

## **Qualitative Inquiry as a Method to Extract Personal Narratives: Approach to Research into Organizational Climate Change Mitigation**

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*The purpose of this article is to demonstrate that qualitative inquiry is highly effective at facilitating the extraction of personal narratives of senior managers in the New Zealand (NZ) public sector. Specifically, in this article I lay out the method used to develop theme-based narratives from semi-structured interviews with senior managers responsible for the delivery of the Communities for Climate Protection and the Carbon Neutral Public Service programs in NZ. In doing so, I demonstrate why qualitative inquiry is the ideal methodological approach for this kind of research program. Further, in demonstrating the research approach, this article may provide policy makers with insight into how to explore the cognitions of senior managers involved with carbon mitigation initiatives, and/ or the nuances of the initiatives themselves. This in turn may provide insight into how to weave climate and carbon management policies with other national strategic policies. Keywords: Qualitative Inquiry, Narrative Analysis, Climate Change, Carbon Management, Carbon Neutral, Public Sector, Organizations, Senior Managers*

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Qualitative, or inductive research emerged as a reaction to late 19th and 20th century positivism (Brower, Abolafia, & Carr, 2000). Unlike positivist, or quantitative research, in which research questions are deductive, specific and measurable, and the goal is generalizability and replicability, qualitative studies often address ambiguous phenomena, generate rich evidence from the everyday experience, and focus on context (e.g., Bernard & Ryan, 2010; Brower et al., 2000; Liamputtong, 2011). Because of its holistic and interpretive nature, qualitative research has been accused of lacking rigor and failing to measure up to the “cannons of positivist research” (McCabe & Holmes, 2009, p. 1519). For Weber (2004), however, “it is time to assign the rhetoric of positivism versus interpretivism to the scrap heap. It no longer serves a useful purpose” (p. xi). And in the end, as Jootun, McGhee, and Marland (2009) suggest, “no single research method is inherently superior to any other; rather the appropriateness of the method must be appraised in relation to the research question” (p. 42). From a reliability perspective it is not possible to rigidly replicate qualitative research (Liamputtong, 2011).

However, qualitative inquiry, quite effectively, allows the researcher to explore meaning, interpretations, and individual experiences. The purpose of this article is to lay out the method used to conduct a research program into organizational carbon mitigation, and to demonstrate that qualitative inquiry is highly effective at facilitating the extraction of personal experiences of senior managers in the New Zealand (NZ) public sector. This approach is critical in order to better understand the dynamics influencing the termination of initiatives intended to help the New Zealand Government reduce its contribution to atmospheric greenhouse gas (GHG) emissions. More practically, this article demonstrates a research method for policy makers interested in exploring the cognitions of senior managers involved with carbon mitigation initiatives, and/ or the nuances of the initiatives themselves. This in turn can provide insight into how best to weave climate and carbon management policies with other national

strategic policies.

I have divided this article into four primary sections. In the first section, Introduction, I highlight the strength of qualitative inquiry as method to extract personal experiences and present the aim of this article. In section 2, Background, I provide an overview of the study's policy context, situate myself within the research and discuss my motivations for PhD research. Section 3, Research Approach, demonstrates the methodology I employed in the study, including attention to narrative analysis, design and selection criteria, execution of semi-structured interviews, interpretation of data, application of theory, and organization of results. In section 4, Concluding Thoughts, I end with a reflection on the utility of qualitative inquiry vis-a-vis the objectives of the research study and quickly present a synopsis of the study's findings.

## **Background**

### **Policy Context**

Climate change presents society with an unprecedented challenge, and governments from around the world are initiating programs to mitigate climate change and reduce their contribution to atmospheric GHG emissions (e.g., Bailey, 2007). In an effort to promote public sector carbon management, in 2004, NZ's Labour-led government, under Clark, sponsored local government participation in the Communities for Climate Protection - New Zealand (CCP-NZ) program, an initiative delivered through ICLEI - Local Governments for Sustainability (ICLEI). In 2007, the same government launched the Carbon Neutral Public Service (CNPS) program. Though the core public sector is responsible for only 2% of NZ's total GHG emissions (New Zealand Government, 2007), the goal of these initiatives was to demonstrate the Government's commitment to global climate change mitigation. In late 2008, NZ shifted from Clark's (more liberal) Labour-led to Key's (more conservative) National-led government, and this saw a change to Government's carbon agenda, including the dismantling of the CCP-NZ and the CNPS programs.

NZ Government response to climate change remains controversial and highly politicised. This empirical study goes beyond existing academic research to provide a critical examination of the processes of conception, outworking and termination of the CCP-NZ and the CNPS programs. Further, in this study I seek to discover the beliefs, values, commitments, and narratives at play in government organizations which were keen (and to varying degrees mandated) to act on climate change and carbon mitigation. Specifically, the objective of the study is to first, determine why NZ's newly elected National-led government cancelled the CCP-NZ and the CNPS programs; and, second, to determine whether despite the discontinuation of these two initiatives, and in the absence of Government support, will government organizations continue to strive for carbon emission reductions and neutrality.

