

Making Climate Action Meaningful: Communication Practices in the New Zealand Climate Movement

Jonathan Oosterman

Abstract

In the face of still-rising greenhouse gas emissions, climate movement participants seek to make climate action meaningful to people, thereby mobilising them to create a social consensus on climate action and the political will for change. Understanding current approaches to climate communication is crucial for ensuring that communication practices play the vital role they will need to as the climate crisis continues to deepen. Grounding my work in the experiences of climate movement participants, in this article I take a movement-centred activist scholarship approach to research on climate communication decision-making.

Keywords: climate, movement, communication, framing, emotion, activist scholarship

Introduction

Climate change is already causing widespread suffering, and continuing increases in greenhouse gas emissions signal the likelihood of far greater suffering in the coming decades. In order to safeguard the wellbeing of people and the planet, significant social change is essential, and it is therefore up to civil society to take action. As Hoffman & Jennings (2012, p. 59) state, the “generation of a *social* consensus is an important follow-up to the generation of a *scientific* consensus” on climate change.

Instead of a social consensus, however, we have “climate silence” (Rowson & Corner, 2015, p. 4). Immerwahr (1999, p. 13) writes that “people literally don’t like to think or talk about the subject”. While a significant portion of the public expresses concern about the climate crisis (see, e.g., Motu Economic and Public Policy Research, 2015), serious engagement has largely been lacking. As Rowson & Corner (2015, p. 6) put it: “We are changing the climate, but it’s not yet changing us.”

The climate movement therefore confronts an increasingly urgent problem, combined with an unpromising mix of active resistance, lukewarm concern, lack

of engagement, and lack of hope. In the face of this, movement participants seek to bring about a “social consensus” on climate action by engaging with people and communicating their understanding, or ‘framing’, of the issue, and undertaking actions that draw attention to this framing. If successful in their framing efforts, they influence the public’s own ways of framing the issue, with the resulting change in framing manifesting in new ways of thinking, feeling and acting (Benford, 1997). However, there is a large gap between movement framing and public framing, and this gap is difficult to bridge. Rowson & Corner (2015, p. 28) state: “(T)here is no shortage of bright ideas for climate policies that would keep us within a safe carbon budget... The bigger challenge is how do ‘we’... go about persuading people (so) that policies like these happen”.

This article reports part of the findings of a broader project on communication practices in the New Zealand climate movement that also included detailed consideration of moral and economic framing (Oosterman, 2016a, 2016b). Here, I consider a core dynamic that underlies all climate communication: the balance climate communicators strike between, on the one hand, speaking ‘the facts’ and ‘speaking their own truth’, and, on the other, ‘meeting people where they are at’.

Research Approach

In this research project, I took a movement-centred activist scholarship approach to research on climate communication decision-making via in-depth semi-structured interviews with fourteen members of the New Zealand climate movement. The choice of participants reflects my broad conception of the climate movement (see also North, 2011; Garrelts & Dietz, 2014). Participants included campaigners, educators, permaculturalists, community project co-ordinators, protesters, and politicians. Participants were involved with campaigns and projects based around deep sea oil, fracking, coal, transport, food and farming, divestment, community-building, and broader sustainability issues. I also actively sought a diversity of participants in terms of gender, age, ethnicity, and geographic location. Organisational affiliations of research participants are noted throughout the article to provide context; however, all participants spoke in an individual capacity in the interviews.

In the words of Laura Bisailon (2012, p. 610), an activist scholar is “(a) person who foregrounds the political aims of the research she or he carries out”. Fuster Morell (2009, p. 41) adds that activist research must not be “about” social

movements but rather “from and for” them (see also Casas-Cortés, Osterweil & Powell, 2008). In developing our efforts to respond to the climate crisis, the experiences and perspectives of those involved in the climate movement are fundamentally important. Through this research project, I therefore sought to engage with the “socially lived theorizing” (Casas-Cortés et al., 2008, p.47) of movement participants, and I approached the research as a process of the co-development of knowledge (see, e.g., Derickson & Routledge, 2015). I undertook two interviews with each research participant and integrated multiple feedback processes into the research, thereby allowing opportunities to deepen the analysis being developed.

As part of my activist scholarship approach, I draw on both academic and activist literature. Furthermore, to borrow a comment by anthropologist David Graeber originally made about anarchism, rather than ‘High Theory’, what I believe climate activism needs is ‘Low Theory’: “a way of grappling with those real, immediate questions that emerge from a transformative project” (quoted in Gaisford, 2010, p. 30; see also Sutherland, 2012). I have therefore oriented this research towards the “real, immediate questions” of climate communication, with a particular focus on face-to-face communication.

In this research, I use a broad conception of framing, consistent with Lakoff’s (2014, pp. xi-xii) description of frames as “mental structures that shape the way we see the world”. I assume that it is impossible to avoid framing (Lakoff, 2014; Corner, Markowitz & Pidgeon, 2014), and that framing is both expressive and strategic; it articulates a worldview or ideology, and may also act to convince and inspire (Goodwin & Jasper, 1999; Westby, 2002; Kruse, 2014). Thus, Brulle (2010, p. 86) writes of how “social movements seek to spread familiarity and acceptance of the alternative discursive frame, and to generate political pressure to implement institutional change based on this new worldview”.

Two principal bodies of work consider climate framing: climate movement literature and climate communication literature (see, e.g., Moser, 2010, 2016; Wibeck, 2014; Ballantyne, 2016). Within the former, there has been a focus on distinguishing between two broad streams of, and forms of framing in, the climate movement: one being ‘climate justice’ and the other variously termed ‘climate change’, ‘climate science’ or ‘climate action’ (see, e.g., della Porta & Parks, 2014; Garrelts & Dietz, 2014; Dietz, 2014; Baer, 2014; Hadden, 2015; for contrasting approaches, see North, 2011; Wahlström, Wennerhag & Rootes, 2013; Caniglia et al., 2015; Kidner, 2015). Within the climate communication

literature, a number of different forms of framing are described. In addition to “the traditional framing of climate change as an environmental problem”, Wibeck (2014, pp. 400-1) describes a security framing, a religious or moral framing, an economic framing, and a health framing (see also Nisbet, 2009).

This research project is intended to make an original contribution in a number of ways. Thus far, in the development of the bodies of literature mentioned above, there appears to be a lack of communication between those working on the climate movement and those working on climate communication. Moser (2016, p. 351) notes that “The role of communication specifically in mass mobilization and the climate movement has remained relatively neglected over the past 5 years.” Moreover, more generally, Moser (2010, p.33) notes that there has been a “lack of exchange among those *doing* the communicating and those *researching* it”. Thus, there is a lack of detailed climate communication literature that takes a movement-centred perspective, and this research project seeks to address this gap.

Furthermore, this research is intended to complement previous framing work by adopting an alternative approach to both those mentioned above. In this article, I direct my attention to the core dynamics that underlie framing and communication decisions. I seek to give attention to “the multi-layered complexities of frames and framing activities” (Benford, 1997, p. 422) and to avoid characterising frames as “monolithic, static entities” (Snow, Benford, McCammon, Hewitt & Fitzgerald, 2014, p. 36). In my attention to framing decisions, I also give attention to the process of framing, which has been underexplored (Benford, 1997; Snow et al., 2014). To support this approach, I specifically directed interview discussion towards research participants’ experiences of climate communication decision-making.

In addition to contributing to the climate communication literature, this research project also adds to the limited body of academic literature on the New Zealand climate movement (see, e.g., Willoughby-Martin, 2012; Moon, 2013; Fougère, 2013; O’Brien, 2013a, 2013b, 2016; Kidner, 2015; Cretney, Thomas & Bond, 2016; Diprose, Thomas & Bond, 2016). Furthermore, it is the first extended piece of academic research on New Zealand climate movement communication that draws on perspectives from across the movement.

Making Climate Action Meaningful

You can tap into core meanings and values... and present them as

what's at stake... Essentially, the essence of framing around anything is you giving the meaning to the struggle... and your opponent disagrees with the meaning you're giving to it, and they try and give another meaning to it, and it's essentially about who wins the battle of meaning.

