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Someone Else's Problem

The Framing of Climate Change Politics in *The Irish Times*,
The Guardian and *The New Zealand Herald*

Robin Ira Campbell

A thesis submitted in partial fulfilment of the requirements for the
degree of Master of Arts in Political Studies,
University of Auckland, 2012.

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Abstract

Someone Else's Problem applies comparative framing analysis to explore climate change-related journalism in three newspapers, *The Irish Times*, *The New Zealand Herald* and *The Guardian* during the 2010 United Nations Framework Convention on Climate Change conference in Cancun, Mexico. Diverse and disjointed strains of public opinion regarding climate change are central to the inadequacies of current national and global climate change policy; public support for policy action is a necessary condition for addressing the complex problem of climate change in a meaningful and substantive democratic manner. Mass media have a democratic responsibility to help facilitate appropriate and reasoned public political discussions about climate change. Broadsheet newspapers can play important roles as traditional conduits of public sphere debate and democratically significant journalism.

In all three newspapers, this thesis argues, the human or lived effects of climate change are framed as affecting people in the global south, while the power to act regarding climate change is framed as residing with elite global political agents, mostly from the global north. The global political arena in which the politics of climate change plays out is framed as chaotic and conflict-ridden, and the key agents in it are framed as self-serving players of geopolitical strategy games. Global political action is divorced from everyday lived experiences and individual action. The local politics of climate change are silent. Climate change is framed as someone else's problem.

This thesis argues that economic considerations dominate the framing of climate change. Climate change policy is framed as economically favourable in *The Irish Times*, which endorses domestic policy action in lieu of a binding global agreement. However, in *The Guardian* and most evidently in *The New Zealand Herald*, climate change action is usually framed as costly, and the

problem of climate change subsequently becomes subservient to other economic concerns. *The New Zealand Herald* frames domestic climate change policy as both evidence that New Zealand is taking appropriate steps to combat climate change and as a dangerous burden on the domestic economy; in doing so it paints a contradictory picture of the diplomatic importance of New Zealand as a principled and independent nation state that is also relatively powerless in the international system and economically at the mercy of other global agents.

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1. Introduction

The politics of climate change reach into many spheres of life in the twenty-first century and may define the global political landscape for decades to come. Public confusion about climate change is an easily identifiable phenomenon, and as global greenhouse gas emissions continue trending upwards global policy incoherence is discernible also. Climate change is a complex problem to comprehend and address. It does not fit within national borders or under the umbrella of state government control. It is not primarily a foreign policy problem, but it has important implications for international politics. It is not primarily a social or economic problem, but it has huge social and economic ramifications. Climate change politics happen at the intersection of local and global. There is a consensus among scientists that the world will experience dramatic climate change with atrocious consequences for the human population and other species diversity, unless major changes are made to the way we live now. The warnings are clear and place distinctive responsibilities on the mass media because of the political significance of the media in democracies: to investigate, interrogate, critique, and most of all, to take the problem seriously.

This thesis explores the mediated politics of climate change by employing a framing analysis of climate change-related content in three broadsheet newspapers, *The Irish Times*, *The Guardian* and *The New Zealand Herald*, at the time of the sixteenth session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Cancun, Mexico, in late 2010. Framing is a cognitive process by which people understand phenomena; news texts contain frames that select or highlight some aspects and agents in a news story so as to tacitly or openly endorse a particular definition of the problem and therefore define the scope for possible solutions. This thesis thus addresses how newspapers frame climate

change as a political problem. It argues that a neoliberal economic paradigm dominates the three newspapers, wherein action on climate change is justified, or not, in the language of economics: in *The Irish Times* climate change policy is often framed as potentially economically beneficial, and therefore worthy of action, while in *The Guardian* and especially *The New Zealand Herald* climate change policy is framed as costly, and therefore subservient to economic development. While there are variations across and within the newspapers, this thesis argues that in general, a focus on macroeconomics and conflict-ridden elite spheres of global politics, together with the absence of discussion of the “close to home” impacts of climate change, lead the newspapers to frame climate change as someone else’s problem.

This research begins from two propositions. The first is that climate change is a very important political issue. This is empirically underpinned by the fourth, most recent, report of the United Nations Intergovernmental Panel on Climate Change (IPCC), which sets out science that suggests grave consequences for humanity if climate change is allowed to continue unchecked.¹ Additionally, as Nick Lewis argues, climate change has become shorthand for the environmental consequences of modernity.² The politics of climate change call into question dominant political-economic systems of production and ways of being. A political studies thesis is not the appropriate place to argue the science of climate change, but to investigate what kind of questions of power, policy and democracy result from the science, and how these questions are debated. This thesis focuses not on the science of climate change but on the communication of the science and the political contexts

¹ Rajendra K. Pachauri and A. Reisinger, “Climate Change 2007: synthesis report,” (Geneva: IPCC, 2007). http://www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html (accessed 17/02/2012).

² Nick Lewis, “Talking Science” (lecture, University of Auckland, 12 May 2011).

that this occurs in, following Robert Cox's definition of environmental communication as

the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; it is the symbolic medium that we use in constructing environmental problems and negotiating society's different responses to them.³

Maxwell Boykoff argues that climate change is 'a defining symbol of our collective relationship with the environment.'⁴ It is embroiled with the modes of production and ways of being that form a neoliberal hegemony in the early twenty-first century. In late-modern societies fossil fuels turn the cogs of tractors, factories, stock exchanges and political policymaking. Harriet Bulkeley and Peter Newell suggest that

Climate governance is ironically both a microcosm of a larger global political economy, but also a meta-feature of that system in so far as virtually all areas of political activity have an impact on, or might be understood as forms of, climate governance.⁵

This research accepts the position of the IPCC: that anthropogenic climate change is almost certainly happening (over 90% likelihood), and that time is running out to take action to mitigate and adapt to the consequences of a changing climate.⁶ IPCC reports are peer-reviewed and government approved,

³ Robert Cox, *Environmental Communication and the Public Sphere* (Thousand Oaks, C.A: SAGE, 2006): 12.

⁴ Maxwell T. Boykoff, *Who Speaks for the Climate? Making sense of media reporting on climate change* (Cambridge and New York: Cambridge University Press, 2011): 1.

⁵ Harriet Bulkeley and Peter Newell, *Governing Climate Change* (Oxon and New York: Routledge, 2010): 113.

⁶ Pachauri and Reisinger, "Climate Change 2007." This position can be roughly and basically summarised as follows: greenhouse gas emissions from human-controlled activity cause the climate to change. A global rise in temperatures of more than two degrees centigrade is likely to have extreme impacts on the climate, dramatically changing weather patterns and sea

and ‘present the best approximation of a worldwide consensus on climate science every five to six years.’⁷ However, it is clear that no matter how near-unanimous the scientific consensus is about climate change, public opinion is fragmented. In Ireland, New Zealand and Britain, public opinion is divided among three loose groups: those who accept the urgency of the climate problem, those who accept the climate problem but not its urgency, and those who remain highly sceptical of the existence or threat of human-caused climate change. It is important that the media connect with these differences in popular opinion and attempt to engage their exponents with alternative points of view. People must understand that action on climate change is both essential and possible.

As well as being fertile ground for the study of science journalism and public opinion of science, the politics of climate change provide a poignant lens through which to critique global and national exercises of political and economic power in the early twenty-first century. The politics of climate change reach ‘to the heart of how we live, work, play and relax in modern life.’⁸ Understanding how the politics of climate change is imagined, framed and discussed gives insights into broader discourses and narratives of economic development and national-international politics. Boykoff argues that free-market hegemonies enforce ideological commitments

to economic growth, and deeply entrenched technological optimism, [which] have been significant forces influencing the wider cultural politics of climate change. In this context, it is often the case that those

levels, which would force widespread social and economic changes. In order to limit climate change to two degrees, global greenhouse emissions must be reduced by the year 2020.

⁷ Stephen H. Schneider and Michael D. Mastrandrea, “The Politics of Climate Science,” in *The Politics of Climate Change: a survey*, edited by Maxwell T. Boykoff (London: Routledge, 2010): 18.

⁸ Boykoff, *Who Speaks for the Climate?* 1.

deemed as permissible discourses have remained encased in the logic of neoliberal late capitalism.⁹

This logic depends on the burning of cheap greenhouse-gas emitting natural resources. Julie Doyle argues that the consequences of framing climate change through neoliberal, consumerist discourse are that

Existing individual habits and practices are not fundamentally altered, and the true cost of consumption in relation to CO2 emissions, as well as global power relations, is left ignored.¹⁰

Doyle expands this idea to implicate the epistemological underpinnings of environmental science in the problem:

Climate change is the result of the massive increase in the burning of fossil fuels for the development and sustenance of capitalist societies since the industrial revolution. As science has presented nature and natural resources as commodified objects to be utilised for economic production and growth, science is thus implicated in the very development of climate change.¹¹

The second proposition underpinning this research is that democratic policy responses to problems of collective concern like climate change should be built upon foundations of public debate and support, and that mass media play central roles in this. Key to the foundation of the second assertion are the words of Dame Onora O'Neill:

⁹ *ibid.*, 5.

¹⁰ Julie Doyle, *Mediating Climate Change* (Surrey and Burlington, V.T: Ashgate, 2011): 6.

¹¹ Doyle, *Mediating Climate Change*, 19-20.

Democracy requires not merely that the media be free to express views, but that they actually and accurately inform citizens. If we are to have democracy, the media must not only express views and opinions but aim to communicate and inform.¹²

Journalism that is intelligible, accessible and assessable is required for successful democratic policy responses to climate change. Eric Pooley argues that for the mass media, climate change 'is the great political test, and the great story, of our time.'¹³ The mass media have twin essential roles to play: to publicise information about the politics of climate change and to stimulate or engage public deliberation. Mass media should expose people to 'information and opinions that they would not have sought out in advance' because, as Cass Sunstein argues, 'democracy does not benefit from echo chambers or information cocoons.'¹⁴ Especially in a new media landscape where news audiences and readers are potentially bombarded with a bewildering assortment of infotainment television programmes and questionable bloggers, Michael Gurevitch, Stephen Coleman and Jay G. Blumler argue that there remains significant public demand on the "old" media for authoritative journalistic interpretation of the news.¹⁵ David Puttman warns that 'in embracing the benefits of the digital world, we must take care not to lose the core values we have traditionally attached to the "old" public service [media] model.'¹⁶ Newspapers 'employ people, trained to

¹² Onora O'Neill, *Rethinking Freedom of the Press* (Dublin: Royal Irish Academy, 2004): 7.

¹³ Eric Pooley, "How Much Would You Pay to Save The World? The American press and the economics of climate change" (discussion paper #D-49, Joan Shorenstein Center on the Press, Politics and Public Policy, Harvard University, 2009): 1.
http://www.hks.harvard.edu/presspol/publications/papers/discussion_papers/d49_pooley.pdf (accessed 02/02/2012).

¹⁴ Cass Sunstein, *Republic 2.0* (Princeton, NJ: Princeton University Press, 2007): 218.

¹⁵ Michael Gurevitch, Stephen Coleman and Jay G. Blumler "Political Communication: old and new media relationships," *The ANNALS of the American Academy of Political and Social Science* 625 (2009): 173-4, 176.

¹⁶ David Puttman, "Lessons from the First Communications Act," in *The Price of Plurality: choice, diversity and broadcasting institutions in the digital age*, edited by Tim Gardam and David A. L. Levy (Oxford: Reuters Institute for the Study of Journalism, 2008): 39.

observe the normative values of journalism, who have unparalleled access to the holders of power because of their organisations' audience reach.¹⁷ Newspapers are not the only important form of mass media, but they are one nonetheless. Notwithstanding fallout from the 2011 *News of the World* scandal, newspapers remain authoritative contributors to and conduits of public political debate.

Understanding the mass media is important for understanding the politics of climate change because of the mass media's unparalleled reach as a communication device. As Boykoff notes, climate change journalism 'certainly does not determine engagement; rather, it shapes possibilities for engagement.'¹⁸ Ways of thinking about climate change are played out in the media. The frames that journalists employ when they construct the news both reflect and influence the ways that audiences and readers think about "news" events. As the vehicle through which most people in the global north,¹⁹ most of the time, access political information and engage with the political process, mass media hold determinate discursive power over how people engage with the politics of climate change:

From subtle to obvious shifts in wording within climate-change stories, media portrayals possess great potential to influence reader perceptions and concern. In turn, these can feed into public awareness and engagement, as well as politics and policy. In other words, the ways in which 'climate change' and 'global warming' are discussed in media representations – as a 'threat',

¹⁷ Gavin Ellis, "A Ghost in the Chair: trustee ownership and the sustenance of democratically significant journalism," PhD Thesis, Department of Political Studies, University of Auckland (2011): 286.

¹⁸ Boykoff, *Who Speaks for the Climate?* 2.

¹⁹ This thesis employs the terminology "global north" and "global south" rather than the language of developed/developing states, core and periphery, or the First and Third worlds, following trends in international development literature.

‘problem’ or ‘opportunity’ – impact considerations of possible responses, as well as policy priorities.²⁰

This is all the more important given that public opinion on climate change and climate change policy does not mirror the near-consensus in the scientific community. In Britain, Ireland and New Zealand significant numbers of individuals do not believe that climate change is happening or do not think that governments should do anything about it, as is illustrated in chapter three. This gap between scientific expert and public opinion may reflect the influence of intermediary forces, of which the mass media is among the most evident because of its reach and power. Public attitudes and perceptions are of critical importance to successful climate policy on many levels, from seaside communities effected by future offshore wind farms to city commuters whose reliance on petrol-driven cars is challenged by policy attempts to neutralise transport emissions. As a British report on public perceptions of climate change argues

perceptions of the need to take mitigating action against climate change, and of the ability to act on this, will be key precursors to personal behaviour change and compliance with wider policies aimed to motivate such changes.²¹

The effects of the decisions made by nation states and international organisations (IOs) are dependent on action at lower levels like cities and communities, which in turn rest on public opinion and the behaviour of individuals. The dependence flows both ways, with individual behaviour

²⁰ Boykoff, *Who Speaks for the Climate?* 12.

²¹ Alexa Spence et al., “Public Perceptions of Climate Change and Energy Futures in Britain: summary findings of a survey conducted in January-March 2010” (technical report , Understanding Risk Working Paper 10-01, Cardiff: Cardiff University School of Psychology, 2010).

<http://www.ipsos-mori.com/Assets/Docs/Polls/climate-change-public-perceptions-of-climate-change-report.pdf> (accessed 17/09/2011): 5.

choices often reliant on structural conditions controlled by cities, corporations and nation states. Susanne Moser states:

no matter which international climate treaties will be signed, no matter which national policy mechanisms are chosen to realize these multi-lateral commitments, political support and engagement of the public will be required for any political leader to realize them.²²

When discussing “engagement” with climate change, a three-dimensional definition of engagement is helpful.²³ The first, a cognitive dimension, is ‘related to people mentally grappling with and gaining understanding of the issue’; the second is an affective dimension ‘reflecting an emotional response to the information and knowledge, such as interest or concern’; the third a concerned with behaviour and is ‘illustrated by people’s active response through some kind of action’.²⁴ Also useful to this research as a point of orientation is Maxwell Boykoff, Michael Goodman and Ian Curtis’ definition, which they acknowledge has epistemological roots in the ideas of Derrida and Foucault, of the cultural politics of climate change:

those oft-contested and politicized processes by which meaning is constructed and negotiated across space, place and at various scales ... Such dynamic interactions form nexuses of power-knowledge that shape how we come to understand things as “truth” and “reality” and, in turn, contribute to managing the conditions and tactics of our social lives.²⁵

²² Susanne C. Moser, “Costly Knowledge – Unaffordable Denial: the politics of public understanding and engagement on climate change,” in *The Politics of Climate Change: a survey*, edited by Maxwell T. Boykoff (London: Routledge, 2010): 156-7.

²³ *ibid.*

²⁴ *ibid.*

²⁵ Maxwell T. Boykoff, Michael K. Goodman and Ian Curtis, “Cultural Politics of Climate Change: interactions in everyday spaces,” in *The Politics of Climate Change: a survey*, edited by Maxwell T. Boykoff (London: Routledge, 2010): 136.

As a vehicle for understanding climate change journalism, this research employs a framing analysis of all climate change-related content from three newspapers – *The Irish Times*, *The Guardian* and *The New Zealand Herald* – at the time of the sixteenth session of the Conference of the Parties (COP 16) to the United Nations Framework Convention on Climate Change (UNFCCC) and the sixth session of the Conference of the Parties serving as the meeting of the parties (CMP 6) to the Kyoto Protocol, in Cancun, Mexico, from November 29 to December 10, 2010. For reasons of readability, these conference sessions and two others held simultaneously by subgroups of the UNFCCC are referred to throughout this thesis as the Cancun conference.

The Cancun conference provides a ‘critical discourse moment’ during which, previous research suggests, climate change is more likely than usual to be high on the media agenda.²⁶ During the 2009 COP 15 conference in Copenhagen, Denmark, the amount of climate change journalism published globally spiked.²⁷ Furthermore, Petri Tapio and Jari Lyyttimäki argue that ‘peaks of publicity’ like COP have residual effect on public opinion: following important events, ‘the level of coverage is likely to remain on a higher level than before the peak(s) of publicity.’²⁸ The research period stretches seven days either side of the Cancun conference, to allow for some journalistic build-up to the conference and post-conference analysis. Both the specific discursive messages embodied in individual texts and frames and also the broad themes and narratives that stretch across the newspapers are analysed. While the methodology is discussed further in chapter four, the key questions that this research seeks to address are:

²⁶ Cox suggests that science media coverage waxes and wanes around major events like Earth Day and COP conferences. Cox, *Environmental Communication and the Public Sphere*: 165-7.

²⁷ Boykoff, *Who Speaks for the Climate?* 22.

²⁸ Petri Tapio and Jari Lyyttimäki, “Climate Change as Reported in the Press of Finland: from screaming headlines to penetrating background noise,” *International Journal of Environmental Studies* 66, 6 (2009): 731.

- How is climate change framed in mainstream newspapers?
- What types of voices find space to be heard, and which are privileged, in mainstream media coverage of climate change?
- How does the framing of climate change by the newspapers define the appropriate spheres and levels of action for political and policy responses to climate change?
- What similarities and differences are there between climate change journalism in *The Irish Times*, *The Guardian* and *The New Zealand Herald*?

Climate Change as a Global Political Problem

The global-local nature of climate change as both an environmental and political problem makes climate change a complex and interesting issue. No one state can unilaterally control climate change within or beyond its borders and collective action is required to coordinate a global response. Bulkeley and Newell explain that

resources, capacity, expertise, networks and power of actors as diverse as states, firms, cities, communities, civil society organizations and individuals are required to actively address all aspects of the [climate change] problem.²⁹

Global greenhouse gas emissions began to rise sharply during the industrial revolution: the historical period that saw the Anglo-American world rise to global dominance through powerful developments in technology, exploitation

²⁹ Bulkeley and Newell, *Governing Climate Change*: 107.

of natural resources and the often-ruthless pursuit of imperialist colonisation. Emissions continued to rise sharply in the decades following World War Two. The global north emits far greater greenhouse gas emissions per capita than the global south, yet the global north is better placed with financial and technological resources to adapt to a changing climate. Some states in the global south – especially low-lying states like Bangladesh, small island nations like Nauru, and those with climate-reliant agricultural-based economies – will disproportionately bear the human and macroeconomic costs of climate change. Many of these states are already trapped in debt cycles.³⁰ However, wealthy countries in the global north will be affected too, by flow-on effects of agricultural change in developing food exporters, and by changing weather patterns at home and rising sea levels affecting major coastal cities. Adaptation to unchecked climate change may be easier if one has a weighty wallet, but it will still cost.

Mitigating climate change is also often associated with costs, especially short-term costs. The substance of international climate change negotiations is testament to this: many states have made commitments conditional on their trading partners doing the same, so that they would not disadvantage their own economies. The threat of competitive disadvantage for domestic energy-intensive industries and subsequent ‘carbon leakage’ migration of industry and jobs to other countries or regions, particularly in the global south, with less expensive or non-existent emissions price-signal mechanisms, is surveyed by Robyn Eckersley.³¹ Carbon (CO₂) tariffs on imports are a potential solution, but do not fit comfortably within the pro-free trade ideological framework that guides the behaviour of many states and international organisations. And, as Eckersley argues, such carbon tariffs would probably penalise the

³⁰ Ha-Joon Chang, *Bad Samaritans: rich nations, poor policies & the threat to the developing world* (London: Random House, 2007).

³¹ Robyn Eckersley “The Politics of Carbon Leakage and the Fairness of Border Measures,” *Ethics & International Affairs* 24 (4) 2010: 367-393.

global south, requiring a redistribution of carbon tariff revenue back to the global south in order to fulfil ‘the climate regime’s burden sharing norms’ of common but differentiated responsibility.³² Eckersley concludes that ‘the short-term costs of [carbon] leakage are likely to be insignificant when set against the immeasurable longer-term advantages that would flow from the imposition of aggressive domestic carbon constraints by developed countries.’³³ Not only would global carbon emissions likely fall, but market signals would spur productive investment in more sustainable domestic economic development.

Similarly, Pooley argues that an effective carbon cap-and-trade system would likely cost the United States (US) about half of one per cent of gross domestic product (GDP) over two decades; this would be ‘a slight drag on growth, not an economy killer’, especially when compared to the estimated five per cent of GDP lost due to the global financial crisis in the fourth quarter of 2008 alone.³⁴ This conflation of economic and environmental wellbeing has roots in the 2006 Stern Review of the economics of climate change, in which economist Lord Nicholas Stern makes the economic case for action on climate change.³⁵ It helps define climate change as an economic issue and means that many who push for policy action on climate change define their aims in economic terms.

These factors mean that the terrain on which climate change policy is wrestled over by policy makers and citizens is a complex intersection of science, history, community, globality, past, present and future. In the era of globalisation, Manuel Castells argues, ‘[n]ot everything or everyone is globalized, but the global networks that structure the planet affect everything

³² *ibid.*, 390

³³ *ibid.*

³⁴ Pooley, “How Much Would You Pay to Save The World?” 2.

³⁵ Nicholas Stern, *The Economics of Climate Change: the Stern review* (London: Cabinet Office – HM Treasury, 2007).

and everyone.³⁶ Globalisation can be defined from a neo-Gramscian point of view as principally a result, and simultaneously a driver, of the 'hegemonic extension of capitalism beyond national boundaries' that has distinct and diverse political, social and economic effects on people, communities and nation states.³⁷ David Held highlights the potential for on-going globalisation to help develop a cross-border sense of social justice to assist in addressing global poverty.³⁸ 'Learning global citizenship' is nonetheless an uneven and contested concept.³⁹ It is simply easier to associate with the problems faced by people like oneself than it is to associate with the problems of "others", in Edward Said's sense of the word.⁴⁰ States often continue to act in their own best interests in the world of international politics.

For this reason it is important for public engagement with climate change and support for measures to mitigate and adapt to a changing climate that the proximate impacts of climate change on citizens of the global north be understood. If learning of droughts in Kenya and floods in Pakistan will not help citizens of the global north understand the importance of climate change, the hope is that questioning the worthiness of the Thames barrier to cope with rising sea levels may do so.⁴¹ The media should play a central role in informing citizens of developed countries about the potential proximate effects of climate change, as well as presenting "global" viewpoints and the experiences of others. None of the three newspapers that this research analyses do this to a great extent at the time of the Cancun conference.

³⁶ Manuel Castells, "The New Public Sphere: global civil society, communication networks, and global governance," *The ANNALS of the American Academy of Political and Social Science* 616 (2008): 81.

³⁷ Natasha Shukla, "Power, Discourse, and Learning Global Citizenship: a case study of international NGOs and a grassroots movement in the Narmada Valley, India," *Education, Citizenship and Social Justice* 4, 2 (2009): 136.

³⁸ David Held, "At the Global Crossroads: the end of the Washington Consensus and the rise of global social democracy," *Globalizations* 2, 1 (2005): 99.

³⁹ Shukla, "Power, Discourse, and Learning Global Citizenship."

⁴⁰ Edward Said, *Orientalism* (New York: Vintage Books, 1994).

⁴¹ Irene Lorenzoni and Nick F. Pidgeon, "Public Views on Climate Change: European and USA perspectives," *Climatic Change* 77 (2006): 89.

The homogenising flows of globalisation contrast with continued assertions of identity and cultural heterogeneity. Birgit Meyer and Peter Geshire argue that ‘people’s awareness of being involved in open-ended global flows seems to trigger a search for fixed orientation points ... as well as determined efforts to affirm old and construct new boundaries.’⁴² James Ferguson argues that there ‘is a new ‘transnationalized “local” that fuses the grassroots and the global in ways that make a hash of the vertical topography of power on which the legitimating of nation-states has long depended.’⁴³ “Glocal” is a concept that seeks to recognise the ways in which locally-oriented and organised groups interact with global politics through globalisation.⁴⁴ This interaction is often fuelled by rapid advances in communication technologies like the internet. There is also a clear aspect of political economy at play in the glocal concept, which seeks to explain and often critique transnational economic flows. The slogan “think globally, act locally” exemplifies a glocal orientation. Glocalism is thus potentially at the heart of the climate change issue.

But glocalism presents a challenge to climate change journalism. It is not easily framed in terms of dominant narratives about nations, states or global politics. Bulkeley and Newell suggest that an orthodox view of climate change as a global problem stems from the physical nature of climate change but translates as an *international* problem because nation states are seen as ‘the primary participants’ in global politics.⁴⁵ This conflation of interstate politics with globalism ignores the importance of non-state agents, especially non-governmental organisations (NGOs) and corporations, in the politics of

⁴² Birgit Meyer and Peter Geschiere, “Globalization and Identity: dialectics of flow and closure – introduction,” in *Globalization and Identity: dialectics of flow and closure*, edited by Birgit Meyer and Peter Geschiere (Oxford: Blackwell, 1999): 2.

⁴³ James Ferguson, *Global Shadows: Africa in the neoliberal world order* (Durham: Duke University Press, 2006): 111.

⁴⁴ Victor Roudometof, “Translationalism, Cosmopolitanism, and Glocalization,” *Current Sociology* 53, 1 (2005): 113–135.

⁴⁵ Bulkely and Newell, *Governing Climate Change*, 2. My emphasis.

climate change. The orthodox state-centricity fails to adequately explain the governance of climate change because it does not question exercises of state power and privileges Western conceptions of the state that conceive the state as neutral and non-dependent.⁴⁶ Drawing on James Rosenau's explanation of the differences between government and governance and on Robert Keohane and Joseph Nye's work on transnational networks of governance power, Bulkeley and Newell argue that as a

response to the perceived failures and limitations of more traditional international institutions and national governments ... the nature of the climate change problem and how it is being addressed has created the political space for new [transnational] collaborations and mechanisms of governance.⁴⁷

The state is not at the centre of their analysis, which instead highlights information-sharing, implementation and capacity-building as key practices of non-state climate governance.

Global policy responses to climate change take place in opaque spaces of global governance. Global governance is a contested concept and no one institution of global government exists. Increasingly, state governments have less power at local and domestic levels to enact policy. Castells theorises the existence of a 'network state, which is characterized by shared sovereignty and responsibility, flexibility of procedures of governance, and greater diversity in the relationship between governments and citizens.'⁴⁸ Maarten Hajer suggests the arrival of an institutional void, wherein established institutions of governance like nation states and the rule of law lack a monopoly on the policy-making process, if they have any power over it at all,

⁴⁶ *ibid.*, 9.

⁴⁷ *ibid.*, 55.

⁴⁸ Castells, "The New Public Sphere," 88.

and in which ‘there are no clear rules and norms according to which politics is to be conducted and policy measures are to be agreed upon.’⁴⁹ According to Hajer, governance in this transnational institutional void is an ad hoc process incorporating interested and relevant agents in the simultaneous formation of policy networks, norms, institutions, and outcomes.⁵⁰ In regard to the governance of climate change, some global institutions do exist, like the UNFCCC, but they have not at the time of writing achieved a binding global policy commitment on climate change. Joanna Depledge surveys the construction of the global climate change ‘regime’, concluding that ‘It’s a faulty process, but it’s the only one we have.’⁵¹

In these evolving spaces of global policymaking, the ways in which issues like climate change are discussed and understood can have major implications for the actions and processes of policymakers and policymaking. Climate change is a global problem; its effects will be felt locally, nationally, regionally and globally. In Matthew Nisbet’s terms, triggering ‘a new way of thinking about the personal relevance’ of climate change requires narratives that link the local and the global, the personal action and the global response.⁵² Doyle argues that

Climate change needs to be understood as a concern for the “here and now”, rather than a distant future, “out there” somewhere. This involves making climate change temporally, spatially and socially meaningful and relevant.⁵³

⁴⁹ Maarten Hajer, “Policy without Polity? Policy analysis and the institutional void,” *Policy Sciences* 36, 2 (2003): 175.

⁵⁰ *ibid.*

⁵¹ Joanna Depledge, *The Organization of Global Negotiations: constructing the climate change regime* (London and Sterling V.A: Earthscan, 2005): 231.

⁵² Matthew C. Nisbet, “Knowledge Into Action: framing the debates over climate change and poverty,” in *Doing News Framing Analysis: empirical and theoretical perspectives*, edited by Paul D’Angelo and Jim A. Kuypers (New York and Oxon: Routledge 2010): 44.

⁵³ Doyle, *Mediating Climate Change*, 8.

Dominant ways of thinking about and discussing global and domestic politics in the public sphere often keep the global and domestic realms separate. For example, following the 2008 global financial crisis, governments around the world were blamed by their citizens for the sudden collapse of their economies; in countries like Iceland, this led to a change of government. But Iceland's economic collapse was a direct consequence of the mortgage crisis in the US, itself a symptom of global 'casino capitalism', and although successive Icelandic governments could perhaps be afforded some blame for so deeply integrating their national economic fortunes in such volatile global investment areas, even here their decisions were arguably dictated by the global dominance of neoliberal prescriptions for national economic development.⁵⁴ Nonetheless, when the system fell apart the Icelandic people cast their government in the role of scapegoat. The point is, the intersections between global and local, national and international politics are complex. People often blame things that they know, that they think they understand and that they feel they have some power over – in Iceland's case, the national government. Climate change journalism must seek a way around this problem, and attempt to convey the sense of interconnectedness that glocalism sketches. Where journalistic discourses locate climate change, who is given power in political discourses of climate change and who is painted as victim, can have critical consequences.

This thesis proceeds with a discussion of the roles of mass media in democracy in relation to the importance of media texts to public understanding of political issues like climate change, and the processes by which meanings and power can be invested in and taken from media texts.

⁵⁴ Andrew Gamble, *The Spectre at the Feast: capitalist crisis and the politics of recession* (Basingstoke: Palgrave Macmillan, 2009).