### **Situating the Researcher**

As a method to enhance rigor and validity, reflexivity is a critical component of qualitative research (Jootun et al., 2009). McCabe and Holmes (2009) describe reflexivity as the act of reflecting on one's ability to remain unbiased while realizing and accounting for the effect of existing bias on the research. A researcher's history, beliefs, and interests will affect what he/she chooses to study, how he/she approaches the study, and how she/she ultimately interprets the findings (e.g., Horsburgh, 2003; Irvine & Deo, 2006). While this bias may hold the potential to skew the research, Malterud (2001) contends that by identifying one's biases at the outset of the research, and maintaining a reflexive approach throughout the research

process, bias can be minimized. In this respect, the reciprocal relationship between the researcher and the research must be made explicit. With this in mind, and as suggested by Etherington (2004), it is important for researchers to situate themselves in the research by describing their experiences and beliefs.

Having grown up in a small town on a large lake, surrounded by forests and open fields, I was raised to appreciate nature for its intrinsic value. My academic training has provided me with the tools necessary to understand how the natural world functions, how ecosystems remain in balance, and importantly, how we as a society influence this complex balance. My professional experience has allowed me to appreciate how difficult it is for a capitalist wealth-driven society, to remain in balance with the natural world. And, how despite the efforts of some (from within both the private and public sectors), without collective global agreement and action, balance with nature will remain a challenge.

The combination of training and experience has led to my strong belief that as a society we will never right our imbalance with nature as long as we continue to use the same thinking that got us into the problem in the first place. Anthropogenic climate change, while planetary in scale, is at its root, a symptom of our collective compulsion to live unsustainable lifestyles, to live beyond the natural carrying capacity of the ecosystem. While governments and corporations continue to shortsightedly place economic benefit above environmental health, our balance with nature will remain illusive.

It is clear from my background that I appreciate the environment, but I also understand the need to take from the environment. I am also acutely aware that not all green actions are indeed environmentally positive actions. Greenwashing is an endemic problem and ultimately hurts environmental efforts. As an academic I find it important to view things from a critical perspective. As a result, I actively strive to remain objective, be it as a student, project manager, consultant, or researcher. This is particularly important when conducting qualitative research, as it is impossible for the researcher to remain neutral. Because of the political nature of the current study, and the emotional attachments of many of the interviewees, it is crucial as a researcher that I remain aware of my own biases, and appreciate how this may influence the evolution of the research (e.g., Jootun et al., 2009). By including this reflexive approach, it is my hope to present, as Horsburgh (2003) suggests, a transparent and, as objective as possible, interpretation of the data.

### **Motivations for PhD Research**

My research philosophy is driven by a keen sense of curiosity and a desire to continuously learn, with specific reference to the social-economic-environmental nexus and the solutions to solving the complex problems that exist within this space. The research programme, Carbon Neutrality—Fact or Fiction?, led by Professors Markus Milne and Amanda Ball in the Department of Accounting and Information Systems at the University of Canterbury, provided me with an opportunity to expand my studies and explore a field that is growing in global importance.

While my previous research experience addressed climate science and policy, as well as organizational strategies for climate mitigation, it nevertheless lacked an in-depth consideration for organizational decision dynamics: how do organizations come to understand climate change—what are their cognitions? How do organizations decide how best to act on climate mitigation—how do they decide their commitments and actions? As a result, in addition to being an interesting line of inquiry, Carbon Neutrality—Fact or Fiction? also serves a pragmatic function. Participation in this research programme would ultimately allow me to become a better researcher and a better-rounded academic.

Why this research programme specifically? Simply stated, as the literature had shown

at the beginning of my PhD studies, while organizations were starting to engage in climate mitigation activities, little scholarly work had attempted to flesh-out the motives that drive or resist action (Okereke, 2007). Additionally, insight gleaned from the work that did explore this dynamic (e.g., Kolk & Pinkse, 2004; Okereke, 2007) tended to focus on analysis of websites, reports, and questionnaires, rather than the narratives at play within organizations.

*Carbon Neutrality –Fact or Fiction?* thus provided me with an opportunity to contribute to the scholarly debate on climate change mitigation in general, and importantly, contribute to the vastly under-researched literature on public sector organizational carbon management and carbon neutrality. Moreover, by approaching this study through in-depth longitudinal case studies, employing termination theory as the theoretical lens, and using narrative analysis to extract the experiences of those involved in the carbon management (and neutral) strategies, this study provides an inside view of the state of public sector organizational buy-in for carbon mitigation in NZ under a National-led Government.

## **Research Approach**

### **Narrative Analysis**

Narrative analysis is a subfield of discourse analysis, and has wide application in scholarly research, including organizational studies (e.g., Bailey, 2007; Bebbington, Higgins, & Frame, 2009; Feldman, Skoldberg, Brown, & Horner, 2004), where over the past 20 years, according to Gertsen and Soderberg (2011), it has built a strong reputation. Watson (2009) echoes this notion, indicating that “narratives and stories are increasingly being seen as relevant material for social scientific analysis” (p. 427).

As Bernard and Ryan (2010) explain, within qualitative research, there are four main traditions of narrative analysis:

- a) Sociolinguistics, which focuses on the structure of the narratives;
- b) Hermeneutics, which explores the greater meaning of narratives
- c) Phenomenology, which employs narratives to understand a lived experience of an individual; and,
- d) Grounded Theory, which uses narratives to better understand how things work.

