a crash and all the rest of the passengers on the train are sitting happily unaware and you turn, 'we've got to stop this train!' But they're all just reading their paper and that's what gives you the [laughing] ... the authority, I think (Wayne, 68).

... if I can try to live by example and work with myself and not be greedy not.. not to, think about what I'm doing, to be aware, have that clarity in my life then maybe it'll rub off on others I think the change has to start with ourselves ultimately with everything that we do in our lives and that will help us to communicate the bigger issue (Jackie, 39).

There was no unified response to what enables members within this group to take action on climate change. Certainly for Wayne knowing climate change both in an empirical sense and as an ethical issue created personal empowerment and the moral obligation to act. Marcia, on the other hand, said her involvement was based on her values, illustrated above in terms of conservation of resources and sufficiency, which establishes her obligation to take action around climate change. Whilst for Jodie taking part in collective action with like-minded people supports her ability to act. Jackie expressed her individual motivation more in terms of her personal philosophy which is a transformative approach based on a process of self reflection and enquiry and where actions speak louder than words.

Constraints to individual and group agency

... my building it's a very modest building but it has no gas so I'm stuck with electricity and have all these limitations and I would, I am definitely now taking the bus more umm and but I'm really addicted to my car 'cause I've been driving since I was about 18 or 19, that's a long time now umm and I'm just used to that convenience and I find Sydney an awkward place to public transport around in (Jodie, 70).

This shows the limitations in dealing with, we've gotta have a good transport system and the governments gotta do things. We've gotta apply the pressure and the government's gotta do it (Wayne, 68).

Yeah so I think you know you get to a certain level and even now we eat less meat and we're very conscious you know of all of our purchasing recycled or recycling things or buying less or whatever but still only so much, you do get quite quickly to that ceiling and then you ... you ... it's easy to sustain if you if it becomes a way of life and you're motivated but I think it's very hard to take that next step (Marcia, 36).

I don't do a lot of flying but I mean I think a lot of us in the West do you know we take we sort of think it's a kind of virtue to go travelling and it's a hard thing I think that might be the last thing that most people would want to give up I mean probably myself included [others agreeing] but I've cut it right back and I

guess you can buy offsets but I'm not sure about that, the whole ethical situation (Debbie, 47).

Illustrated here are a series of typical barriers to climate change action both at the individual and collective scale. Systemic constraints around housing types and public transport systems for example limit the ability of individuals to take action to mitigate against climate change. For members in this group in particular, juxtaposed as they are against a background of the biggest household carbon polluters within Australia, those limitations must appear keener. Taking progressively more difficult actions has a toll and offsetting emissions raises ethical issues: it requires a greater and more sustained level of motivation, one that undoubtedly the group provides but there is also a level of individual sacrifice, as Wayne illustrates below.

And ... and it is hard because I mean back to the old air travel thing, you don't want to stop contact with family members and seeing grandchildren and interrupting umm all those good things in life (Wayne, 68).

For other people there are constraints of lack of time and knowledge and the potential paralysis of fear. People who live in the city are also often disconnected from nature and do not aspire to a sustainable lifestyle based on notions of sufficiency.

Time. I think people get caught up in their work predominantly, ahh, and they may have the passion there but don't have the time, so that's a big one (Jackie, 39).

You can't be motivated unless you ... you know you can't act unless you're motivated (Wayne, 68).

I sort of understand why you'd put it to one side if you could because it's just so frightening so I think that those that might ... might be disposed to.. to do something will also be terrified by it (Debbie, 47).

And so many people live in the city where they're quite cut off from nature and they don't get it that everything is so connected (Jodie, 70).

I think there's a ... a lot of laziness 'cause people don't want to make, because it's about making adjustments and changes and for people who don't enjoy you know growing vegetables and whatever they see it as imposition on their lifestyle (Marcia, 36).

Enabling group agency

... it's like a tank collecting water, rather than just running away (Wayne, 68).

I know once I get here and I don't know all of you very well but it's a really positive thing it brings me back into focus and it starts me thinking (Jackie, 39).