The research methodology is then discussed, followed by analysis of the major research findings.

2. Mass Media, Framing and Climate Change

‘The power of a frame can be as great as that of language itself.’⁵⁵

The news and entertainment media are the ‘most important sources of information about the environment’ for most citizens.⁵⁶ Governments recognise the crucial role that public discourses of science play in many of the key political questions that frequently appear on the minutes of their cabinet meetings. In its dying days the Blair/Brown British Labour Government commissioned a detailed report on the inside workings of science journalism in Britain.⁵⁷ In New Zealand, Prime Minister John Key established the position of Chief Science Advisor in 2009, reflecting the perceived importance of science policy in the twenty first century. New Zealand also has a Prime Minister’s science media communications prize.

A basic model of the relationship between scientists, policy makers and the public places information flow at its core, and

assumes that, ideally, the content of the [scientific] information passes on unchanged and initiates political action almost automatically, following the “rational logic” of the information obtained.⁵⁸

Unsuccessful communication can thus be remedied by ‘more and better information’.⁵⁹ The model mirrors the “hypodermic” model of news media

⁵⁵ Robert M. Entman, “Framing: toward clarification of a fractured paradigm,” *Journal of Communication* 43, 4 (1993): 55.

⁵⁶ Cox, *Environmental Communication in the Public Sphere*, 163.

⁵⁷ Andy Williams and Sadie Clifford, “Mapping the Field: specialist science journalism in the UK national media,” (Cardiff: Cardiff University School of Journalism, Media and Cultural Studies, 2009). http://cf.ac.uk/jomec/resources/Mapping_Science_Journalism_Final_Report_2003-11-09.pdf (accessed 12/02/2012).

⁵⁸ Weingart et al., “Risks of Communication: discourse on climate change in science, politics, and the mass media,” *Public Understanding of Science* 9 (2000): 262.

⁵⁹ *ibid.*

communication, injecting the public with knowledge and understanding.⁶⁰ It is inaccurate for climate change science, if it is even accurate for any topic; the major issue is that the model neglects the role of intermediaries in shaping and framing the information flow and helping audiences to comprehend it. It also ignores the differentiated abilities of different groups of information receivers – readers and audiences – to (mis)understand the scientific information that they are presented with in diverse ways. Willy Smith contends that there is very little evidence that the more people understand science, the more they ‘like’ science.⁶¹ Moser argues that this is especially so when scientific knowledge conflicts with existing knowledge, as ‘individuals frequently reject ... new information as “false” if it ‘requires revision of previously held mental models or attitudes.’⁶² There is more to science journalism, to any journalism, than simply stating the facts. As Boykoff argues, ‘the role of the journalist is not that of a parrot.’⁶³ Uncontextualised and unexplained scientific data is unlikely to promote widespread public engagement with anything. Karen Callaghan and Frauke Schnell argue that:

the average citizen is neither an active consumer of information nor a consistent political participant ... [but is often] at the mercy of the media and other key political agents who meet as combatants in the policy arena and determine how issue debates and policy alternatives will be structured and defined.⁶⁴

The mass media plays an important role in science policy, as Boykoff explains, because, to an extent:

⁶⁰Daniel Riffe, Stephen Lacy and Frederick G. Fico, *Analysing Media Messages: using quantitative content analysis in research*, 2nd ed. (New Jersey: Lawrence Erlbaum Associates, 2005): 6.

⁶¹ Willy Smith, “Talking Science” (lecture, University of Auckland, 12 May 2011).

⁶² Moser, “Costly Knowledge – Unaffordable Denial,” 168

⁶³ Boykoff, *Who Speaks for the Climate?* 62.

⁶⁴ Karen Callaghan and Frauke Schnell, “Assessing the Democratic Debate: how the news media frame elite policy discourse,” *Political Communication* 18, 2 (2001): 183.

elected officials, (climate) policy negotiators and rank-and-file policy actors view amplified media attention to climate change as a proxy for public attention to climate change (and pressure for action) ... Conversely, a diminished amount of coverage can be seen as detrimental to putting forward strong climate policies.⁶⁵

Science journalism often relies on elite sources: scientists, academics and governmental sources. It shares this elite focus with political journalism, although the decrease in elite sources and length of sound-bites and increase in decontextualised and unexplained vox-pops in political television news stories is a documented phenomenon.⁶⁶ Adam Simon and Michael Xenos argue that in contemporary mass mediated democracies, 'the origins of public opinion – the sacred icon of democracy – ... [lie] in elite discourse.'⁶⁷ Politicians and other elites, Callaghan and Schnell argue, can 'maximize the media's responsiveness to their themes by creating frames that fit the conventional news narrative and appeal to journalists' own personal values.'⁶⁸ Scholars such as Edward Herman and Noam Chomsky argue that the global(ising) structure of capitalism overarches public mediated discourse and elite control serves to reinforce and propagate dominant political-economic hegemonies.⁶⁹ Aeron Davis argues that through the creation of tight elite policy-communication networks and the 'capture' of journalists by elite sources, a culture of elite-driven spin defines the mainstream British media.⁷⁰

⁶⁵ Boykoff, *Who Speaks for the Climate?* 28.

⁶⁶ For example, see Daniel Cook, "Diet-News: the impact of deregulation on the content of One Network News, 1984-1996," PhD Thesis, Department of Political Studies, University of Auckland (2002).

⁶⁷ Adam Simon and Michael Xenos "Media Framing and Effective Public Deliberation," *Political Communication* 17, 4 (2000): 363.

⁶⁸ Callaghan and Schnell, "Assessing the Democratic Debate," 189.

⁶⁹ Edward S. Herman and Noam Chomsky, *Manufacturing Consent: the political economy of the mass media*, 2nd ed. (New York: Pantheon, 2002).

⁷⁰ Aeron Davis, *The Mediation of Power: a critical introduction* (Oxon and New York: Routledge, 2007): 72.

Pooley cites an example of journalistic capture from *The Washington Post*, wherein a journalist deliberately gave unequal weight to climate-sceptic arguments in order to preserve relationships with sources.⁷¹

The media play a dual role in the framing of elite discourse: as a conduit for elite and non-elite frames and as constructors of their own frames.⁷² When elites agree on an issue, journalists and readers can easily follow their lead. But when there is disagreement among elites, spaces open up for media and public debate. Elites are not a uniform category of people, and the public may trust some more than others when they are reported in the media. Trust is a key issue for questions of political communication in an age of political marketing and spin. In the case of climate change, Saffron O'Neill and Sophie Nicholson-Cole's research suggests that people are more likely to trust environmental organisations and scientists who work for universities or environmental groups, but are 'somewhat ambivalent about trusting' politicians on local, national and intergovernmental levels.⁷³ Irene Lorenzoni and Nick Pidgeon suggest that individuals 'tend to mistrust' governments, businesses and industry groups in regards to environmental politics, but nonetheless assign governments 'a high degree of responsibility' for solving environmental problems.⁷⁴

Additionally, both the global Occupy movement on the left and the American Tea Party movement on the right are evidence that many people hold generally critical or sceptical views of elites, especially financial and economic elites following recent financial crises. Lorenzoni and Pidgeon argue that mistrust in public institutions and political elites is 'a determining factor

⁷¹ Pooley "How Much Would You Pay to Save The World?" 13.

⁷² Callghan and Schnell, "Assessing the Democratic Debate," 184, 187.

⁷³ Saffron O'Neill and Sophie Nicholson-Cole, "'Fear Won't Do It': promoting positive engagement with climate change through visual and iconic representations", *Science Communication* 30, 3 (2009): 363.

⁷⁴ Lorenzoni and Pidgeon, "Public Views on Climate Change," 85.

inhibiting public support for [climate change] mitigation efforts' because individuals recognise that the scale of the problem requires widespread, coherent and institutionalised action in order for individual actions to 'make a difference'.⁷⁵ Therefore the classification of climate change as an elite economic issue potentially encourages scepticism of climate change and global measures to mitigate and adapt to it, to mirror the widespread scepticism that already exists about the key agents in the climate policy debate: politicians, scientists, economists, energy companies and environmentalists.

Elites – who as well as being 'those people who devote the bulk of their activities to politics or public affairs'⁷⁶ can also be conceptualised as somewhat different from the public at large by virtue of their specialist knowledge – often do guide public discourse, but so they should: scientists should play key roles in public scientific discourse, just as doctors should be heard in public medical debates and politicians should be central agents in political discourse. Boykoff defends the role of elites and experts in public debate: 'Media portrayals of the details and nuances of expert views help journalists, scientists, policy actors and public citizens alike to better understand and appreciate these changing and contested contours of climate science policy.'⁷⁷ None of this suggests that the public is completely out of the picture, or that democracy is doomed to exist as merely a façade for elite control: a lot of the time, mass media do provide crucial informational and deliberative functions in late-modern democracies. Indeed, framing forms a central component of public, mediated deliberation. In liberal-pluralist fashion, Simon and Xenos envisage 'competing frames as the principle means by which interlocutors interact with one another in a mass media context.'⁷⁸

⁷⁵ *ibid.*, 88.

⁷⁶ Simon and Xenos, "Media Framing and Effective Public Deliberation," 364.

⁷⁷ Boykoff, *Who Speaks for the Climate?* 58

⁷⁸ *ibid.*, 367.

The news media continues to impart information and opinion, and people continue to watch, read, listen and learn. The critical question, and the one that this thesis addresses, is what audiences can learn, and whether it is worth learning.

Framing

Framing is a process by which certain aspects of an issue are made prominent. Framing involves defining the type of issue or problem, and therefore placing it within plausible spheres of response and action. Erving Goffman's 1974 study of framing popularised the term in the academic field of political communication studies, and was grounded in the observation (previously accepted in other social science disciplines like Anthropology) that we 'actively classify and organize our life experiences to make sense of them'; we construct 'schemata of interpretation' which help us to 'locate, perceive, identify, and label' the things we experience in the world around us.⁷⁹ The term has also been applied to human-environmental geography, notably by Deborah Shmueli, who defines framing as

a cognitive process whereby individuals and groups filter their perceptions, interpretations and understandings of complex situations in ways consistent with their own socio-political, economic and cultural world views and experiences.⁸⁰

In this sense, people frame new information that they process as a way of understanding that information. Shmueli usefully explains that

⁷⁹ Erving Goffman, *Frame Analysis: an essay on the organization of experience* (Boston, M.A: Northeastern University Press: [1974] 1986): 21.

⁸⁰ Deborah F. Shmueli, "Framing in Geographical Analysis of Environmental Conflicts," *Geoforum* 39 (2008): 2048.

As cognitive devices, frames are interpretive lenses through which we see and make sense of complex situations in ways internally consistent with our world views, giving meaning to events in the context of life experience, understandings, and roles.⁸¹

Dominant cognitive frames take root over time and often play off pre-existing conditions and perceptions to achieve relevance, and then dominant status. This understanding of cognitive frames and framing as tools for explaining human perception and action is a valuable sociological insight. Analysis of the politics of climate change, however, requires the addition of a power-focused dimension. Paul D'Angelo puts it thus:

if you could lay the entire framing project down on a psychoanalytic couch, you would find that it is concerned not merely with examining media content and its effects, but with understanding the perils and possibilities of the news media's role as a political actor in the deliberative setting.⁸²

There is thus tremendous power invested in a mass media textual frame. Simon and Xenos explain: 'a [textual] frame is an ever-present discursive device that channels the audience as it constructs the meaning of particular communicative acts.'⁸³ Thus, as well as being understood as cognitive devices, frames are also 'strategic communication devices' that 'persuade broader audiences, build coalitions or promote preferred outcomes.'⁸⁴ As Dietram Scheufele argues, audience or cognitive frames (through which people process and understand information) must be distinguished from the frames

⁸¹ *ibid.*, 2049.

⁸² Paul D'Angelo, "Arriving at the Horizons of News Framing Analysis" in *Doing News Framing Analysis: empirical and theoretical perspectives*, edited by Paul D'Angelo and Jim A. Kuypers (New York and Oxon: Routledge 2010): 357.

⁸³ Simon and Xenos, "Media Framing and Effective Public Deliberation," 367.

⁸⁴ Shmueli, "Framing in Geographical Analysis of Environmental Conflicts," 2049.

that are embedded in mass media texts, which are used to present information and which are the primary subjects of this thesis.⁸⁵ Robert Entman explains that textual frames in the mass media:

*select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation.*⁸⁶

Put differently, 'to frame a message in a given way entails necessarily that the message is constructed in such a way as to contain certain associations rather than others.'⁸⁷ A simple and common example is the use of the terms "terrorists" and "freedom fighters" as different ways to frame violent non-state political groups. By highlighting particular factors, viewpoints and agents, and by presenting these in certain ways using certain words and phrases, newspapers convey meanings and judgments to their readers and often rule out other possibilities for interpretation. Entman points out that journalists

may follow the rules for "objective" reporting and yet convey a dominant framing of the news text that prevents most audience members from making a balanced assessment.⁸⁸

Mediated representations of climate change 'are convergences of competing knowledge ... drawing attention to how to make sense of, as well as value, the changing world.'⁸⁹ The framing of climate change, and of the Cancun

⁸⁵ Dietram A. Scheufele, "Framing as a Theory of Media Effects," *Journal of Communication* (1999): 106.

⁸⁶ Entman, "Framing," 52. Italics in original.

⁸⁷ Simon and Xenos, "Media Framing and Effective Public Deliberation," 367.

⁸⁸ Entman, "Framing," 56.

⁸⁹ Boykoff, *Who Speaks for the Climate?* 4

conference, is a product of both the journalists' understandings of the issues and problems and of the wider hegemonic discourses through which journalists communicate through their work. On one level, the elite international agents involved in the conference are likely to be framed differently from activist groups protesting on the streets of Cancun. On another level, the overall framing of the climate change issue and the conference's attempts to mitigate and respond to climate change can influence public opinion and domestic political action.

Most media texts contain dominant frames, and much of the time these frames affect how uncritical or non-expectant audiences and readers perceive the information in the text. The role that the mass media plays in late-modern western democracies as an agenda-setter and information provider makes the media 'a central component in constructing the social world'.⁹⁰ The authority afforded to news media, in particular, gives the news genre added power in the portrayal of important issues like climate change. Whether conceptualised as citizens, consumers or consumer-citizens, people's understanding of science comes mostly from the mass media.⁹¹

Al Gore's 2006 documentary *An Inconvenient Truth* has been labelled 'an illustrative watershed moment in the shifting politics of climate change'; the film's reach and impact was amplified by widespread analysis of the film in the mass media.⁹² While science-fiction movies like *The Day After Tomorrow* (2004) that depict climate disaster might also raise consciousness about the possible effects of climate change, their Hollywood origins prevent audiences from taking them too seriously.⁹³ The readers of newspapers may be critical of

⁹⁰ Linda Jean Kenix, "Framing Science: climate change in the mainstream and alternative news of New Zealand," *Political Science* 60, 1 (2008): 119 .

⁹¹ Boykoff, *Who Speaks for the Climate?* 53

⁹² Boykoff, Goodman and Curtis, "Cultural Politics of Climate Change," 143.

⁹³ Gill Branston, "The Planet at the End of the World: 'event' cinema and the representability of climate change" *New Review of Film and Television Studies* 5, 2 (2007): 211-229.

how newspapers report political and scientific issues, but they can also appropriately expect that newspaper journalists attempt to portray an adequate version of the facts at hand. Newspapers are not usually read in the same ways that films are “read”.

Underlying this is recognition of the political power conveyed through dominant frames, and the hegemonic discourses within which mainstream media produce information as both commodity and civic necessity and which are mutually reinforced by many political frames. Employed in a news text a frame is, according to Entman, ‘the imprint of power’.⁹⁴ Gurevitch, Coleman and Blumler define a political act as ‘an encounter with power’.⁹⁵ Boykoff, Goodman and Curtis define politics as ‘the struggle for dominance among political opinions and sympathies, attitudes and opinions’.⁹⁶ The framing of climate change is therefore inherently political and at the centre of discursive climate politics.

Media power and political influence are expressed in the media’s ability to frame the news. Political agents

peddle their messages to the press in hopes of gaining political leverage. The media’s political influence arises from how they respond – from their ability to frame the news in ways that favour one side over another.⁹⁷

However, whether journalists or politicians hold ultimate power over political framing is a topic of debate. In the creation of media texts, framing is not always a conscious process. Davis argues that the ‘capture’ of political and

⁹⁴ Entman, “Framing,” 55.

⁹⁵ Gurevitch, Coleman and Blumler, “Political Communication,” 178.

⁹⁶ Boykoff, Goodman and Curtis, “Cultural Politics of Climate Change,” 158.

⁹⁷ Robert M. Entman, *Projections of Power: framing news, public opinion, and U.S. foreign policy* (Chicago: University of Chicago Press, 2004): 4.

financial journalists by small, closed networks of elites makes journalists ultimately beholden to elite agents.⁹⁸ This institutionalised reliance on small elite networks potentially overshadows the decisions made by individual journalists when writing up their stories. Newspapers become vehicles of communication for elites and by elites, but funded by advertising aimed at and mass sales to the general public.

Additionally, audiences and readers may ignore, misunderstand or critique dominant frames in a media text and they may (re)frame the text in their own ways. Yet the media does possess crucial power in political and social agenda setting and the formation and constellation of public opinion(s). The media is both reflective of and reflects its audiences, but it would be hard to find a single newspaper reader who wholeheartedly believes everything their favourite newspaper ever publishes. Linda Jean Kenix states that 'mass media construct powerful images of reality for the public ... [but] the public draws upon these frames only to contextualize them against their own pre-existing schemas.'⁹⁹

Journalists therefore report, and frame, news in ways that can be understood in pre-existing terms. The outcome of the reading of media texts is the production of a version of reality that is built from personal experience, human interaction and mediated information sources. It is a mistake to assume that all readers take the same meanings from the same texts, but as Entman argues, 'To identify a meaning as dominant or preferred is to suggest a particular framing of the situation that is most heavily supported by the text and is congruent with the most common audience schemata.'¹⁰⁰ The power of a frame is drawn from the language employed to define an issue; language is unlikely to resonate with audiences unless it is understandable in terms of

⁹⁸ Davis, *The Mediation of Power*.

⁹⁹ Kenix, "Framing Science," 119.

¹⁰⁰ Entman, "Framing," 56.

audience members' cognitive structures. Entman refers to audience schemata – ways of categorising and seeing the world.¹⁰¹ The framing of politics in mainstream media thus often speaks to, and reinforces, dominant ways of looking at things.

It does not necessarily follow that the framing of issues in the mainstream mass media is always a conscious, manipulative process by which elites seek to control public opinion and perpetuate dominant systems of social power, although it would be unhelpful to rule this explanation out altogether. The macro and micro influences on what makes the first five minutes of an evening news bulletin or the front page of a newspaper are complex and multifaceted, as are the processes by which news stories are framed. Journalists privilege certain agents and sources for a variety of reasons including easy access, specialist knowledge and the ability to provide sound bites and good quotes for copy. Allison Anderson explains that environmental journalism is produced under multiple pressures, from 'advertising pressure, editorial policy and ownership, to stylistic convention, news cultures and the limitations of time and space.'¹⁰² In 2011, thirty-one British weekly newspapers closed.¹⁰³ In a global media system that is facing losses in audience numbers, advertisers, income, time and staff the decision whether to run a story and how to run it is often rushed.

In addition, mass media news journalism is event- and conflict-driven. Stories and events gain newsworthiness when they contain drama, novelty, conflict, elite agents, proximity, a personal angle, relevance, new information and, especially since the advent of television, striking imagery. Crime stories

¹⁰¹ Entman, "Framing"; Entman, *Projections of Power*.

¹⁰² Allison Anderson, *Media, Culture, and the Environment* (New Brunswick, N.J.: Rutgers University Press, 1997): 56.

¹⁰³ Roy Greenslade, "Weekly Newspaper Closures in 2011," *The Guardian* 16 December 2011. <http://www.guardian.co.uk/media/greenslade/2011/dec/16/local-newspapers-downturn> (accessed 25/01/2012).

feature heavily in the mass media largely because they ‘satisfy the criteria of event-oriented reporting, include drama, and usually provide stunning visuals.’¹⁰⁴ Science too can fulfil these criteria, for example, images from the Hubble space telescope can provide the basis for scientific reporting that is striking, dramatic, deals with new information and contains catching images.

There are twin ideal outcomes of news framing in broadsheet newspapers: to sell papers, and to inform readers and engage public opinion on major issues. But whatever weight is given to the commercial and political influences on the framing process, the underlying objective is to make news stories relevant to particular audiences by presenting them according to widely understood values, meanings and discourses. Newspapers speak in particular languages that impart specific meanings; they reflect, shape and reinforce how individuals understand the world around them. Journalists and editors do this consciously (often) and in such a way as to naturalise the meanings imparted, because news stories must make sense to audiences and readers: this is the goal of framing.

Scholars such as Nisbet argue given that issues, events and stories are framed in the mainstream media in certain ways, there is a need for media elites to actively engage with the framing process with the goals of facilitating better information flow, public understanding and deliberation, because to not do so is to perpetuate the much-lamented decline in public political engagement and participation.¹⁰⁵ Nisbet writes that

To overcome the communication barriers of human nature, partisan identity, and media fragmentation requires tailoring messages to a specific medium and audience, using carefully researched metaphors,

¹⁰⁴ Callaghan and Schnell, “Assessing the Democratic Debate,” 189.

¹⁰⁵ Nisbet, “Knowledge Into Action,” 44.

allusions, and examples that trigger a new way of thinking about the personal relevance of a gridlocked problem. Whether it is climate change, poverty, or another issue, the public and policymakers require frameworks for connecting the dots on otherwise apparently isolated events, trends, and policy solutions.¹⁰⁶

Likewise, Moser states that

communicators and advocates interested in increasing positive public engagement may even have to rethink their own commitment to the enlightenment ideal [of objectivity and knowledge neutrality]. Substantial research shows that providing information and filling knowledge gaps is at best necessary, but rarely sufficient to create active, behavioural engagement, and occasionally may even be used as a substitute for action.¹⁰⁷

These are not calls for objective journalism in the information-centric “the truth is out there” tradition. Pooley clarifies that climate change journalists should not be unblinkingly biased against those who seek to stall climate change policy, but they should, instead,

be sympathetic only to the idea that solutions must be found and that further delay is intolerable. Beyond that, what’s needed isn’t sympathy but honesty — a referee who calls it straight. The press has an obligation to remain clear-eyed and sceptical because with the policy issues so complex and the stakes so high, we can’t afford to get this wrong.¹⁰⁸

¹⁰⁶ *ibid.*

¹⁰⁷ Moser, “Costly Knowledge – Unaffordable Denial,” 170.

¹⁰⁸ Pooley, “How Much Would You Pay to Save the Planet?” 18.

In the US, where Nisbet and Pooley both write from, there is a clear democratic need for a moderated response to the extreme partisanship and elite-centred policy debate that characterises mass media narratives of climate change. Because mass media frames set the terms for public debate about climate change, the American news media has a democratic obligation to help provide the framework for connecting the dots about climate change. In London, where *The Guardian* is published, similar networks of elite global policy agents exist, but less so in the smaller cities of Dublin and Auckland, home to *The Irish Times* and *The New Zealand Herald*. Nevertheless, Ireland and New Zealand have active climate-focused interest groups, ranging from environmental organisations to established scientific bodies, farming lobbies and industrial polluters. Just because there are likely more (climate) policy agents in London than in Dublin or Auckland does not mean that the discursive climate battlefield in Auckland and Dublin is any less fraught with contention.

In order to fill important democratic functions, a well-functioning mass media should provide late-modern western democracies like England, Ireland and New Zealand with at least some of the key structural supports for the 'connecting the dots' required for effective policy development that Nisbet describes above. Climate change presents a challenge to global media, in its many different forms from Twitter to *The New York Times*, to build narratives and construct frames that promote public understanding of the science, politics and economics of climate change. This potentially involves localising a global problem and personalising foreign policy, because it is much easier to understand things that are geographically, temporally and contextually close. Such aspirational goals of inspiring social change for a global media system that is at best fragmented, uneven and consumerist seem lofty, until they are compared with the climactic and economic outcomes of doing the opposite.

Exploration of the direct effects of climate change journalism on the readers of *The Irish Times*, *The Guardian* and *The New Zealand Herald* is beyond the scope of this thesis. Nonetheless, studying the framing of important political events and phenomena like climate change and the Cancun conference helps to shed light on the competing discourses and agents, and helps to reveal patterns in their communication with the public. This thesis thus seeks to illuminate power relations at play in the politics of climate change and the politics of media reporting, both at global and local levels. This research is not about audience reception, but about the structural environment of climate change reporting and the effects this has on the flow of information regarding climate change. Who speaks, and how do they speak, in climate change newspaper journalism? What does newspaper coverage of climate change at the time of the Cancun conference suggest about what newspapers think will click with dominant audience schemas, and sell papers? What defines the politics of climate change in the media? With this in mind, the following section surveys academic critiques of climate change journalism.

Framing Climate Change

The following section surveys some key contributions to the growing field of studies of media reporting of climate change with the aim of sketching some tentative expectations of the Cancun-related dataset. The importance of COP as critical discourse moments is expressed, followed by some outcomes of research on past COP including the 2009 Copenhagen COP. The role of “scare stories” in engaging public opinion on climate change is discussed and a useful distinction between alarmist and alarming is articulated. The largely North American “balance as bias” discourse is explored, and the roots of this discourse are traced to the differing forms of knowledge production in science and newspaper journalism.

The weather is an important part of mass news media formats in late-modern media systems. Some accounts of audience/consumer desires propose that ‘upon hearing from a newscaster that the world was safe, their [television news audiences] remaining viewing motive often was only to hear what the weathercaster had to say.’¹⁰⁹ Weather is perhaps the most global, most widely experienced and understood phenomenon deemed newsworthy. Understood through meteorology, superstition, or most commonly through direct experience, weather is experienced by everyone. While more prominent in television news bulletins than newspapers (and perhaps also more obvious – a small weather summary on page two is not as obtrusive as constant weather summaries throughout a TV news bulletin), weather as “news you can use” plays a key role in the satisfaction of perceived reader/audience wants. A problem with climate change as a topic of journalism is that it potentially destabilises the weather as “safe” news. Weather is transformed from a blameless act that has passive victims and beneficiaries into a politicised driver of policy. As Doyle argues, how weather and climate change are (not) linked together by individuals is key to the ways in which individuals engage with information about climate change to construct systems of knowledge and understanding.¹¹⁰ When newspapers like *The New Zealand Herald* link climate change and ‘a summer of cloudless days’, this detracts from the understanding of the negative consequences of climate change.¹¹¹

Astrid Dirikx and Dave Gelders suggest that climate change is often ‘not a prevalent theme’ in the media ‘except at critical moments like international summits ... especially at those ‘critical discourse moments’ public

¹⁰⁹ Craig Allen, “Discovering Joe Six Pack Content in Television News: the hidden history of audience research, news consultants, and the Warner class model,” *Journal of Broadcasting and Electronic Media* 49, 4 (2005): 371.

¹¹⁰ Doyle, *Mediating Climate Change*, 109.

¹¹¹ NZPA, “Heat Now Means We’ll be Even Hotter Soon,” *The New Zealand Herald*, 4 December 2010, A20.

understanding of climate change might be altered.¹¹² Doyle agrees that the event-nature of COP and the strong presence of elite agents at COP make them 'compatible with the media's preferred news values.'¹¹³ Because much climate change journalism is focused on international summits, Ulrika Olausson argues that climate change mitigation is generally framed by European newspapers as a 'transnational concern'.¹¹⁴ Within this transnational space, conflict between the US and the European Union (EU) is often framed as 'drama', and the discourses that newspapers present are thus emotionally charged and conflict-oriented.¹¹⁵ The global south rarely features in these discourses, and is usually homogenised and characterised as passive when it does feature; European newspaper readers are encouraged to pity the residents of developing countries affected by climate change and to understand that climate-related droughts and floods in the global south are largely the fault of the industrialised world. However, notes Olausson, when action on climate change is framed in the European media at the local, rather than transnational, level the conflict-focused and emotional discourses are not present, instead newspaper reporting takes on a neutral and distanced character.¹¹⁶

Dirikx and Gelders compare Dutch and French media frames during COP from 2001 to 2007 and find that the newspapers of the two countries studied 'revealed no significant differences' between media framing of climate change in France and the Netherlands.¹¹⁷ These conferences were the predecessors to the 2010 Cancun conference that this thesis focuses on, in part in response

¹¹² Astrid Dirikx and Dave Gelders, "To Frame is to Explain: a deductive frame-analysis of Dutch and French climate change coverage during the annual UN Conferences of the Parties," *Public Understanding of Science* 19 (2010): 735.

¹¹³ Doyle, *Mediating Climate Change*, 102.

¹¹⁴ Ulrika Olausson, "Global Warming – Global Responsibility? Media frames of collective action and scientific uncertainty," *Public Understanding of Science* 18 (2009): 426.

¹¹⁵ Olausson, "Global Warming – Global Responsibility?" 427-8.

¹¹⁶ *ibid.*

¹¹⁷ Dirikx and Gelders, "To Frame is to Explain," 739.

to Dirikx and Gelders' call for 'more cross-national analyses of climate change media coverage'.¹¹⁸ They find that although during COP politics and policy characterise the climate-centred discussion more than science does, around the time of COP journalists often include some scientific context or background in their reporting on the political, social and economic aspects of climate change.¹¹⁹ This situates international relations within the dichotomy of public and political opinion on climate change which is often focused around conflict between climate change "believers" and climate change "sceptics".¹²⁰

The 2009 COP in Copenhagen, Denmark, is perhaps the most hyped international climate change event in the history of climate politics. Doyle pairs an analysis of British newspaper coverage, including *The Guardian*, of Copenhagen with a nuanced theoretical analysis of how humans view the environment.¹²¹ Doyle's analysis of Copenhagen coverage focuses on how scientific uncertainty is represented, which agents are bestowed with importance and responsibility, and how urgency appears in the coverage. Of ten daily and Sunday newspapers Doyle analysed, only two (*The Daily Mail* and *The Times*) did not support the climate science consensus. These two newspapers, argues Doyle, 'downplay and undermine the urgency of addressing climate change by presenting policy action as deluded (because there is no chance of success) or unproductive (because it threatens economic growth)'.¹²²

Doyle paints a picture of *The Guardian* as a 'liberal, left of centre', pro-environment communicative force.¹²³ She praises the newspaper for its 'high

¹¹⁸ *ibid.*, 733.

¹¹⁹ *ibid.*, 736.

¹²⁰ *ibid.*, 739.

¹²¹ Doyle, *Mediating Climate Change*.

¹²² *ibid.*, 115.