I chose phenomenological narrative analysis for this study because it allows for an exploration of the experience of the senior managers responsible for the delivery and application of the CNPS and the CCP-NZ programs. As Feldman et al. (2004) suggest, narratives are particularly useful data because individuals make sense of the world through narratives; when individuals share their stories, they reflect experiences (see also Liamputtong, 2011), creating meaning (Soin & Scheytt, 2006). According to Watson (2009), unlike facts, narratives can speak for themselves. Through analysis of narratives, or stories, a better understanding of the individuals’ experiences can be achieved; as Kleres (2011) explains, “People have specific narrative knowledge—the knowledge of how things have come about” (p. 183). From an organizational perspective, narratives reflect the cultural context of an experience, providing insight into the character of the organization itself (e.g., Soin & Scheytt, 2006). Or, as Soderberg (2006) puts it, “a narrative analysis focuses on interviewee” (p. 397) story-work and how it constitutes organizational reality.

Ultimately, narratives are not fact (e.g., Soderberg, 2006). As Watson (2009) concedes, “To a certain extent a story is a story is a story, so to speak” (p. 448). And as Soderberg (2006) warns, there is an inherent risk of interpreting narratives as fact about an organization or event.

Another potential limitation of narrative inquiry, as Soderberg (2006) notes, relates to the interviewee's need, whether conscious or subconscious, to demonstrate his/ her authority and intelligence. Likewise, interviewees may purposely present themselves in such a way that their emotions, be it anger or frustration, appear "worthy of the audience's empathy" (Soderberg, 2006, p. 401).

While these often taken-for-granted risks were mitigated by treating the narratives as the interviewees' retrospective interpretation or sense making, it was important that I remain aware of the interviewees' context relative to his/ her narrative. The inclusion of multiple interviewees and multiple case studies, and extensive background reading about the organization helped to further mitigate this risk, and triangulate the findings which increased the credibility of the study in general (e.g., Soin & Scheytt, 2006). However, as cautioned by Soin and Scheytt (2006), narrative analysis, like all qualitative inquiry, runs the risk of being influenced by the researcher's theoretical and conceptual assumptions. Though a reflexive research design can lessen this risk, it was critical that I continuously check my research assumptions, and ensure that I was indeed following the data.

### **Design and Selection Criteria**

Case study research remains a target for positivist researchers, who believe it to lack rigor and accuracy (Liamputtong, 2011). And even within qualitative circles, the use of few case studies over several case studies has the potential to draw criticism for being too shallow a sample. To this point, however, Siggelkow (2007) cites the example of a fictitious talking pig, and argues that even "a single case can be a very powerful example" (p. 20). Brower et al. (2000) concur, adding that single case research can provide contextually rich insight. For this study, I chose two similar yet distinct case studies because together they provide an interesting account of NZ public sector organizations' resolve for carbon management: Case Study 1, the CNPS Program (CS1), focuses on the six lead-core departments that were involved in the CNPS program; and Case Study 2: CCP-NZ program (CS2), focuses on 16 councils that were involved in the CCP-NZ program.

While both case studies involved a series of semi-structured interviews (the resultant transcripts form the primary data of the study) with the senior managers responsible for the delivery of the respective program within their organization, CS2 also included a longitudinal component in which 7 of the 16 councils that participated in the first phase of the research are revisited for a second interview a year later (see Table 1). I included the second set of interviews to provide another layer of richness to the data, "expos[ing] different perspectives of reality" (Liamputtong, 2011, p. 27).

Along with the semi-structured interviews with senior managers, both case studies also involved semi-structured interviews with the program architects responsible for macro aspects of program creation and operation. Data resulting from interviews with the program architects serves to triangulate findings from the semi-structured interviews with senior managers.

In preparation for the first phase of interviews, I reviewed GHG emission inventories and management plans. For CS1, this included analysis of the six ministries Emission Inventory Reports for 2007 and GHG Emission Reduction Plans for 2008. For CS2, this included analysis of the 16 councils GHG Emission Analysis and Forecast Reports and Greenhouse Action Plans for 2004 - 2009. In preparation for CS2's second phase of interviews, I analyzed council Annual Reports (2004 to 2010), Annual Plans (2010) and Long-term Community Council Plans (LTCCP) (2009 to 2019).

### **Table 1: Research Design**

Case Study	Phase of Analysis	Organization Type	Number of Organizations Interviewed	Number of Interviewees from Organizations	Number of Program Architects Interviewed	Number of Interviewees
1: CNPS Program	1	Ministry/ Department	6	10	1	11
2: CCP-NZ Program		Local Government Council	16	18	3	21
	2			7	7	0
TOTAL NUMBER OF INTERVIEWS/ INTERVIEWEES						39

Sample selection criteria varied slightly between case studies, given their organizational and respective program mandate. Of the 34 core NZ agencies that were involved in the CNPS initiative (New Zealand Government, 2007), I decided to explore six in CS1 (see Table 2). The six ministries were selected based on their lead role in the CNPS initiative, and because these organizations represent a good cross section of core NZ ministries in general (New Zealand Government, 2007).