– Steve Abel (Greenpeace)

Interviewees described in their own words how they understand their communication practices. Mike Smith (Ngāpuhi, Ngāti Kahu; Greenpeace) spoke about helping people “see the world through a climate-changed lens”. Dayle Takitimu (Te Whānau-ā-Apanui, Ngāti Porou) spoke about a desire to “try and get the great New Zealand public on board”, while other interviewees spoke of attempts to bring about a “change in consciousness”, and “shift the public debate”.

It is clear that the context of communication influences decisions that climate movement participants make around the content of communication. As climate communication scholar Susanne Moser (2010, p. 39) comments: “What message should we give to people? The first answer to (this) question may seem rather unsatisfactory, namely, ‘It depends!’” Research participants discussed a number of contextual influences on their framing decisions: the campaign focus, the type of activity during which the communication takes place, the degree of engagement and communication that the activity allows for, and the audience that is addressed. In addition to this, groups have different goals of communication, related to their theories of, and strategies for, change, which are themselves forms of climate framing.

Common across research participants, however, was the need to engage with various dynamics at play in climate communication. Central among these is the way in which communicators balance speaking ‘the facts’ of the climate crisis and ‘speaking their own truth’ with ‘meeting people where they are at’. Thus, Dayle Takitimu spoke of “trying to get as broad support as possible... while still remaining true to ourselves”.

The first, and most basic, way that climate communicators make climate action meaningful is by providing information about the climate crisis. In addition to this, Steve Abel suggested that “you will actually get much greater support” if you “speak to your own truth”. He explained: “Often it's about remembering what at its core we're actually here for”. Similarly, Lakoff (2014, p. 160) writes: “Be sincere. Use frames you really believe in, based on values you really hold” (see also Goodwin & Jasper, 1999; Crompton, 2008; Shenker-Osorio, 2012).

Climate movement participants communicate both information about the climate crisis and ‘their own truth’ through diagnostic and prognostic framing. Diagnostic framing identifies problems and their causation, while prognostic framing suggests solutions, strategies and tactics to respond to these problems, and thereby also speaks to the goals of communication. A detailed discussion of the forms of diagnostic and prognostic framing used by interviewees is beyond the scope of this article; however, I wish to highlight two points. Firstly, participants emphasised the importance of economic drivers of the climate crisis. Thus, Katherine Peet (One Voice Te Reo Kotahi, Network Waitangi Ōtautahi, Sustainable Ōtautahi Christchurch) spoke of the “crisis that we face, brought on by the economic system and manifesting itself in climate”. Secondly, in terms of prognostic framing, we can consider behavioural change, broadly understood, as the aim of climate communication. Changed behaviour includes both reduced carbon footprints and increased political participation, building public capacity to engage with climate issues as well as building public demand for adequate climate policy (see, e.g., Stern, 2000; Torgerson, 2000; Corner et al., 2010; Ehrhardt-Martinez, Rudel, Norgaard & Broadbent, 2015; Ballantyne, 2016). Such behaviour change will cumulatively create social change, via changed social norms and mass mobilisation (Moser, 2010; Brulle, 2010).

The Communication Gap

In exploring climate communication efforts, it is important to consider the ‘gap’ between climate communicators and the public. Benford & Snow (2000, p. 626) note that “The very existence of a social movement indicates differences within a society regarding the meaning of some aspect of reality” (see also Bedall & Görg, 2014). Similarly, Rosewarne, Goodman & Pearse (2014, p. 100) observe the “gulf between climate activists and the rest of society”, particularly noting the difference in the emotional experience of the climate crisis. In their words, “many interviewees found themselves in a world apart” (2014, p. 99).

An important aspect of the communication gap is the sense of “confusion and disconnection” people have around climate change. Niamh O’Flynn (350 Aotearoa) stated: “I don’t think it has really hit home that it’s a serious concern for now and it’s inevitable and we have the power to make the changes that need to happen now”. Participants suggested that while people may believe that they understand the issue, many people don’t “understand the scale of the crisis” (Matt Morris - Edible Canterbury, Soil & Health Association of New Zealand; see also

Rayner & Minns, 2015; Moser, 2010).

Participants described the challenge of moving beyond the dominant framing used in the discussion of issues (see also Lakoff, 2014). They referred to ways in which the current political economy shapes our lives, influencing people's framing of the climate crisis and thereby constraining climate action. Mike Smith spoke of being up against "the habits of a lifetime", while Gareth Hughes (Green Party) referred to the ways that fossil fuel companies are part of people's lives: "Maybe BP isn't seen as so bad if you visit them twice a week and you buy your pie from them".

A range of works discuss cognitive and behavioural challenges in responding to climate change (Norgaard, 2009; Moser, 2009; Crompton & Kasser, 2009; Leining, 2015). This material supports the sense of disconnection noted by interviewees. A number of articles note that there is "widespread misunderstanding" of climate change even among highly educated adults (Norgaard, 2009, p. 18). Roeser (2012, pp. 1033-4) notes that "Empirical studies show that people lack a sense of urgency", while Weber (2015, p. 1) speaks of people's "insufficient visceral reaction to the risks of climate change". Lakoff (2010, p. 73) suggests that the "system of frames" needed to understand the climate crisis has to be "built up over a period of time" and "This has not been done".

There is also difficulty with the translation of understanding and concern into action (McCarthy et al., 2014). Commentators have variously described this as "socially organized denial", "implicatory denial" and "stealth denial" (Norgaard, 2006a, 2006b, 2009, 2011; Rowson, 2013; Cohen, 2001). In an Australian study, Leahy, Bowden & Threadgold (2010, p.858) note that "Most people interviewed had a strong view that environmental apocalypse was just around the corner, combined with an unwillingness to do anything to change that scenario by political action".

In addition to misunderstandings and a sense of disconnection from the climate crisis, the work of climate communication is made difficult by the fact that both 'the 1%' and the global middle class benefit from the current political economy, and largely resist the call for social change. Paul Young (Generation Zero) spoke about the challenge of "overcoming the vested interests, and the sort of excessive power that they have in the political system".

Jeanette Fitzsimons (Coal Action Network Aotearoa, Auckland Coal Action, previously co-leader of the Green Party) described how communication

efforts must be made “against the clamour” from business, politicians, the media and mainstream society (see also Lewandowsky, 2015):

We can flog ourselves about ‘Our communication isn’t good enough’, and sometimes it isn’t, but sometimes it’s just that the noise coming in the other direction is huge, you know, you’re fighting into a hundred-miles-an-hour gale going the other way.

Interviewees spoke about the current ascendancy of the National Party in terms of the actions of the party itself but also in terms of the extensive public support for a party that opposes adequate climate action. Matt Morris stated:

There’s concern out there [and yet] they vote the National Government in... What the hell? It doesn’t make any sense at all... I think what people are looking for is more action to be taken on climate change that enables our status quo to remain in place.

John Peet (Sustainable Aotearoa New Zealand, Engineers for Social Responsibility, Sustainable Ōtautahi Christchurch) also discussed his previous experience communicating with the Labour Party, observing that a core barrier was the question: “How do I get re-elected if I promote those ideas?”, with “a local Labour MP” saying: “If Labour took it on, we’d just take a nosedive. The country isn’t ready for it” (see also Ockwell, Whitmarsh & O’Neill, 2009).

Brulle & Jenkins (2006, p. 84) note that the “social power” of the “powerful vested interests in the existing carbon-based economy... will continue to define values” that also mobilise public attitudes. Barriers to change exist both at the level of political economy and at a cultural and psychological level, and these are intimately related. Norgaard (2006b, p. 366; see also Moser, 2010) observes that: Citizens of wealthy nations who fail to respond to the issue of climate change benefit from their denial in economic terms. They also benefit by avoiding the emotional and psychological entanglement and identity conflicts that may arise from knowing that one is doing ‘the wrong thing’.

Meeting People Where They Are At

“One of the challenges that faces climate activism... is about speaking to values that the people you’re trying to convince have, not just your own values.”