... it opens, it broadens your horizons and I suppose it gives you more enthusiasm to do things elsewhere as well as within the group (Debbie, 47).

In fact I think the greatest benefit is just being able to talk with like minded people even if we didn't do any action at all. But you need, you need the action, ahh, to give a focus (Wayne, 68).

Other groups described the group being greater than the sum of its individuals, and viewed in this light Wayne's analogy to a tank collecting water is insightful. The group gathers "like-minded" people together who bring a variety of experiences, knowledge and skills which represent precious resources. In return the group supports its individual members by providing a focal point which centres and energises.

Again there is the idea that the group provides a collective identity for "like-minded people" and the juxtaposition of participants of this group with the more typical local resident of their suburb was characterised in terms of their excess consumption and overt wastefulness.

Sphere of Influence

I'm trying to influence the political masters through, by showing that there is a consensus for action and they needn't be scared, they'd be voted in if they act on the environment and they'd be voted out if they don't. So it's a whole chain of people, you've got to influence the local community but that, the end goal is to get serious commitment, political action which means building big

infrastructure and changing laws and take and ... and regulations and transport systems and everything else to make sustainability possible (Wayne, 68).

I think influencing individuals within the community you know local community like getting the community galvanised around the issue so it's not just a few individuals scattered around (Marcia, 36).

We need governments to do stuff but we need to give the courage to do it by having greater numbers of people prepared to say that we want this (Debbie, 47).

... people who are in business, big business who have got a lot of clout because of the resources they control, the money that they have, they're the people I want to target (Jackie, 39).

The group has an emphasis on influencing people at the local level to take action with a view to generating change at the political level. Again the ambition for this group is to facilitate wide support for action on climate change from the individual householder through to politicians and corporations.

It should be noted that this group has significant influence within their local government area due to a member who is a local councillor and the majority of the group's actions have been focused at this level.

Vision of how change occurs

It would be nice I think to ... to have some great idea that that gets taken on in a big way like Clean Up Australia or I think that would be an efficient way of getting something done that it's difficult to crack but it does seem that.. that a lot of movements do spring up from a good idea and a bit of a start (Debbie, 47).

Yeah I've got this theory you've gotta I mean it's your family your extended family and your friends. Umm I think it's sort of gotta radiate out from there yeah. I mean you just you show them your solar panels and talk about you riding a bike or something that does influence them (Wayne, 68).

So we've got to get some runs on the board and to get runs on the board we've gotta do it as a community, its gotta be you know have an impact across the community and umm but then yeah you want to say you don't have to wait for government to work out what the hell they're doing and you know umm for the global, you know, for for for nations to work out between them what's happening. You do it at a local level and it's easy to actually just encourage other, you know through the network of councils or whoever, umm, and I think that's empowering because the people at a grassroots level can say yep, we can do something (Marcia, 36).

I think the change has to start with ourselves ultimately with everything that we do in our lives and that will help us to communicate the bigger issue (Jackie, 39).

Most participants in this group believe change needs to commence from the personal and the local “grassroots” level. Wayne’s vision involving radiating circles of influence from the personal sphere through to the local community resonates with comments from other focus groups. However the problem of how to move from local grassroots action to achieving a greater level of change through mainstream adoption and buy-in on a national and even international scale remains a question for this group as it does for others.

Marcia’s reservations expressed below, often with a sense of frustration, enunciate the need to spread or seed change effectively from the local level. In her view CAGs do not yet possess the appropriate structures to affect change at a broader level.

... I think it is important that you act and you do set a good example like you said J[] but but I think it's really it's about how do we cross that bridge then from this small pocket of you know individuals who are committed to actually something that is really become a mainstream part of life I think I worry that there is a small pocket of community umm who are very passionate and committed and do all the things we're talking about but there's nothing to really seed it into more mainstream but I think also our group is limited the more I think about it the more I think that we need yes we need more support from

government but I don't think climate action groups have enough structures or umm I don't know infrastructure around them (Marcia, 36).