**Table 2:** Case Study 1: CNPS Program Interviewees (positions)

Organization	Interviewee(s)
Senior Managers	
Ministry/ Department	
Conservation	Sustainability Manager
Inland Revenue	Sustainability Manager
Economic Development	(A) Procurement and Sustainability Advisor (B) Group Manager for Performance Governance and Assurance (C) Manager of Facilities Management
Environment	(A) Manager, Carbon Markets and Emissions Trading Group (B) Senior Analyst
Health	(A) Senior Advisor, Procurement and Contracts (B) Project Leader, Procurement and Contracts
Treasury	Facilities Manager, Sustainability Manager
Program Architects	
Prime Minister	Helen Clark

The remaining 28 departments involved in the CNPS initiative were not included in this research for reasons of time constraint and limited access to personnel responsible for managing and delivering the initiative within the respective ministry. Following program termination, many key senior managers responsible for the delivery of the program were disestablished, thus removing corporate memory of the CNPS initiative and rendering interviews near impossible in many ministries. The program architect, former Prime Minister Helen Clark, was chosen for CS1 because of her role in championing the CNPS program. My efforts to meet with Nick Smith, Minister for the Environment and Climate Change Issues, were unsuccessful.

Before the CCP-NZ program was terminated its membership included 34 councils,

ranging from small local councils to large regional councils (e.g., ICLEI, 2009). While time constraints and restricted access to key personnel made it impossible to include all councils involved in the CCP-NZ program, I explored 16 councils in CS2 (see Table 3).

**Table 3:** Case Study 2: CCP-NZ Program Interviewees (positions)

Organization	Interviewee(s)	Phase of Analysis	
		1	2
<b>Senior Managers</b>			
<b>Regional Council</b>			
Auckland	(A) Project Leader, Sustainability (B) Senior Policy Analyst, Corporate Sustainability Manager	*	*
Environment Canterbury	Energy Policy Analyst	*	
Greater Wellington	Regional Climate Response Coordinator	*	*
Hawke's Bay	Group Manager Assets Management	*	
<b>District Council</b>			
Far North	Senior Planner	*	
Kaikoura	(A) District Planner (B) District Planner	*	
Kapiti Coast	Senior Advisor, Climate Change and Energy	*	
Rotorua	Business Manager	*	*
Southland	Assistant Corporate Planner	*	*
<b>City Council</b>			
Auckland	Senior Sustainability Policy Analyst	*	
Christchurch	Principal Advisor, Sustainability	*	
Dunedin	Energy Manager	*	*
Hamilton	Energy Manager	*	
Nelson	Senior Policy Planner	*	*
Waitakere	Energy Manager	*	
Wellington	Senior Advisor	*	*
<b>Program Architects</b>			
Local Government New Zealand	CCP-NZ Liaison	*	
ICLEI	(A) CCP-NZ National Program Manager (B) CEO ICLEI, Director ICLEI Oceania	*	

Council selection was based on several factors, including the type of council (regional, district or city), year of initial membership, the milestone achieved while participating in the program, the council's population and location (North v. South Island), and in the end, council's willingness to participate in the research. Ultimately, the 16 councils that I selected for this research represent a good multi-level cross section of NZ councils.

The seven councils that I selected for the second phase of CS2 were chosen from among, and are considered a cross-section of, the original 16 councils (see Table 3). Council selection was restricted by access to key senior managers responsible for the delivery of the CCP-NZ initiative within respective councils; as time passed from program termination, access to senior managers became increasingly difficult. The program architects that I chose for CS2 were selected because of their macro-level perspective and their role in either the creation or delivery of the program within NZ. For example, the CCP-NZ National Program Manager was selected for this study because of their role in coordinating the program with NZ councils. The Manager was the key link between councils and ICLEI. The Director of ICLEI Oceania, CEO

of ICLEI, was chosen for this study because of their macro-level perspective with regard to program operation. The CCP-NZ initiative was predicated on the success of ICLEI's global CCP campaign. As a result, the Director was in a position to compare the effectiveness of the CCP-NZ program against other iterations of the initiative from around the world. The liaison with Local Government New Zealand was selected for this study because of their role in supporting the program, and their ability to comment on the effectiveness of the CCP-NZ National Program Manager and Director of ICLEI Oceania, in so far as it relates to the CCP-NZ program.

It should be noted that my attempts to meet with representatives from other partner agencies, such as the Energy Efficiency and Conservation Authority and the Ministry for the Environment were unsuccessful. Furthermore, as with CS1, my attempts to meet with Nick Smith, were unsuccessful.

### **Execution of Semi-structured Interviews**

The nature of this topic and the specific focus of the research has the potential to be politically charged and operationally sensitive. As a result, it was important that I consider the ethics associated with both the line of inquiry and my interactions with interviewees (e.g., Myers & Newman, 2007). Liamputtong (2011) notes that while qualitative research typically does not cause physical harm to the participants, there are nevertheless vital issues that must be considered in order to maintain an ethical decorum. To this end, and in accordance with the University of Canterbury's policy on field interviews with human subjects, I attained clearance from the University's Human Ethics Committee for all field interview related components of the research. Before the interviews occurred interviewees were required to sign a consent form. In signing the consent form, interviewees acknowledged that their participation was strictly voluntary, and that they were free to decline to answer any questions or withdraw from the study at any time without disadvantage. Additionally, I provided each interviewee with a signed security and confidentiality form, which indicated that his/ her anonymity would be preserved.