¹²³ *ibid.*, 104.

number of commentary and opinion pieces’ including the ‘Summit Diary’, for the way it ‘refutes scientific uncertainty’, and for its articulation of ‘the unequal power relations between rich and poor countries underpinning the negotiations’.¹²⁴ She further describes how *The Guardian* presents climate sceptics ‘as irrational, deluded and politically motivated to harm climate policy action.’¹²⁵ However, Doyle admits, even the ‘quality broadsheet’ newspapers like *The Guardian* employ ‘showdown’ elite conflict framing to describe the political negotiations at the Copenhagen COP.¹²⁶ This thesis largely confirms Doyle’s findings about *The Guardian* and expands on them in subsequent sections.

In Europe, the science behind climate change is rarely challenged in the media, and when it is, the sceptical viewpoint is usually presented as a minority viewpoint. Olausson finds that these strong trends are evident across climate change reporting in French, German and Swedish newspapers, and directly contrasts American ‘liberal-pluralist’ and balance-focused reporting with European reporting which is underpinned by ‘the assumption that human-induced global warming is a direct cause of climate change, bringing with it dramatic consequences already at hand.’¹²⁷ This certainty is supported by quotes from experts and elites, as well as “eye-witnesses” whose personal experiences of climate change are highlighted.¹²⁸ Peter Weingart, Anita Engles and Petra Pansegrau, however, point out that in German media, the science of climate change is increasingly questioned, and thus in Germany the media ‘now express a certain scepticism toward their own initial position [of promoting acceptance of the strong evidence in favour of anthropogenic climate change].’¹²⁹ Likewise, Cox suggests that from the 1980s to the 1990s,

¹²⁴ *ibid.*, 105-106, 116, 119.

¹²⁵ *ibid.*, 107.

¹²⁶ *ibid.*, 103, 117.

¹²⁷ Olausson, “Global Warming – Global Responsibility?” 429.

¹²⁸ *ibid.*, 430.

¹²⁹ Peter Weingart, Anita Engles and Petra Pansegrau, “Risks of Communication.” 274.

American mediated climate change discourse has evolved from that of serious impending disaster to that of fringe environmentalism.¹³⁰

Dirikx and Gelders find that governments are often attributed responsibility for alleviating climate change, and that citizens and policy-makers are encouraged to focus on addressing climate change on large-scale rather than personal levels.¹³¹ Importantly, Olausson also stresses, European media '*do not offer any alternative frames*, in relation to those established in policy discourse, for understanding global climate change.'¹³² These findings are largely confirmed by this research. The use of the conflict frame is apparent in the juxtaposition of countries at the COP, perhaps to be expected in media coverage of any important intergovernmental conference.

In the US, the journalistic norm of balance is given much weight, which has tended to have the effect of presenting the science behind climate change as far more contested than it is in the media in most other countries. Moser states that American public opinion on climate change is rather cleanly divided along Republican/Democrat lines.¹³³ Stephen Schneider and Michael Mastrandrea suggest that in political journalism 'it is both natural and appropriate for fair and honest journalists to report "both sides" of an issue' but when science is involved, the 'political balance model often results in well-established conclusions given equal weight in a story with speculative ones, resulting in public confusion regarding both scientific knowledge and appropriate societal responses.'¹³⁴ *New York Times* environmental reporter Andrew C. Revkin stresses that although journalists are trained to 'find the argument', where climate change is concerned it is 'crucial' to also 'find the

¹³⁰ Cox, *Environmental Communication and the Public Sphere*, 8.

¹³¹ Dirikx and Gelders, "To Frame is to Explain," 739.

¹³² Olausson, "Global Warming – Global Responsibility?" 433. Italics in original.

¹³³ Moser, "Costly Knowledge – Unaffordable Denial," 162.

¹³⁴ Schneider and Mastrandrea, "The Politics of Climate Science," 19.

agreement.¹³⁵ Boykoff notes that as the science of climate change has moved towards consensus over the last two decades, the American media have increasingly emphasised conflict and contentions within the scientific community, leading to the ‘appearance of a storyline of increased uncertainty and debate over time.’¹³⁶ This is referred to as “balance as bias”.¹³⁷ Boykoff notes that the caution and uncertainty that is often at the core of new scientific theories and findings is ‘difficult to translate smoothly into crisp, unequivocal commentary’ of the type valued by journalists, policy makers and members of the public.¹³⁸ Biophysical science is complex and often contains uncertainties, but this comes across to/in the media as ‘scientific confusion and incompetence.’¹³⁹ In this environment, Pooley argues, journalists should aim to play the role of referee, rather than stenographer or ‘judge and jury’.¹⁴⁰

Boykoff suggests that the US media tends to place greater stress on the social, economic and political consequences of climate change science, like its effects on economies and trade, than on the ways in which socio-political and economic activities affect and effect global climate change.¹⁴¹ It’s the economy, stupid, and climate change is seen as a problem for economists and policy makers to overcome, rather than a problem in part caused by the existing policies of the same economists and policy makers. Ultimately, the US media’s framing of climate change science as contentious and conflict-ridden ‘can create spaces for US federal policy actors to defray responsibility and

¹³⁵ Anrew C. Revkin, quoted in Pooley, “How Much Would You Pay to Save the Planet?” 3.

¹³⁶ Boykoff, “From Convergence to Contention,” 481-2.

¹³⁷ Maxwell T. Boykoff and Jules M. Boykoff, “Climate Change and Journalistic Norms: a case-study of US mass-media coverage,” *Geoforum* (2007), doi:10.1016/j.geoforum.2007.01.008

¹³⁸ Boykoff, “From Convergence to Contention,” 483.

¹³⁹ *ibid.*, 485.

¹⁴⁰ Pooley, “How Much Would You Pay to Save the Planet?” 3-4.

¹⁴¹ Maxwell T. Boykoff, “From Convergence to Contention: United States mass media representations of anthropogenic climate change science,” *Transactions of the Institute of British Geographers* 32, 4 (2007): 485.

delay action regarding climate change.¹⁴² Boykoff notes that although nature provides a backdrop in front of which human agents vie for material and epistemological success, this background position means that nature is often subservient to socio-political and economic concerns.¹⁴³ This leads to climate change being framed as an economic burden, and also to promotion of market-based measures for mitigating climate change. Similarly, Pooley argues that American climate change journalism has been characterised by three features: a misrepresentation of the economics of climate change regarding the costs and benefits of emissions cap-and-trade systems, a failure ‘to perform the basic service of making climate policy and its economic impact understand-able to the reader’, and a failure by newspapers and editors to devote sufficient resources to covering climate change.¹⁴⁴

The idea that the costs of climate change policy are dangerously high conflicts with the goals of groups like New Zealand’s Sustainable Business Council, which seek to highlight the potential bottom-line benefits of reducing greenhouse gas emissions. Within a neoliberal global political economy, using self-interest to suggest that industry can benefit from emissions-reducing behaviour appears as equally valid to the discussion as the suggestions of Kenix, Olausson and Nisbet that people should be encouraged to think about the moral dimension of climate change is. The real climate battle, “green” economists argue, is to make enough businesses understand that they can save and make money by combating climate change, and to combat the common framing of environmental protection in opposition to economic development. Considerations of morality and social justice are important to inspire behaviour change, but in the absence of total rethinking of the dominant neoliberal paradigm and the economic base of global economies,

¹⁴² *ibid.*, 486.

¹⁴³ *ibid.*, 485.

¹⁴⁴ Pooley, “How Much Would You Pay to Save the World?” 5.

publicising the economic and financial benefits of climate change is an equally important behaviour change motivator.

Little scholarship exists on the reporting of climate change in the New Zealand media; this thesis contributes to a small but growing academic understanding of climate change journalism in a New Zealand context. Papers on the media and climate change were presented at the 2011 Journalism, Media and Democracy Conference on the Political Economy of Communication in Auckland. New Zealand climate change blog *Hot Topic* has published analysis of climate scepticism in *The New Zealand Herald*. From 1982 to early 2012 the newspaper published thirty-six opinion pieces by leading New Zealand climate change sceptic Dr Chris de Freitas of the University of Auckland; twelve of these were published after the fourth IPCC report in 2007, which, as explained, forms the foundation of accepted climate science consensus.¹⁴⁵ According to *Hot Topic*, *The New Zealand Herald* has published more of de Freitas' work than New Zealand's leading right wing newspaper, *The National Business Review*, has. But the *Hot Topic* study did not count how many pro-climate consensus pieces the newspaper published, which makes a sound and useful comparison difficult.

Also within New Zealand, Kenix argues that the shape of climate change reporting is very similar in both mainstream and alternative media.¹⁴⁶ Kenix suggests that New Zealand media follow British and European trends in the reporting of climate change, and that the "balance as bias" feature of

¹⁴⁵ Cindy Baxter, "Cranking it Out: NZ papers conned by denier media strategy," *Hot Topic* 16 January 2012. <http://hot-topic.co.nz/cranking-it-out-nz-papers-conned-by-denier-media-strategy/> (accessed 1/02/2012).

¹⁴⁶ Kenix, "Framing Science"; Linda Jean Kenix, "An analysis of climate change narratives in the alternative press of New Zealand" (paper presented at the sixth Annual Hawaii International Conference on Social Sciences, Honolulu, 30 May – 2 June 2007); Linda Jean Kenix "A Comparative Analysis of Climate Change in the Alternative and Mainstream Press of New Zealand and the United States" (paper presented at the 58th Annual International Communication Association Conference, Montreal, 22 – 26 May, 2008).

American climate change reporting is largely absent from New Zealand media.¹⁴⁷ Elite sources, especially governmental sources, dominate media reporting of climate change in New Zealand, which is often framed with concern for domestic politics and also international relations.¹⁴⁸ Importantly, as in many other countries, the New Zealand media often reports climate change simplistically and explains scientific questions only briefly, potentially leaving audiences bewildered.¹⁴⁹ The findings of this thesis largely confirm Kenix's findings, but also add to them in some important respects, especially regarding the framing of the human impacts of climate change.

Climate Catastrophe: Seeing Climate Change?

Studies of European media have revealed a tendency to often report climate change through the discursive creation of a 'climate catastrophe' event.¹⁵⁰ This future event is used to ground reporting of climate change and place current developments on a timeline leading to the 'climate catastrophe' that can be expected in the future.¹⁵¹ The media have not been alone in promoting fear-based interpretations of climate change: the British Green Party used striking computer-doctored images of a Britain flooded by rising sea levels during the 2005 election campaign.¹⁵² Olausson argues that climate change 'scare stories' play a crucial role in European mediated discourses and legitimise 'the need for collective action ... [which] seems indisputable.'¹⁵³ In this sense, Olausson falls into the trap that Moser identifies, making the

¹⁴⁷ Kenix, "Framing Science," 129.

¹⁴⁸ *ibid.*, 130.

¹⁴⁹ *ibid.*, 130-1.

¹⁵⁰ Weingart et al., "Risks of Communication," 277; Kenix, "Framing Science," 123; Dirix and Gelders, "To Frame is to Explain."

¹⁵¹ *ibid.*, 277; Anabela Carvalho and Jasmin Burgess, "Cultural Circuits of Climate Change: an analysis of representations of 'dangerous' climate change in the UK broadsheet press 1985-2003," *Risk*

Analysis 25 (2005): 1457-1469.

¹⁵² O'Neill and Nicholson-Cole, "'Fear Won't Do It'," 358.

¹⁵³ Olausson, "Global Warming – Global Responsibility?" 432.

‘implicit normative assumption’ that exposure to the climate change problem ‘will lead to climate friendly behaviour.’¹⁵⁴

O’Neill and Nicholson-Cole offer a more nuanced explanation to argue that ‘scare stories’ often do the opposite – turn readers off climate change and leave them feeling helpless and unable to take meaningful action to mitigate climate change.¹⁵⁵ Kenix agrees that scare stories are more likely to ‘leave readers frustrated, confused and afraid of the future without any perceived ability to enact change’ and that instead, ‘climate change must be framed not as a sacrifice or a penalty but as an opportunity to benefit the future.’¹⁵⁶ Furthermore, Gill Ereaut and Nat Segnit have suggested that alarmist sensationalism is connected to ‘the unreality of Hollywood films’ whose ‘awesome form’ potentially becomes ‘secretly thrilling – effectively a form of “climate porn” ... undermining its ability to help bring about action.’¹⁵⁷

O’Neill and Nicholson-Cole argue that fear does not promote or encourage engagement, defining engagement as ‘a state of connection comprising the three codependent spheres of cognition, affect, and behavior.’¹⁵⁸ They begin from the standpoint that the British public are relatively unengaged with climate change, frequently ranking it below other issues in terms of importance, and point out that while government climate change mitigation strategies continue to focus on ‘encouraging voluntary uptake of decarbonisation behaviors and practices’ and while the public fails to provide the ‘policy acceptance needed if society is to substantially reduce its GHG

¹⁵⁴ Moser, “Costly Knowledge – Unaffordable Denial,” 157.

¹⁵⁵ O’Neill and Nicholson-Cole, “‘Fear Won’t Do It’.”

¹⁵⁶ Kenix, “Framing Science,” 129, 131.

¹⁵⁷ Gill Ereaut and Nat Segnit, “Warm Words: how are we telling the climate story and can we tell it better?” (London: Institute for Public Policy Research, 2006): 7.

http://www.ippr.org/ecom/files/warm_words.pdf (accessed 12/02/2012).

¹⁵⁸ O’Neill and Nicholson-Cole, “‘Fear Won’t Do It’,” 356.

[greenhouse gas] emissions' this lack of individual commitment to climate change mitigation is alarming.¹⁵⁹

While fear-based appeals like those that come from framing climate change in terms of horrific future consequences may supply the ingredients to make the front page of a newspaper – sensationalist headlines and sound bites, striking imagery – they are not good at keeping citizens engaged for long periods after the media text is viewed.¹⁶⁰ The extreme and 'wicked' nature of climate change makes the issue 'impersonal and distant'.¹⁶¹ Meaningful engagement, on the other hand, requires 'some connection with "the everyday" in both spatial and temporal terms.'¹⁶² Focus group participants explained that thinking of climate change in terms of melting glaciers and stranded polar bears did not help to bring the issue into proximity with everyday life.¹⁶³ O'Neill and Nicholson-Cole argue that

dramatic, sensational, fearful, shocking, and other climate change representations of a similar ilk can successfully capture people's attention to the issue of climate change and drive a general sense of the importance of the issue. However, they are also likely to distance or disengage individuals from climate change, tending to render them feeling helpless and overwhelmed when they try to comprehend their own relationship with the issue.¹⁶⁴

In short, these kinds of images and frames provide a hook, but do not have a lasting positive impact in terms of engagement. Except when 'they are set in a context within which individuals are situated and to which individuals can

¹⁵⁹ *ibid.*, 357.

¹⁶⁰ O'Neill and Nicholson-Cole, "Fear Won't Do It," 361.

¹⁶¹ *ibid.*

¹⁶² *ibid.*, 369.

¹⁶³ *ibid.*

¹⁶⁴ *ibid.*, 375.

relate', fear-based or sensationalised frames, discourses, narratives and images 'tend to disempower and distance people from climate change.'¹⁶⁵ Doyle largely agrees with O'Neill and Nicholson-Cole about the effect of disaster scenario journalism, but stresses that accurate reporting of unusual climate change-related real weather (rather than sensationalised predictions of extreme weather) can help reinforce 'scientific certainty and climate meaningfulness' which is, in Britain, 'a key strategy of tabloid discourse on climate change'.¹⁶⁶

If O'Neill and Nicholson-Cole's findings are accurate, and this thesis does not attempt to test them, they complicate climate change journalism. Journalism inherently thrives on attention-grabbing headlines and images, which climate change can supply: lone polar bears drifting at sea on tiny fragments of icebergs and computer-enhanced images of cities swamped by rising sea levels. Climate change is a serious problem, with potentially extreme consequences. Boykoff explains that

the dominance of these fear-inducing tropes can be partly attributed to the fact that many aspects of the climate change that get picked up in the media – such as ecological forecasts and societal impacts – are inherently quite gloomy subjects. Therefore, it is difficult to put a hopeful tone on headlines like those covering displaced communities from sea-level rises. Moreover, these fearful themes have fed readily into journalistic norms of dramatization and personalization, making such topics more conducive to story formation.¹⁶⁷

Protection motivation theory suggests that people can be motivated to change their behaviour when they are 'confronted with threatening but

¹⁶⁵ *ibid.*, 376.

¹⁶⁶ Doyle, *Mediating Climate Change*, 109.

¹⁶⁷ Boykoff, *Who Speaks for the Climate?* 16

treatable issues', whereas startling messages that suggest that a problem is beyond human or personal control 'do not lead to action, but rather to apathy and helplessness.'¹⁶⁸ In order to bring the issues "close to home", newspaper readers in developed countries need to be aware that the people of low-lying developing countries will not be the only victims of climate change, but that its consequences will reach into all countries not just through weather patterns but also through, for example, the price of food as global fertility is affected by the climate and the numbers of climate-refugees standing at the gates to developed countries rises. Most of all, readers and audiences need to feel compelled to take action, and that their actions are worthwhile. Problems need to be presented alongside potential solutions.

In countries like Britain and New Zealand with increasingly climate-sceptical populations, presenting climate scare stories without effectively communicating the science behind them creates further hurdles for policymakers who seek a public mandate for climate policy. When presented without solutions, striking images and strong messages of warning lessen the democratic efficacy of climate change journalism. But O'Neill and Nicholson-Cole's research also suggests that climate scare stories

have a place, given their power to hook audiences and their attention. However, they must at least be used selectively, with caution, and in combination with other kinds of representations in order to avoid causing denial, apathy, avoidance, and negative associations that may come as a result of coping with any unpleasant feelings evoked.¹⁶⁹

¹⁶⁸ Dirikx and Gelders, "To Frame is to Explain," 739.

¹⁶⁹ O'Neill and Nicholson-Cole, "Fear Won't Do It," 276.

The 'other kinds of representations' might include accessible communication of the science that underlies the scare stories or discussion of potential solutions to the climate problem on personal, local and global levels.

James Risbey makes a very useful contribution to the study of climate change discourses with the distinction between alarmist and alarming discourses. While alarmist discourses present climate change as 'immense and beyond our control', alarming discourse differs,

in that the problem is not viewed as out of control or inevitable ... This discourse recognises both the possibility of large climate change and the means of preventing it. The discourse is "alarming" in that it sounds an alarm to alert the public to the need to change course.'¹⁷⁰

Risbey argues that climate change is legitimately alarming as a policy problem, but that alarmist discourses are illegitimate because they do not reflect the fact that there is significant scope for humanity to do something about climate change.¹⁷¹ Doyle applies Risbey's distinction to find that during the 2009 Copenhagen COP *The Daily Mirror* employed alarmist discourse while *The Guardian* employed an alarming discourse that promoted 'a sustained sense of importance' of the issue.¹⁷²

At the core of the problems with climate change journalism, like scare stories and balance as bias, are the 'differing norms of knowledge production' held by scientists and journalists: consensus-seeking peer-review and sensationalist focus on conflict and contention.¹⁷³ Schneider and Mastrandrea argue that

¹⁷⁰ James S. Risbey, "The New Climate Discourse: alarmist or alarming?" *Global Environmental Change* 18 (2008): 34.

¹⁷¹ *ibid.*

¹⁷² Doyle, *Mediating Climate Change*, 115.

¹⁷³ Boykoff, "From Convergence to Contention," 484.

In science, there are rarely just two polar-opposite sides, but rather a spectrum of potential outcomes ... when journalists attempt to force scientific debates into this bipolar mode, competing claims from the extreme ends of the spectrum of opinions often get disproportionate time as either-or options. What needs to be conveyed to the public is the relative credibility of each claim.¹⁷⁴

The last sentence highlights a normative conception of the crucial place of science journalism in the public understanding of science. Doyle expands on these ideas, tracing the origins of contemporary public understandings of science to enlightenment conceptions of science as 'a praxis based on objectivity and materiality' wherein 'the environment understood as visible nature places knowledge in the observable structures of the world and not in its invisible relationships and functions.'¹⁷⁵ Seeing nature becomes a way of understanding nature. Because climate change cannot often be easily observed and climate-influencing actions do not often produce immediate effects, it is not easily understood. Doyle argues:

The discourse of scientific truth ... functions through an epistemological framework that structures time, space and vision as objective, mechanical and rational. The certainties of acquiring scientific truth through visible materiality are in conflict with the uncertainties that characterise climate change in terms of its specific effects in particular locations, and its rate of change.¹⁷⁶

This lends weight to why weather reporting is important to the politics of climate change, but also implicates science at a very fundamental level in the problem of public engagement with climate change.

¹⁷⁴ Schneider and Mastrandrea, "The Politics of Climate Science," 19.

¹⁷⁵ Doyle, *Mediating Climate Change*, 19, 22.

¹⁷⁶ *ibid.*, 27.

Voices in Climate Change Debates

Habermasian concepts of the public sphere stress the importance of the mass media as a forum for political debate in late-modern mass-democracies.¹⁷⁷ The extent to which newspapers engage with and provide space (both column space and conceptual space) for public debate is important, and can be used to help judge the democratic utility of climate change journalism in an inherently normative and inexact fashion. Disagreement among elites can open spaces for media-led public debate, but where elites are in agreement debate is less likely.¹⁷⁸ Agreement amongst policy elites makes the truth-seeking job of a journalist easier, while also making the storytelling function of journalism more difficult by removing exciting conflict. The multifaceted nature of the climate change problem requires a diverse range of agents to be engaged and empowered to effect change. At a personal/individual level, behaviour change is important, but as Boykoff, Goodman and Curtis argue, while individual empowerment is important it can also unfairly ‘responsibilize’ climate change at a personal level, taking heat off states and corporations who also share in the climate problem.¹⁷⁹

One way of explaining how newspapers define climate change is to look at which journalists write about climate change in the newspapers. Climate change crosses boundaries of science and politics, local and global. For example, if it is mainly economic journalists who write the climate change stories it would seem fair to suggest that the newspaper sees climate change primarily as an economic issue. Andy Williams and Sadie Clifford note that science-related news stories can change form and are often simplified and

¹⁷⁷ Jurgen Habermas, *The Structural Transformation of the Public Sphere: an inquiry into a category of bourgeois society*, trans. Thomas Burger (Cambridge: Polity, 1989).

¹⁷⁸ Callaghan and Schnell, “Assessing the Democratic Debate,” 187-189.

¹⁷⁹ Boykoff, Goodman and Curtis, “Cultural Politics of Climate Change,” 138.

sensationalised several times as they pass from science and environment reporters, to politics or economics reporters, and on to the general news desk if they gain enough attention to make the front page.¹⁸⁰ Pooley argues that most journalists who write about climate change 'are energy, environment, or political reporters pressed into service on a subject that requires them to wrestle with all of those issues at once.'¹⁸¹ Michael Schudson argues that political reporters are more often "politics-wonks" obsessed with the cut and thrust inside political beltways than they are "policy-wonks" concerned chiefly with the policy inputs and outcomes of the political game.¹⁸² Major political issues like climate change can therefore become trivialised in the media, with the focus not on possible solutions but on conflicts between the major players.

Who is quoted and written about in pieces of climate change journalism has significance for how the journalism defines and frames climate change: 'those who have power, access and influence are those who have the advantage in this battle of knowledges, understandings and interpretations.'¹⁸³ Claire Gough and Simon Shakley identify a climate change "epistemic community" composed of scientists, policy makers, businesspeople, governmental officials, NGOs and IOs.¹⁸⁴ Likewise, Boykoff has sought to answer the 'Lorax-like question "Who speaks for climate?"', charting changes in climate discourses since the 1980s and comprehensively surveying 'individuals, collectives, organizations, coalitions and interest groups [that] have sought to access the power of mass media to influence architectures and processes of climate science, governance and public understanding'.¹⁸⁵ According to Boykoff, 'a wider cast of actors, such as musicians, artists, community groups, museum

¹⁸⁰ Williams and Clifford, "Mapping the Field."

¹⁸¹ Pooley, "How Much Would You Pay to Save the World?" 6.

¹⁸² Michael Schudson, "How News Becomes News," *Forbes Media Critic* 2, 4 (1995): 76–85.

¹⁸³ Boykoff, Goodman and Curtis, "Cultural Politics of Climate Change," 150.

¹⁸⁴ Claire Gough and Simon Shakley, "The Respectable Politics of Climate Change: the epistemic communities and NGOs," *International Affairs* 77, 2 (2001): 329-345.

¹⁸⁵ Boykoff, *Who Speaks for the Climate?* 1, 14

curators, sports figures, film and television producers, and others in popular culture', as well as religious groups, have over time added their voices to spaces of climate debate, previously populated by scientists, policymakers and industry groups.¹⁸⁶ Boykoff argues that this has led to an expansion of 'how climate change became meaningful in our everyday lives.'¹⁸⁷ This leads to the question, 'is it more effective to plant celebrities than to plant trees?'¹⁸⁸ On a functional level, newspapers can provide conditions conducive to public debate in two main ways: by providing column space for comment and opinion contribution, and by reporting a range of voices in news items and articles written by journalists.

Newspapers exist within changing media landscapes, in which online forms of communication pose challenges and opportunities to newspaper journalism. Wikileaks founder Julian Assange has been called 'the modern figurehead for a new world order defined by openness, transparency and Internet freedom.'¹⁸⁹ But much of the pro-democratic praise heaped on Assange and Wikileaks mirrors the misguided faith of science communicators, discussed earlier in this thesis, that more information will always lead to engagement and better understanding. In 2004 O'Neill warned that '[s]hovelling enormous numbers of documents onto web sites is seldom a good way of communicating with wider audiences.'¹⁹⁰ Since then, more focused critiques and explorations of the potential contributions Wikileaks could make to journalism and democracy have been expressed. Yochai Benkler has described how *The Guardian* has strategically embraced Wikileaks as part of a

¹⁸⁶ Boykoff, *Who Speaks for the Climate?* 14.

¹⁸⁷ *ibid.*, 14.

¹⁸⁸ Boykoff, Goodman and Curtis, "Cultural Politics of Climate Change," 150.

¹⁸⁹ Aleks Krotoski, "Wikileaks and the New, Transparent World Order," *The Political Quarterly* 82, 4 (2011): 526.

¹⁹⁰ O'Neill, *Rethinking Freedom of the Press*, 15.

commitment to 'networked journalism' in the internet age.¹⁹¹ Joe Haines argues that leaked secret documents may

add to the gaiety of journalism, but they undermine trust ... between governments and governed, between readers and their newspapers, and currently and worst of all, between Parliament and the people.¹⁹²

Mark Page and J. E. Spence suggest that '[s]candals come and scandals go' but Wikileaks

will not achieve its goal of greater transparency. More likely secrecy will increase ... Secrecy remains necessary, as some [diplomatic] processes will always require quiet talks behind closed doors, as the IRA [Irish Republican Army] and [Nelson] Mandela examples demonstrate.¹⁹³

Clive Soley agrees and portrays Wikileaks as part of a larger, dangerous recalibration of privacy norms in journalism that includes the *News of The World* phone-hacking scandal.¹⁹⁴ The place of Wikileaks in climate change journalism is returned to in chapter seven.

This chapter has outlined some key features of existing research relevant to the analysis to follow. Climate change journalism is often prominent during COP, at which time climate change journalism is frequently globally or transnationally oriented. The media often ascribes responsibility for addressing climate change to politicians; macroeconomic solutions are

¹⁹¹ Yochai Benkler, "A Free Irresponsible Press: Wikileaks and the battle of the soul over the networked fourth estate," *Harvard Civil Rights – Civil Liberties Law Review* 46 (2011): 389.

¹⁹² Joe Haines, "The Right to Know is Not Absolute," *British Journalism Review* 22 (2011): 27.

¹⁹³ Mark Page and J. E. Spence, "Open Secrets Questionably Arrived At: the impacts of Wikileaks on diplomacy," *Defence Studies* 11, 2 (2011): 235, 242.

¹⁹⁴ Clive Soley, "Who Will Protect Us?" *British Journalism Review* 22 (2011): 22-23.

endorsed over personal actions. Science is often drowned out in political debates; when science is prominent, it is often framed as contentious, sometimes leading to balance as bias. Nature is framed as a background to human productive economic behaviour. Market-based problem-solving concepts are privileged and the costs of addressing climate change are often said to outweigh the economic benefits.

3. Comparing Ireland, New Zealand and Britain

The framing of global politics in *The Irish Times*, *The New Zealand Herald* and *The Guardian* is intertwined with the representations of the national identities of Ireland, New Zealand and Great Britain. If national identity is understood as 'imagined community', following Benedict Anderson, then it is imagined in relation and opposition to other communities, and owes some of its form to the international structural conditions that the nation operates in.¹⁹⁵ Furthermore, identity is just as much employed by nation states to construct a citizenry as it is by groups who use it to oppose the state.¹⁹⁶ In a globalising world, the identities of nation states can be understood as the product of branding exercises aimed at carving niche positions in the global political economy.¹⁹⁷ This is especially true of smaller states like Ireland and New Zealand that lack the economic and political weight to be major players across the global system, and whose economies cannot compete for cheap labour in globalised systems of commodity production. Climate change journalism therefore is a valuable lens through which to critique representations of national identity in relation to the global political economy. Furthermore, studying the mass media can give insight into the characteristics of political systems themselves. Rodney Tiffen suggests that national media systems and political structures are parasitic: they feed off each other.¹⁹⁸ This chapter outlines some important similarities and differences between Ireland, New Zealand and Britain which relate to the political contexts that their newspapers operate in.

¹⁹⁵ Benedict Anderson, *Imagined Communities: reflections on the origin and spread of nationalism* (London and New York: Verso, 2006).

¹⁹⁶ Birgit Meyer and Peter Geschiere, "Globalization and Identity," 5.

¹⁹⁷ Richard Devetak and Jacqui True, "Diplomatic Divergence in the Antipodes: globalisation, foreign policy and state identity in Australia and New Zealand," *Australian Journal of Political Science* 41, 2 (2006): 241-256.

¹⁹⁸ Rodney Tiffen, "Towards a Comparative Analysis of Australian Media," unpublished mss., (Sydney: University of Sydney, 2011).

With similar systems of parliamentary democracy, politics in New Zealand, Ireland and Britain plays out in similar but differentiated ways. Ireland's political landscape is in part characterised by still-simmering religious divisions, while New Zealand's has the distinct flavours of Pacific post-colonialism; both countries have significant historical relationships with Britain. A populous country with a large economy and a history of imperialism, key features of Britain's political national identity include its tense position within the EU, lingering de-colonisation or post-imperialism and growing multiculturalism.