- Paul Young

Having described the gap between climate communicators and the public, I begin here to describe how communicators go about bridging this gap. In their communication efforts, climate movement participants seek to weave in people’s experiences, emotions, values, and their sense of identity and morality, making

the climate crisis feel tangible and real, and speaking about climate action in a way “that people can relate to” (Steve Abel). This begins from the basic aim of making communication accessible, through offering a mixture of solid evidence and stories, avoiding jargon, and speaking in clear “mental images” and metaphors. A number of further elements of this are evident in the comments of research participants: speaking to values; the differences between various publics; dialogue and ongoing engagement; linking the local and the global; and dilution of the message.

Much of the material shared by research participants was in line with a values-centred approach to climate communication (see also Diprose et al., 2016). Thus, Nicole Masters (Integrity Soils, previously spokesperson for the Association of Biological Farmers New Zealand) spoke of how “You’ve got to find what people care about”. Gareth Hughes expanded on this, speaking of a Green Party leaflet: “It talks about how climate change impacts a lot of things people care about, so coffee, alcohol, wildlife, chocolate, farmers, our endangered animals like the Maui’s dolphin, the kiwi bach... Everyone has a reason to care about this issue”.

A range of writers similarly speak of the need to make a “human connection” (Moser, cited in Rayner & Minns, 2015, p. 23) and to “appeal to values that are meaningful for your audience” (Thompson & Schweizer, 2008, p. 14; see also Lakoff, 2014; Wibeck, 2014; Moser, 2010).

The public that is addressed plays an important role in framing decisions. Thus, Jeanette Fitzsimons spoke of the need to tailor your message to specific audiences (see also Benford & Snow, 2000; Hine et al., 2014). Participants offered divergent opinions on the importance of communicating with various publics, for example, business-people, farmers, and those who identify as right-wing politically (see also Jasper, 2004).

Other ways of ‘meeting people where they are at’ and ‘making climate action meaningful’ are through dialogue and ongoing engagement. The “tribal kura” of the iwi Te Whānau-ā-Apanui is a good example of the combination of these. Dayle Takitimu described the tribal kura as “a two-day wānanga at the marae”, approximately once every two months, describing it as “a space (for people) to ask questions and have big... ethical debates”. Discussing Te Whānau-ā-Apanui’s opposition to drilling in the Raukumara Basin by Brazilian petroleum company Petrobras, Dayle Takitimu spoke about the role of the tribal kura in “getting people decision-ready”, thereby “provid(ing) the foundation for the

Petrobras campaign” over the preceding years. She specifically noted the way in which the tribal kura supported iwi members in “being able to say ‘*That’s a climate change issue, that’s a climate issue*’.”

A number of participants suggested that linking the global and the local was a way to connect with people. Paul Young described using “local scale campaigning” such as supporting the Auckland city rail link to show “what tackling climate change looks like”. Further, Steve Abel spoke of the 2015 floods in Whanganui:

We gave people the image of people shovelling silt out of their living rooms, and said, ‘That’s a consequence of climate change, that’s a consequence of the government’s inaction on climate change, and we’re going to see more of that’.

Finally, Jeanette Fitzsimons suggested that “sometimes you do have to dilute the message”:

I think if somebody is so far from being in our court, and from understanding our message, you don’t throw the whole thing at them, that would be crazy, and it would just scare them off... You’re just choosing the parts of the message they’re capable of responding to and understanding, and letting the rest go until they’re in a space where they can receive it.

She added, however, that you can do this without “accept(ing people’s) prejudices”, and without going against your core beliefs and values.

Co-Risk/Co-Benefit Framing

Interviewees described the value of communicating about climate ‘co-risks’ and ‘co-benefits’ (Ürge-Vorsatz, Tirado Herrero, Dubash & Lecocq, 2014) in order to connect with diverse publics. Steve Abel said that “the risk of oil washing on our beaches” is a potentially powerful “battleground”, because it is an “immediate threat” of loss that people strongly respond to (see also Diprose et al., 2016, pp. 166-7). He similarly spoke of the “destruction of ground water, or toxic chemicals or fire coming out of your tap” as “emotive” issues that can be used to oppose fracking. He commented: “What’s going to make this community of people care about fracking? It’s their water.” Catherine Cheung (Climate Justice Taranaki) indicated that, in her experience of working on fracking, this was true, with people connecting more with water issues than with the climate crisis (see also Klein, 2014; Schwom et al., 2015).

Participants contrasted the emotive impact of co-risks with the intangibility of climate change (see also Moser, 2010). Gareth Hughes suggested:

I just think in terms of persuading people, they actually need a concrete visual idea of what the thing they're talking about is, and carbon dioxide is hard, because it's an invisible gas... so an oil spill is something icky and yucky and identified as polluting and toxic, so it's a way to immediately grab a physical image in your head.

He cited the 2011 *Rena* oil spill in relation to this. While, strictly speaking, oil spills are not climate change as such, this illustrates how they can act as a way for people to connect with it.

Interviewees also spoke about other ways of using a focus on co-risks and co-benefits as a bridge to concern about the climate crisis. Paul Young said that a central aspect of Generation Zero's Auckland transport campaign has been "tapping into everyday frustrations" around traffic congestion and the "broad public support for public transport in Auckland", thereby "bring(ing people) along with the idea that... tackling climate is a good thing".

The question of effectiveness is also important. Interviewees suggested that you can work and campaign in ways that will reduce emissions without focusing on the climate crisis (see also Klein, 2014; Ürge-Vorsatz et al., 2014; CRED, 2009; Bain et al., 2015). Nicole Masters gave the example of a young farmer who "doesn't care about anything except money... he doesn't care about climate change", and she spoke of how, by focusing on soil health, which influences this farmer financially, she is able to get wins for the climate (see also McDonald & Kerr, 2011).

Risks and Challenges

If movement participants don't go far enough towards meeting people where they are at, there is the risk of having "no effect, or a negative effect on your listener" (Jeanette Fitzsimons); but if they go too far from 'speaking their own truth', the integrity of their message will be undermined, and once again nothing will be achieved, or the underlying drivers of the climate crisis may even be reinforced. Crompton (2010, pp. 68-9) speaks of these risks in terms of 'trade-offs' in social change efforts, maintaining that "how to manage these trade-offs, where they arise... should be put at the heart of debate about communication and campaigns strategies". This idea is central to my own analysis here.

The risk of not connecting with people takes a number of forms. Several interviewees spoke about not wanting to 'alienate' people or to polarise the issue. As Jasper (2004, p. 13) puts it: "To appeal to your various audiences you must use the meanings they already hold, and pushing too far may cause you to lose

them” (see also Lakoff, 2014; Leining, 2015). Coming from a different angle, Gary Cranston (Climate Justice Aotearoa) cautioned about the lack of communication about “solutions that will be relevant to ordinary people”, while Matt Morris spoke about the risk of climate activism not “actually entering into people’s lives”.

Participants highlighted scientific framing as one form of framing that carries a risk of not reaching people (see also Lakoff, 2010); however, almost all participants drew on aspects of climate science to back up their comments, in combination with other forms of framing. Two participants strongly cautioned about framing the climate issue in terms of emission reduction targets. Niamh O’Flynn observed that this is “a language that people don’t understand”, and suggested that “it takes the focus away from real action and real change”. Instead, she promoted a greater focus on keeping fossil fuels in the ground (see also McKibben, 2012).

Catherine Cheung suggested that climate change can itself be “a barrier” and can “turn people off”. Similarly, Matt Morris spoke of the “many motivations” for Edible Canterbury’s work developing a local food economy, observing that a focus on climate change can block off some of those who have other motivations. A further aspect of the ‘barrier’ to connection is the issue of politicisation: “So every time you try and talk about anything to do with climate, sort of like the colour green appears and if (the audience isn’t) culturally aligned to that programme, then (they) will just switch off” (Matt Morris).