Initial participant recruitment for CS1 began in early June 2009, mid-August 2009 for CS2. Initial recruitment was in the form of an email, within which I included an information brief detailing the research objectives and the nature of the research. Because of the termination of the CNPS and the CCP-NZ programs, it was important to make contact with prospective interviewees quickly, as many were becoming disestablished in the near-term.

Liamputtong (2011) suggests that the purposive selection of participants for their knowledge and unique experience gives the research credibility. With this in mind, prospective interviewees were purposively targeted for their expertise and experience with the CNPS the CCP-NZ programs, respectively. Myers and Newman (2007) caution that interviewing only senior officials may lead to elite bias. While this is likely true in many other studies, it is specifically the views and experience of the senior managers that was sought in this study (e.g., Carpenter & Suto, 2008).

While the study, in the end, included 39 interviewees, representing both case studies, 44 prospective interviewees were initially approached. Though appreciating the merit of the research, some prospective interviewees were unable to participate for reasons of availability and accessibility. Critically, the 39 interviewees who ultimately participated in the research satisfied the need for cross-sectional organization representation (e.g., Liamputtong, 2011).

As for the interview strategy, Pepper and Wildy (2009) liken the semi-structured interview, when well executed, to an art. Similarly, at the base of all qualitative interview techniques is the need to remain calm, organized, and prepared (e.g., Myers & Newman, 2007). This latter point is particularly critical in the semi-structured interviews, as the very nature of a semi-structured interview is to allow the conversation to take its course and allow the



interviewee the opportunity to tell his/her story (e.g., Feldman et al., 2004). In general, if the interviewer fails to remain calm and organized, the tone of the interview can become tense. The interviewee is likely to sense the interviewer's state of mind and react accordingly, potentially creating a positive feedback of discomfort which will influence the dialogue and affect the level of information the interviewee wishes to divulge. Moreover, as noted by Myers and Newman (2007), the interview is an artificial situation that intrudes on the interviewee. Given that this intrusion may influence the behavior of the interviewee, a phenomenon known as the Hawthorne Effect, and thus the results of the interview, it was important that I be as respectful as possible.

In preparation for each interview it was critical that I become extensively familiar with the organization and its association with the topic in question, and importantly, become aware of the interviewee's role within the organization. As for the former, the organization's carbon profile, its commitment and actions on carbon mitigation, and its relationship with the respective program was thoroughly explored (including analysis of Government, ministry and council cabinet and board reports, media releases, and other strategic documents). This background research allowed for a better understanding of the organization's vision, values, ethos, and resolve with regard to climate change and carbon mitigation, thus fostering a more informed dialogue with the interviewee.

Dialogue was further facilitated by well thought-out questions. I asked each interviewee a similar set of semi-structured questions (e.g., Bernard & Ryan, 2010). In order to gain insight into the evolution of the CNPS and the CCP-NZ programs, interview questions reflected elements of the study's theoretical framework, deLeon's (1982) Termination Theory. More specifically, the questions, while semi-structured, were designed to allow the interviewee the opportunity to provide a window into his/her experience with the respective organization as it relates to climate mitigation. As cited in Myers and Newman (2007), Rubin and Rubin suggest that the qualitative interview is like a pair of night goggles, "permitting us to see that which is not ordinarily on view and examine that which is looked at but seldom seen" (pp. 2-3).

Recognizing that the interview may stress or pressure the interviewee (e.g., Myers & Newman, 2007), I began each interview with general questions (broad and open-ended) and became more specific and probing as the interview progressed (e.g., Liamputtong, 2011). The purpose of this method is to create a sense of comfort with the discussion before moving into the potentially more difficult questions (e.g., Gertsen & Soderberg 2011). This approach also allows the interviewee more freedom in telling his/her story. Importantly, questions were generated with the understanding that the interview should remain a jointly constructed, fluid relationship between the interviewer and interviewee (Hand, 2003); the interviewer is a co-author of the narrative being told (Gertsen & Soderberg, 2011; Soderberg, 2006). It should also be noted that while the interview questions were designed primarily to elicit conversation, some questions, despite qualitative research convention, were conceived with a dichotomous response in mind (Liamputtong, 2011).

Finally, in preparing for the interviews, it was important that I be aware and consider the drawbacks of the semi-structured interview methodology. Recognition of the pitfalls of this approach allowed me to mitigate their occurrence, or at least make efforts to minimize the influence on the research.

Interview execution occurred face-to-face. It is important to note that while face-to-face interviews can be time consuming, unlike surveys which tend to be "fragmented and decontextualized" (Gertsen & Soderberg, 2011, p. 800), the narratives they elicit can provide access to rich personal experiences. Interviews with senior managers from the lead-core agencies involved in the CNPS program took place in September 2009 (Wellington, NZ), while the interview with the program architect responsible for the CNPS program occurred in April 2010 (Manhattan, USA). Duration of the CNPS program interviews varied from 38 minutes to

1 hour, 47 minutes. Interviews with senior managers from the CCP-NZ program member-councils took place throughout NZ with the first phase occurring in January and February 2010, and the second phase occurring in February 2011, one year following the first stage of interviews. Interviews with the program architects involved with the CCP-NZ program occurred in February 2010 (Wellington, NZ), July 2010 (Melbourne, Australia), and July 2011 (Wellington, NZ). The CCP-NZ program interviews lasted between 32 minutes and 1 hour 21 minutes.