Ireland, New Zealand and Britain can all be categorised as countries of the global north, with developed economies and high standards of living. Some key economic indicators are shown in Table 3.1. All three countries have carbon-intensive economies, with high per capita carbon emissions and total greenhouse gas emissions by global standards. However, Ireland's per capita carbon emissions are the greatest of the three countries, as is its GDP per capita. Ireland¹⁹⁹ and New Zealand²⁰⁰ have high levels of agricultural emissions as percentages of overall greenhouse gas emissions, as well as small, dispersed populations that make personal car ownership popular while Britain has a higher population density and more extensive public transport networks. New Zealand has the highest annual energy use per capita, but the lowest CO₂ and total greenhouse gas emissions, partly because of the large proportion of electricity in New Zealand is produced by hydroelectric and geothermal power stations.

¹⁹⁹ Ministry for the Environment, Community and Local Government, "Review of National Climate Policy: November 2011," <http://www.environ.ie/en/PublicationsDocuments/FileDownload,28328,en.pdf> (accessed 29/01/2012), 6.

²⁰⁰ United Nations Climate Change Secretariat, "Summary of GHG Emissions for New Zealand," http://unfccc.int/files/ghg_emissions_data/application/pdf/nzl_ghg_profile.pdf (accessed 11/02/12).

CO₂ is one of many greenhouse gas, although it is probably the most commonly spoken about. New Zealand's emissions profile is unlike those of Ireland and Britain, in that a large proportion of New Zealand's greenhouse gas emissions constitute methane from farm animals.²⁰¹ Additionally, measurement of greenhouse gasses sometimes takes into account land use change and carbon removed from the atmosphere by existing forests, and sometimes does not. In science and social science, measurement can be manipulated towards certain outcomes. Table 3.1 shows both CO₂ and total combined greenhouse gas emissions. CO₂ emission and population data is from the World Bank, and combined emissions per capita data is derived from UNFCCC emissions profiles and United Nations Population Fund (UNFPA) population data for 2009, which is the most recent year the UNFCCC holds detailed data for.²⁰²

Table 3.1: Economic Indicators

	<i>Ireland</i>	<i>New Zealand</i>	<i>Britain</i>
Population (2009) ²⁰³	4,458,942	4,315,800	61,801,570
Net GDP (US\$, 2009) ²⁰⁴	221.779 billion	126.679 billion	2.173 trillion
GDP per capita (US\$, 2009) ²⁰⁵	49,738	29,352	35,163
Total annual greenhouse gas emissions (2009) ²⁰⁶	60,221,790 metric tons (CO ₂ equivalent)	43,881,060 metric tons (CO ₂ equivalent)	565,987,280 metric tons (CO ₂ equivalent)

²⁰¹ *ibid.*

²⁰² 2009 is also the most recent year for which the World Bank holds GDP data for New Zealand.

²⁰³ Robert Engleman, "State of World Population 2009 – Facing a Changing World: women, population and climate," United Nations Population Fund (UNFPA) (2009), http://www.unfpa.org/swp/2009/en/pdf/EN_SOWP09.pdf (accessed 18/02/2012).

²⁰⁴ "GDP (current US\$)," *World Bank*, <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD> (accessed 19/02/2012)

²⁰⁵ "GDP per capita (current US\$)," *World Bank*, <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD> (accessed 19/02/2012).

²⁰⁶ "Greenhouse Gas Inventory Data – Comparisons By Gas," *United Nations Framework Convention on Climate Change (UNFCCC)*,

Total greenhouse gas emissions per capita (2009)	13.5 metric tons (CO2 equivalent)	10.2 metric tons (CO2 equivalent)	9.2 metric tons (CO2 equivalent)
Annual CO2 emissions per capita (2008) ²⁰⁷	9.9 metric tons	7.8 metric tons	8.5 metric tons
Annual energy use per capita (kg of oil equivalent, 2009) ²⁰⁸	3,216	4,032	3,184

Ireland’s greenhouse gas emissions rose steadily from 1990 to 2007, in line with economic growth, and fell along with GDP in 2009 following economic crisis.²⁰⁹ The reliance on fossil fuels to maintain economic systems of production and standards of living that Ireland, New Zealand and Britain share suggests that climate change policy that limits or raises the cost of fossil fuel use will be met with organised and unorganised opposition from interest groups and individuals.

Legislation

In late 2010, at the time of the Cancun conference, Ireland, New Zealand and Britain had different types of climate change legislation in place. The former, Labour-led, New Zealand Government established an emissions trading scheme (ETS) in 2008 and it has been reviewed and amended by the

<http://unfccc.int/di/DetailedByGas/Event.do?event=go> (accessed 11/02/12). Data originally in giga-grams, converted to tons by the author for easier comparison with CO2 emissions data.

²⁰⁷ “CO2 Emissions (metric tons per capita),” *World Bank*,

<http://data.worldbank.org/indicator/EN.ATM.CO2E.PC> (accessed 18/01/2012).

²⁰⁸ “Energy Use (kg of oil equivalent per capita),” *World Bank*,

<http://data.worldbank.org/indicator/EN.ATM.CO2E.PC> (accessed 19/02/2012).

²⁰⁹ Ministry for the Environment, Community and Local Government, “Review of National Climate Policy: November 2011.”

subsequent National-led government.²¹⁰ New Zealand's ETS has been criticised by environmentalists for its liberal allocation of free "carbon credits" which effectively means that taxpayers subsidise polluting industries, and for the delayed entry of agriculture into the ETS.²¹¹ Agriculture comprises over thirty per cent of New Zealand's total greenhouse gas emissions.²¹² The ETS has also faced criticism that it imposes unaffordable costs on farmers, businesses and households that are not matched by similar costs in other countries, particularly major trading partners like (at the time of the Cancun conference) Australia, China and the USA.²¹³

Ireland and Britain, as EU member states, participate in the EU ETS, which has been in operation since 2005. Under the scheme, EU states set their own national emissions caps, which are approved by the EU collectively, and emissions units are traded on an open market. Lorenzoni and Pidgeon argue that Britain took 'a leading role' in developing and championing the EU's ETS response to the Kyoto Protocol, especially during its 2005 EU presidency.²¹⁴ But the EU ETS is far from comprehensive. Seventy-two per cent of Ireland's emissions are from areas not covered by the ETS, including agriculture,

²¹⁰ Climate Change Response (Emissions Trading) Act, 2008; Climate Change Response (Moderated Emissions Trading) Amendment Act, 2009.

²¹¹ See, for example: Greenpeace New Zealand, "Revised ETS an Insult to New Zealanders [press release]," *Scoop.co.nz*, 14 September 2009, <http://www.scoop.co.nz/stories/PO0909/S00153.htm> (accessed 19/02/2012); Jeanette Fitzsimons, "Government Wants Taxpayers to Pay Twice for Emissions [press release]," *Greens.org.nz*, 31 August 2009, <http://www.greens.org.nz/press-releases/government-wants-taxpayers-pay-twice-emissions> (accessed 19/02/2012).

²¹² Ministry for the Environment, "New Zealand's Greenhouse Gas Inventory 1990-2009: environmental snapshot April 2011," <http://www.mfe.govt.nz/publications/climate/greenhouse-gas-inventory-2011-snapshot/index.html> (accessed 20/02/2012).

²¹³ See, for example: Don Nicholson, "ETS Announcement a Mixed Bag for Agriculture [press release]," *Federated Farmers*, 14 September 2009, <http://www.fedfarm.org.nz/n1683.html> (accessed 19/02/2012); "Emissions Trading Cost 'Too Great' for NZ," *Stuff.co.nz*, 01 May 2008, <http://www.stuff.co.nz/business/394780/Emissions-trading-cost-too-great-for-NZ> (accessed 19/02/2012); John Boscawen, "If The French Can Abandon Its Carbon Tax, Why Can't We?" [speech in parliamentary general debate] *Hansard*, vol. 661, week 37, 24 March 2010, http://www.parliament.nz/en-NZ/PB/Debates/Debates/Daily/7/7/e/49HansD_20100324-Volume-661-Week-37-Wednesday-24-March-2010.htm (accessed 19/02/2012).

²¹⁴ Lorenzoni and Pidgeon, "Public Views on Climate Change," 73.

transport, waste, residential homes and light industry.²¹⁵ As in New Zealand, plentiful allocation of free emissions permits have seen the EU scheme being criticised as ineffective,²¹⁶ and in 2007 the saturated market drove the price of carbon emissions down to €0, but it has generally drifted between €10 and €30 since then.²¹⁷

Britain's key piece of climate change legislation is the 2008 Climate Change Act, which is the first nationwide law passed globally that commits to specific legally-binding carbon emissions cuts by 2020 and 2050.²¹⁸ The Act established a permanent Climate Change Committee, which monitors Britain's progress on climate-related issues. In Ireland, during the Cancun conference, climate change legislation was being drafted, but the resulting Climate Change Response Bill was not passed into law. Some aspects of climate change policy are legislated individually in Ireland, such the 2010 Energy (Biofuel and Miscellaneous Provisions) Act. National Climate Change Strategies, published in 2000 and 2007, form important pillars of Irish climate change policy, but as of the time of writing, Ireland does not have one major climate change law like Britain and New Zealand do.

Public Opinion

Lorenzoni and Pidgeon provide a valuable but dating survey of public opinion data from the EU (including Britain and Ireland) and the US regarding climate

²¹⁵ Ministry for the Environment, Community and Local Government, "Review of National Climate Policy: November 2011," 8.

²¹⁶ See, for example: Corporate Europe Observatory, "EU ETS: failing at the third attempt," 7 April 2011, <http://www.corporateeurope.org/news/eu-ets-failing-third-attempt> (accessed 19/02/2012).

²¹⁷ Committee on Climate Change, "Building a Low Carbon Economy: the UK's contribution to tackling climate change," (2008) <http://www.theccc.org.uk/pdf/TSO-ClimateChange.pdf>, (accessed 19/02/2012): 149.

²¹⁸ Corina Hoppner and Lorraine Whitmarsh, "Public Engagement in Climate Action: policy and public expectations," in *Engaging the Public with Climate Change: behaviour change and communication*, edited by Lorraine Whitmarsh, Saffron O'Neill and Irene Lorenzoni (London and Washington D.C: Earthscan, 2011): 47.

change that paints a broad picture about how people view climate change across democracies of the global north.²¹⁹ They argue that whatever the political position of a nation or its head of state regarding climate change, public opinion is relatively uniform across EU member states and the USA, notwithstanding some contextual cultural differences.²²⁰ However, their analysis is purely focused on the two sides of the Atlantic and so New Zealand is excluded. Their key findings are:

- People are commonly aware and concerned about climate change, but view it as less important than other social and personal issues.
- Public understanding of the causes of climate change is limited.
- Climate change is commonly perceived negatively as a threat, although 'it remains a psychologically, temporally and spatially distant risk'.²²¹
- Both risks and benefits of climate change are acknowledged. Some benefits stem from changes in the climate (like warmer winters in areas with traditionally harsh winters), while others 'are felt to derive directly from the technologies and actions that cause climate change', for example the benefits gained from burning coal to heat one's home.²²²
- There is some evidence that people want to address the climate problem, but they see their actions as circumscribed by economic and social contexts, in other words, many people feel that taking individual action would drastically change their daily lives and put them out of sync with the way the world works.

²¹⁹ Lorenzoni and Pidgeon, "Public Views on Climate Change," 86-87.

²²⁰ *ibid.*, 88.

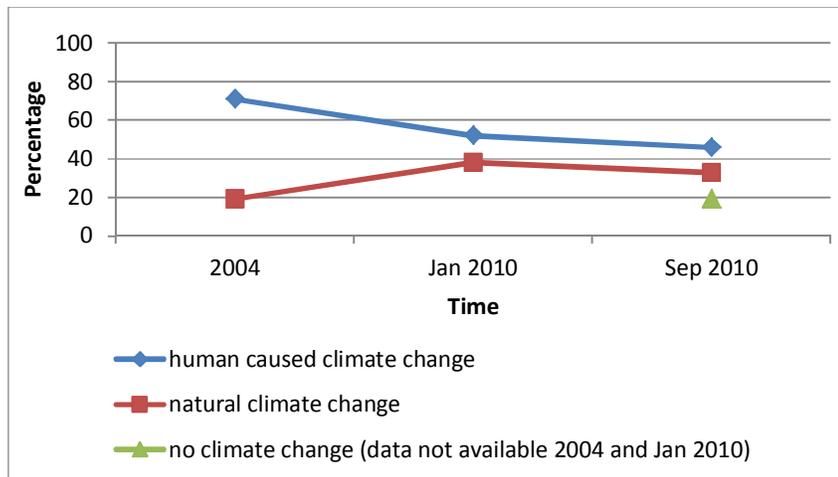
²²¹ *ibid.*, 86.

²²² *ibid.*

- Governments are generally ascribed responsibility to provide solutions to climate change, although this differs depending on the level of trust that citizens within particular countries have in regard to their governments.

Opinion polls suggest that New Zealanders are less concerned and less convinced about climate change than they used to be, shown in the figures 3.1, 3.2 and 3.3. In 2004, nearly three quarters of New Zealanders agreed that anthropogenic (human-caused) climate change was real, but by 2010 the number of New Zealanders who still held these views had dropped to a little over half.²²³ Another study in late 2010 found that nearly twenty per cent of New Zealanders did not think that any form of climate change was happening.²²⁴ Public perceptions of climate science have also changed, with the perception that there is a lot of scientific disagreement about climate change growing from 2006 to 2010.²²⁵

Figure 3.1: Perceived Causes of Climate Change (New Zealand)²²⁶



²²³ UMR Research, "Climate Change."

²²⁴ NZPA, "Climate Change Concern Slips as Cost of Living Worry Grows," *The New Zealand Herald* 20 September 2010, http://www.nzherald.co.nz/environment/news/article.cfm?c_id=39&objectid=10674726&ref=rss (accessed 15 June 2010).

²²⁵ *ibid.*

²²⁶ *ibid.*; NZPA, "Climate Change Concern Slips as Cost of Living Worry Grows."

Figure 3.2: Public Perceptions of Climate Science (New Zealand)²²⁷

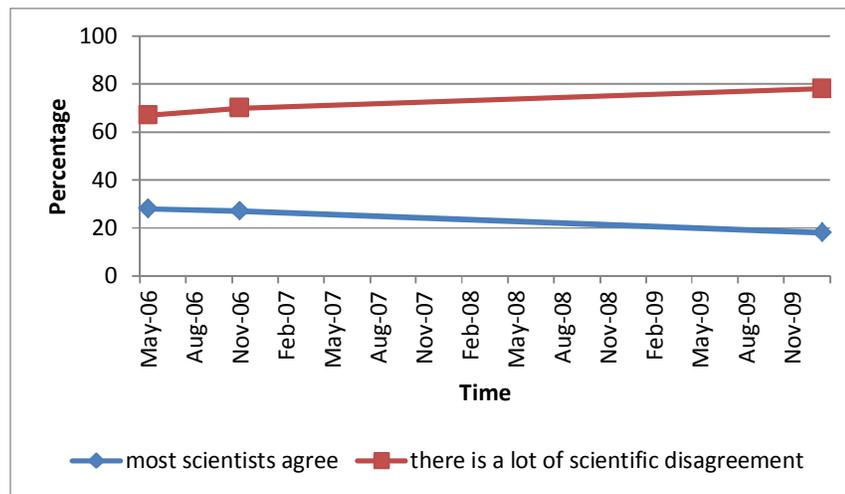
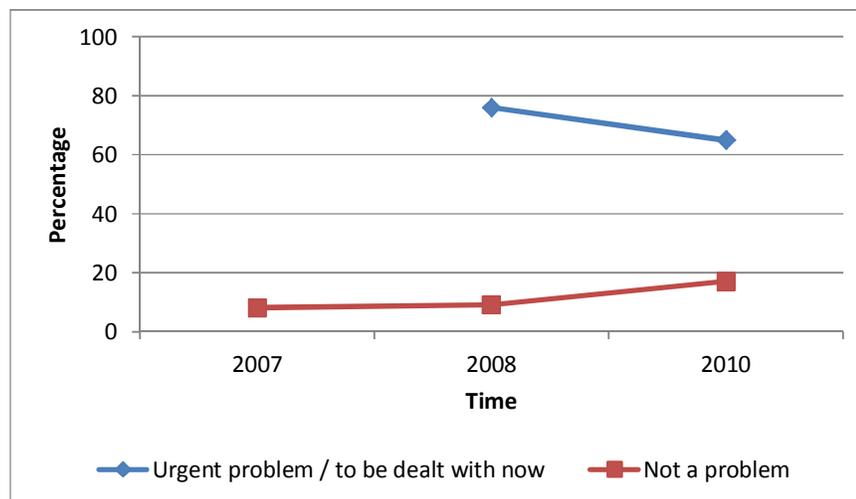


Figure 3.3: Perceived Urgency of Climate Change (New Zealand)²²⁸



²²⁷ UMR Research, "Climate Change"

²²⁸ Shape NZ, "Shape NZ Environmental Issues Survey 2010" (2010), http://www.nzbcscd.org.nz/_attachments/Microsoft_Word_-_ShapeNZ_Environmental_Issues_Survey_Report_March_26_2010.pdf (accessed 02/03/2011); Shape NZ, "New Zealanders' Views on Climate Change and Related Policy Outcomes 2007" (2007), http://www.nzbcscd.org.nz/_attachments/ShapeNZ_Climate_Change_survey_interim_result_April_4-7_2007.pdf (accessed 17/12/2011); UMR Research, "Climate Change: the role of public opinion," (2010), www.umar.co.nz/Media/ClimateChange-TheRoleOfPublicOpinion-Mar10.pdf (accessed 29/06/2011).

The number of New Zealanders who think that the government should do more to mitigate climate change has dropped, and the number who think that the government is doing the right amount or should do less have risen between 2007 and 2010.²²⁹ This change in support for state-led action on climate change, especially the growing perception that the government is doing ‘the right amount’ potentially reflects the legislative development (2008) and modification (2009) of New Zealand’s ETS, which came into effect in mid-2010.

A 2009 Europe-wide report found that only ten per cent of Irish people thought climate change was not a serious problem, while fifty-six per cent thought it was a very serious problem and twenty-six per cent thought it was a fairly serious problem.²³⁰ The same study shows that the percentage of Irish who understand the basics of climate science is growing.²³¹

Public opinion of climate change in Britain is similar to in Ireland, according to the same 2009 European study, with fifty-one per cent of British respondents stating that climate change is a very serious problem, thirty-one per cent that it is a fairly serious problem and fifteen per cent that it is not a serious problem.²³² However, a 2010 British study found that the strength of the British majority who believe that climate change is happening has dropped since 2005 from ninety-one per cent to seventy-eight per cent, shown in Figure 3.4.²³³ Risk perceptions and ‘overall levels of concern’ about climate change have also dropped since 2005.²³⁴ Less than half of respondents

²²⁹ UMR Research, “Climate Change.”

²³⁰ TNS Opinion & Social, “Special Eurobarometer 322: Europeans attitudes towards climate change,” http://ec.europa.eu/public_opinion/archives/ebs/ebs_322_en.pdf (accessed 17/09/2011).

²³¹ The study asked for levels of agreement with the following statement: greenhouse gas emissions “have only a minor impact on climate change.”

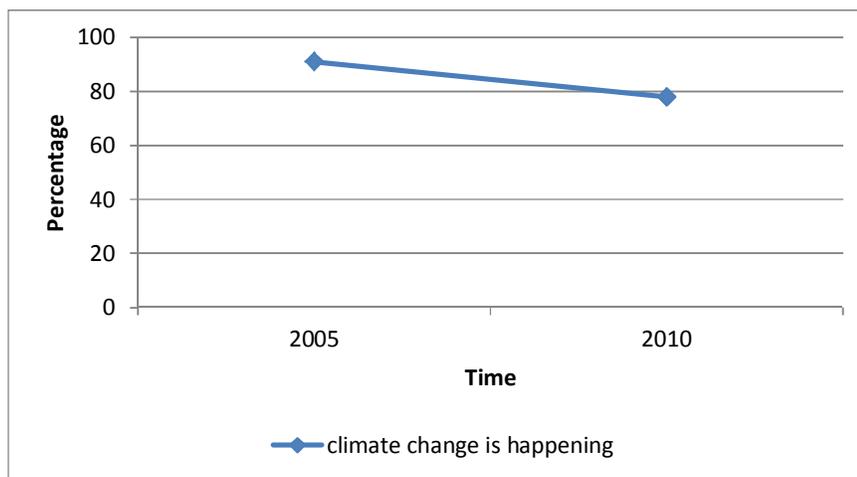
²³² TNS Opinion & Social “Special Eurobarometer 322,” 17.

²³³ Spence et al, “Public Perceptions of Climate Change and Energy Futures in Britain,” 22.

²³⁴ *ibid.*

thought that climate change is purely human-driven, with nearly one in five stating that climate change has ‘mostly or entirely natural causes’.²³⁵ Fifty-seven per cent think that ‘most scientists agree’ about climate change, much higher than in New Zealand.²³⁶ Older studies show that while most Britons view climate change as the most important environmental political issue facing Britain, it is ranked lower in importance than terrorism and domestic issues like the economy.²³⁷ In 2004, over half of British respondents to a survey thought that ‘climate change would have little or no effect on them’, a trend that is mirrored on the other side of the Atlantic.²³⁸

Figure 3.4: Public Perceptions of Climate Science (Britain)



Research by Karen Bickerstaff, Peter Simmons and Nick Pidgeon on British public opinion about climate change points to feelings of disillusionment and disempowerment amongst citizens directed towards their government.²³⁹ Lorenzoni and Pidgeon summarise that in Britain and the US, the

²³⁵ *ibid.*

²³⁶ *ibid.*, 18.

²³⁷ Lorenzoni and Pidgeon, “Public Views on Climate Change,” 75.

²³⁸ *ibid.*, 80, 82.

²³⁹ Karen Bickerstaff, Peter Simmons and Nick F. Pidgeon, “Public Perceptions of Risk, Science and Governance: main findings of a qualitative study of five risk cases,” unpublished working paper (Norwich: Centre for Environmental Risk, University of East Anglia).

perceived inability of individuals to respond to climate change was ascribed in part to the dependency on technologies associated with high energy use, embedded in current societal expectations, and in part with the realisation that successful solutions to climate change depend on concerted collective action, entwined with issues of broader social change and shared responsibility. Personal action was seen to be pointless in isolation; a responsible government was called for to lay the foundations to meet the collective interests of society through policy and by enabling individual duties. Yet political institutions were said to be absolving themselves of that role and responsibility. The widely observed public ambivalence towards climate change may well reflect an expression of frustration fuelled by disempowerment.²⁴⁰

The data reviewed in the above section is clear: there is no consensus of public opinion to mirror the scientific consensus about climate change in Britain, Ireland or New Zealand. In Ireland, public opinion appears to be moving towards consensus, but in Britain and New Zealand people are getting less concerned and more confused about climate change over time.

Political and Media Systems

Ireland, New Zealand and Britain are recognised as sharing some key similarities in three influential academic models of comparative politics. While none of these models are flawless, they reflect important comparative observations. Ireland, New Zealand and Britain are all examples of Arend Lijphart's majoritarian style democracy, in which relatively stable governments composed of usually only one party face few obstacles in their

²⁴⁰ Lorenzoni and Pidgeon, "Public Views on Climate Change," 85.

exercises of legislative power.²⁴¹ However, the 1996 introduction of proportional representation in New Zealand and consequent minority and coalition governments has seen the country adopt elements of Lijphart's other category, consensual democracy.²⁴² Ireland also uses proportional representation with frequent coalition government outcomes, and Britain's Conservative-Liberal Democrat coalition government was elected six months before the Cancun conference in 2010. Neither country in 2010 could be said to fit Lijphart's aging model perfectly. Nonetheless, elected governments in Ireland, New Zealand and Britain face fewer institutional checks and balances than countries like Germany and Belgium which are firmly classed in the other category of Lijphart's comparative model, consensual democracies.

Ireland, New Zealand and Britain also all fit into the same category of Gosta Esping-Andersen's typology of western welfare states: liberal, as opposed to Scandinavian-style social democratic or French-style corporatist.²⁴³ Put simply, this liberal category applies to countries that operate their welfare regimes as market-failures safety nets, which is true of Ireland, New Zealand and Britain especially following their enthusiastic embrace of neoliberal macroeconomic policy in the 1980s and 1990s.

Daniel Hallin and Paolo Mancini provide a media-system centred model for comparative political analysis.²⁴⁴ In this model as well, Ireland, New Zealand and Britain all fall into the liberal category, as opposed to the Mediterranean polarised pluralist or North-West European democratic corporatist categories.

²⁴¹ Arend Lijphart, *Democracies: patterns of majoritarian and consensus government* (New Haven: Yale University Press, 1984); Arend Lijphart, *Patterns of Democracy: government forms and performance in 36 countries* (New Haven: Yale University Press, 1999).

²⁴² Raymond Miller and Jennifer Curtin, "New Zealand's Party System: a multi-party mirage?" in *Key to Victory: the New Zealand General Election of 2008*, edited by Stephen Levine and Nigel S. Roberts (Wellington: Victoria University Press, 2010): 120-133.

²⁴³ Gosta Esping-Anderson, *The Three Worlds of Welfare Capitalism* (Cambridge: Polity Press, 1990).

²⁴⁴ Daniel C. Hallin and Paolo Mancini, *Comparing Media Systems: three models of media and politics* (Cambridge: Cambridge University Press, 2004).

The countries categorised as liberal are classified such because of their relatively strong mass circulation presses and traditions of journalistic professionalism, alongside low state intervention and relatively low parallelism between major political parties or divisions and particular media outlets. There are, of course, many differences between Britain, Ireland and New Zealand, but as these models show, their political and media systems share some important characteristics.

Newspaper Ownership

Britain fits uneasily into the Hallin and Mancini's liberal category because of its higher levels of press partisanship/parallelism than the model prescribes. The partisan tabloid press is an important feature of Britain's mass media landscape, while in Ireland and New Zealand pure tabloid newspapers exist more at the margins of the mainstream. *The New Zealand Herald* and *The Irish Times* are mid-market newspapers that trend towards tabloidisation with, for example, increasing use of tabloid-style front page features: colourful banners, free giveaways, celebrity pictures and sensationalised headlines. *The Guardian* is a more elitist newspaper in the broadsheet tradition. *The Irish Times* and *The New Zealand Herald* are, at least self-professedly, their nations' leading newspapers, while *The Guardian* accounts for only sixteen per cent of newspaper readership in its home city, London.²⁴⁵ The demographic make-up of *The Guardian's* readership trends towards being highly educated and liberal.²⁴⁶ Table 3.2 shows readership and circulation for the three newspapers. They are all published six days a week.

²⁴⁵ "Circulation and Readership," *The Guardian*, <http://www.guardian.co.uk/advertising/guardian-circulation-readership-statistics> (accessed 17/02/2012).

²⁴⁶ *ibid.*

Table 3.2: Readership and Circulation

	<i>The New Zealand Herald</i>	<i>The Irish Times</i>	<i>The Guardian</i>
Readership	574,000 ²⁴⁷	359,000 ²⁴⁸	1,198,000 ²⁴⁹
Circulation	170,707 ²⁵⁰	105,742 ²⁵¹	239,652 ²⁵²

As mentioned, Ireland, New Zealand and Britain have relatively low levels of political press parallelism by international standards. *The Irish Times* has a low level of leftish partisanship, while *The New Zealand Herald* generally has a low level of rightish partisanship. Analysis published on the New Zealand climate change blog *Hot Topic* shows that *The New Zealand Herald's* moderate conservatism often gives way to more extreme right viewpoints when climate change is concerned.²⁵³ *The Guardian* has a medium level of left-wing partisanship in its editorial bias and openly supported the Liberal-Democrat Party during the 2010 British general election, but as this research shows, it also gives significant space to conservative points of view.²⁵⁴

Also relevant to this research are the environmental commitments of the three newspapers in their operational business practices. *The Guardian* has a 'vision is to be a leader on sustainability within the media industry' and is 'committed to enhancing society's ability to build a sustainable future.'²⁵⁵ *The*

²⁴⁷ Newspaper Publishers Association of New Zealand, "NZ Paper Fact Sheets: The New Zealand Herald," <http://www.nabs.co.nz/page/pageid/2145834747> (accessed 17/01/2012).

²⁴⁸ "Readership," *The Irish Times*, http://www.irishtimes.com/mediakit/p_reader.htm (accessed 17/02/2012).

²⁴⁹ "Circulation and Readership," *The Guardian*.

²⁵⁰ Newspaper Publishers Association of New Zealand, "NZ Paper Fact Sheets."

²⁵¹ "Readership."

²⁵² "Circulation and Readership," *The Guardian*.

²⁵³ Cindy Baxter, "Cranking it Out."

²⁵⁴ "Editorial: General election 2010: the liberal moment has come," *The Guardian*, 30 April 2010, <http://www.guardian.co.uk/commentisfree/2010/apr/30/the-liberal-moment-has-come> (accessed 19/02/2012).

²⁵⁵ "Sustainability Report 2012: our vision," *The Guardian* 28 June 2011, <http://www.guardian.co.uk/sustainability/sustainability-report-2011-our-vision> (accessed 17/02/2012).

New Zealand Herald abides by a much weaker environmental code, which states that the 'company supports best practice and is committed to complying with all relevant legislation ... environmental issues are considered as part of the decision-making process'.²⁵⁶ No reference could be found to *The Irish Times*' environmental policy.

Final salient factors for comparison between the three newspapers are their ownership structures. *The Guardian* and *The Irish Times* are figurehead newspapers run under rare examples of trust ownership. Gavin Ellis argues that for newspapers, trust ownership 'institutionalises a commitment' to 'democratically significant' journalism as well as providing a way to protect the resources required to produce such journalism in the face of commercial pressures.²⁵⁷ Ellis illustrates that the 'separation of the Irish Times Trust from the operation of the entities that it owns is even more pronounced than the buffer between the Scott Trust [which owns *The Guardian*] and the Guardian Media Group.'²⁵⁸ Such trust ownership allows newspapers such as *The Guardian* to consistently run at a loss, and be subsidised by the governing trust or parent company's other, profitable, business interests which include business software and media ventures, magazine publishing and an externally managed investment fund with annual turnover of more than £200 million.²⁵⁹ Ellis explains how *The Guardian* is profit-seeking rather than profit-making: 'it must operate efficiently, but does not face dire consequences when it operates at a loss – which in recent times has been the norm.'²⁶⁰ The Irish Times Trust also generates revenue from full or part-ownership of internet and magazine publishing ventures.²⁶¹

²⁵⁶ APN News & Media, "Corporate Governance," 2010, http://www.apn.com.au/apn/assets/File/corp_gov_overview.pdf (accessed 17/02/2012).

²⁵⁷ Ellis, "A Ghost in the Chair," 4.

²⁵⁸ *ibid.*, 221.