Communicating climate change

I think that the main message that people are getting is that it's good to consume it's good to have a fully renovated house a large house and two cars and whatever yeah (Debbie, 47).

Communication as well for groups like this group being able to communicate effectively in an effective way that gets noticed instead of people having to come looking they can actually see it, we go and find them almost. It's hitting the right communication strategy to get people's attention as there may also be a lot more people out there interested but don't know this group exists. I know that I lived in [suburb] for two years and didn't know you were around until two months ago (Jackie, 39).

Whilst the question of how the group communicates climate change wasn't specifically addressed there were some references to its role, firstly in terms of the competing messages that people in the general community receive that support activities that increase their carbon footprint. The participants in this group have identified issues of consumption and wastefulness as their primary motivation for taking action around climate change, and so countering the prevailing message that their affluent community receives presents a considerable challenge.

There is also the challenge, often facing CAGs, of how to promote their role within their local community so as to attract greater membership and traction around their collective projects. Some CAGs have managed to develop extensive outreach strategies; however this generally relies on tapping into other community networks. CAGs situated in regional areas appear to be particularly adept at taking advantage of these opportunities whereas urban CAGs find promoting climate change action within their local community area more difficult.

Secondary themes

Quality of life

Irrespective of the less tangible benefits which come from supporting personal behaviour around climate change mitigation, for some people undertaking voluntary actions can be a great source of personal satisfaction and an enhanced quality of life.

I'm very lucky I work at [suburb] so it's a walk, a ferry and a train, a train against the traffic and it's just, I love it. Because the ferry's heaven and time to read on the train and so yep I'm blessed. Umm and I've been growing vegetables for a while and have got some good vegetables going for the last few years and I love doing that, yeah (Debbie, 47).

... I think it really adds new meaning to your life in a way, that ahh you're living sustainably and that's a source of great enjoyment (Wayne, 68).

Wayne and Debbie express further what tangible benefits they derive from doing things that are also a component of a more sustainable way of life.

Yeah I agree I really enjoy most of the things I do in my own life umm to.. to have a lesser footprint. I don't find it a drag really, it's fun, it's like sort of solving a puzzle, how can you minimise your.. your footprint umm and actions improve, they make you feel good if you feel like you're getting somewhere but I guess if you feel like you're not getting somewhere or something it's not having a great effect it's ... it's not that much fun (Debbie, 47).

I mean I've found there's sort of an innate joy in it. I found that you know I used to drive everywhere but now I love catching the bus because I can read on the bus even if the bus takes hours to get through the city I've got plenty of time. I've learnt to value time I mean so just for personal satisfaction I've found it's opened up all sorts of horizons that you know I just assumed that obviously you'd use the cars, it's the only sensible way but you get on the bus and you look at people, you talk to people, you read, all sorts of dramas are going on, you're more relaxed, you've got time to think (Wayne, 68).

Systemic constraints – getting to the root causes

But back in the back in the sixties and seventies we thought that ahh it was going to be you know so much leisure by year 2000 because technology would improve productivity but we all chose not to just to take leisure but to take more

consumption we all worked far more. Why did we do that? I've never understood that. Why didn't we just say let's work half as much with the technology productivity improvements. Let's just have half the wages but we never said that. We said no.. no we'd have more trips, more furniture, more new cars, more everything, that's where we went wrong, tsk, damn it, we should have done something about it (Wayne, 68).

Well I don't think governments are brave enough to.. to step off, you know, yeah, what we've just been describing. Basically economists are the high priests today, I'm sure I've read that somewhere but its true and the economy is the thing that they' re all trying to in their theory there's no, there's no place for.. for limited resources, limited environmental resources and even looking at waste it's assumed to be infinite that you can produce infinite waste so it's a flawed, it's a terribly flawed theory but it's the theory that's dominating the West (Debbie, 47).

Consistent with the group participants' focus on climate change as a sustainability issue, they perceive systemic causes to be related to excessive levels of production and consumption. The systemic or root causes of climate change can be traced to patterns of consumption entrenched in the West at least fifty years ago. Both the rise of technology and a materialist viewpoint are critiqued here.

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