With two exceptions, all interviews took place in either the interviewee's office or a private conference room. In all instances, the environment was comfortable and non-threatening to both interviewees and researcher alike; interruptions did not occur. The majority of interviews involved only one interviewee, but some did involve two or more interviewees.

Interviews were recorded with a digital recorder, and the subsequent unsanitized transcripts were later returned to the interviewees for their approval. Participants were afforded the opportunity to clarify and modify their statements if they felt it necessary. It was important that the interviewee had the opportunity to check and ensure that the narrative did in fact represent his/ her experience. Horsburgh (2003) notes that this process may be problematic, given that the researcher and interviewee have different agendas and perspectives. However, given the ambiguity of language and resultant interpretation of questions, this process is important because it allows the opportunity for clarification (Myers & Newman, 2007) because the researcher may understand the gist of what the interviewee is saying at the time, following transcription, the meaning may be difficult to decipher (e.g., Feldman et al., 2004). This feedback process also serves to increase the rigor and validity of the study (e.g., Liamputtong, 2011).

Though some interviewees identified areas that they would prefer remained absent, or that they felt misrepresented themselves or their organization, the majority of interviewees signed off on the transcript without alteration. In any event, the minor alterations that did occur had no significant bearing on the research, and in the end all transcripts were approved.

### **Interpretation of the Data**

Using transcripts from the semi-structured interviews, I manually coded and studied the data to develop emerging themes. In light of the objectives of this study, themes emerging from the data were examined to determine the rationale for program termination and the resolve of government organizations to continue efforts for carbon mitigation. In addition, as Termination Theory is the theoretical lens through which the data were assessed, themes were explored to determine whether the cancelling of the CNPS and the CCP-NZ programs aligns with deLeon's (1982) rationales for program termination. While theory did influence my development of the semi-structured interview questions, new themes did emerge from the data.

Given that the interviews occurred over an extended period of time, I began the preliminary analysis of the interview transcripts immediately following transcription. This analysis also included review of interview and field notes. While the purpose of this assessment was purely exploratory, and a prelude to more in-depth attention once all the interviews were complete, it nonetheless provided initial insight for theme development. The inclusion of interview and field notes in this process, as described by Ryan and Bernard (2003), also served to ensure continuity with the transcript data.

Once all the transcripts had been transcribed, and before primary data analysis occurred, I separated CS1 data from CS2 data; likewise, with regard to CS2, data resulting from the first phase of interviews was separated from data resulting from the second phase. While the resultant data from the case studies was reunited, at this point, and in order to maintain the integrity of the respective case study, each case study was assessed in isolation.

I began narrative analysis with a quick reading of the transcripts (Step 1, see Table 4). Doing this for all the transcripts provided a sense of tone and context; this also allowed for improved recollection, which aided in the initial identification of similarities and themes between the transcripts. Following, I reread each transcript, slowly, so as to really appreciate the narrative and understand the stories held within each transcript (Feldman et al., 2004; Step 2). Key quotations were highlighted using different colour markers to represent themes (e.g., Ryan & Bernard, 2003). As noted by Coffey and Atkinson (1996), in spite of the open-ended nature of the semi-structured interview questions, the initial themes tend to emerge from the interview protocol. With that said, however, Dey (1993) notes that because of the open-ended nature of semi-structured interview questions, all themes cannot be anticipated in advance of data analysis.

**Table 4:** Steps to data interpretation

Step	Description
1	Quick reading of all the transcripts
2	Detailed reading and highlighting of transcripts
3	Render themes within each transcript
4	Determine common themes within each case study
5	Re-organise by theme, drawing examples from each transcript
6	Summarize findings from each case study

The next step involved rendering the themes within each transcript (Step 3). For each transcript, this involved cutting, pasting, and gathering highlighted quotations onto a separate page(s), organised by colour-code (e.g., Bernard & Ryan, 2010). Themes were then distilled down to those common within the respective case study and phase (e.g., Pepper & Wildy, 2009) (Step 4). Ultimately, within CS1, I identified five primary themes, within CS2 phase 1, I identified seven primary themes, and within CS2 Phase 2, I identified six primary themes. As I culled the themes, I identified sub-themes.

At this point, I gave each theme a colour-coded page(s) and quotations from each organization that reflected that theme were cut and pasted onto the corresponding colour-coded page(s) (Step 5). This was done for each case study and stage. For example, for CS1, I created five individually colour-coded pages, representing the five primary themes identified in Step 4. I then cut quotations from each of the six transcripts (organizations) and pasted them onto the corresponding colour-coded theme page(s). And finally, I summarized each case study (Step 6). While the findings write-up is not meant to be an exhaustive account of all the quotations from the transcripts, it pulls together the most appropriate quotations to articulate a narrative which conveys the interviewees' stories through the common themes identified in Steps 4 and 5 (e.g., Malterud, 2001; Pepper & Wildy, 2009).