²⁵⁹ *ibid.*, 219.

²⁶⁰ *ibid.*, 217.

²⁶¹ *ibid.*, 230.

For *The Irish Times* the 'explicit nature of the editorial objectives set out in the company articles requires the editor, Geraldine Kennedy, and her staff to provide forms and levels of editorial content to which other Irish publications are not bound.'²⁶² These objectives are:

- The support of constitutional democracy expressed through governments freely elected;
- The progressive achievement of social justice between people and the discouragement of discrimination of all kinds;
- The promotion of a friendly society where the quality of life is enriched by the standards of its education, its art, its culture and its recreational facilities, and where the quality of spirit is instinct with Christian values, but free from all religious bias and discrimination;
- The promotion of peace and tolerance and opposition to all forms of violence and hatred, so that each man may live in harmony with his neighbour, considerate for his cultural, material and spiritual needs;
- The promotion of understanding of other nations and peoples and a sympathetic concern for their wellbeing.
- In pursuance of the foregoing and to enable readers of *The Irish Times* to reach informed and independent judgments and to contribute more effectively to the life of the community to ensure that the following principles govern the publication of *The Irish Times*:
 - that news shall be as accurate and as comprehensive as is practicable and be presented fairly;
 - that comment and opinion shall be informed and responsible, and shall be identifiable from fact;

²⁶² *ibid.*, 224.

- that special consideration shall be given to the reasonable representation of minority interests and divergent views.²⁶³

The Guardian has comparable commitments enshrined in its governance structure: the editorial code includes the full text of an essay written by editor C. P. Scott on the newspaper's centenary in 1921, which argues that a newspaper should 'educate, stimulate' and 'assist' their readers because of its crucial democratic capabilities.²⁶⁴ For *The Guardian*, the commitment to democratically significant journalism and a sense of self-reflexivity has led to the appointment of the Readers Editor. Ellis explains that this position is essentially an internal ombudsman, and has led to rising levels of care taken by journalists who know that they could be publicly embarrassed in their own newspaper the next day if their stories tend towards falsity.²⁶⁵

What is particularly special about trust-run newspapers, argues Ellis, is that '[w]hile none has been immune from the effects of changes to news media markets, each has exhibited a determination to preserve the core journalism to which the creators of their unique forms of ownership committed them.'²⁶⁶ This has meant that their 'political influence is greater than their circulation numbers would suggest.'²⁶⁷ *The New Zealand Herald* also exercises political influence, on account of its status as the only daily newspaper published in New Zealand's largest city (but not capital city), Auckland, and its title of New Zealand's most-read newspaper.²⁶⁸ It is not, however, owned by a trust but by an Australian media conglomerate (APN News and Media) that is publicly listed on stock exchanges in Australia and New Zealand. Irish company

²⁶³ Irishtimes.com, "Group Structure," <http://www.irishtimes.com/about/group-structure/> (accessed 17/02/2012).

²⁶⁴ Scott Trust, "Editorial Guidelines: Guardian News & Media Editorial Code", 2011, <http://www.guardian.co.uk/info/guardian-editorial-code> (accessed 17/02/2012).

²⁶⁵ Ellis, "A Ghost in the Chair," 213.

²⁶⁶ *ibid.*, 249.

²⁶⁷ *ibid.*, 290.

²⁶⁸ Newspaper Publishers Association of New Zealand, "NZ Paper Fact Sheets."

Independent News and Media has a 31.6% stake in APN.²⁶⁹ *The New Zealand Herald's* commercial ownership structure is more profit-driven than newspapers under trust ownership.

As explained, Ireland, New Zealand, and less so Britain, have relatively low levels of media political parallelism or partisanship. *The Guardian* is more firmly aligned to the left, but as the only major daily newspapers in the largest commercial cities in Ireland and New Zealand, *The Irish Times* and *The New Zealand Herald* both tread mainly politically centrist if consistently pro-market narrative paths in their editorial content. Their status as the most-read newspaper in the biggest city in a small country gives particular weight to two particular goals, one with roots in the public service role of journalism and one driven by commercial imperatives. The newspapers are protective of their position as market-leaders and to keep this position they cannot descend too quickly or noticeably away from acting in line with public conceptions of a democratic press. The democratically important issues that are most likely to get emphasised in a newspaper operating in this environment are those that both show potential to hook readers and contribute to democratic discourses.

With some points of comparison between the three newspapers in Ireland, New Zealand and Britain now established, the next chapter outlines the research methodology.

²⁶⁹ Independent News & Media, "Operations: group directory," <http://www.inmplc.com/operations/australasia> (accessed 21/01/2012).

4. Research Methodology

Because media frames and discourses form ‘part of a complex network of identities and power relations’, one of the objectives of critical framing analysis is to uncover power-holders, decode their messages and critique their objectives.²⁷⁰ On the flip side, and while this thesis does not attempt to measure audience effects, another key objective of framing analysis is to ask, how might audiences receive frames and discourses and what effects might this have on their thoughts and actions? How might frames cloud or clear-up judgments, or channel people towards some conclusions and away from others? Both areas of inquiry are important to this research, which hopes to gain further understanding of the role media can and might play in raising levels of public engagement with the political questions of climate change.

The data sample for this research is from searches of the Proquest online database, for all items in *The New Zealand Herald*, *The Irish Times* and *The Guardian* containing the phrase “climate change”, restricted to the period including seven days either side of the Cancun conference (from November 22 to December 17, 2010). The Proquest database was chosen as a reliable data-gathering tool partly because all three newspapers analysed are available through the database. The database searches were run twice for each newspaper, and both times returned the same results. The search results returned a small number of erroneous items with no obvious or subtle links to climate change, politics, economics, sustainability or the Cancun conference. These were read by the coder but not included in the data analysis, for example, an article about football that contained the phrase ‘the sport is undergoing a climate change’ was excluded.²⁷¹ Table 4.1 shows the original and revised numbers of search results, including and excluding erroneous

²⁷⁰ Kenix, “Framing Science,” 124.

²⁷¹ Kevin McCarra, “Redknapp Works Bit of Magic,” *The Irish Times*, 22 November 2010, 6.

items.²⁷² For easier comparison across the three newspapers, all subsequent graphs in this thesis show data as a percentage of total items analysed from each of the three newspapers, unless otherwise stated, because *The Guardian* published roughly double the number of items as the other two newspapers. All averages mentioned are statements of mean.

Table 4.1: Items Included in the Data Analysis

	<i>Original results</i>	<i>Revised results</i>
<i>New Zealand Herald</i>	27	23
<i>Irish Times</i>	24	23
<i>Guardian</i>	42	41
TOTAL	93	87

A definition of quantitative content analysis is useful as a foundation for this research’s methodology:

the systematic and replicable examination of symbols of communication, which have been assigned numeric values according to valid measurement rules and the analysis of relationships involving those values using statistical methods, to describe the communication, draw inferences about its meaning, or infer from the communication to its context, both of production and consumption.²⁷³

The first step in the content analysis that this research employs was a review of existing literature about climate change journalism. The researcher then read the entire dataset, by newspaper, in chronological order, noting key features of articles and the organisation and presentation of ideas that are relevant to the framing process. A matrix of important features and frames

²⁷² The articles are all listed in the bibliography.

²⁷³ Riffe, Lacy and Fico, “Analyzing Media Messages,” 3.

was then drawn up (including Nisbet's frames, see below), and the dataset read again and coded against this matrix. This process reflects the importance of minimising preconceptions when approaching a dataset and the utility of combining deductive (from the literature review, specifically Nisbet) and inductive (from the researcher's interpretations of the dataset) approaches, as argued by Balwin Van Gorp.²⁷⁴

Using Nisbet's list of commonly occurring frames in science policy debates (see Table 4.2) as a starting point, *New Zealand Herald*, *Irish Times* and *Guardian* content was analysed in terms of how the articles define the issue of climate change, how they frame it, and the framing devices employed. Nisbet's framing matrix contributed towards an external, deductive approach in that the frames were viewed as extant templates and the items in the dataset were compared against them. The analysis also noted key recurring themes, narratives and additional framing devices in the dataset. Frames other than Nisbet's, especially frames or framing devices that situate or locate climate change locally and/or globally, were noted to provide an inductive approach. All articles were also analysed and coded according to their focus/main topic, secondary topics, and judgments they put forward about climate change and the Cancun conference.

²⁷⁴ This research, however, does not replicate Van Gorp's extensive methodological approach. Balwin Van Gorp, "Strategies to Take Subjectivity Out of Framing Analysis," *Doing News Framing Analysis: empirical and theoretical perspectives*, edited by Paul D'Angelo and Jim A. Kuypers (New York and Oxon: Routledge 2010): 84-109.

Table 4.2: Nisbet’s Common Frames that Appear Consistently across Science Policy Debates²⁷⁵

Frame	Defines Science-Related Issue As...
Social progress	Improving quality of life, or solution to problems. Alternative interpretation as harmony with nature instead of mastery, “sustainability”
Economic development/ competitiveness	Economic investment, market benefits or risks; local, national or global competitiveness
Morality/ethics	In terms of right or wrong; respecting or crossing limits, thresholds or boundaries
Scientific/ technical uncertainty	A matter of expert understanding; what is known versus unknown; either invokes or undermines expert consensus. Calls on the authority of “sound science”, falsifiability or peer-review
Pandora’s Box/ Frankenstein’s Monster/runaway science	Call for precaution in face of possible impacts or catastrophe. Out-of-control, a Frankenstein’s monster, or as fatalism, i.e. action is futile, path is chosen, no turning back
Public accountability/ governance	Research in the public good or serving private interests; a matter of ownership, control and/or patenting of research, or responsible use or abuse of science in decision-making, “politicization”
Middle way/ alternative path	Around finding a possible compromise position, or a third way between conflicting/polarized views or options
Conflict/strategy	As a game among elites; who’s ahead or behind in winning debate; battle of personalities or groups (usually journalist-driven interpretation)

The research therefore employs two primary units of quantitative analysis. One is a frame. The items analysed were coded (1 or 0) according to whether a particular frame was present or not. The other unit of analysis is the focus on or mention of a topic. All items were coded (1 or 0) in the following categories: topic focus, topic secondary, topic mention, no topic mention (see Appendix Four). These topic categories generally supplement the core framing

²⁷⁵ Nisbet, “Knowledge Into Action,” 52.

data. For example, as well as noting the occurrence of Nisbet’s ‘Economic Development/Competiveness’ frame, the data analysis also includes the incidence of focuses or mentions of the “green” or sustainable economics topic. Some articles employed multiple frames, often by defining multiple problems related to climate change and the Cancun conference, or by presenting one frame as dominant and another as oppositional. This research primarily draws quantitative conclusions about the frequency of certain frames in the three newspapers, and relates them in qualitative discussion to national and editorial contexts. As there was only one coder (the researcher) there are no issues of inter-coder reliability.

Entman’s explanation of textual mass media frames provided a guide to the data analysis. Table 4.3 is reproduced below from Entman’s influential book, *Projections of Power: framing news, public opinion, and U.S. foreign policy*.²⁷⁶ This table outlines a coherent method for conducting framing analysis.

Table 4.3: Entman’s Functions and Objects of News Frames

<i>Function of Frame</i>	<i>Focus of Frame</i>		
	<i>Issues</i>	<i>Events</i>	<i>Political Actors (Individuals, Groups, Nations)</i>
Defining problematic effects/conditions			
Identifying cause/agent			
Endorsing remedy			
Conveying moral judgment			

²⁷⁶ Entman, *Projections of Power*, 24.

A news article or item may present a coherent frame without explicitly providing something to fit in each and every cell in Entman's table (Table 4.3).²⁷⁷ For example, an article may define problems and identify their causal agents without conveying a moral judgment about the agents, or may outline a problem, cause, remedy and judgment but not include any particular events. Nonetheless, when news items provide evidence to fit most or all of the spaces in Entman's table, they can reasonably be said to construct and convey a strong framing of an issue. These largely complete, coherent and dominant frames can be contrasted with 'poorly developed' counter frames wherein 'news with alternative information exhibits serious gaps in several of the cells'.²⁷⁸ It is thus just as important to look for what is not there, as it is what is there, when undertaking framing analysis.

The authorship of all items was noted, especially where the author was a contributor to the newspaper's opinion columns or in cases where articles were written by political, economic or environment reporters. All items were also coded according to word count, publication date and type of news text, e.g. local news, world news, opinion, weather, editorial, brief, sidebar. See Appendix Four for a summary of the coding matrix.

While content analysis can employ complex statistical methods such as chi-square and Cramer's V, many academic studies, including this research, are 'able to achieve their objectives using only means, proportions, or simple frequency counts'.²⁷⁹ Daniel Riffe and Alan Freitag find that forty per cent of content analysis studies published in *Journalism & Mass Communication Quarterly* use only simple, descriptive statistics to present their results.²⁸⁰

²⁷⁷ *ibid.*, 23.

²⁷⁸ *ibid.*

²⁷⁹ Riffe, Lacy and Fico, "Analyzing Media Messages," 174.

²⁸⁰ Daniel Riffe and Alan Freitag, "A Content Analysis of Content Analyses: twenty-five years of *Journalism Quarterly*," in *Content Analysis: Volume 3. Applications: a focus on mass media*, edited by Roberto Franzoni (London: SAGE, 2008): 9.

No methodology is perfect, and some limitations and potential improvements are discussed in the concluding chapter of this thesis.

5. Defining the Issue

This chapter outlines how climate change is presented in *The New Zealand Herald*, *The Irish Times* and *The Guardian*. It presents analysis of how much coverage climate change news was afforded during the Cancun conference and what types of journalists wrote the bulk of the coverage. The dominant framing of climate change as an economic problem is explored. How and how often the newspapers report climate science is discussed, followed by analysis of the frequency and extremity of climate catastrophe or scare story framing.

How Big an Issue?

The Cancun conference was not the only thing that happened between November 29 and December 13 2010. In New Zealand, a fatal explosion at the Pike River coal mine led the news. Amidst a debt crisis in Ireland, the government unveiled a €15 billion austerity package imposed by the EU in return for an €85 billion economic rescue package. Britain experienced widespread protests against rising university tuition fees, a strike by London Underground workers, H1N1 “swine flu” cases, the engagement of Prince William and Kate Middleton and the fiftieth anniversary of *Coronation Street*. Extreme winter weather closed critical infrastructure in Britain and Ireland and was also felt across Europe and North America. A NATO summit was held in Lisbon, Portugal and a G20 summit in Seoul, South Korea. Much of Latin America experienced extreme flooding. Wikileaks released 250,000 classified documents and Interpol issued a warrant for the arrest of Julian Assange. Nobel Prizes were awarded. Cholera reached epidemic levels in Haiti, as the country was preparing for an election. National elections were held or their results announced in nine other countries.²⁸¹ FIFA announced the locations of

²⁸¹ Afghanistan, Burkina Faso, Burma, Cook Islands, Cote d’Ivoire, Egypt, Guinea, Moldova and Tonga.

the 2018 and 2022 football world cups. North and South Korea exchanged artillery fire over Yeonpyeong Island. Two new planets were discovered. The Cancun conference had to contend with all these and more for newsworthiness and this analysis suggests that often climate change lost out.

Judging newspapers by their front pages is a blunt but illustrative method of analysis that reveals little about how journalists frame climate change but does illuminate how importantly editors and publishers view the politics of climate change. Climate change does not feature on the front page of any of the three newspapers at the time of the Cancun conference. Given the Pike River mining tragedy in New Zealand and the debt crisis in Ireland, it is not surprising that neither *The Irish Times* nor *The New Zealand Herald* mentions climate change on its front page at any time during the period of analysis. One *New Zealand Herald* Cancun story made the front page of the World section of the newspaper.²⁸² In *The Irish Times*, the highest-placed climate-related story was on page seven, and it is about science in general not climate change or the Cancun conference specifically.²⁸³ Neither did *The Guardian* report climate change or the Cancun conference on its front page; climate change was accorded space on page two, but only once.²⁸⁴ This lack of placement of climate change stories on the front page suggests that climate change is not considered to provide the journalistic hooks necessary for a front page story. The trend is consistent across the dataset that climate change is rarely anywhere near the front of the newspapers: climate change is not often given prominent or front-page space even during global climate conferences.

²⁸² Brian Fallow, "Groser to Take Key Role in Climate Talks," *The New Zealand Herald*, 2 December 2010, B1.

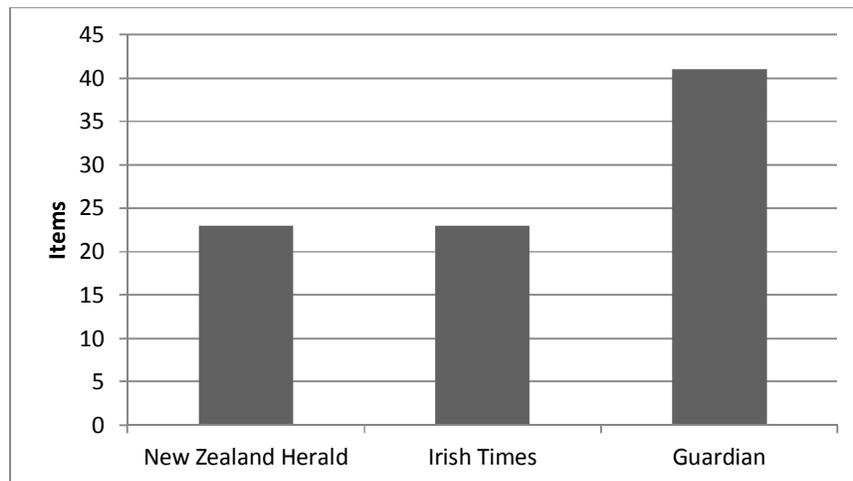
²⁸³ Ian Campbell, "EU Must Coordinate R&D to Compete on Global Stage," *The Irish Times*, 10 December 2010, 7.

²⁸⁴ Allegra Stratton and Tim Webb, "Huhne Backtracks on Bank for Green Projects," *The Guardian*, 15 December 2010, 2.

The topics of editorials can also be counted to provide a measurement of the importance that newspapers place on issues. The specific content and framing of the editorials also sheds light on understandings of climate change, as is explored later in this thesis. *The Guardian* published two editorials about Cancun during the analysis period, *The New Zealand Herald* published one and *The Irish Times* none. This crudely suggests that *The Guardian* placed most editorial weight on climate change as an important issue at the time of the Cancun conference and *The Irish Times* placed least.

Figure 5.1 shows the total number of climate change-relevant items published in the three newspapers during the analysis period. *The Guardian* published nearly double the twenty three items in each of *The Irish Times* and *The New Zealand Herald*. In Britain there was not one major news event that defined the media landscape during the period of analysis like there was in Ireland (debt crisis) and New Zealand (mining disaster), and this correlates with more space in *The Guardian* for climate change journalism.

Figure 5.1: Number of Climate Change-Relevant Items Published



Figures 5.2 and 5.3 show the total word count of climate-relevant items across the three newspapers studied and the average word count per item in each

newspaper. These figures show that *The Guardian* published significantly more words in total but also on average published fewer words per item: *The Guardian* contains more, shorter items while the other two newspapers tend to contain fewer but longer items. Many of the shorter items in *The Guardian* are comment or opinion items from people who are not journalists, and this dimension of public debate in *The Guardian* is returned to later in this thesis.

Figure 5.2: Total Word Count

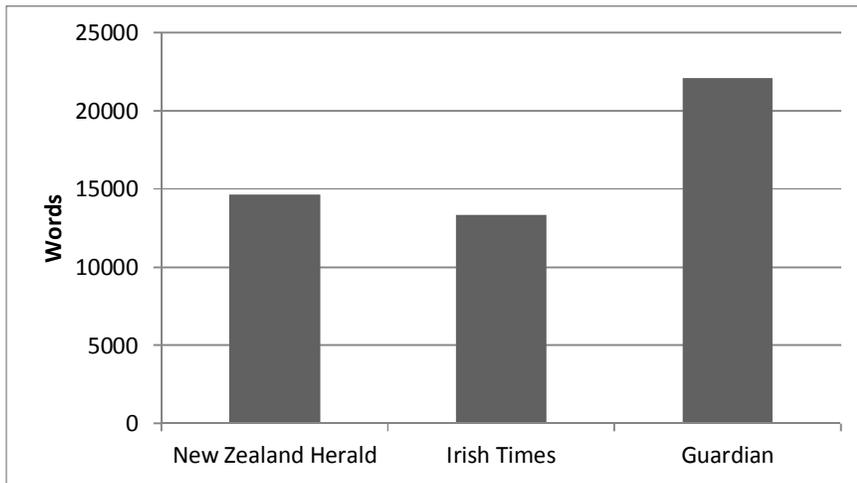
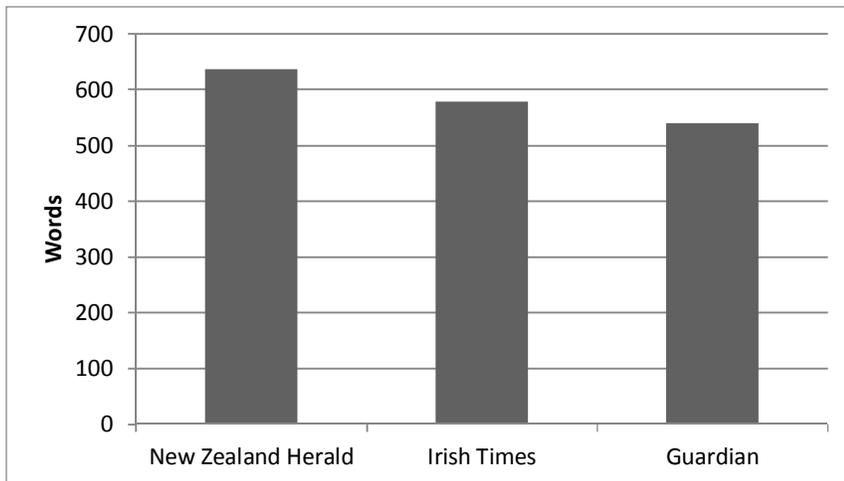


Figure 5.3: Average Word Count per Item



Who Writes Climate Change Journalism?

All three newspapers employed specialist environmental reporters at the time of the Cancun conference. As specialist journalists, they are expected to synthesise political, economic and scientific information and communicate “environmental” issues to the public. As an issue at the intersection of domestic and global politics, science, and economics, climate change reporting requires some understanding of these different disciplines and the terrain on which they intersect. Many stories that environment reporters write may be about unheard-of species of insect or local problems with illegal rubbish dumping; times like the Cancun conference provide fertile ground for environment journalists to write front-page stories that focus on major environmental issues. Forty-eight per cent (eleven articles) of *The Irish Times* items analysed were written by the paper’s environment editor, Frank McDonald, who filed just over half of his stories from Cancun during the period analysed. The predominance of McDonald in the reporting of climate change and the Cancun conference in *The Irish Times* lends coherence and continuity to the paper’s content. The value of the specialist position of environment editor is conveyed through the comprehensive reporting; a professional journalistic focus on climate change that recognises a multidimensionality to the issue that is not as prominent in items by economics journalists in the other newspapers analysed, *The New Zealand Herald* especially.

The Guardian also sent a journalist to Cancun, environment editor John Vidal, who is credited with four items (just under ten per cent of total *Guardian* items) plus one jointly written with a *Guardian* contributing journalist based in Mexico City, Jo Tuckman. Four items in *The Guardian* are by the newspaper’s Head of Environment Damian Carrington. Together, Vidal and Carrington account for less than half the percentage of total items written by *The Irish*

Times' environment editor McDonald, from Cancun. *The Guardian* consequently has more narrative variation than *The Irish Times*, but, like *The Irish Times* there is a recognition in *The Guardian* of the value of specialist environmental journalism regarding climate change.

The New Zealand Herald did not send a journalist to Cancun. Its environment reporter, Isaac Davison, is credited with only two stories comprising a total of less than one thousand words during the analysis period, and only one story is about Cancun. Brian Fallow, the economics editor, is credited with three stories, a total of just over two and a half thousand words. Which journalists write about Cancun influences the discursive framings that are strong in the newspapers. As the next section shows, the framing of climate change as an economic issue is stronger in *The New Zealand Herald* than it is in the two northern hemisphere newspapers, which publish more narratively varied, comprehensive and nuanced climate change journalism.

Climate Change as an Economic Problem

Bulkeley and Newell argue that the logic of neoliberalism pervades common prescriptions for climate policy.²⁸⁵ Prescribing market mechanisms such as emissions trading, promoting self-governance at the community and individual levels, and 'the growth in [public-private] partnership approaches', encases climate policy action firmly within the bounds of accepted hegemonic economic discourse.²⁸⁶ This is the case in *The Guardian*, *The Irish Times* and *The New Zealand Herald*. In all three newspapers the solutions proposed or implied are market-based and do not seek to question current neoliberal economic paradigms; this solution framing stems from the framing of climate change as an economic problem.

²⁸⁵ Bulkeley and Newell, *Governing Climate Change*, 109.

²⁸⁶ *ibid.*, 109.

The data analysis suggests that *The New Zealand Herald* generally employs a simplistic economic framing that implies that climate change policy is inherently economically damaging, whereas *The Guardian* and especially *The Irish Times* employ more complex narratives that play on both economic and social progress framing, with considerable journalistic attention given to “green” or sustainable economic ideas. But, like *The New Zealand Herald*, the two northern hemisphere newspapers emphasise the financial costs of climate change mitigation and adaptation.

Nisbet’s economics frame defines scientific policy issues in terms of economic development or competitiveness or in terms of market benefits or risks.²⁸⁷ Figure 5.4 shows the proportionate occurrence of economic framing in across the three newspapers. In *The New Zealand Herald*, economic framing appears in sixty-two per cent of the items analysed; in *The Irish Times*, it appears in forty-three per cent of items, and in *The Guardian* in only twenty-nine per cent of items. This data shows the percentages of articles that frame climate change as an economic issue, rather than the (higher) percentages of articles that contain discussion or mention of economics. Data was also gathered on the mention and prominence of “green” economics, or economic development/competitiveness brought about through the development and use of sustainable “green” technologies. The results appear in Figure 5.5. In only two items did the option of sustainable development or “green” economics enter the frame in *The New Zealand Herald*. *The Guardian* features a higher proportion of items that mention green economics (fifteen per cent), and *The Irish Times* the highest at thirty per cent.

²⁸⁷ Nisbet, “Knowledge Into Action,” 2010.

Figure 5.4: Percentage of Items with Economic Framing

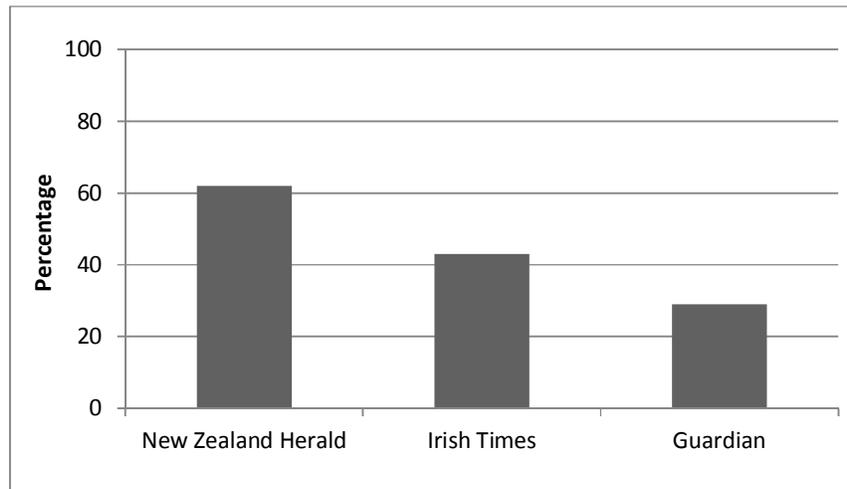
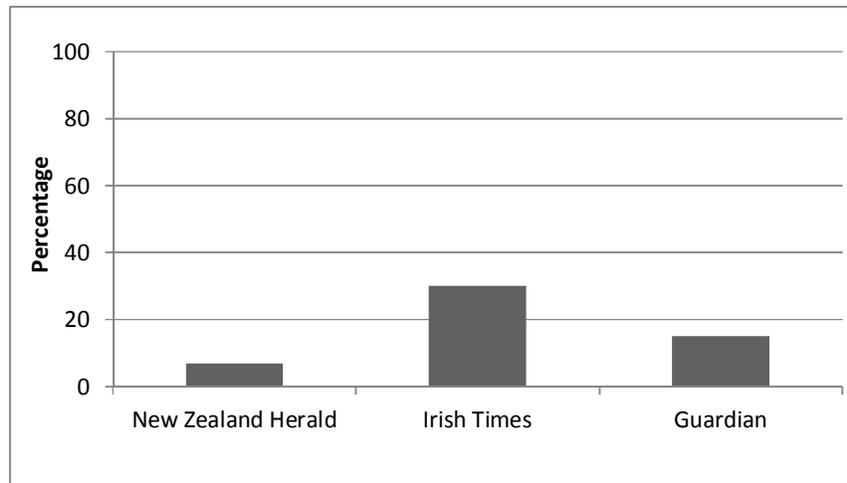


Figure 5.5: Percentage of Items Mentioning “Green” Economics



Especially in *The New Zealand Herald*, the impacts of climate change are presented in largely negative economic terms: whether the focus of an article is the Cancun conference or the New Zealand domestic emissions trading scheme (ETS), the financial costs of doing something about climate change are highlighted and the potential financial costs of doing nothing are ignored.

Climate change policy is framed as ‘imposing costs on your country.’²⁸⁸ It could ‘cost New Zealand companies a fortune’.²⁸⁹ Central to this framing is an expressed concern for potential competitive disadvantage if countries like New Zealand are burdened with the financial costs of emissions while key trading partners are not (in the absence of a binding global agreement or ETS). In *The New Zealand Herald*, the environment is, as Boykoff writes of American climate change reporting, subservient to political, social and economic “progress”.²⁹⁰

Only occasionally does *The New Zealand Herald’s* coverage of the Cancun conference allow space to discuss the global economic impacts (which are also felt on a local level) of not doing anything about climate change; these include rising food costs due to decrease in arable land, and even the potential loss of major coastal metropolises due to rising sea levels. The 2006 Stern Report on climate change suggests that while effective action to mitigate climate change would cost between one and two per cent of global GDP, taking no action and letting the climate grow hotter and more extreme over the coming century could cost as much as twenty per cent of global GDP.²⁹¹ This perspective is largely absent from *The New Zealand Herald’s* coverage.

Only two *New Zealand Herald* articles make mention of “green” economics, or the potential bottom-line benefits of building a sustainable economy. One of these two articles is about ‘the first successful New Zealand project to turn landfill gas into a transport fuel.’²⁹² Opening with personalisation – ‘A waste truck which is fuelled by what you threw out last week has begun its rounds’ –

²⁸⁸ Fallow, “Groser to Take Key Role in Climate Talks.”