A number of writers also suggest that an environmental framing may not resonate with the broader public (Rademaekers & Johnson-Sheehan, 2014; Corner, 2012). Rowson (2013, p. 3) makes the case that the communication challenge “is compounded by collectively mischaracterising the climate problem as an exclusively environmental issue, rather than a broader systemic threat to the global financial system, public health and national security” (see also CRED, 2009; Lakoff, 2010; Spratt, 2012; Rowson & Corner, 2015). A number of interviewees particularly drew attention to these broader issues, in conjunction with environmental concerns.

The risk of losing the integrity of the message is the second major risk. While it may sometimes be necessary to “dilute” the climate message, at greater levels of dilution the integrity of the message will be lost, and this once again highlights the possibility of climate communication having “no effect, or a negative effect” (see also Kössler, 2014; Snow, Rochford, Worden & Benford,

1986). One example of this cited by participants related to the use of some forms of economic framing.

Interviewees also discussed the danger of being overly focused on climate co-risks, such that “the climate (gets) bumped down” (Steve Abel). Gareth Hughes added:

But yes, I do think it is a problem, in the sense that groups are consciously not talking about climate change because they feel it’s not going to get their message across, and when the whole movement does that it becomes a vicious circle.

These concerns are reflected in Diprose et al.’s (2016) work on opposition to deep sea oil in New Zealand.

Interviewees spoke of dealing with this risk in different ways. A number of participants spoke of prioritising a climate framing (with several describing a recent return to such an approach), while others spoke about focusing on other issues, but still keeping the climate in the picture. Robina McCurdy (Institute of Earthcare Education Aotearoa, Permaculture Institute NZ) spoke of how she always mentions climate change in her work; however, this is done in particular ways: “We are teaching about soil quality, about real, long-term soil fertility, and in that we mention climate change, but that’s one of ‘carbon sequestration, let’s get on with it’.”

In a piece entitled “Can you solve global warming without talking about global warming?”, Romm (2010a) suggests that, in fact, you can’t. Smith & Brecher (n.d.) make the case that “public concern about climate has plummeted (in the US) in direct correlation with the ‘stop talking about climate change’ strategy”. Rayner & Minns (2015, p. 8) note that “While such an approach may indeed be effective (in the short term), it comes with a danger of ‘bright-siding’, which underestimates the extent of change needed” (see also Spratt, 2012).

Such concerns can also be seen more generally in the promotion of “ideologically friendly frames” (Nisbet, quoted in Ytterstad, 2015, p.6; see also Schittecatte, 2015). Thus, Moser & Dilling (2011, p.165) suggest that climate communication should not challenge “the sense of self and basic worldviews” of audiences. However, given that a clear case can be made that the worldviews and values of ‘the 1%’ and the global middle class are what have caused climate change in the first place, it can be justifiably claimed that it is *necessary* to challenge them in order to adequately respond to the climate crisis.

Klein (2014, p. 50) discusses similar issues in relation to the suggestion of various commentators (such as Dan Kahan) that, in order to appeal to right-wing audiences:

environmentalists should sell climate action by playing up concerns about national security and emphasizing responses such as nuclear power and “geoengineering... Kahan reasons that since climate change is perceived by many on the right as a gateway to dreaded anti-industry policies, the solution is ‘to remove what makes it threatening’.

Klein (2014, p. 50) maintains that, in addition to promoting “reckless, short-term thinking”, “this strategy... doesn’t work”. She describes it as “twisting yourself in knots trying to appease a lethal worldview” (2014, pp. 51-2; see also Shenker-Osorio, 2012; cf. Corner, 2012).

In her work on New Zealand climate group Generation Zero, Moon (2013, p. 214) contends that “the privileged objective (of the group) is to make climate change an issue that can be related to by those that benefit from the system’s status quo” (see also Klein, 2014). She suggests that “framing climate change as an accessible issue may undermine the pursuit for systemic change in order to address justice issues and thus work to depoliticise the issue, counter to the broad intentions of many research participants” (2013, p. 114). Despite this, however, she notes the role that Generation Zero has played in building awareness of climate change (2013, p. 137).

Crompton (2010, p. 69) discusses the spectrum of communication and campaign choices that groups face. At one extreme, he describes a narrow focus on achieving specific campaign objectives “even if the values that are activated (and therefore further strengthened) are likely to operate counterproductively at a more systemic level” (see also Crompton, 2008; Corner et al., 2010; Brulle, 2010). He connects this with ‘social marketing’ approaches (see, e.g., Ereaut & Segnit, 2006). At the opposite end, he describes the adoption of “a thoroughgoing and consistent deployment of particular values, even if consistency in appeal to these values sometimes detracts from the effectiveness with which issue-specific campaign objectives are met”. Directly critiquing the former approach, Crompton (2008, p. 5) suggests that the appeal to “immediate personal self-interest”, which “pervades many current pro-environment behaviour change strategies” (and is often associated with forms of economic framing), is problematic. Crompton (2008, p. 6) suggests that communication need not only work with “those motivations which currently dominate within a particular audience”, but may also

“work to bring other, latent, motivations to the fore” (see also Shenker-Osorio, 2012).

While there is a risk of polarisation, this must be balanced with the potential loss of integrity, and long-term effectiveness. Ytterstad (2015, p.14) suggests that “It is important to frame solutions to climate change, but this must be thought of in relation to the objective situation we are in, not primarily what we believe will resonate with public opinion”. Following a similar line of thought, Lewandowsky (2015) implies that, rather than “nuanced cognition” about climate communication approaches, what may be required is, in fact, “deep courage”.

Emotions

You’ve got to have a balance between the fear element of it, and the hope for the future. So it’s important to raise the spectre, as a motivating (force), and as a reality check: You’ve got to get real about this, it’s serious, it’s imminent, and it’s almost guaranteed, so we’ve got to get our heads round that. But secondly we’ve got to have some hope for survival, otherwise people will just give up.

- Mike Smith

Emotions play a central role in climate communication (Roeser, 2012; Moser, 2016). All participants in this research agreed that it is important to make an emotional connection and an emotional impact: “It’s that impact that will change their practices” (Nicole Masters). Paul Young asked:

How do we ignite the intensity of feeling around climate change?
Because the numbers are on our side, the majority of people are concerned, but they’re not intensely concerned enough that they’ll put aside their plans and go to a march.

On the other hand, interviewees also spoke of how the emotional weight of the climate crisis (see also Corner et al., 2010; Moser & Pike, 2015) may manifest as a threat to people’s identity, and may elicit feelings of hopelessness or despair, thereby impacting upon people’s sense of social and political efficacy: “I think the biggest reason why people turn off and don’t engage is that it’s just too big. Once you take it seriously, it’s overwhelming” (Jeanette Fitzsimons). Thus, in their efforts to reach people and promote behavioural change, climate communicators must strike a balance between the need to make an emotional impact and the need to avoid overwhelming people emotionally with the weight of the climate crisis. This balance interacts with the balance between ‘speaking your own truth’ and ‘meeting people where they are at’, described earlier.

Several participants spoke in the interviews of their own personal sense of “desperation” about the climate crisis, as well as their beliefs and fears about a possible economic and social collapse (see also Rosewarne et al., 2014). However, these participants largely indicated that they felt the need to speak more positively with the general public (see also Norgaard, 2006a), not mentioning such issues because “it’s disabling” and “there’s no point to make people more depressed” (Catherine Cheung). Somewhat similarly, Jeanette Fitzsimons described how she might speak with someone who was “pretty indifferent”:

Well you’d have to talk about the nature of the problem, you’d have to talk about ‘Well warming is already starting to change rainfall patterns and wind patterns, and we are going to get more extreme storms and events and so forth, therefore we can’t afford to burn all the fuels that we’ve got’. I might not say to those people ‘80% of all fossil fuels has got to stay in the ground’... ‘We’re not going to have cars in the future’... ‘There are going to be tens of millions of climate refugees and New Zealand’s going to be overrun by them, because it’s one of the few safer places’... ‘Our farmland is going to be absolutely decimated by weather changes’... And I wouldn’t say ‘Oh things might get a little bit drier’ either. I’d say ‘We’re going to have some pretty severe droughts, and in a way they’ve already started’. But I wouldn’t lead them through to the frightening logical conclusion of all this, not just yet.