Of critical importance, as noted by Pepper and Wildy (2009), was to document the theme development process, so as to ensure that what is "claimed to be analysed is being analysed" (p. 23); transparency serves to improve the validity of the researcher's approach (Feldman et al., 2004; Polkinghorne, 2007; Ryan & Bernard, 2003). Subsequent actions involved comparing the findings from CS1 to CS2, and ultimately considering the findings in the context of Termination Theory.

While narrative analysis of the interview transcripts was the primary method of analysis

used in this study, word count analysis was used on CS2 council strategic reports to determine the occurrence of key words related to climate change and climate change mitigation: “climate change,” “carbon,” “carbon management,” “carbon neutral,” “Communities for Climate Protection - New Zealand Program” (or “CCP-NZ”). I included this line of inquiry to triangulate the data, and further enhance the validity of the study (e.g., Carpenter & Suto, 2008).

### **Application of Theory**

The role of the theoretical framework is to provide a conceptual view of how relationships among several factors are important to the objectives of the research. With this in mind, I selected deLeon’s (1982) Termination Theory for the study because it allows for an exploration of the evolution, from inception, application, termination, through next steps, of the CNPS and the CCP-NZ programs. In application, termination theory broadly refers to two primary themes: rationales for policy or programme termination, and obstacles to policy or programme termination.

Other appropriate and interesting theoretical frameworks also lend themselves to this line of inquiry. Institutional theory (e.g., Bebbington et al., 2009), for example, specifically institutional entrepreneurship, provides insight into how actors leverage political skill to strategically transform institutions and drive change (Dacin, Goodstein, & Scott, 2002; Levy & Scully, 2007; Wijen & Ansari, 2007), emphasizing how actors must break the institutional logic and institutionalize the practice they are championing (Garud, Hardy, & Maguire, 2007). Given NZ’s political shift in 2008, the application of institutional entrepreneurship would allow for an interesting exploration of the motivations and drivers for the new Government’s (National) abandonment of many of the previous Government’s (Labour) climate mitigation strategies.

Similarly, socio-cultural theory explores how alternative ways of perceiving and organizing can provide effective solutions to pressing social problems; Verweij et al. (2006) apply socio-cultural theory to the problem of climate change, positing that the Kyoto Protocol has “stagnated.” In this vein, given that carbon neutrality is no-longer an aspiration of the National-led Government, the application of socio-cultural theory to this line of research could shed light on Government’s intended direction vis-a-vis climate change mitigation.

I held off direct application of Termination Theory until after theme development occurred to avoid too heavy a reliance on prior theorising, which as Charmaz (1990) argues, can limit the development of new ideas. Avoiding theory, on the other hand, as Ryan and Bernard (2003) caution, can result in the failure to make connections between the data and the research objective. This approach, along with reflexive considerations, lessened the likelihood of simply finding what I was looking for in the data, instead of following the data (e.g., Ryan & Bernard, 2003).

While application of theory occurred after theme development, it did play an initial role in influencing the development of the semi-structured interview questions. Considering the data through this lens shed light on the rationale(s) for termination of the CNPS and the CCP-NZ programs, and ultimately aided in the determination of whether the termination of these two programs aligns with deLeon’s (1982) model for program termination.

### **Organization of Results**

I organized the research findings around two chapters. The first chapter, though not strictly an analytical or interpretive chapter, attempts to presents the findings as a descriptive and coherent narrative. Here, a similar experience across the case studies was revealed. While themes varied slightly between case studies, a common thread did present. This is in part, perhaps, a result of the theory’s influence on interview question development. The similarity

is also likely because of the fact that all organizations involved in this study are public sector organizations and thus share a similar mandate and ethos, that is, as Broadbent and Guthrie (1992) suggest, to “provide utilities and services to the community and which have traditionally been seen as essential to the fabric of our society” (p. 3).

It is important to note that the themes that follow are not an exhaustive representation of the themes that emerged from the transcripts, but instead depict the themes common to all organizations from the respective case study (and respective stage). Additionally, some of the themes are supported by sub-themes, and it is within the sub-themes that the differences between the case studies become more evident.

Analysis of CS1 (6 organizations) resulted in five dominant themes:

1. Support, which discusses how well the program was supported;
2. Application, which explores the operational efficiency of the program;
3. Termination, which explores the ultimate cause of program termination;
4. Outcome, which considers the effectiveness of the program; and
5. Moving forward, which presents agencies’ next steps.

Analysis of CS2 S1 (16 organizations) and CS2 S2 (7 organizations) resulted in the same five themes, and included two additional dominant themes:

1. In the Beginning, which explores council rationale for joining the program;
2. Final Thoughts and Membership Fee, which discusses the program’s greatest influence on councils and councils’ willingness to fund the in the absence of the Ministry for the Environment’s assistance.

The final section of this chapter presents the results of word count analysis of Annual Reports, LTCCPs, and Annual Plans for CS2 S2 organizations.

The second findings chapter interprets the data through deLeon’s model of program termination. The purpose of this approach is to determine whether the dismantling of the CNPS and the CCP-NZ programs aligns with economics, programmatic inefficiency, and/ or political ideology. Here, I focused on the themes that concern program delivery, application, and termination. Further, at this stage, while the previous findings chapter was organized by case study, in order to assess the appropriateness of deLeon’s model, results from CS1, CS2 S1 and CS2 S2 were aggregated.