²⁸⁹ David Venables, “NZ Must Play Cards Well at Climate Change Table,” *The New Zealand Herald*, 24 November 2010, A15.

²⁹⁰ Boykoff, “From Convergence to Contention,” 485.

²⁹¹ Nicholas Stern, *The Economics of Climate Change*.

²⁹² Isaac Davison, “Biofuel Truck Quietly Proves Nothing Need go to Waste,” *The New Zealand Herald*, 26 November 2010, A11.

the article's subject matter relates to everyday concerns around the price of imported transport fuel. It addresses the marginal cost of converting trucks to run on biogas, and explains in simple terms the process by which waste is turned into biomethane fuel. Scientific and business experts are quoted emphasising the importance of continued researching and funding of renewable energy infrastructure, an eventual outcome of using biogas for domestic heating is promoted and an aspiration that five per cent of New Zealand's road transport could be converted to run on biogas is voiced. A scientist is quoted saying that 'the sky's the limit' for converting waste into fuel, and that the cost of converting diesel engines to biogas 'can be earned back within a year', however the article also stresses that the logistics of waste-to-fuel application are difficult, as the biogas is difficult to transport.²⁹³

This article relies heavily on a press release from the company that developed the biogas rubbish-collection truck.²⁹⁴ The experts quoted in the article are from the press release, as is the catchy opening sentence about last week's waste being this week's fuel, albeit slightly reworded. The article does not contain any information that is not in the press release, making it a clear example of Davies concept of "churnalism".²⁹⁵ The article presents a "she'll be right" orientation towards the problem of climate change. Local businesses are finding solutions, and the mayor is supportive. No personal action is required – just keep throwing out your rubbish so someone else can turn it into fuel, which will be used to power more rubbish-collection trucks.

The other *New Zealand Herald* article that mentions "green" economics is an opinion piece by Connie Hedegaard, the European Commissioner for Climate

²⁹³ *ibid.*

²⁹⁴ Transpacific Industries Group, "New Zealand's First Biogas Fuelled Rubbish Truck Hits the Road," [press release], 25 November 2010, <http://www.transpac.co.nz/BiogasLaunch.pdf> (accessed 5/6/2011).

²⁹⁵ Nick Davies, *Flat Earth News* (London: Chatto & Windus, 2008).

Action and host of the 2009 Copenhagen conference.²⁹⁶ Hedegaard's opinion column is an exception to the dominant narratives and framing in *The New Zealand Herald*, emphasising the benefits of a 'transition to a low-carbon economy.'²⁹⁷ Economic growth and development is usually framed in *The New Zealand Herald* in opposition to action to mitigate or adapt to climate change.

Likewise in *The Guardian* climate change action is usually framed as costly: 'the first overwhelming priority of the government has to be to get the deficit down', which means borrowing less to fund investment in clean technologies.²⁹⁸ This framing promotes the idea that the global north must pay financially to prevent catastrophic consequences for the global south. Coupled with the human impact framing discussed in chapter five, it establishes a separation between those affected by climate change and those who effect climate change policy, when in fact, for arbitrary reasons of geography and latitude the costs of climate change will be borne disproportionately by some countries rather than others; global warming is just that, global, and it will very likely have profound global effects on everyone in the twenty first century.

Comparing figures 5.4 and 5.5 shows that most of *The Irish Times* items that contain economic framing discuss "green" economics. While these articles do frame climate change as an economic problem with potential economic costs, they also stress the potential economic benefits of climate change policy. *The Irish Times* reports that 'global clean energy investments' are worth US\$200 billion, with scope to at least double, and that 'the long-term cost of governments pursuing weak policies on climate change ... would be an

²⁹⁶ Connie Hedegaard, "Big Nations Must Deliver on Climate Change Pact," *The New Zealand Herald*, 29 November 2010, A11.

²⁹⁷ *ibid.*

²⁹⁸ Stratton and Webb, "Huhne Backtracks on Bank for Green Projects."

additional US\$1 trillion to cut carbon emissions after 2020'.²⁹⁹ Action now is said to 'reduce potential damages very significantly and pay off many times, compared to inaction.'³⁰⁰

Figure 5.6: Percentage of Items with Social Progress Framing

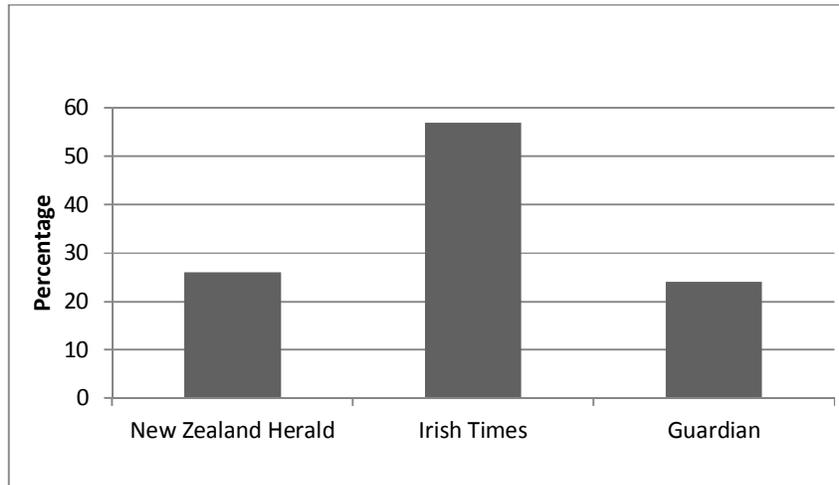


Figure 5.6 shows the occurrence of Nisbet's social progress framing in the dataset. It occurs in fifty-seven per cent of *Irish Times* items, and in one fifth of all *New Zealand Herald* and *Guardian* items. There is a correlation in *The Irish Times*, between the prominence of ideas about sustainable development and Nisbet's social progress frame. This is especially apparent with a low occurrence of both in *The New Zealand Herald* and a high occurrence of both in *The Irish Times*. Across *The Irish Times*' coverage of the Cancun conference, a theme of promoting sustainable development, green economics and social progress is much clearer than in *The New Zealand Herald* or *The Guardian*. *The Irish Times* frames EU climate aspirations in a positive light, quoting a European Environment Agency report to argue that 'the transition to a "green economy" would bring substantial benefits for the environment, the economy

²⁹⁹ Frank McDonald, "Deep Pessimism on Climate Change Issue," *The Irish Times*, 29 November 2010, 12.

³⁰⁰ Frank McDonald, "Complete Green Shift Needed, says EU Agency," *The Irish Times*, 1 December 2010, 12.

and society'.³⁰¹ In this instance, climate change is not framed as a cost but as an economic and social opportunity. This correlation of social progress and economic framing is not a major feature in *The Guardian* or *The New Zealand Herald*.

Emphasis on the financial costs of climate change is a prominent feature of climate change journalism at the time of the Cancun conference in *The Guardian* and *The New Zealand Herald*. *The Irish Times*, however, contains strong links between emissions reduction and economic development. These ways of framing the economics of climate change reflect the privileged position of economic development in the hegemonic structure of neoliberal late-capitalism. Economic competitiveness is the fixed variable: climate change action is good if it can enhance economic competitiveness – as framed in *The Irish Times* – and bad if it will damage economic competitiveness, as framed in *The New Zealand Herald* and to a lesser but still clear extent in *The Guardian*.

Reporting Climate Science

The mass media are the most commonly accessed source of scientific information for the public: most people 'typically do not start their day with a morning cup of coffee and the latest peer-reviewed journal article.'³⁰² This research finds that during the Cancun conference, the narrative of most news stories across all three newspapers analysed was political and economic, rather than scientific, although some reports do contain brief or background scientific statements. There is no evidence of overt scientific debate or "balance as bias" in *The New Zealand Herald*, *The Irish Times* or *The Guardian*. There is little natural or climate science in the dataset, and even fewer

³⁰¹ *ibid.*

³⁰² Boykoff, *Who Speaks for the Climate?* 53

examples of detailed discussion or strong journalistic attempts at explanation. In general, the scientific facts are settled, climate change is real, and the news items are framed around conflict amongst and between states and global elites over what to do about it.

Nonetheless, science does appear in all three newspapers. In addition to Nisbet's scientific uncertainty and Pandora's Box/Frankenscience frames, items in the dataset were categorised according to nine different natural/climate science-related criteria, and a further six technology-related criteria (see Appendix Four). This section discusses the presentation of the science that is in the three newspapers, before considering the potential effects on public opinion of the lack of climate science journalism at the time of the Cancun conference.

Only one article in *The New Zealand Herald* is focused on science, and its primary topic is New Zealand's Antarctic research team, rather than the climate science relevant to the Cancun conference.³⁰³ Two further *New Zealand Herald* items have a secondary focus on climate science.³⁰⁴ Similarly, in *The Irish Times*, one item focuses on climate science, and one has a secondary focus on climate science.³⁰⁵ *The Guardian* contains three science-focused items; two are about climate science and one is a promotion of "blue-sky" science (science for the sake of science rather than instrumental, often profit-driven scientific research). A further four *Guardian* items have a secondary focus on climate science. This data is shown in terms of percentage of items that focus or mention science in Figure 5.7.

³⁰³ Joe Dogshun, "Antarctic Team Shows NZ's Edge," *The New Zealand Herald*, 1 December 2010, A10.

³⁰⁴ NZPA, "Heat Now Means We'll be Even Hotter Soon"; Greg Ansley, "Food to Go Round," *The New Zealand Herald*, 4 December 2010, A25.

³⁰⁵ John Gibbons, "The Not-so-strange Paradox of Global Warming's Northern Freeze," *The Irish Times*, 9 December 2010, 13; McDonald, "Deep Pessimism on Climate Change Issue."

Figure 5.7: Prominence of (natural/climate) Science

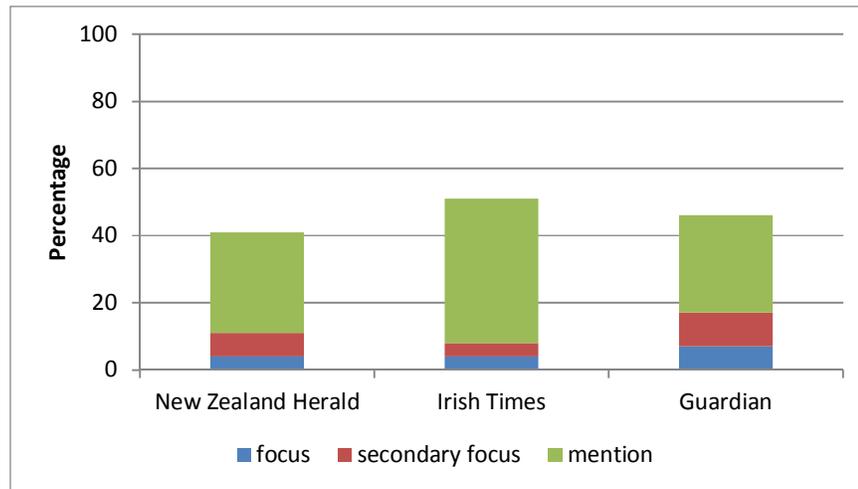
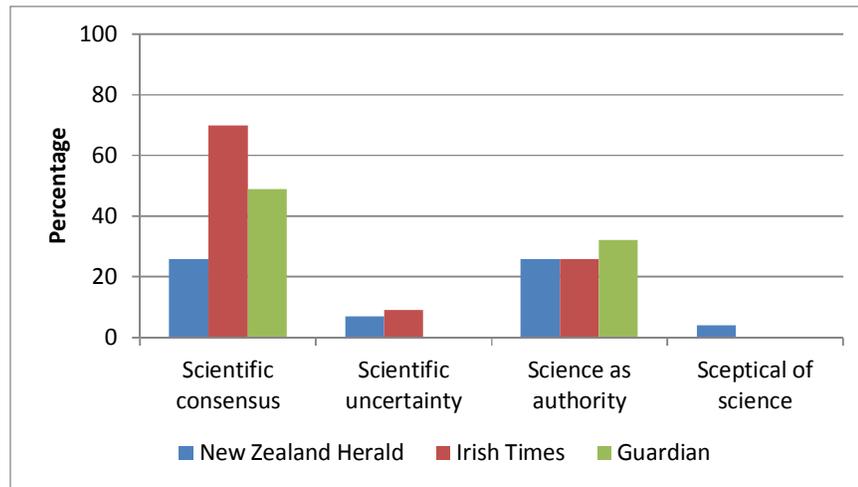


Figure 5.7 shows that while climate science is not a common focus of items in the three newspapers, it is mentioned in around thirty per cent of *New Zealand Herald* and *Irish Times* items, and over forty per cent of *Guardian* items. Climate science is often mentioned in passing in all three newspapers, but it is not often up for debate.

How science is framed is at least as important as how often it is the focus of news items or is mentioned in them. As argued earlier in this thesis, 'normative conceptions of science do not allow for uncertainty,' and because the climate is inherently unstable, climate science 'does not adhere neatly to the rationalising logic of science', making scientific (un)certainty central to this research.³⁰⁶ Figure 5.8 shows that in all three newspapers, scientific consensus around climate change is more prominent than scientific uncertainty. This is most true of *The Guardian*, in which no items suggest scientific uncertainty and forty-nine per cent of items emphasise or invoke the idea of scientific consensus. In *The Irish Times*, seventy per cent of items suggest scientific consensus, while nine per cent suggest scientific uncertainty.

³⁰⁶ Doyle, *Mediating Climate Change*, 19.

Figure 5.8: Scientific Framing



The three newspapers show similar levels of framing science as authoritative. This framing relates to science in general and the idea that scientific discoveries should have weight in social and policy decisions. Figure 5.8 shows that twenty-six per cent of *New Zealand Herald* and *Irish Times* items and thirty-two per cent of *Guardian* items framed science as authoritative. This framing is often achieved through a privileging of scientists as expert agents, as in a profile of a Whitehall climate change consultant,³⁰⁷ and through presenting the scientific consensus as something that should be taken seriously in public policy, for example: ‘We can only afford to ignore such scientific evidence at our peril’.³⁰⁸ The opposing framing is sceptical of science, and only appears once, in *The New Zealand Herald*, in an article about nuclear energy.³⁰⁹ This research finds no evidence that sceptical framings of science in the mass media are common in climate change journalism in the three newspapers during the Cancun conference.

³⁰⁷ Mark Tran, “Work: A working life – the climate change consultant,” *The Guardian*, 11 December 2010, 3.

³⁰⁸ “A Small Victory in Cancun,” *The Irish Times*, 13 December 2010, 13.

³⁰⁹ “Nuclear Power Blasts into Political Focus,” *The New Zealand Herald*, 2 December 2010, A17.

Figure 5.8 shows that *The New Zealand Herald* invokes scientific consensus much less often than the two northern hemisphere newspapers do. Detailed scientific analysis is completely absent from *The New Zealand Herald* news items analysed, although occasionally climate science is mentioned in simplistic. This low incidence of science in *The New Zealand Herald* reflects the economic focus of the key journalists. While this near-absence closes the space within the newspaper for scientific debate, and therefore potentially strengthens the dominant view that climate science is relatively settled and agreed, it also prevents *The New Zealand Herald* from offering persuasive evidence to readers who doubt the solidity of climate science. Playing down or ignoring the science that drives climate change politics helps climate change morph from a science-policy issue to “just another” political issue. The nature of the problem is obscured by a focus on the elite geopolitical processes that are to provide solutions, explored in detail in chapter eight. The likelihood of widespread support for a sound public policy achieved through workable compromise decreases because the likelihood of partisan deadlock, spin and public opinion manipulation increases. This potentially encourages individuals to see climate change simplistically as an issue that they are either for or against along partisan lines. And it does not reflect the changes in public opinion in New Zealand: the increase in scepticism and in the perception of scientific uncertainty is neither strongly and clearly rebutted nor affirmed in *The New Zealand Herald* – it is not engaged with at all.

The Irish Times does seem to engage with public perceptions of climate science. In an item by environmental writer and blogger John Gibbons, *The Irish Times* addresses the ‘not-so-strange paradox of global warming’s northern freeze’, linking climate change with ‘this year’s two extreme cold snaps’.³¹⁰ Gibbons explains that climactic changes cause changes to the Arctic ice cover, in turn giving Europe colder winters. Seventy per cent of items from

³¹⁰ Gibbons, “The Not-so-strange Paradox of Global Warming’s Northern Freeze.”

The Irish Times invoke climate science consensus. In a long article of over one thousand words that focuses on the opening of the Cancun conference, the newspaper reports that ‘the scientific evidence continues to accumulate’, citing several examples.³¹¹ Scientific uncertainty in *The Irish Times* could be classified as “soft” scientific uncertainty. It features in news stories relating to the current impacts of changing weather patterns, and is exemplified in this quotation: ‘Experts say it is hard to tell whether this series of dry spells is part of a trend.’³¹² Another example is the suggestion that the ‘dramatic weather events which have battered Ireland in the last 24 months, cannot in themselves be extrapolated to either “prove” or “disprove” man-made climate change’, but the article continues, rebutting the uncertainty:

However, when viewed against a global canvas of record high temperatures ... and a marked increase in “weather anomalies”, a more ominous picture emerges. It remains a physical impossibility that continuing to pump 27 billion tonnes of heat-trapping gas, CO₂, every year into the atmosphere could do anything other than ratchet up the global temperature.³¹³

The above passage is the most detailed scientific analysis in all *The Irish Times* items that this research analysed. Climate science is presented as settled, the consensus that anthropogenic climate change is real and happening is clear, but there is little scientific explanation, if slightly more than in *The New Zealand Herald*.

The Irish Times has the most frequent mentions of scientific consensus of the three newspapers, and is from the country, Ireland, with the highest level of

³¹¹ McDonald, “Deep Pessimism on Climate Change Issue.”

³¹² Jody Clarke, “When You See Food and are Hungry, You Will Not Fear to Die,” *The Irish Times*, 4 December 2010, 13.

³¹³ Gibbons, “The Not-so-strange Paradox of Global Warming’s Northern Freeze.”

acceptance and understanding of climate change as a political problem, according to the public opinion data outlined in chapter three. This suggests a correlation between sustained and frequent mentions of climate science and public engagement with climate change. The science in *The Irish Times* is most often without detail, suggesting that what is important is not complex scientific journalism but rather repetition of the easily digestible idea that a scientific consensus supports the proposition that climate change is real. Alternatively, perhaps additionally, the newspaper's frequent mentioning of climate science reflects journalists' perceptions of public opinion, and journalists seek to confirm or reinforce existing public beliefs about climate change by frequently mentioning climate science and invoking largely accepted ideas of scientific consensus.

When scientific uncertainty is mentioned in *The Guardian*, it is only so that it can be rebutted. For example, *The Guardian* devotes a two hundred word article to directly rebutting the 'popular argument of climate change deniers' that carbon dioxide has no effect on the earth's warming and cooling.³¹⁴ The focus of this article is a statement from the Geological Society of London, which the newspaper calls 'closely argued' and supported by 'an immense body of research'.³¹⁵ This bestows authority on the Geological Society's statement. On the same day that this item was published, *The Guardian's* editorial includes numerous statistics designed to give credibility to the serious nature of the topic.³¹⁶ Another item reports that 'new understanding of the science' and 'remodelling data on a more powerful computer' means that 'evidence of the dangerous impact of climate change is clearer than ever.'³¹⁷

³¹⁴ Paul Brown, "Weather: weatherwatch," *The Guardian*, 13 December 2010, 33.

³¹⁵ *ibid.*

³¹⁶ "Editorial: Yet Another Opportunity Lost," *The Guardian*, 13 December 2010, 28.

³¹⁷ John Vidal, "Cancun summit: Met Office: Tropical forests and permafrost at greater risk," *The Guardian*, 6 December 2010, 12.

Nonetheless, climate science is not central to the major constructions of climate politics in any of the three newspapers. While the scientific consensus is accepted by the newspapers, climate change is framed as a global economic-political issue. It is not up to scientists to solve the climate problem, it is a duty for politicians.

Scare Stories and Disaster Scenarios

Several categories of analysis are relevant to the exploration of climate catastrophe scare stories in this research. This section first uses Nisbet's Pandora's Box/Frankenscience frame to measure major occurrences of climate scare stories or disaster scenarios. The frame is defined as a 'call for precaution in face of possible impacts or catastrophe. Out-of-control, a Frankenstein's monster, or as fatalism, i.e. action is futile, path is chosen, no turning back.'³¹⁸ Its low occurrence in the dataset is shown in Figure 5.9 in terms of percentage of total items analysed. There is notable variation between the newspapers, with the frame apparent in eight (twenty per cent of) *Guardian* items and only two (or nine per cent of) *Irish Times* items. However, some items in the dataset contained apparent scare-story characteristics without actually framing the issue in terms of Nisbet's definition. All items were therefore also coded according to whether they focused on or mentioned negative environmental consequences or predictions: the results of the analysis in terms of percentage of total items are shown in Figure 5.10.

³¹⁸ Nisbet, "Knowledge Into Action," 54-55.

Figure 5.9: Pandora's Box / Frankenscience Framing

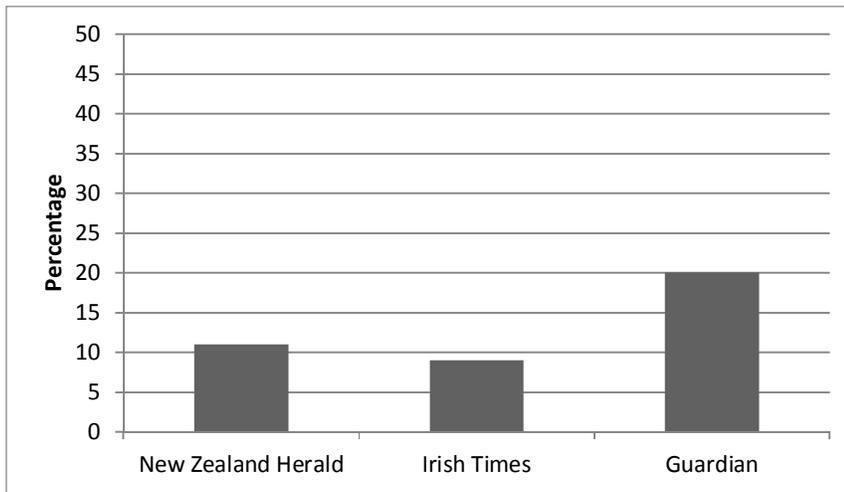
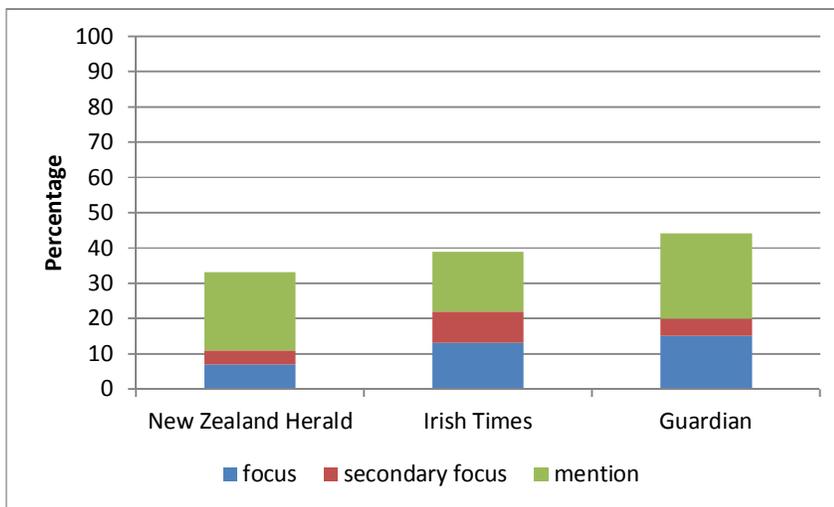


Figure 5.10: Negative Environmental Consequences



The Guardian has the highest proportion of items that focus on negative environmental consequences or predictions and also the highest proportion of Pandora's Box/Frankenscience framing. A strong example is a *Guardian* editorial published two days after the Cancun conference finished, which lists some of 2010's notable and record-breaking extreme weather events and predicts that

More and worse could be on the way ... the record temperatures of 2003 will seem mild. Cities – urban heat islands ... sometimes 10C hotter than the surrounding countryside – will become increasingly dangerous: no place for the elderly, the poor, the sick, the very young, or anybody without access to cool fresh water and air-conditioned buildings.³¹⁹

Furthermore, *The Guardian* reports that rising temperatures will lead to increased demand on air conditioning, which runs on electricity (often generated from fossil fuels) and hydrofluorocarbon refrigerants, which are far more powerful greenhouse gases than carbon dioxide.³²⁰ So the climate problem compounds itself: as it gets hotter, we generate more emissions trying to cool down, thus pushing climate change further. *The Guardian* also has the highest proportion of items that mention negative environmental consequences or predictions without any detail or discussion. These are mostly passing mentions to climate catastrophe, as in an article that reports the gap between scientific requirements for global emissions reduction to limit climate change and the pledges that states have actually made: more needs to be done to ‘avoid the worst consequences’ of climate change which are described without detail as ‘serious’.³²¹

Pandora’s Box is opened less frequently in *The New Zealand Herald* and *The Irish Times*, in three (eleven per cent) and two (nine per cent) items respectively. In *The Irish Times*, readers are warned that an ‘ominous picture’ of climate science predictions suggests that climate change will bring ‘the inevitable as much as the unpredictable.’³²² Aid agencies will be

³¹⁹ “Editorial: Yet another opportunity lost”.

³²⁰ *ibid.*

³²¹ John Vidal, “UN says Emission Pledges Fall Well Short of Climate Change Goal,” *The Guardian*, 24 November 2010, 11.

³²² Gibbons, “The Not-so-strange Paradox of Global Warming’s Northern Freeze.”

'overwhelmed' by climate 'disasters'.³²³ Much more prominent than "climate catastrophe" scare stories in *The New Zealand Herald* are current weather stories focusing on the long hot summer to come for New Zealanders and on the negative impact this could have for drought-stricken farmers – but the hot, dry conditions are chiefly attributed to the La Nina weather pattern, with journalists and their meteorologist sources unable or unwilling to confirm a link to climate change.³²⁴

In the two northern hemisphere newspapers climate scare stories or negative consequences of climate change feature consistently throughout the analysis period, although not frequently. In *The New Zealand Herald*, however, this framing comes to the fore towards the end of the Cancun conference period. An article from late in the analysis period introduces Nisbet's "Frankenscience/ Pandora's Box" frame, present in the possibility of crossing 'some threshold for runaway, catastrophic global warming' before global elites have acted to cut greenhouse gas emissions.³²⁵ Nature has its own rules: 'whatever is decided, or left undecided, in Cancun will make no difference to the laws of nature or the laws of mathematics.'³²⁶

One 915 word *New Zealand Herald* article, by Australian correspondent Greg Ansley, is essentially a list of frightening predictions: 'catastrophic global food shortage', 'new warnings' of 'potential catastrophe', 'potential mass extinction', 'ocean dead zones', 'threatening the lives of hundreds of millions of people', 'global emergency', 'the world has barely begun to understand the ramifications', 'irreversible in our lifetimes', culminating in the statement that

³²³ Frank McDonald, "Robinson Warns Against Failing to Address Global Warming," *The Irish Times*, 25 November 2010, 11.

³²⁴ For example, NZPA, "Heat Now Means We'll be Even Hotter Soon"; Derek Chen, "Govt Ponders Action on Drought," *The New Zealand Herald*, 2 December 2010, A4.

³²⁵ Brian Fallow, "Power Plays Threaten Climate Summit," *The New Zealand Herald*, 2 December 2010, B2.

³²⁶ *ibid.*

rising populations, declining resources and climate change will increase the risk of food price spikes and shortages, water scarcities in volatile regions, mass displacement cause [sic] by climate or resource scarcities, a possible collapse in fish stocks, and greater risk of civil wars, intercommunal violence, insurgency, pervasive criminality and widespread disorder.³²⁷

One sentence in the final paragraph of the same article supplies another list – ‘co-operation, sharing of knowledge, and the subordination of national pride, greed and fear’ – but does little to overcome the fear induced by the major narrative of environmental degradation and widespread social disorder. In this sense the article bears striking resemblance to Hollywood environmental catastrophe blockbusters like *The Day After Tomorrow* (2004) and *The Day the Earth Stood Still* (2008), which tell seemingly prophetic stories of catastrophic environmental degradation and end with vague suggestions that cooperation and compassion will solve the problems of environmental collapse. In *The Day the Earth Stood Still*, the alien sent to renew Earth’s ecosystem by destroying humanity eventually accepts that humans can change and gives them a chance to, then the credits roll, just as this article tells of impending catastrophe and ends with a brief nod to social and technological change without any illustration of what change entails.

This chapter has outlined some key findings of this research in terms of what climate change journalism looks like in *The Irish Times*, *The New Zealand Herald* and *The Guardian* at the time of the Cancun conference. In all three newspapers, climate change is not a front-page issue. In *The New Zealand Herald*, most climate change journalism is written by economics or political journalists, while in the other two newspapers environmental journalists feature prominently. Climate change is framed as an economic problem in all three newspapers. Detailed climate science is scarce in all three newspapers,

³²⁷ Ansley, “Food to go Round.”

most starkly in *The New Zealand Herald*, but the basics of the science do get mentioned sometimes. Climate catastrophe disaster scenarios appear in all three newspapers, but not often. As subsequent analysis in this thesis shows, the politics of climate change is framed as elite-focused and out of the reach of ordinary citizens, and the global political sphere in which the politics of climate plays out is defined in the newspapers as a chaotic and selfish realm where cooperation and compassion seem unlikely to flourish. The potential consequences of climate change are largely side-lined in the picture of a battle of global elites that the newspapers construct. Climate scare stories are coupled with this elite-focused and conflict-ridden political framing to remove the issue from proximate cognitive spheres of action and potentially disempower and distance readers from climate change. The next chapter examines how the newspapers locate climate change, and the political implications of its locational framing.

6. Locating Climate Change

Problem definition often involves situating a problem in the appropriate area for solutions to be applied; an example is the legal system, with its categorisation of types of law that dictate through which courts and legal processes different legal problems travel. The situating and the placing of climate change in particular contexts where it can be dealt with, the definition of climate change as a local, national, regional or global issue, delineates the appropriate realm(s) for action on climate change and is central to the framing of climate change.