In contrast, interviewees also offered a variety of strong statements about the climate crisis that they would make when communicating with people. Jeanette Fitzsimons commented: “I have said that... certain behaviours of certain corporations are destroying my grandchildren’s future, which is... a pretty big thing to say”. Mike Smith described how he will speak with audiences about a number of high-end climate impacts, including the potential consequences of a 3.3 metre sea level rise by 2050 (see Hansen et al., 2015), with multi-metre storm surges on top of that. Gary Cranston highlighted the importance of tipping points: “We’re either going to do something that makes a difference, in terms of avoiding tipping points, or we’re not. There’s no such thing as half doing it”. Finally, Steve Abel suggested that “We don’t often enough say, actually the choice we’re making is between dirty energy or the survival of humanity”.

In the academic literature, caution is offered on both sides of this balance. In regard to making the message too ‘comforting’, Rayner & Minns (2015, p. 5; see also Brysse, Oreskes, O’Reilly & Oppenheimer, 2013) specifically critique the ‘2°C remains feasible’ narrative:

(T)he likelihood of high levels of warming and greater extremes, potentially occurring sooner than previously thought – e.g. 3°C in the 2040s (Jackson et al., 2015), 4°C rise in 2060s (Betts et al. 2011) – may be higher than is generally appreciated. Yet arguably these risks are not being communicated adequately, either to political and economic decision makers or to wider publics... Such a comforting message neglects the extreme economic, political and social challenges associated with rapid decarbonisation.

Brulle (2010, p. 92) observes that “One of the most common assumptions in designing identity-based environmental communication campaigns is that fear appeals are counterproductive”; however, he notes that “the academic literature portrays a much more complex picture”:

A number of empirical studies show that individuals respond to threat appeals with an increased focus on collective action... While fear appeals can lead to maladaptive behaviors, fear combined with information about effective actions can also be strongly motivating (See also Romm, 2010b, 2012).

Corner et al. (2010, p. 4) maintain that, overall, the message needs to be: “We know this is scary and overwhelming, but many of us feel this way and we are doing something about it”.

“Empower Anybody and Everybody”

You don’t just give up, you make a difference for the here and now, for the future generations to come, which are inheriting a huge mess... to empower anybody and everybody, to wake them up, give them the tools to turn things round.

- Robina McCurdy

The context for a discussion of hope and empowerment is precisely the widespread hopelessness and disempowerment experienced in relation to the climate crisis (see, e.g., Moser, 2010; Rosewarne et al., 2014; Wibeck, 2014; cf. Aitken, Chapman & McClure, 2011). Furthermore, while the consumption habits of ‘the 1%’ and the global middle class have acted as a major cause of the climate crisis, the habit of political non-engagement is equally important (Ockwell et al., 2009; Cross, Gunster, Piotrowski & Daub, 2015). Roser-Renouf, Maibach, Leiserowitz & Zhao (2014, p. 2) observe that “activism is currently constrained by public beliefs that political activism is ineffective”. Immerwahr (1999, p. 25) states:

Our research suggests that what the public is most sceptical about is not the existence of problems but our ability to solve them. What will

make the public invest energy in these issues is not the conviction that the problems are real, but that we can do something about them.

This directly mirrors participant Niamh O’Flynn’s comment, quoted earlier, that people don’t recognise that “we have the power to make the changes that need to happen now”.

Participants therefore repeatedly spoke of the importance of empowering people, and helping them feel that they can make a difference, individually and collectively (see also Nerlich et al., 2010; Moser, 2016). This influences the aspects of the crisis that they choose to emphasise, with many interviewees suggesting that at least some attention to solutions (prognostic framing) is necessary to empower people and create hope. Nicole Masters suggested that if you don’t “leave them with what’s possible, you’d just have some depressed people who’d continue doing what they’re doing.” Although Catherine Cheung’s fracking presentations are largely focused on fracking itself, she said “I try to end with something positive” such as speaking about renewable energy, because “looking into the future is important”.

In line with comments from participants, Roeser (2012, p. 1038) notes that “in addition to fear, hope is needed” (see also Brulle, 2010). Similarly, Futerra (2005) suggests: “Don’t create fear without agency” (see also Snow et al., 1986; Roser-Renouf et al., 2014). For Brulle (2010, p. 90), a primary goal for communication is “increasing citizens’ sense that they can collectively change things”, rather than trying to “tap an emotional hot button and trigger the desired response” (which he calls “Framing Without Mobilization”). A number of writers also speak of the need to “emphasise the availability and feasibility of solutions” (Pralle, 2009, p. 793). More generally, Klein (2014, p. 357) notes that “the most powerful lever for change (is) the emergence of positive, practical, and concrete alternatives to dirty development”.

One form of a focus on hope and empowerment is a strong orientation towards solutions, ‘opportunities’ and the ‘positive’ aspects of climate action (including economic co-benefits of action), which various participants spoke of. Other participants also offered caution about what might be considered an unbalanced focus on solutions and the ‘positive’, however (see also Corner et al., 2010). Gary Cranston maintained that the climate movement “should’ve been talking about tipping points a long time ago”, but that globally “the more conservative and Western elements of the movement” are “trying to get people on board with a positive thing”. In response to this, he stated: “It’s not positive, it’s pretty bad”. Steve Abel also stated:

People are not motivated by positive visions of the future so much as they are motivated by temporal threats to things that they care about, so people are more motivated by fear of loss of something that they love than they are by ‘Hey, we could have wind turbines on the mountains and lots of jobs’.

Research participants therefore negotiated this balance between various forms of diagnostic and prognostic framing in different ways.

Robina McCurdy, Nicole Masters and Matt Morris, the three research participants working on food-related issues, all in various ways spoke of taking a ‘solutions-oriented’ approach. In Norgaard’s (2009, p. 29) description of implicative denial, she states: “What I observed in my work has not been a rejection of information per se, but the failure to integrate this knowledge into everyday life or transform it into social action”. This suggests the need to actively promote this integration, as evident in the ‘prefigurative’ strategy (see, e.g., Scialom, 2014; Maeckelbergh, 2011) taken by these participants. Demonstrating this, Matt Morris described the approach of Edible Canterbury: “The approach is very much about empowering people to live in a thriving local economy”. Robina McCurdy outlined the importance of building “strong models on the ground... creating a new paradigm to step into, not just in theory but in practice, being tried and tested and experimented with as the old paradigm crumbles”.

As part of such an approach, Nicole Masters described the importance of “help[ing] people change behaviour without banging them over the head, or without making them feel really guilty”. These participants also described ways in which they combine individual and collective change, for example, through a community development approach, and through the promotion of “mentor groups”. Highlighting a core element of prefigurative approaches, Robina McCurdy spoke of the empowerment of taking action at the local level and the need to make this practical: “I aim to be an inspiring educator, (so that people are) not just inspired, but inspired to do *this*: ‘I can do *this*, and *this*’.”

A number of participants also spoke of the importance of giving voice to real solutions, saying that this can be empowering and encouraging for people. Thus, Robina McCurdy spoke about her work with the Localising Food Project documentary film series: “I wanted to make these initiatives known from one area to another... so these ideas could be picked up on, so people could know... what’s possible”.

The aim of promoting political or civic action was also discussed by participants (thus linking ‘rhetorical strategy’ with grassroots organising – see

Brulle, 2010, p. 90). In their research in Canada, Cross et al. (2015, p. 24) note a lack of basic understanding of how activism works, and suggest that “Information about how to engage politically, and the effects of political engagement, is just as important as information about climate change science” (2015, p. 5; see also Ockwell et al., 2009). Such information may take a variety of forms. Dayle Takitimu spoke of the inspiration that members of Te Whānau-ā-Apanui gained from watching material online showing “other indigenous people fronting up to multinational corporations and governments”.