In addition to presenting the research findings in my Thesis, I also discussed the results at the 9th Australasia Conference on Social Environmental Accounting Research, Albury, Australia (Birchall, Ball, Mason, & Milne, 2010), and the 16th International Research Society for Public Management Conference, Rome, Italy (Birchall, 2012). My results have also been published in peer-reviewed journals (Birchall, 2013; Birchall, 2014a; Birchall, 2014b; and, Birchall, Ball, Mason, & Milne, 2013).

### **Concluding Thoughts**

My doctoral work was more than a PhD thesis, it was a life experience, a roller-coaster ride of obstacles (including a series of devastating earthquakes) and rewards that has made me a better researcher. While there are number of things that I would have done differently from an experiential perspective, I would not change my research objectives or approach.

I chose a qualitative methodology for this study because of the need to extract the personal narratives of the senior managers responsible for the delivery of the CNPS and the

CCP-NZ programs. This approach effectively allowed me to explore meaning, interpretations, and individual experiences, all of which are critical in order to better understand the dynamics influencing the termination of the CNPS and the CCP-NZ programs. While this approach was time-consuming and expensive (face-to-face meetings from around the country), I believe it yielded richer data than would have been possible from a more quantitative approach.

With that said, I believe the study could have benefited from a larger set of interviewees, representing a greater number of organizations. While the study set was representative of NZ public sector organizations involved in the CNPS and CCP-NZ programs, this would have increased the depth of the narrative further. Likewise, the overall story would have been enhanced by an actual interview with the Minister for the Environment and Climate Change Issues, instead of relying on media and government reports to glean his view on Government's new direction on climate change.

As for my study's findings, it was illustrated that the CNPS and the CCP-NZ programs grew out of the Labour-led government's desire to make sustainability a pillar of NZ's national identity. This came at a time when sustainability and climate change were featuring prominently on international agendas, and Labour wanted to be a force in this area (e.g., Birchall, 2014a; Birchall et al., 2013).

While National openly recognised climate change as the greatest environmental challenge of our time (before and after winning the 2008 election), and advocated the need to incorporate climate policy into economic growth plans, it did not support Labour's ambition for leadership on carbon mitigation. Arguing that actions associated with the CNPS and the CCP-NZ programs should occur without costly initiatives, the newly elected National-led government quickly dismantled the CNPS program and halted funding, ultimately ending the CCP-NZ program.

Using deLeon's model for program termination to explore the dismantling of the CNPS and the CCP-NZ programs, I found that though economic constraints and programmatic inefficiencies may have played a role, political ideology was the primary rationale for program termination (Birchall, 2014b).

With the ideological shift towards strong neoliberal market environmentalism, Government support for initiatives like the CNPS and the CCP-NZ programs has declined (Birchall, 2013; Birchall et al., 2013). And though the National-led government does believe that the good cost benefit initiatives associated with these programs should continue, Government emphasises that the actions should occur without requiring Government assistance.

The data suggest, however, a clear need for Government leadership and support in this area. Since the termination of the CNPS program, efforts to achieve carbon neutrality have ceased, with organizational resolve towards carbon management in decline (Birchall et al., 2013). The experience within the CCP-NZ program organizations is similar, with plans for carbon neutrality recast as aspirational and carbon management as non-target orientated-measures, but not necessarily emission reduction-driven (Birchall, 2012).

Overall, notwithstanding the desire of some organizations to continue with program objectives, NZ public sector organisational resolve towards these goals has weakened. On the national level, the Government's new climate change policy focuses on a revised emissions trading scheme, and a national emission reduction target of 50% reduction in CO<sub>2</sub>e, as compared to 1990 levels (Birchall, 2014a; New Zealand Government, 2013). However, with its recent announcement to move away from the Kyoto Protocol's second commitment, the Government is unclear how national emission targets will evolve in the near-term (New Zealand Government, 2012).

Describing the research approach, as I have done here, lends credibility and authenticity to the research process and the study itself. This is particularly important in qualitative research

because of the inherent potential, resulting from its interpretive nature, for bias and soft science (Liamputtong, 2011). In demonstrating the approach taken to execute the study, this article thus highlights the value of qualitative research as a tool for extracting and understanding personal experiences and context.

This study is significant because it goes beyond existing academic work to provide a critical analysis of how the NZ Government perceives, rationalizes and acts on climate change and carbon mitigation. By approaching this study through in-depth longitudinal case studies, employing termination theory as the theoretical lens, and using narrative analysis to extract the experiences of those involved in the carbon mitigation strategies, this study provides an inside view of the state of Government and public sector organizational buy-in for carbon mitigation in NZ. More practically, this work provides Government policy makers with hands-on insight into how best to weave climate and carbon management policies with other national strategic policies such as agriculture and energy, which in 2009 were responsible for 46% and 44%, respectively, of domestic GHG emissions (New Zealand Government, 2011). Additionally, beyond NZ, lessons learned from this analysis have also shed light on the effectiveness of an international climate change mitigation network that is poised to expand into Europe.

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