Consistently across *The New Zealand Herald*, *The Guardian* and *The Irish Times*, there is a discursive gap between those who are or will be affected by and will suffer the effects of climate change on everyday, human levels – those who “live” climate change often because their lifestyles are relatively beholden to the climate – and those who are represented as having political power in the formation and implementation of climate change policy. The newspapers overwhelmingly imply that those affected are citizens of the global south, and those who hold power are policy elites from the global north. The previously mentioned *Guardian* editorial that describes climate change-stricken cities as dangerous ‘urban heat islands’ is a rare exception to the general framing trend.³²⁸ The lived or empirical problem of climate change is located at a geographical distance from the readers of the three newspapers in Auckland, London and Dublin, and the more abstract problems of climate change policy formation are located at a cognitive distance from non-elite readers by being focused on high-level elite global policy processes.

The majority of items included in this research are chiefly about or make mention of the Cancun conference. There is thus a general continuity across

³²⁸ “Editorial: Yet another opportunity lost”.

the three newspapers in terms of a focus on global politics and elite agents, which reflects the globally-oriented Cancun conference, whose meeting rooms were largely populated by diplomats, representatives of IOs and NGOs, and other policy elites. This community of elite policy agents, explored further in chapter nine, dominates the items analysed in this research. The journalistic focus on elite political processes and agents outweighs the reporting of the current and potential human impacts of climate change.

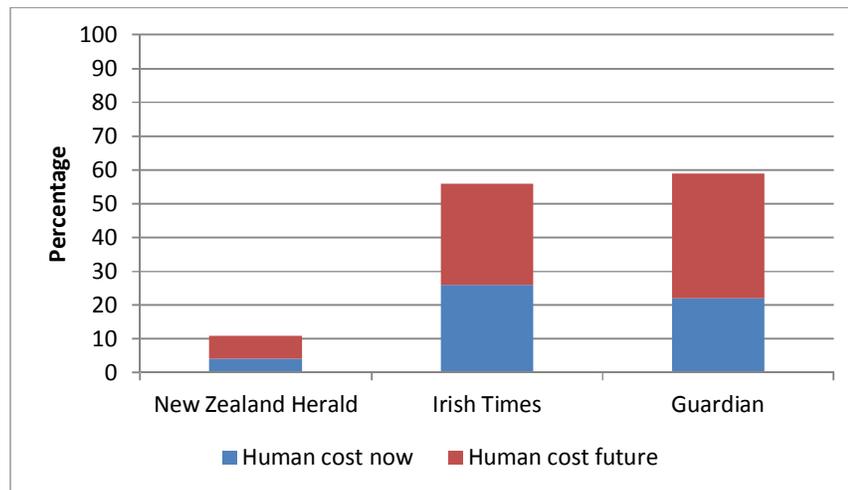
This chapter first addresses the framing of the human costs or lived experiences of climate change, which are in the main located in the global south by the frames employed in the newspapers analysed. The clear contrast that emerges across all three newspapers is that the costs of unchecked climate change for the global south are from climate change itself, by way of droughts and floods, whereas the costs that the global north incurs are imposed by global political-economic actions in response to climate change rather than by the climate itself. In this sense, the problem of climate change is defined in two different ways depending on geographical location and industrial development, as either a lived climatic problem or an abstract political-economic problem. The section ends with a discussion of how the newspapers place agency in the hands of some agents and not others.

Locating the Human Impacts of Climate Change

All items analysed were coded in six “human impact” categories; the results are presented in Figures 6.1 and 6.2. *The New Zealand Herald* stands out from the other two newspapers as having a very low proportion of items that mention the potential or current human costs of climate change. Almost half of items in *The Guardian* and *The Irish Times* mention the human costs of climate change. All three newspapers more commonly frame climate change as a problem that will affect the future than as a problem that is already

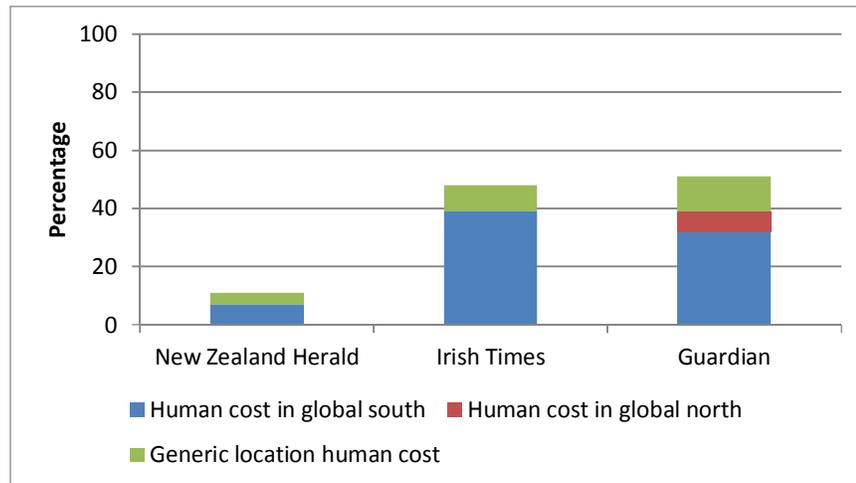
having impacts. *The Irish Times* and *The Guardian* have comparable results in terms of the framing of the human costs of climate change, with the dominant framing of the human cost as happening in the future, in the global south. However, both northern hemisphere papers also contain notable recognition of the current human costs of climate change, as experienced in recent extreme weather events. An example of the commonly occurring split between global north and global south in the framing of the impacts of climate change is from *The Guardian*, which reports that fears of ‘northern Europe facing a new ice age, or of catastrophic sea-level rises ... that swamp the planet ... have been ruled out by leading scientists’ but carries on to say that tropical rainforests (in which very few *Guardian* readers presumably reside) are likely to succumb to drought.³²⁹ *The Guardian* is the only newspaper analysed that mentions the potential human costs of climate change on citizens of the global north who are the newspapers’ readers, although all three newspapers contain infrequent occurrences of “generic/no location human cost” framing.

Figure 6.1: Temporal Framing of Human Cost



³²⁹ Vidal, “Cancun summit: Met Office: Tropical forests and permafrost at greater risk.”

Figure 6.2: Locational Framing of Human Cost



In *The New Zealand Herald*, climate change and extreme weather events happening now are the subject of ‘Colombia battling worst rains in decades’, which reports the story of a produce truck driver whose regular trip to the Bogota market that usually takes one day has taken four due to extreme weather and flooding.³³⁰ In a comparable, but much longer, *Guardian* item, the location is western Uganda, where climactic change is manifest in increased drought, changing watercourses, the spread of malaria into new areas, economic tension and political strife.³³¹ In *The Irish Times*, the comparable global south location is Kenya, where thanks to bi-annual droughts survival is becoming ‘an ever more violent occupation’.³³² These three items clearly exemplify the overriding framing across all three newspapers that locates the human costs of climate change in the global south. It appears often, but with less detail, in many items that are focused on the Cancun conference itself. In contrast to the items discussed above, *The New Zealand Herald* suggests that for readers at home in New Zealand,

³³⁰ AP, “Colombia Battling Worst Rains in Decades,” *The New Zealand Herald*, 11 December 2010, B11.

³³¹ James Randerson, “‘Losing my land is breaking my heart’: climate change is shifting the course of the river between Congo and Uganda, with devastating consequences for farmers,” *The Guardian*, 8 December 2010, 10.

³³² Clarke, “When You See Food and are Hungry, You Will Not Fear To Die.”

climactic changes are linked to the likelihood of ‘a summer of cloudless days.’³³³

The phrasing ‘on the frontline of climate change’ peppers *The Guardian’s* Cancun-related coverage.³³⁴ While the other two newspapers analysed do not employ the recurring “frontline” phrasing that occurs in *The Guardian*, their dominant situating of climate change is similar. This frontline is far from *The Guardian’s* London readers and the overarching focus on the impacts of climate change in the global south detracts from the closeness of *Guardian* readers to the lived problems of climate change. Vicarious experience through mediated communication is extremely difficult when the shoes one is supposed to imagine oneself in are entirely alien. It can be difficult to make a connection between driving less or paying more for electricity in London, Dublin or Auckland and the impact this may have on the course of a river in Uganda.

Central to this framing of climate change as a problem experienced by the global south is the lengthy travel-diary style story by *The Guardian’s* environmental editor John Vidal, which charts his ‘extraordinary, epic journey through the Andes ... to record the stories of the largely hidden people on the frontline of climate change.’³³⁵ It reads not unlike a colonial era travel diary, where the intrepid western journalist uncovers alien peoples and practices and attempts to convey them to readers at home: an isolated farmer whose mountainside crops of two hundred and fifteen varieties of potato are threatened by changes in the climate, a city where running water is only available for thirty minutes a day – these are the lived experiences of stories of climate change that *The Guardian* focuses on. These types of news items tell readers little other than that climate change is making hard lives even

³³³ NZPA, “Heat Now Means We’ll be Even Hotter Soon.”

³³⁴ John Vidal, “My Climate Journey,” *The Guardian*, 27 November 2010, 37.

³³⁵ *ibid.*

harder in the global south. Vidal's climate tourism blends with the conception of humans as separated from the environment, drawing on ideas of the "other". The nomadic farmers of Uganda and the potato-growers of Peru almost form a part of the wild landscape of the environment on which climate change impacts. Urban citizens of the global north are displaced from this landscape and therefore removed from the impacts of climate change. Far from the frontline, citizens at home in developed countries are poorly located to help the fight against climate change.

The negative and worrying potential consequences of climate change, or the human costs of climate change, are usually located in the global south in all three newspapers. Locating the human and environmental costs of climate change in the global south contrasts with the overall framing of climate change as a global, elite problem. The lived experiences of climate change are divorced within the major news narratives from the elite politics of climate change, and both are also removed from close spheres of individual cognition. In this sense, the narratives of both climate change politics "on the ground" and institutional climate change politics are unlikely to be easily accessible to most newspaper readers. Rather than promote engagement with climate change, the major framings that this research finds potentially push climate change into existing cognitive spheres that are removed from individual action. As a lived problem, climate change affects people far away who are "not like me". As a political policy issue, climate change is to be dealt with by elite policy agents who operate in opaque and conflict-ridden spaces of global governance, spaces in which newspaper readers do not have any place in.

Locating Solutions

The dominant global elite framing in *The Guardian*, *The Irish Times* and *The New Zealand Herald* defines climate politics as an issue for elites to deal with.

There is very little of the ‘connecting the dots’ between the implications for personal behaviour, business practice, domestic policy and global politics that Nisbet calls for.³³⁶ Figures 6.3, 6.4 and 6.5 show the results of the data in terms of how the newspapers define the appropriate sites for climate change action in those items from the three newspapers that frame solutions to the climate change problem (either mitigation or adaption, or both) in terms of personal, business/corporate, government and intergovernmental action. Simply being about the Cancun conference is not enough to qualify an item as focusing on or mentioning intergovernmental actions/solutions: these categories of analysis measure items that explicitly present certain actions, for example, on a governmental level, legislating against coal-fired power plants, or on an intergovernmental level, formulating a global framework for accurate measurement of emissions. Personal level actions could include changes in modes of transportation or reducing consumption. Business or corporate actions stress the place of commerce in solutions to climate change.

Figure 6.3: Solution Framing in *The New Zealand Herald*

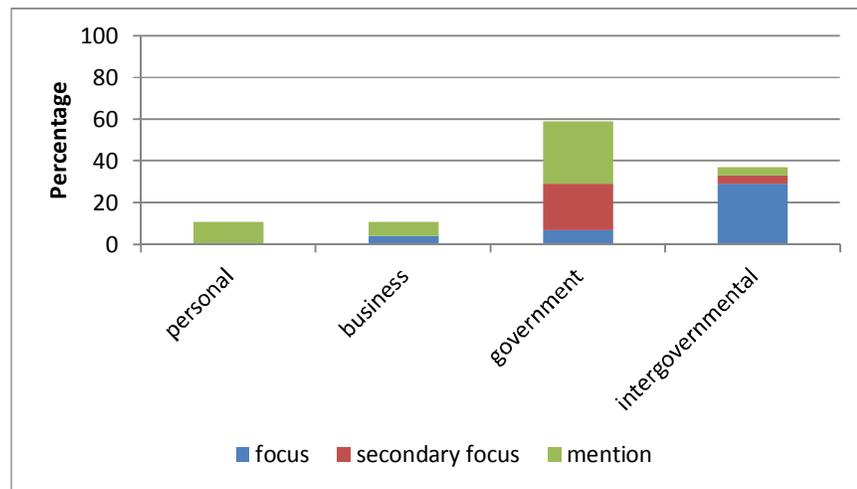


Figure 6.3 shows that personal and business action is almost entirely absent from *The New Zealand Herald* items. While climate change is framed as an

³³⁶ Nisbet, “Knowledge Into Action,” 44.

economic problem, business is framed as playing a very limited role in providing or enacting solutions, largely by not being discussed frequently. Fallow argues that ‘harnessing the power of prices and markets’ as a problem solving tool is the path towards policy solutions, but does not discuss what this means in practice.³³⁷ More items focus on intergovernmental actions/solutions than on any other type of action/solution, and over half *The New Zealand Herald* items mention or focus on governmental action. This is borne out in many of the Cancun-focused items that frame climate change as a global issue, but also mention domestic climate policy, for example Bennett quotes environment minister Nick Smith arguing that in light of ‘the progress that has been made in Cancun’ New Zealand’s ETS is ‘the right thing to do’.³³⁸

Figure 6.4: Solution Framing in *The Irish Times*

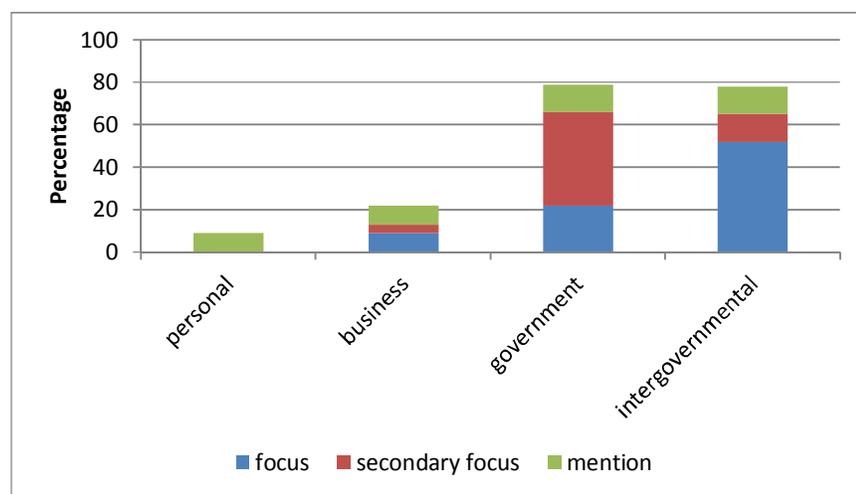


Figure 6.4 shows that over fifty per cent of *Irish Times* items focus on intergovernmental actions/solutions, framing the Cancun conference as the appropriate place for climate solutions to be sought. *The Irish Times* also has a significant proportion of items with a secondary focus on national

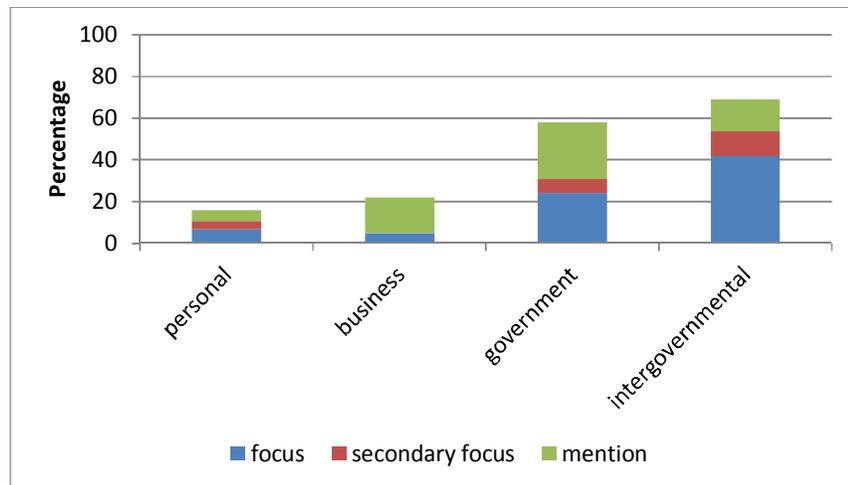
³³⁷ Brian Fallow, “Cancun Talks Highlight Climate Dilemma,” *The New Zealand Herald*, 16 December 2010, B2.

³³⁸ Adam Bennett, “Smith Hails Breakthrough in Global Climate Change Talks,” *The New Zealand Herald*, 13 December 2010, A4.

government providing solution to climate change problems. This is discussed further in chapter seven. It is clear from Figure 6.4 that the solutions to climate change in *The Irish Times* are framed as being in the hands of elite governmental and intergovernmental agents.

Like in the other two newspapers, the most common action/solution framing in *The Guardian* is at the intergovernmental level, with over forty per cent of items focusing on the solutions at the intergovernmental level, shown in Figure 6.5. This reflects a strong focus in the newspaper on the Cancun conference itself. Around half as many items frame national government actions/solutions as important, reflecting the concurrent debate about the Government’s proposed Green Investment Bank. In an item with a business solutions focus *The Guardian* reports the environmental advances that the global postal industry has made un-coerced by domestic or global policy,³³⁹ but the dominant narratives across *The Guardian’s* Cancun coverage and about the proposed Green Investment Bank suggest that commerce requires government intervention to meet the challenges of climate change.³⁴⁰

Figure 6.5: Solution Framing in *The Guardian*



³³⁹ Herbert-Michael Zapf and Dag Mejdell, “Why Climate Change Negotiators Should Go Postal,” *The Guardian*, 6 December 2010, 33.

³⁴⁰ Stratton and Webb, “Huhne Backtracks on Bank for Green Projects.”

The Guardian is also the only newspaper that focuses on personal action/solutions, doing so in three items (seven per cent). One article that does so explores why it is hard to conceptualise the future impacts of climate change and argues that citizens have a duty to use climate policymaking as a chance to reinvigorate democracy.³⁴¹ Another is a profile of environmentalist Bill McKibben.³⁴² The final item is about a group of activists who stand trial for conspiracy to trespass on private property, namely a coal-burning power plant. NASA Scientist James Hansen, the trial's 'star witness', argues in court that using 'biodegradable compost toilets' and switching off 'all the lights' will 'do little good' if countries like Britain continue to set a poor example by burning coal.³⁴³ While the personal actions of activists are highlighted, the everyday actions of individuals are subservient to the macroeconomic actions of governments.

In all three newspapers, climate change is framed as a serious, immediate problem with human and economic effects for the global south, but for the readers of newspapers in the global north, climate change is usually framed as an abstract problem with geographically and temporally distant consequences. The framing of the impacts of climate change primarily in the global south contrasts with the solutions proposed, which are framed at an intergovernmental level.

³⁴¹ Marek Kohn, "Fair Weather Societies," *The Guardian*, 10 December 2010, 46.

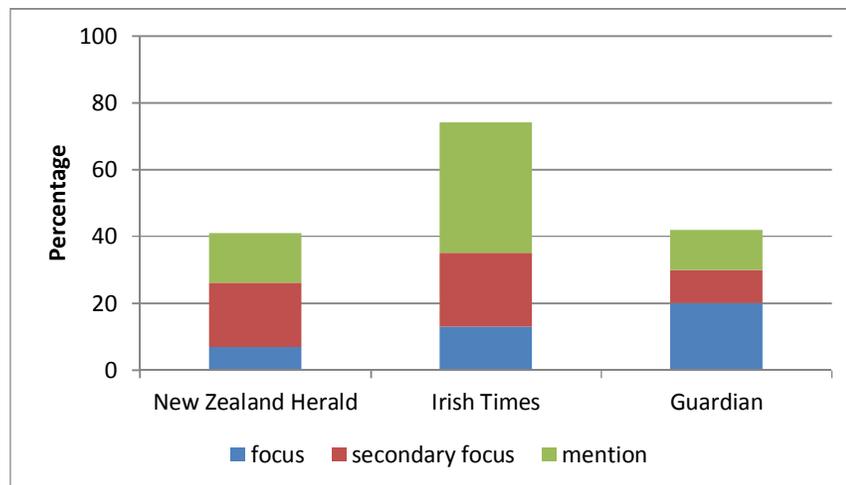
³⁴² Susanna Rustin, "A Life in Writing: Bill McKibben," *The Guardian*, 4 December 2010, 10.

³⁴³ Tim Webb, "Governments Not Telling Truth about Climate, says NASA Scientist," *The Guardian*, 30 November 2010, 30.

7. Framing Domestic Politics

In Ireland and Britain at the time of the Cancun conference in late 2010, specific climate change legislation was being developed. This concurrence of domestic policy action and international conference negotiations provides conditions under which the local/domestic and global politics of climate change can be linked. As this chapter shows, the importance of salient legislation development in Ireland and Britain at the time of the Cancun conference helps to move climate change up the news agenda in *The Irish Times* and *The Guardian*. This chapter explores the framing of the domestic politics of climate change to address the extent to which the newspapers make these links, and also how the dominant framing of climate change as an economic problem prescribes appropriate domestic policy responses. Figure 7.1 shows the prominence of domestic politics across the three newspapers analysed: *The Guardian* focusses on domestic politics more often than the other newspapers do, but overall *The Irish Times* contains the most mentions of domestic politics.

Figure 7.1: Prominence of Domestic Politics



In *The New Zealand Herald*, the domestic politics of climate change are presented as one-sided and supportive of the policy status quo, as well as framing government figures in a positive light. For example, in a profile of New Zealand's Minister for International Climate Change Negotiations Tim Groser, economics editor Brian Fallow writes that Groser 'is often called upon to defend the Government's climate change policies by questioners convinced New Zealand is doing more than anyone else.'³⁴⁴ The opposition that Groser and environment minister Nick Smith respond to in *The New Zealand Herald* is aimed at those in greenhouse gas-emitting industries, who complain that mitigating climate change will hurt their bottom line. This framing of New Zealand as potentially doing too much to combat climate change and thereby imposing unreasonable economic costs on itself is dominant in *The New Zealand Herald* and congruent with the way the New Zealand government has attempted to frame climate change in its policy announcements and press releases.³⁴⁵ There is almost no criticism of government policy from environmentalists, or from the parliamentary opposition, although the largest opposition party's climate change spokesperson was in Cancun for the conference, blogging and issuing press releases that could have provided *The New Zealand Herald* with valuable counterstatements to help provide balance, since the newspaper lacked a journalist at the conference.³⁴⁶

The Guardian has the highest proportion of items focusing on domestic politics of the three newspapers analysed (twenty per cent), but also a high

³⁴⁴ Fallow, "Groser to Take Key Role in Climate Change Talks."

³⁴⁵ For example: Nick Smith, "ETS to Proceed on July 1 [press release]," 29 April 2010, <http://www.national.org.nz/Article.aspx?articleId=32701> (accessed 19/02/2012); Nick Smith, "The Emissions Trading Scheme: performance and outlook," 1 August 2011, <http://www.national.org.nz/Article.aspx?articleId=36649> (accessed 19/02/2012); Nick Smith, "Slowing of ETS Recommended by Review Panel [press release]," 15 September 2011, <http://www.national.org.nz/Article.aspx?articleId=37066> (accessed 19/02/2012).

³⁴⁶ For example: New Zealand Labour Party, "Cancun Climate Deal 'Looks like Six out of Ten' [press release]," *Scoop.co.nz*, 12 December 2010, <http://www.scoop.co.nz/stories/PA1012/S00216/cancun-climate-deal-looks-like-six-out-of-ten.htm> (accessed 19/02/2012).

proportion with no mention of domestic politics (fifty-nine per cent, equal to *The New Zealand Herald*). Where journalism in *The Irish Times* often discusses domestic and global politics together, in *The Guardian* they are more commonly kept separate. Domestic-politics focused items in *The Guardian* are mostly critical of the British government's climate change policies. Over half are opinion pieces rather than news items; the opinion pieces are mostly published in the lead up and at the beginning of the Cancun conference period, whereas the news items are mostly from the end of the conference period. The news items are often critically focused on government announcements on climate change policy including decisions to disempower the government's Green Investment Bank'.³⁴⁷

The prominence of economic framing in the domestic politics of climate change is also clear in *The Guardian*. Domestically, climate change is framed in opposition to economic competitiveness: climate change mitigation is costly. For example, energy and climate change secretary Chris Huhne is quoted saying 'the first overwhelming priority of the government has to be to get the deficit down', which he suggests is exclusive of promoting investment in clean technologies.³⁴⁸ Climate change mitigation is presented as something to think about when the economy is in good shape, a nice-to-have rather than a must-have for policymakers. However, these frames are not as significant in *The Guardian* overall as they are in *The New Zealand Herald*, as only twenty-nine per cent of *Guardian* items include strong economic framing, significantly lower than the other two newspapers. Forty-eight per cent of *Guardian* items make no mention of finance or economics.

³⁴⁷ Damian Carrington, "Advisers Want 60% Cut in Britain's Greenhouse Gas Emissions by 2030," *The Guardian*, 7 December 2010, 13; Allegra Stratton and Tim Webb, "Green Investment Bank Likely to be Scaled Back," *The Guardian*, 15 December 2010, 14.

³⁴⁸ Stratton and Webb, "Green Investment Bank Likely to be Scaled Back."

The domestic politics of climate change is discussed in many of *The Irish Times* items analysed. Over seventy per cent of content analysed in *The Irish Times* mentions or focuses on domestic politics, compared to forty-one per cent of *New Zealand Herald* and *Guardian* content. In *The Irish Times*, the positive sustainable economic development framing discussed in chapter five is related to a presentation of Irish domestic climate change politics that tends towards blandness and almost “business as usual” policymaking, while the hard and dirty political battles are fought on the global stage in Cancun. Amid a national debt crisis, climate change is not framed as a hot-topic domestic political issue. The skirmishes around policy action on climate change are carried out by major global players like the US and Japan, suggests *The Irish Times*.

Rather than focusing on domestic politics alone, domestic politics is more commonly intertwined with Cancun-focused journalism in *The Irish Times*. Of the nine items (thirty nine per cent) that focus on Cancun, seven either mention or discuss domestic climate politics as well. This creates links between domestic and global politics and helps to situate domestic policymaking in an international context. The trend is not as strong reciprocally; three of the four items that focus on domestic climate politics do not mention the Cancun conference, and of the five items that have a “secondary focus” on domestic politics, two focus on Cancun, two mention Cancun and one does not.

The Irish Times does not contain the same strong, frequent economic burden framing as *The New Zealand Herald*. The high correlation in *The Irish Times* between social progress framing, economic framing and mention of sustainable economics influences the economic narratives of climate change in the newspaper. The Irish economy was hit particularly hard by the fallout from the 2008 international financial crisis, and during the Cancun conference

a €6 billion readjustment budget began progressing through the Irish Dail. Lyle Scruggs has found that in the USA, recessionary economics and labour market concerns have pushed climate change down the list of concerns for policymakers and the public.³⁴⁹ This does not seem to be the case in Ireland, where *The Irish Times* frames climate change in such a way to promote sustainable economic development. As the build-up to the Cancun conference began, *The Irish Times* published a list of notable global clean technology developments.³⁵⁰ A guest column from psychologist John Sharry explicitly ties economic hardship and environmental degradation together and promotes ‘a leadership that is prepared to bravely tackle the problems we face...’³⁵¹ *The Irish Times* generally frames the economics of climate change more as an opportunity than a burden.

Nisbet’s economics frame appears in forty three per cent of *Irish Times* items analysed. Sustainable economics are mentioned in thirty per cent. The social progress frame is the most commonly occurring of Nisbet’s science policy frames in *The Irish Times*, found in fifty-three per cent of items analysed. It often occurs alongside or intertwined with the economics frame and the morality frame, to positively emphasise sustainable economic development. The public accountability/ governance and middle way frames are often also present in the same item or news story as the social progress frame. These help to define *The Irish Times* coverage as generally constructive and positive about the social, political and economic changes that can be made at a domestic level to help mitigate and adapt to climate change. In Ireland, a country with tumultuous social history and hard hit by the fallout from the

³⁴⁹ Lyle Scruggs, “Declining Public Concern about Climate Change: Can We Blame the Great Recession?” (revised version of paper presented at the 2010 World Congress of Sociology Meeting in Gothenburg, Sweden, July 2010). www.sp.uconn.edu/~scruggs/gec11.pdf (accessed 2/12/11).

³⁵⁰ “News in Brief,” *The Irish Times*, 26 November 2010, 8.

³⁵¹ John Sharry, “Though the Situation is Grim, it is Not Hopeless,” *The Irish Times*, 30 November 2010, 20.

2008 global financial crisis, *The Irish Times* presents a mainly positive view of the ability for Irish people to deal with climate change.

Although an article that sums up the outcomes of the Cancun conference finishes by noting that ‘even in Ireland, tackling climate change has moved far down the list of public priorities as incomes plummet and the recession deepened’, just a few days later *The Irish Times* calls the newly formulated Climate Change Bill before the Dail an ‘innovative ... milestone’.³⁵² Where in *The New Zealand Herald* the potential for domestic policy action is framed as ‘futile self-sacrifice’ depending ‘on what the rest of the world is doing’,³⁵³ *The Irish Times* paints a picture of the Irish just getting on with it. A profile of former Irish Prime Minister Mary Robinson stresses the consequences of doing nothing and the need to act now.³⁵⁴ The newspaper promotes European-wide clean technology research and development coordination.³⁵⁵ Without criticism, *The Irish Times* agrees with an EU report that economically and behaviourally, a ‘complete green shift is needed’.³⁵⁶

At the time of the Cancun conference, Ireland’s coalition government included the Irish Green Party, and was in the process of forming climate change legislation. This domestic legislation process is the focus seventeen per cent of *Irish Times* items analysed, typified by the story ‘Cabinet agreed gas emissions targets, says Gormley’.³⁵⁷ The Irish Green Party features in twenty-six per cent of *Irish Times* items analysed, and in most of these a spokesperson is quoted or the party is mentioned rather than being the focus of the reporting. Nonetheless, the Irish Greens find space to be heard in *The Irish Times*, and the social progress/sustainable economic development narratives that feature

³⁵² “A Small Victory in Cancun”; Mary Minihan, “Cabinet Agreed Gas Emission Targets, says Gormley,” *The Irish Times*, 17 December 2010, 10.

³⁵³ Fallow, “Power Plays Threaten Climate Summit.”

³⁵⁴ McDonald, “Robinson Warns Against Failing to Address Global Warming.”

³⁵⁵ Campbell, “EU Must Coordinate R&D to Compete on Global Stage.”

³⁵⁶ McDonald, “Complete Green Shift Needed, says EU Agency.”

³⁵⁷ Minihan, “Cabinet Agreed Gas Emission Targets, says Gormley.”

widely in the newspaper reflect the legitimacy of the Irish Green Party that the dominant framing achieves.