Gary Cranston spoke of deconstructing some of the ‘good news’ stories that lead people to “put their hope in the wrong places”. In response to this, he said he would “tell them the good news stories that they don’t hear”, giving “as many examples as I can when real change happens (through grassroots mobilisation)” (see also Beautiful Solutions Aotearoa, n.d.). As examples of this, he spoke of:

(The) 190 or so coal fired power stations (that) have been stopped (in the US) through community-level campaigning, including direct action campaigning... I give examples like La Via Campesina – 200 million organised anti-capitalist small-scale farmers, whose very lives are the answer to climate change, in everything they do.

Supporting such an approach, Moore & Russell (2011, p. 13) note: “There are lots of community solutions everywhere you look, but often people don’t see them”. Cross et al. (2015, p. 30) write: “As one’s awareness and understanding of examples and forms of political success grow, so too does one’s capacity not only to resist cynicism in oneself but also to intervene and disrupt its hegemonic presence in everyday political discourse”.

Conclusion

As described throughout this article, a core dynamic in climate communication is the balance between, on the one hand, speaking faithfully to the facts of the climate crisis and to what makes climate action meaningful to climate communicators personally, and on the other, speaking in a way that is meaningful to those being communicated with, and thereby ‘meeting them where they are at’. If climate communicators are able to strike the right balance in this, they will empower people, thereby inspiring behavioural change and political engagement. If the right balance is not struck, however, communication efforts risk not connecting with people, emotionally overwhelming them with the weight of the climate crisis, or overly diluting the message and losing its integrity, leading to

no effect, or to a negative effect. Given the urgency of responding to the climate crisis, getting this balance right is essential.

Social movements are central to processes of societal learning. The communication experiences of climate movement participants described and analysed in this article therefore provide valuable insights that can help us understand the challenges we face in responding to the climate crisis. Understanding current approaches to climate communication is crucial for ensuring that our communication practices play the vital role they will need to as the climate crisis continues to deepen, informing our ongoing efforts both to promote just and compassionate responses to the climate disruption that we are already committed to, and, ultimately, to avoid triggering amplifying feedbacks and runaway climate chaos.

References

- Aitken, C., Chapman, R., & McClure, J. (2011). Climate change, powerlessness and the commons dilemma: Assessing New Zealanders' preparedness to act. *Global Environmental Change*, 21, 752-760.
- Baer, H. (2014). The Australia climate movement: A disparate response to climate change and climate politics in a not so 'lucky country'. In M. Dietz & H. Garrelts (Eds.), *Routledge handbook of the climate change movement* (pp.147-162). Milton Park, Abingdon, Oxon: Routledge.
- Bain, P., Milfont, T., Kashima, Y., Bilewicz, M., Doron, G., Garðarsdóttir, R.B., Gouveia, V., Guan, Y., Johansson, L., Pasquali, C., Corral-Verdugo, V., Aragonés, J.I., Utsugi, A., Demarque, C., Otto, S., Park, J., Soland, M., Steg, L. M., Utsugi, A., González, R., Johansson, L-O, Lebedeva, N., Madsen, O. J., Wagner, C., Akotia, C., Kurz, T., Saiz, J. L., Schultz, W., Bilewicz, A. & Saviolidi, N. (2015). Co-benefits of addressing climate change can motivate action around the world. *Nature Climate Change*. Retrieved from <http://doi:10.1038/NCLIMATE2814>
- Ballantyne, A.G. (2016). Climate change communication: What can we learn from communication theory? *WIREs Climate change*. Retrieved from <http://doi:10.1002/wcc.392>
- Beautiful Solutions Aotearoa (n.d.). Website. <http://beautifulsolutions.org.nz/>
- Bedall, P. & Görg, C. (2014). Antagonistic standpoints: The climate justice coalition viewed in light of a theory of societal relationships with nature. In M. Dietz & H. Garrelts (Eds.), *Routledge handbook of the climate change movement* (pp.44-65). Milton Park, Abingdon, Oxon: Routledge.
- Benford, R. (1997). An insider's critique of the social movement framing perspective. *Sociological Inquiry*, 67(4), 409-430.
- Benford, R., & Snow, D. (2000). Framing process and social movements: An overview and assessment. *Annual Review of Sociology*, 26, 611-639.
- Bisaillon, L. (2012). An analytic glossary to social inquiry using institutional and political activist ethnography. *International Journal of Qualitative Methods*, 11(5).
- Brulle, R. (2010). From environmental campaigns to advancing the public dialog: Environmental communication for civic engagement. *Environmental Communication*, 4(1), 82-98.

- Brulle, R. J., & Jenkins, J.C. (2006). Spinning our way to sustainability? *Organization & Environment*, 19, 82-87. Retrieved from <http://10.1177/1086026605285587>
- Brysse, K., Oreskes, N., O'Reilly, J., & Oppenheimer, M. (2013). Climate change prediction: Erring on the side of least drama? *Global Environmental Change*, 23(1), 327-337.
- Caniglia, B. S., Brulle, R., & Szasz, A. (2015). Civil society, social movements and climate change. In R. Dunlap & R. Brulle (Eds.), *Climate change and society: Sociological perspectives*. Oxford: Oxford University Press.
- Casas-Cortés, M.I., Osterweil, M., & Powell, D. (2008). Blurring boundaries: Recognizing knowledge-practices in the study of social movements. *Anthropological Quarterly*, 81(1), 17-58.
- Cohen, S. (2001). *States of denial: Knowing about atrocities and suffering*. Cambridge: Polity Press.
- Corner, A. (2012). A new conversation with the centre right about climate change. COIN. Retrieved May 24, 2016, from <http://climateoutreach.org/resources/a-new-conversation-with-the-centre-right-about-climate-change/>
- Corner, A., Crompton, T., Davidson, S., Hawkins, R., Kasser, T., Lertzmann, R., Lipman, P., Lorenzoni, I., Marshall, G., Mundy, C., O'Neil, S., Pidgeon, N.F., Rabinovich, A., & Whitmarsh, L.E. (2010). Communicating climate change to mass public audiences. Climate Change Communication Advisory Group, Working Document. Retrieved May 24, 2016, from <http://psych.cf.ac.uk/understandingrisk/docs/cccg.pdf>
- Corner, A., Markowitz, E., & Pidgeon, N. (2014). Public engagement with climate change: the role of human values. *WIREs Climate Change*, 5(3), 411-422. Retrieved from <http://doi:10.1002/wcc.269>
- CRED (Center for Research on Environmental Decisions) (2009). The psychology of climate change communication: A guide for scientists, journalists, educators, political aides, and the interested public. New York. Retrieved May 24, 2016, from <http://guide.cred.columbia.edu/>
- Cretney, R., Thomas, A., & Bond, S. (2016). Maintaining grassroots activism: Transition towns in Aotearoa New Zealand. *New Zealand Geographer*, 72(2), 81-91. Retrieved from <http://10.1111/nzg.12114>
- Crompton, T. (2008). *Weathercocks & signposts: The environment movement at a crossroads*. WWF-UK.
- Crompton, T. (2010). *Common cause: The case for working with our cultural values*. WWF-UK.
- Crompton, T., & Kasser, T. (2009). *Meeting environmental challenges: The role of human identity*. WWF-UK.
- Cross, K., Gunster, S., Piotrowski, M., & Daub, S. (2015). News media and climate politics: Civic engagement and political efficacy in a climate of reluctant cynicism. Canadian Centre for Policy Alternatives. Retrieved May 24, 2016, from https://www.policyalternatives.ca/sites/default/files/uploads/publications/BC%20Office/2015/09/CCP_A-BC-News_Media_Climate_Politics.pdf
- della Porta, D., & Parks, L. (2014). Framing processes in the climate movement: From climate change to climate justice. In M. Dietz & H. Garrelts (Eds.), *Routledge handbook of the climate change movement* (pp.19-30). Milton Park: Routledge.
- Derickson, K.D., & Routledge, P. (2015). Resourcing scholar-activism: Collaboration, transformation, and the production of knowledge. *The Professional Geographer*, 67(1), 1-7.
- Dietz, M. (2014). Debates and conflicts in the climate movement. In M. Dietz & H. Garrelts (Eds.), *Routledge handbook of the climate change movement* (pp.292-307). Milton Park: Routledge.

- Diprose, G., Thomas, A.C., & Bond, S. (2016). 'It's who we are': Eco-nationalism and place in contesting deep-sea oil in Aotearoa New Zealand. *Kotuitui: New Zealand Journal of Social Sciences Online*, 11(2), 159-173. Retrieved from <http://doi:10.1080/1177083X.2015.1134594>
- Ehrhardt-Martinez, K., Rudel, T., Norgaard, K., & Broadbent, J. (2015). Mitigating climate change. In R. Dunlap & R. Brulle (Eds.), *Climate change and society: Sociological perspectives*. Oxford University Press.
- Ereaut, G., & Segnit, N. (2006). Warm words: How are we telling the climate story and can we tell it better? Retrieved May 24, 2016, from http://www.climateaccess.org/sites/default/files/Ereaut%20&%20Segnit_Warm%20Words.pdf
- Fougère, L. (2013). *Democracy in the face of disagreement: Environmentalist opposition to Escarpment Mine on the Denniston Plateau*. (Unpublished master's thesis). Victoria University of Wellington.
- Fuster Morell, M. (2009). Action research: Mapping the nexus of research and political action. *Interface*, 1(1), 21-45.
- Futerra. (2005). The rules of the game: Evidence base for the Climate Change Communications Strategy. Retrieved May 24, 2016, from <http://www.cdfc.org/uploads/File/RulesOfTheGame.pdf>
- Gaisford, T. (2010). *An alternative to development framework: A study of permaculture and anarchism in global justice movements in New Zealand* (Unpublished Master's thesis). Victoria University of Wellington.
- Garrelts, H., & Matthias, D. (2014). Introduction. In D. Matthias & H Garrelts (Eds.), *Routledge handbook of the climate change movement*. Milton Park: Routledge.
- Goodwin, J., & Jasper, J. (1999). Caught in a winding, snarling vine: The structural bias of political process theory. *Sociological Forum*, 14, 27-54.
- Hadden, J. (2015). *Networks in contention: The divisive politics of climate change*. Cambridge: Cambridge University Press.
- Hansen, J., Sato, M., Hearty, P., Ruedy, R., Kelley, M., Masson-Delmotte, V., Russell, G., Tselioudis, J., Cao, E., Rignot, I., Velicogna, B., Tormey, B., Donovan, E., Kandiano, K., von Schuckmann, P., Kharecha, A.N., LeGrande, M., Bauer, M., & Lo, K.W. (2015). Ice melt, sea level rise and superstorms: Evidence from paleoclimate data, climate modeling, and modern observations that 2°C global warming is highly dangerous. *Atmos. Chem. Phys. Discuss.*, 15, 20059–20179.
- Hine, D., Reser, J., Morrison, M., Phillips, W., Nunn, P., & Cooksey, R. (2014). Audience segmentation and climate change communication: Conceptual and methodological considerations. *WIREs Climate Change*, 5, 441-459. Retrieved from <http://doi:10.1002/wcc.279>
- Hoffman, A., & Devereaux Jennings, P. (2012). The social and psychological foundations of climate change. *Solutions*, 3(4), 58-65.
- Immerwahr, J. (1999, April 15). Waiting for a signal: Public attitudes toward global warming, the environment and geophysical research. *Public Agenda*, American Geophysical Union. Retrieved November 1, 2016 from <http://research.policyarchive.org/5662.pdf>
- Jasper, J. (2004). A strategic approach to collective action: Looking for agency in social-movement choices. *Mobilization: An International Journal*, 9(1), 1-16.
- Kidner, K. (2015). *Beyond greenwash: Environmental discourses of appropriation and resistance* (Unpublished doctoral thesis). Victoria University of Wellington.
- Klein, N. (2014). *This changes everything: Capitalism vs. the climate*. New York: Simon & Schuster.
- Kössler, G. (2014). The climate movement in Germany. In M. Dietz & H. Garrelts (Eds.), *Routledge handbook of the climate change movement* (pp.117-130). Milton Park: Routledge.

- Kruse, J. (2014). Reframing climate change: The Cochabamba conference and global climate politics. In M. Dietz & H. Garrelts (Eds.), *Routledge handbook of the climate change movement* (pp.280-291). Milton Park: Routledge.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication*, 4(1), 70-81.
- Lakoff, G. (2014 (2004)). *The all new Don't think of an elephant*. Vermont: Chelsea Green.
- Leahy, T., Bowden, V., & Threadgold, S. (2010). Stumbling towards collapse: Coming to terms with the climate crisis. *Environmental Politics*, 19(6), 851-868. Retrieved from <http://doi:10.1080/09644016.2010.518676>
- Leining, C. (2015). Not a problem, someone else's problem, my problem or our opportunity? Shifting attitudes and behaviour on mitigating climate change. Motu note #18. Retrieved May 24, 2016, from <http://motu.nz/assets/Documents/our-work/environment-and-resources/emission-mitigation/shaping-new-zealands-low-emissions-future/Motu-Note-18.pdf>
- Lewandowsky, S. (2014, July-August). Review (Review of the book *Don't even think about it: Why our brains are wired to ignore climate change*, by G. Marshall). *Reports of the National Center for Science Education*, (35)4, 7.1-7.4.
- Maeckelbergh, M. (2011). Doing is believing: Prefiguration as strategic practice in the alterglobalization movement. *Social Movement Studies*, 10(1), 1-20.
- McDonald, H., & Kerr, S. (2011). Why do New Zealanders care about agricultural emissions? Motu note #9. Retrieved May 24, 2016, from <http://motu.nz/assets/Documents/our-work/environment-and-resources/emission-mitigation/agricultural-greenhouse-gas-emissions/Motu-Note-9-Why-do-New-Zealanders-Care-about-Agricultural-Emissions.pdf>
- McKibben, B. (2012, July 19). Global warming's terrifying new math. *Rolling Stone*.
- Moon, E. (2013). *Neoliberalism, political action on climate change and the youth of Aotearoa New Zealand: A space for radical activism?* (Unpublished master's thesis). Victoria University of Wellington.
- Moore, H., & Russell, J.K. (2011). Organizing cools the planet: Tools and reflections on navigating the climate crisis. PM Press Pamphlet Series No.0011. Oakland, California: PM Press.
- Moser, S. (2010). Communicating climate change: History, challenges, process and future directions. *WIREs Climate Change*, 1(1), 31–53.
- Moser, S. (2016). Reflections on climate change communication research and practice in the second decade of the 21st century: what more is there to say? *WIREs Climate Change*, 7, 345-369.
- Moser, S., & Dilling, L. (2004). Making climate hot: Communicating the urgency and challenge of global climate change. *Environment*, 46(10), 32-46.
- Moser, S., & Dilling, L. (2011). Communicating climate change: Closing the science-action gap. In J.S. Dryzek, R.B. Norgaard, & D. Schlosberg (Eds.). *Oxford handbook of climate change and society*. Oxford: Oxford University Press.
- Moser, S., & Pike, C. (2015). Community engagement on adaptation: Meeting a growing capacity need. *Urban Climate*, 14(1), 111-5. Retrieved from <http://doi:10.1016/j.uclim.2015.06.006>
- Motu Economic and Public Policy Research. (2015). Majority of New Zealanders are concerned about climate change and taking actions that reduce emissions. Retrieved May 24, 2016, from <http://motu.nz/about-us/news/majority-of-new-zealanders-are-concerned-about-climate-change-and-taking-actions-that-reduce-emissions/>
- Nerlich, B., Koteyko, N., & Brown, B. (2010). Theory and language of climate change communication. *WIREs Climate Change*, 1(1). Retrieved from <http://doi:10.1002/wcc.002>
- Nisbet, M. (2009). Communicating climate change: Why frames matter for public engagement. *Environment: Science and Policy for Sustainable Development*, 51(2), 12-23.

- Norgaard, K. (2006a). 'People want to protect themselves a little bit': Emotions, denial and social movement non-participation. *Sociological Inquiry*, 76(3), 372-396.
- Norgaard, K. (2006b). 'We don't really want to know': Environmental justice and socially organized denial of global warming in Norway. *Organization & Environment*, 19, 347-370.
- Norgaard, K. (2009). Cognitive and behavioral challenges in responding to climate change: Background paper to the 2010 World Development Report. Policy Research Working Paper 4940, The World Bank Development Economics World Development Report Team.
- Norgaard, K. (2011). Climate denial: Emotion, psychology, culture, and political economy. In J.S. Dryzek, R.B. Norgaard & D. Schlosberg (Eds.). *Oxford handbook of climate change and society* (pp.399-413). Oxford: Oxford University Press.
- North, P. (2011). The politics of climate activism in the UK: A social movement analysis. In *Environment and Planning A*, 43(7), 1581-1598.
- O'Brien, T. (2013a) Social control and trust within the New Zealand environmental movement. *Journal of Sociology*, 51(4), 785–798. Retrieved from <http://doi:10.1177/1440783312473188>
- O'Brien, T. (2013b). Fires and flotillas: Opposition to offshore oil exploration in New Zealand. *Social Movement Studies*, 12(2), 221–226.
- O'Brien, T. (2016). Camping, climbing trees and marching to Parliament: Spatial dimensions of environmental protest in New Zealand. *Kōtuitui: New Zealand Journal of Social Sciences Online*, 11(1), 11-22. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/1177083X.2015.1012170>
- Ockwell, D., Whitmarsh, L., & O'Neill, S. (2009). Reorienting climate change communication for effective mitigation: Forcing people to be green or fostering grass-roots engagement? *Science Communication*, 30(3), 305–327. Retrieved from <http://doi:10.1177/1075547008328969>
- Oosterman, J. (2016a). *Making climate action meaningful: Communication practices in the New Zealand climate movement* (Unpublished master's thesis). Victoria University of Wellington.
- Oosterman, J. (2016b, July 14). *Making climate action meaningful: Communication practices in the NZ climate movement* [Video]. Retrieved November 1, 2016 from <https://www.youtube.com/watch?v=QrcAvjLMYDI>
- Pralle, S. (2009). Agenda-setting and climate change. *Environmental Politics*, 18(5), 781-799.
- Rademaekers, J.K., & Johnson-Sheehan, R. (2014). Framing and re-framing in environmental science: Explaining climate change to the public. *Journal of Technical Writing and Communication*, 44(1), 3-21.
- Rayner, T., & Minns, A. (2015). The challenge of communicating unwelcome climate messages. Tyndall Centre for Climate Change Research Working Paper 162. Retrieved May 24, 2016, from http://www.tyndall.ac.uk/sites/default/files/twp162_0.pdf
- Roeser, S. (2012). Risk communication, public engagement, and climate change: A role for emotions. *Risk Analysis*, 32(6), 1033-1040.
- Romm, J. (2010a, June 17). Can you solve global warming without talking about global warming? [Blog post]. ThinkProgress. Retrieved from <https://thinkprogress.org>
- Romm, J. (2010b, November 22). Dire straits: Media blows the story of UC Berkeley study on climate messaging [Blog post]. ThinkProgress. Retrieved from <https://thinkprogress.org>
- Romm, J. (2012, February 26). Apocalypse not: The Oscars, the media and the myth of 'Constant repetition of doomsday messages' on climate [Blog post]. ThinkProgress. Retrieved from <https://thinkprogress.org>
- Roser-Renouf, C., Maibach, E., Leiserowitz, A., & Zhao, X. (2014). The genesis of climate change activism: From key beliefs to political action. *Climatic Change*, 125(2), 163-178. Retrieved from <http://doi:10.1007/s10584-014-1173-5>

- Rosewarne, S., Goodman, J., & Pearse, R. (2014). *Climate action upsurge: The ethnography of climate movement politics*. Milton Park, Abingdon, Oxon: Routledge.
- Rowson, J. (2013). *A new agenda on climate change: Facing up to stealth denial and winding down on fossil fuels*. London: RSA Action and Research Centre.
- Rowson, J., & Corner, A. (2015). The seven dimensions of climate change: Introducing new ways to think, talk, and act. RSA and COIN. Retrieved May 24, 2016, from <https://www.thersa.org/discover/publications-and-articles/reports/the-seven-dimensions-of-climate-change-introducing-a-new-way-to-think-talk-and-act/>
- Schittecatte, G. (2015). *The effects of framing on support for political action on climate change*. (Unpublished master's thesis). University of British Columbia, Vancouver.
- Schwom, R., McCright, A., Brechin, S., Dunlap, R., Marquart-Pyatt, S., & Hamilton, L. (2015). Public opinion on climate change. In R. Dunlap & R. Brulle (Eds.). *Climate change and society: Sociological perspectives*. Oxford: Oxford University Press.
- Scialom, F. (2014). Embodying economic change: De-growth and localisation practices in Totnes, United Kingdom. Retrieved May 24, 2016, from http://www.transitionresearchnetwork.org/uploads/1/2/7/3/12737251/embodying_economic_change_by_florence_scialom.pdf
- Shenker-Osorio, A. (2012). *Don't buy it: The trouble with talking nonsense about the economy*. New York: Public Affairs.
- Smith, B., & Brecher, J. (n.d.). Are progressives in denial about climate change? Labor Network For Sustainability. Retrieved May 24, 2016, from <http://www.labor4sustainability.org/articles/are-progressives-in-denial-about-climate-change/>
- Snow, D., Benford, R., McCammon, J., Hewitt, L., & Fitzgerald, S. (2014). The emergence, development, and future of the framing perspective: 25+ years since 'Frame alignment'. *Mobilization: An International Quarterly*, 19(1), 23-45.
- Snow, D., Rochford, E.B., Worden, S., & Benford, R. (1986). Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51, 464-481.
- Spratt, D. (2012). Always look on the bright side of life: Bright-siding climate advocacy and its consequences. Retrieved May 24, 2016, from <https://dl.dropboxusercontent.com/u/75392680/brightsidings-climate-3.pdf>
- Stern, P. (2000). Toward a coherent theory of environmentally significant behaviour. *Journal of Social Issues*, 56(3), 407-424.
- Thompson, J. & Schweizer, S. (2008). The conventions of climate change communication. Paper presented at the Annual Meeting of the NCA 94th Annual Convention, TBA, San Diego. Retrieved November 2, 2016, from http://citation.allacademic.com/meta/p_mla_apa_research_citation/2/5/7/4/1/pages257413/p257413-1.php
- Torgerson, D. (2000). Farewell to the green movement? Public action and the green public sphere. In J.S. Dryzek & D. Schlossberg (2005), *Debating the earth: The environmental politics reader*. Oxford: Oxford University Press.
- Ürge-Vorsatz, D., Tirado Herrero, S., Dubash, N., & Lecocq, F. (2014). Measuring the co-benefits of climate change mitigation. *Annual Review of Environment and Resources*, 39, 549-582.
- Wahlström, M., Wennerhag, M., & Rootes, C. (2013). Framing 'The climate issue': Patterns of participation and prognostic frames among climate summit protesters. *Global Environmental Politics*, 13(4), 101-122.
- Weber, E. U. (2015). What shapes perceptions of climate change? New research since 2010. *WIREs Climate Change*. Retrieved from <http://doi:10.1002/wcc.377>
- Westby, D. L. (2002). Strategic imperative, ideology, and frame. *Mobilization: An International Journal*, 7(3), 287-304.

- Wibeck, V. (2014). Enhancing learning, communication and public engagement about climate change – some lessons from recent literature. *Environmental Education Research*, 20(3), 387-411. Retrieved from <http://doi:10.1080/13504622.2013.812720>
- Willoughby-Martin, E. (2012). *Autonomous geographies in Aotearoa: Camp for Climate Action and the politics of climate change* (Unpublished master's thesis). Victoria University of Wellington.

Jonathan Oosterman believes that social scientists must find ways to contribute to the climate action that is so urgently needed. This article is one such effort. Contact details: jonathanoosterman@gmail.com. 22B Durham St, Aro Valley, Wellington 6021