In New Zealand, the Green Party of Aotearoa New Zealand held nine parliamentary seats (in opposition) at the time of the Cancun conference, having been represented in parliament since 1999.³⁵⁸ The importance of the Green Party in New Zealand politics is not reflected in *The New Zealand Herald's* climate change journalism; the party is not mentioned once, although the Australian Green Party is mentioned in an article about Australian domestic politics that also discusses climate change.³⁵⁹ *The Guardian* does not once mention the Green Party of England and Wales which, despite not being a major political party in Britain, won over one million British votes in the 2004 elections for the European Parliament, and in May 2010 party leader Caroline Lucas won a seat in the House of Commons.

Tables 7.1, 7.2 and 7.3 show the dominant political framing in the three newspapers, which relate to both the domestic politics of climate change and the global politics of climate change, which are discussed in the next chapter. The tables show different definitions of the climate change problem in relation to domestic and global politics, which lead the newspapers to frame the politics of climate change in differing ways. In *The New Zealand Herald*, the problem is the costs associated with climate change policy, whereas climate change itself is the problem addressed in *The Irish Times*, and the key political problem addressed in *The Guardian* is the lack of (public and elite) political will for strong policy action.

³⁵⁸ From 1996 to 1999 the Greens existed in parliament as part of the multi-party Alliance, holding three of the Alliance's thirteen seats in New Zealand's single house of parliament.

³⁵⁹ Greg Ansley, "State Results Threaten Gillard Reform Plans," *The New Zealand Herald*, 30 November 2010, A21.

Comparison of the tables shows that *The New Zealand Herald's* dominant framing endorses a cautious domestic approach to climate change policy that is in line with contemporary government policy. The dominant framing in *The Irish Times* also endorses contemporary government actions, but to the opposite effect of *The New Zealand Herald* because the Irish government was at the time of the Cancun conference developing climate change policy rather than in favour of moderating it, as the New Zealand Government was. The dominant framing in *The Guardian* is critical of government policy which is disparaged in the newspaper for being insufficient. The major difference between the three newspapers is that *The Irish Times* and *The Guardian* suggest that Ireland and Britain should show global political leadership by enacting climate change legislation in lieu of a global agreement, while *The New Zealand Herald* warns that New Zealand should proceed cautiously with legislation until a binding global agreement is reached, which, it is suggested, is unlikely to be soon.

Table 7.1: Political Framing in *The New Zealand Herald*

<i>Function of Frame</i>	<i>Focus of Frame</i>		
	<i>Issues</i>	<i>Events</i>	<i>Political Actors</i>
<i>Defining problematic effects/conditions</i>	NZ runs risk of competitively disadvantaging its economy to combat climate change in the global south.	Domestic legislation (NZ ETS), extreme weather and climatic changes in global south e.g. Colombia	Politicians, polluting industry groups, citizens of the global south. Previous Labour-led government who developed ETS.
<i>Identifying cause/agent</i>	Lack of global agreement to	Previous COP such as in	US, China, Japan, other

	ensure fairness and equity of policy costs.	Copenhagen, 2009.	states.
<i>Endorsing remedy</i>	Lower global expectations. Cautious domestic policies until global framework agreement reached.		Climate negotiations minister Tim Groser.
<i>Conveying moral judgment</i>	Economic development trumps climate change action. NZ is already playing its part.		Global elite agents are self-serving, which obstructs policy progress.

Table 7.2: Political Framing in *The Irish Times*

<i>Function of Frame</i>	<i>Focus of Frame</i>		
	<i>Issues</i>	<i>Events</i>	<i>Political Actors</i>
<i>Defining problematic effects/conditions</i>	Climate change. Lack of global agreement to ensure fairness and equity of policy costs.	Previous COP such as at Copenhagen in 2009.	US, China, other states.
<i>Identifying cause/agent</i>	Disagreement between major states.	Previous COP such as at Copenhagen in 2009.	US, China, other states.
<i>Endorsing remedy</i>	Ireland should show international leadership by passing climate change legislation in lieu of a global agreement.		Green Party leader John Gormley, former PM Mary Robinson, the EU.

<i>Conveying moral judgment</i>	It is difficult to get anything done at a global level, but climate change must be addressed.	Global political negotiations in general.	Global elite agents are self-serving, which obstructs progress.
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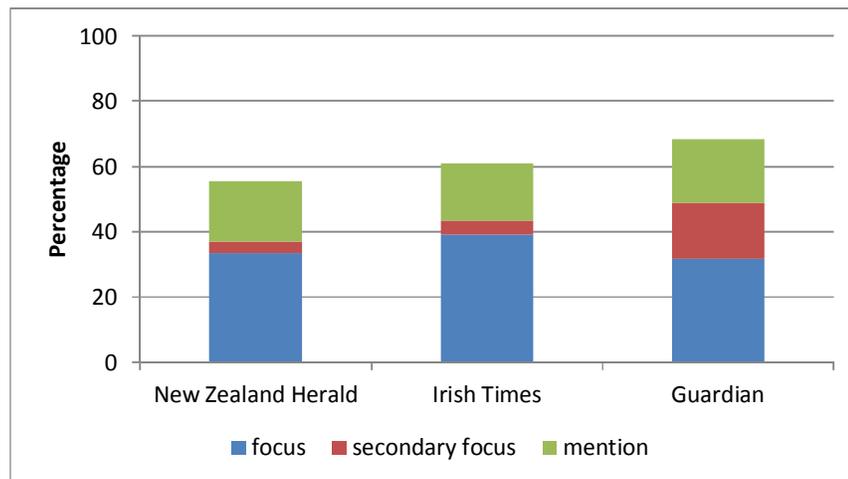
Table 7.3: Political Framing in *The Guardian*

<i>Function of Frame</i>	<i>Focus of Frame</i>		
	<i>Issues</i>	<i>Events</i>	<i>Political Actors</i>
<i>Defining problematic effects/conditions</i>	Lack of political will for strong policy action, Conservative-led government too focused on narrowly-conceptualised economic growth.	Domestic legislation (Green Investment Bank), Extreme weather and climatic changes in global south e.g. Uganda, Latin America.	Politicians, polluting industry groups, citizens of the global south.
<i>Identifying cause/agent</i>	Lack of global agreement to ensure fairness and equity of policy costs.	Previous COP such as at Copenhagen in 2009.	Global elite agents, such as state diplomats, negotiators.
<i>Endorsing remedy</i>	British government should be doing more, not less, in lieu of a global agreement.		Environment minister Chris Huhne.
<i>Conveying moral judgment</i>	It is difficult to get anything done at a global level. Climate change policy action brings costs more than benefits.	Global political negotiations in general.	Government not acting wisely. Global elite agents are self-serving, which obstructs policy progress.

8. Framing Global Politics

The Irish Times, *The New Zealand Herald* and *The Guardian* all focus economic and political narratives of climate change at a global level. Global narratives dominate the dataset. The majority of the items this research analyses, from all three newspapers, are about the Cancun conference, shown in Figure 8.1. This in itself helps to frame climate change as a global problem, which it is, and define the global sphere of elite policy makers as the appropriate realm for policy responses to climate change, which is only one area where behaviour change is needed to mitigate and adapt to climate change. Action on national, regional, local and individual levels is also important. The global elite policy sphere that the politics of climate change are located in by the dominant global elite framing across all three newspapers is cognitively distant from most individuals. There are very few links, and those that do exist are tenuous, in any of the newspapers between the global politics of the Cancun conference and the lived experiences of individuals in London, Dublin and Auckland. The global political sphere itself is framed as a chaotic, semi-anarchic Machiavellian arena, in which nation states act sceptically and self-servingly. The following section explores the framing of economics at a global level. It then examines the elite global conflict framing apparent in all three newspapers, and analyses how the newspapers situate their home nations – Ireland, Britain and New Zealand – in the global political arena.

Figure 8.1: The Cancun Conference in *The Irish Times*, *The Guardian* and *The New Zealand Herald*



Emissions Reduction and Global Development

In *The New Zealand Herald*, global political-economic frames are often constructed through discussion of the tensions between global development and emissions reduction. Development, it is commonly suggested in *The New Zealand Herald*, is incompatible with emissions reduction. Furthermore, developing states have a right to keep developing, because poverty alleviation is essential to common conceptions of global justice. This perspective is exemplified in a *New Zealand Herald* article by economics editor Brian Fallow, which quotes New Zealand’s Minister for Climate Change Negotiations Tim Groser: ‘No one expects developing countries to reduce their emissions. That is impossible in terms of their development objectives.’³⁶⁰ Implicit is the idea that environmentally sustainable social progress is unachievable on a limited budget. There is no clear attempt to address the interconnectivity of the two problems, for example, poverty due to crop failure in drought-affected areas. This reflects an underlying narrative of economic development that defines emissions reductions as inherently damaging to economic growth and

³⁶⁰ Fallow, “Groser to Take Key Role in Climate Talks.”

development, an argument applied to both the global south and New Zealand's own small economy

This general tendency of *The New Zealand Herald* not to offer an economically-positive narrative of climate change helps to frame climate change as a cost rather than an opportunity, as opposed to an opportunity that also has associated costs. *The New Zealand Herald* presents the path to a global agreement as typified in Cancun as a struggle over how to share the costs of adapting to and mitigating climate change, rather than as an opportunity to merge global development goals with sustainability and emissions reduction. Readers are essentially presented with two options: pay for climate change mitigation or face the vague, abstract and faraway consequences of climate change.

This contrasts with the positive sustainable development framing in *The Irish Times* which extends from the domestic level to the international arena: immediate 'economic concerns should not divert attention from the "life and death" issue' of climate change.³⁶¹ Referring to the Cancun conference, *The Irish Times* stresses that '[t]hese are not trade talks.'³⁶² The newspaper gives column space to discussion of calls from global financial institutions like Allianz and HSBC for 'clear policies' and the enactment of 'strong and sustained price signals on carbon emissions', or else 'risk economic disruptions far more severe than the recent financial crisis.'³⁶³ These represent a call for clarity and action in climate policy; climate change policy is presented as an integral part of global economic development strategies. Unlike in *The New Zealand Herald*, climate change mitigation and adaption are not usually framed as oppositional to economic development in *The Irish Times*.

³⁶¹ McDonald, "Robinson Warns Against Failing to Address Global Warming."

³⁶² *ibid.*

³⁶³ McDonald, "Deep Pessimism on Climate Change Issue."

The Guardian does not contain significant levels of economic framing in terms of global development. Global politics is only the focus of four of the twelve *Guardian* items that employ economic framing, and this research found no clear framing trend across these four items other than their globally-focused narratives. One is an aforementioned report from the ‘frontline’ of climate change.³⁶⁴ Another reports Wikileaks-based revelations about US clean-tech diplomacy in the Middle East, and frames climate change as an issue with which elites and diplomats play strategy games, something that is discussed further below.³⁶⁵ One is a brief piece reporting a shortfall in global clean energy investment relative to emissions targets, which highlights progress that India is expected to make and the failure of ‘the world’s richest 20 nations’ to make similar progress.³⁶⁶ The last is a comment piece from a visiting senior fellow on climate change at the London School of Economics that argues that the Cancun conference has reversed the negative post-Copenhagen global momentum.³⁶⁷

Intergovernmental Conflict and Strategy Games

As EU member states, Britain and Ireland are politically located within a strong supranational policy community, much more so than New Zealand is. Where *The New Zealand Herald* frames global politics as an anarchic battlefield of competing national interests, *The Irish Times* and *The Guardian* situate themselves within an EU context. In most of *The New Zealand Herald* items there are not really any “good guys and bad guys” (although New

³⁶⁴ Vidal, “My Climate Journey.”

³⁶⁵ Damian Carrington, “The US Embassy Cables: climate change: Copenhagen accord”, *The Guardian*, 4 December 2010, 6.

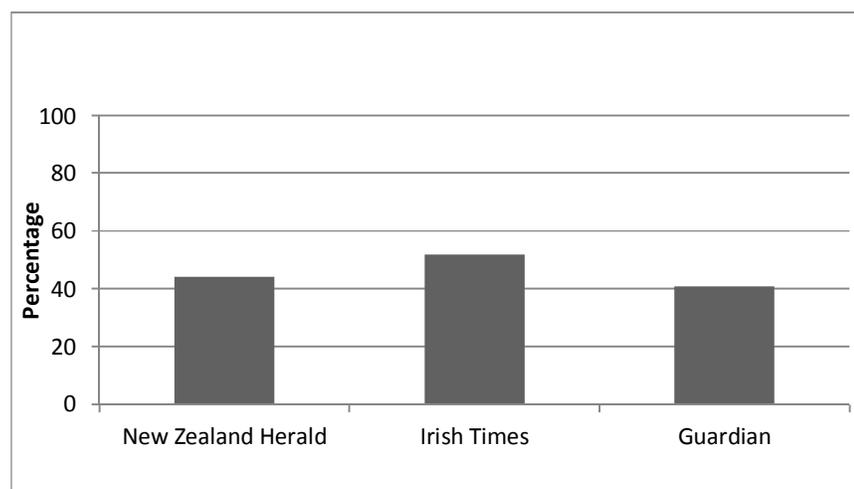
³⁶⁶ Tim Webb, “Green Investment ‘will be £350 less than needed’”, *The Guardian*, 9 December 2010, 34.

³⁶⁷ Michael Jacobs, “Comment: why Cancun gives us hope,” *The Guardian*, 15 December 2010, 32.

Zealand is framed positively), rather everyone is out for themselves, whereas in *The Irish Times* and *The Guardian*, the EU is commonly framed as a positive influence on global climate politics and the US, China and Japan are framed as negative obstacles to global climate policy progress.³⁶⁸

Nisbet's conflict/strategy frame is present in forty-one per cent of *Guardian* items analysed, forty-four per cent of *New Zealand Herald* items and fifty-two per cent of *Irish Times* items. This is shown in Figure 8.2. The conflict/strategy frame presents issues as games among elites, often depicting a battle between personalities or groups. Nisbet comments that this is often a journalist-driven frame as it provides headline-material tension and conflict.³⁶⁹ In national politics, this frequently translates into a "horse race" poll-driven narrative, while in the reporting of global politics it is more likely to centre on questions of national interest and distrust of and opposition to other global players.

Figure 8.2: Conflict/Strategy Framing



³⁶⁸ For example, see Frank McDonald, "US Absence Raises Concern for Climate Change Deal," *The Irish Times*, 30 November 2010, 12; Frank McDonald, "EU Pushes for Progress at Mexico's Climate Talks," *The Irish Times*, 1 December 2010, 12.

³⁶⁹ Nisbet, "Knowledge Into Action," 52.

The conflict/strategy frame defines the international political system across all three newspapers. Nine items in each of *The New Zealand Herald* and *The Irish Times* are focused on the Cancun conference, and in each of these newspapers seven of the nine items contain the conflict/strategy frame. Of the twelve *New Zealand Herald* items that focus on global politics (including but not limited to the Cancun conference) nine contain conflict/strategy framing. Ten of the fifteen *Irish Times* items that are focused on global politics contain conflict/strategy framing. In *The Guardian*, six of the thirteen Cancun-focused items contain the conflict/strategy frame, and of the twenty-four *Guardian* items that were coded as having global politics as their major focus, fifteen contain the conflict/strategy frame.

Ireland's identity in relation to global climate diplomacy is influenced by Ireland's position in the EU. The EU is generally presented in a positive light in *The Irish Times* Cancun coverage, with European Climate Commissioner Connie Hedegaard featuring prominently.³⁷⁰ EU officials are quoted prominently saying 'that the EU is ready to agree on an ambitious global climate framework in Cancun but regrettably some other major economies are not.'³⁷¹ The EU is framed as a progressive force in global climate politics, and Ireland's location within the EU lends support to the idea that is on the right team in the global game of climate change politics, both reducing its domestic emissions and contributing to global policy progression.

Ireland is framed as playing a positive role in the global climate change game. A key way this framing is constructed is through promotion of Irish elites acting on the world stage, something that is also common in *The New Zealand Herald*. Former Irish Prime Minister and United Nations (UN) High Commissioner for Human Rights Mary Robinson is quoted urging world

³⁷⁰ McDonald, "Complete Green Shift Needed, says EU Agency"; Frank McDonald, "New Draft Text at Climate Conference Hints at Compromise," *The Irish Times*, 11 December 2010, 11.

³⁷¹ McDonald, "EU Pushes for Progress at Mexico's Climate Talks."

leaders to act.³⁷² Robinson is also profiled in *The Irish Times*, focusing on her successful vaccination work in the global south, and stressing that she is now turning her efforts to combating climate change.³⁷³ The newspaper happily reports that ‘positive climate-related policies’ as well as a ‘recession-induced fall’ in carbon emissions have led to Ireland moving up the 2010 Climate Change Performance Index, which is a measurement structure of climate change policy indicators established by European NGOs.³⁷⁴

In *The Irish Times*, while there is significant overlap between domestic and global political spheres because they are discussed in many of the same articles, domestic climate politics is often framed in a positive way to emphasise the potential for “green” economic growth, social progress and governmental accountability, and in contrast the global politics of climate change is usually framed very differently: the international political system, and some particular stubborn players within it, are hindering action on climate change, according to *The Irish Times*. Numerous states are apparently attempting to undermine legitimate multilateral process. The newspaper reports ‘secret texts’ of climate policy documents and ‘rumours’ of furtive meetings at the ‘tortuous’ Cancun conference.³⁷⁵ Early in the period analysed *The Irish Times’* environment editor poses the question ‘what to do about the US’, labelling the US a negative influence on global climate policy progress.³⁷⁶ Even when more positively framed, the Cancun conference is said to have ‘appeared to show progress’, suggesting that the *appearance* of progress is

³⁷² McDonald, “Robinson Warns of Failing to Address Global Warming.”

³⁷³ Alison Healy, “Five Million Lives Saved,” *The Irish Times*, 7 December 2010, 5.

³⁷⁴ Frank McDonald, “Ireland Moves Up Index of Climate Change Performance,” *The Irish Times*, 7 December 2010, 11.

³⁷⁵ Frank McDonald, “Rumours Circulate at Cancun of Plan to Scrap Kyoto,” *The Irish Times*, 4 December 2010, 13; Frank McDonald “Russia Adopts Hardline Stance at Climate Talks,” *The Irish Times*, 10 December 2010, 14.

³⁷⁶ McDonald, “US Absence Raises Concern for Climate Change Deal.”

the only observable insight available into the murky world of international diplomacy.³⁷⁷

In *The New Zealand Herald* narratives of global politics are underpinned by an understanding of global political agents as self-serving within an international system in which only the big players matter: diplomats and Cancun negotiators 'have to do their best in the world as they find it' and '[n]ations are only willing to act if they feel others are pulling their weight.'^{378 379} States are 'urged to avoid bickering', implying that bickering is the natural position of state negotiators at multilateral summits.³⁸⁰ The US and China are frequently mentioned as presenting major obstacles to a global agreement, with their unilateral disagreements representing broader disagreements between states in the global north and states in the global south generally. *The New Zealand Herald's* coverage of Cancun highlights these rifts between developed and developing nations around commitments to reduce emissions. Of the eleven New Zealand Herald articles that feature the elite conflict frame, eight are also framed in terms of the economic consequences of emissions reduction.

Where *The Irish Times* suggests that Ireland has the potential to show global leadership on climate change, *The New Zealand Herald* goes further to, with some hyperbole, frame New Zealand as a key state in the global climate change game. Throughout *The New Zealand Herald's* Cancun coverage, individuals from New Zealand are praised as playing important roles on the world stage. New Zealand's Climate Change Negotiations Minister Tim Groser is 'asked to lead a key strand of the climate talks'.³⁸¹ Groser is described in

³⁷⁷ McDonald, "New Draft Text Hints at Compromise."

³⁷⁸ Isaac Davison, "NZ has Modest Goals from Cancun Climate Change Talks," *The New Zealand Herald*, 2 December 2010, A5.

³⁷⁹ Fallow, "Power Plays Threaten Climate Summit."

³⁸⁰ Davison, "NZ has Modest Goals from Cancun Climate Change Talks."

³⁸¹ Fallow, "Groser to Take Key Role in Climate Talks."

another item as ‘absolutely pivotal’ to the Cancun negotiations.³⁸² Expatriate New Zealander Adrian Macey’s role as vice-chairperson of the Kyoto Protocol negotiations in Cancun is highlighted.³⁸³ An opinion column stresses that whatever happens at Cancun ‘we are going to look good’ because New Zealand already has an ETS, this gives New Zealand ‘status among the big players’ who ‘would not want us at the high rollers’ table unless we were seen to be a positive influence on negotiations.’³⁸⁴

This reflects a representation of New Zealand’s foreign policy as “punching above its weight”, soft-power centred, moralistic and internationally respected, a characterisation of the country that plays on political myths and realities of Antipodean progressive politics and geopolitical principle.³⁸⁵ The roots of this narrative can be traced to nationalistic myths of principled foreign policy exemplified by events in the post-war years such as New Zealand’s anti-nuclear stance and subsequent breakup of the ANZUS alliance, and also to historical achievements like granting female suffrage. *The New Zealand Herald* thus frames New Zealand as a small progressive country that is admired by the international community for its principled and independent presence on the global stage – manifest most often in *The New Zealand Herald* in reference to the important roles “our” political elites play at Cancun.

However, *The New Zealand Herald* also emphasises New Zealand’s minor position as a small state in contrast to the global nature of climate change. The onus of climate change action is placed on elite policy agents, like Groser, but these national elites from small states are framed as relatively powerless to act on the global stage, which is dominated by major states: ‘Where to

³⁸² Bennett, “Smith hails Breakthrough in Global Climate Change Talks.”

³⁸³ Fallow, “Power Plays Threaten Climate Summit.”

³⁸⁴ Venables, “NZ Must Play Cards Well at Climate Change Table.”

³⁸⁵ See, for example: Devetak and True, “Diplomatic Divergence in the Antipodes”; Jim Rolfe, “New Zealand: trade, security and morality,” *The Pacific Review* 5, 3, (1992): 268-277; Terence O’Brien, *Presence of Mind: New Zealand in the World* (Wellington: New Zealand Institute for International Affairs, 2009).

draw the line – at which doing their fair share ends and futile self-sacrifice begins – depends on what the rest of the world is willing to do.³⁸⁶ This framing creates space for the defrayment of responsibility and delays to action. It fits uncomfortably with the framing, discussed above, of New Zealanders as important agents: they are important, but relatively powerless. These two framings often appear in the same article, and while how readers receive them is beyond the scope of this research, their mismatched concurrence can be said to add a level of incoherence to *The New Zealand Herald*.

Over eighty per cent of *Guardian* items analysed either mention or focus on global politics. Like the other two newspapers, *The Guardian* commonly frames global politics as a strategy game between elite agents. International political negotiators are likened to ‘a nest of serpents’.³⁸⁷ In an article from early in the analysis period, *The Guardian* reports that ‘last night the first shots were fired in what are likely to be serious diplomatic clashes’ at Cancun.³⁸⁸ Midway through the Cancun conference, the newspaper reports that the ‘US climate envoy has reacted angrily to suggestions that America used strong-arm tactics and bribery’.³⁸⁹ This follows *The Guardian’s* reports from the previous week, published in a series of articles titled ‘The US Embassy Cables’, that publicised data obtained from Wikileaks about the behaviour and attitudes of American and European climate negotiators.

When newspapers like *The Guardian* publish stories based on Wikileaks information, the newspapers can help to communicate the content of the leaked documents in ways in which readers can understand. Nonetheless, the

³⁸⁶ Fallow, “Power Plays Threaten Climate Summit.”

³⁸⁷ Luis Hernandez Navarro, “Cancun - a nest of serpents in a vast toxic rubbish dump,” *The Guardian*, 26 November 2010, 40.

³⁸⁸ John Vidal and Jo Tuckman, “Rich World ‘Holding Humanity Hostage’ over Climate Change,” *The Guardian*, 27 November 2010, 8.

³⁸⁹ Suzanne Goldenberg and John Vidal, “US Anger at Aid Claims,” *The Guardian*, 7 December 2010, 13.

prominence of Wikileaks not just as a source but as a topic of journalism in itself in *The Guardian* adds to the dominant conflict/strategy framing in the newspaper, exemplified in this passage: 'Hidden behind the save-the-world rhetoric of the global climate change negotiations lies the murky realpolitik: money and threats to buy political support; spying and cyber warfare are used to seek out leverage.'³⁹⁰ Based on a leaked diplomatic cable, the newspaper reports that the 'animated and frustrated' EU president Herman Van Rompuy 'has predicted "disaster"' at Cancun because of poor relationships between the EU, US and China.³⁹¹ For all the talk of positive sustainable development in *The Guardian*, the dominant conflict/strategy framing is enforced by the Wikileaks-related content and detracts from the possibility of global policy progress on climate change by setting the problem of climate change in an arena of dirty, elite-driven politics.

The slow-progress and conflict that is framed as characterising the global political arena is evident in the ways in which the three newspapers frame the outcomes of the Cancun conference. All three newspapers compare the Cancun conference to the 2009 Copenhagen conference. In *The Irish Times*, the outcomes of the Cancun conference – 'the fact that it ended with an agreement at all' – are framed as a 'small victory for multilateralism' following the 'debacle' in Copenhagen.³⁹² Similarly in a *Guardian* editorial, the 'missed opportunities of the Copenhagen meeting' mean that 'nobody expected anything at all from the Cancun encounter, so any agreement represents a significant step. But this significance vanishes when matched against the scale of things to come.'³⁹³ Nonetheless, continues the editorial, given the lack of major progress, soon Cancun 'will look more like another opportunity

³⁹⁰ Damian Carrington, "The US Embassy Cables: climate change: US backed oil emirate's bid to become HQ of green energy," *The Guardian*, 4 December 2010, 7.

³⁹¹ Ian Traynor, "The US Embassy Cables: climate change: global warming talks destined for disaster, says EU president," *The Guardian*, 4 December 2010, 6.

³⁹² "A Small Victory in Cancun."

³⁹³ "Editorial: Yet Another Opportunity Lost."

missed.³⁹⁴ However, an opinion piece in *The Guardian* disagrees with the editorial, saying that while ‘what was achieved was not enough’, ‘the very fact of agreement’ is a ‘crucial advance’ because it reverses the ‘negative momentum’ following the 2009 Copenhagen conference.³⁹⁵ Likewise, a *The New Zealand Herald* editorial suggests that the outcomes of COP are ‘becoming depressingly familiar. As with Copenhagen a year ago, now it is with Cancun’,³⁹⁶ and another article suggests that in ‘contrast to the train wreck at Copenhagen a year ago, progress was made on a range of issues. But the most important and difficult ones have been kicked into touch.’³⁹⁷

Taken together, the robust and frequent positioning of global, economic and elite frames that is strongest in *The New Zealand Herald* but also dominant in *The Irish Times* and *The Guardian* defines climate change as problem to be dealt with at a global macro-economic level. This is reinforced by the emphasis on global elite agents – politicians, diplomats, economists – and powerful states like the US and China. Elite framing shifts responsibility away from peoples’ everyday actions. It potentially moves the problem of climate change away from individuals’ everyday thoughts, decreasing the perception of proximity to the causes of and potential solutions to climate change. It reinforces people’s views that climate change is not a pressing concern for them, right now. It strengthens the idea that emissions reduction is bigger than and beyond the control of individuals, and that individual behaviour does not matter, because powerful elites are working towards a solution. Climate change becomes an issue to be dealt with by them, they who hold power in the global political economy, and their decisions are far removed from everyday behaviour. At the core of the framing of global politics common across the three newspapers is the view of climate change mitigation and

³⁹⁴ *ibid.*

³⁹⁵ Jacobs, “Comment: why Cancun gives us hope.”

³⁹⁶ “Editorial: Cancun Gains Worthless While Kyoto in Limbo,” *The New Zealand Herald*, 14 December 2010, A16.

³⁹⁷ Fallow, “Cancun Talks Highlight Climate Dilemma.”

adaption as inherently costly. However, the global agreement that is prescribed as a fair way of sharing the costs must come from an arena of elite global politics that is framed as conflict-ridden and so unlikely to provide solutions that the best option is to lower our expectations and either push on with formulating climate change policy regardless (in *The Irish Times*), or proceed with cautious, insufficient policy measures (in *The Guardian* and *The New Zealand Herald*).

It would be naive to suggest that the Cancun conference could be reported without some conflict/strategy framing, but that does not mean that conflict/strategy framing should dominate climate change journalism to the extent that this research finds. The international conflict between states over climate change is an important aspect of the global politics of climate change, but it is not the only important aspect. While an agreed definition of “global politics” is not to be found in international relations literature, there is a need to recognise the intersections of the local and the national with the global, and that the global is not a sphere of politics above and detached from the local or the national, but a way of thinking about politics on all levels that embraces the interconnectedness of global information communication technologies, world markets and economic processes with local communication, citizens and consumers.³⁹⁸ Global politics are the politics people engage in when they use Google, or when New Zealanders buy clothing or food made in China; globalisation pervades everyday life in developed countries in the twenty-first century. The dominant presentation of “the global” in all three newspapers instead treats the idea of global politics as an elite process, above the heads of and beyond the reach of individual citizens. The place of the individual is concealed.

³⁹⁸ See, for example: Castells, “The New Public Sphere”; Held, “At the Crossroads.”

Engaging with Complexity: Alternative Frames

The complexity of climate change as a problem that crosses boundaries of space and time makes it a multifarious political issue. It also makes it a difficult topic for journalism, which must be accessible to its audiences. As explained above, one way that climate change journalism tends to simplify the issue to fit it within existing parameters of public understanding is to frame climate change as a global economic policy issue, not, for example, a scientific issue or a local community issue. This framing relegates climate change to the murky and Machiavellian world of international politics, alongside G20 summits, deadlocked disarmament talks and UN General Assembly rhetoric. It removes climate change from spheres of everyday behaviour and thought.

However, there are exceptions to the dominant framings in the three newspapers. The following section explores the few cases of climate change journalism in *The Irish Times* and *The Guardian* that approach climate change as an irreducibly complex issue. These articles provide examples of alternative frames and are the key exceptions to the major trends that this research illustrates. They seek to provide pathways through the complexity of climate politics rather than reducing climate politics to extant easily understood political narratives.

A *Guardian* comment piece by science writer Marek Kohn opens with the problem that climate change ‘is peculiarly, and perhaps fatally, difficult to care about’ because it involves conceptualising and ‘reconciling the interests of nearly 7 billion people and countless unborn billions, together with those of cities, regions, a couple of hundred countries and thousands of companies’,

and human brains cannot easily deal with that much information.³⁹⁹ Kohn suggests that ‘although we may grasp the idea of climate, what we feel in our bones is weather’.⁴⁰⁰ Further, ‘the climactic consequences of our actions will mostly fall on others, in other parts of the world and in that distant country, the future.’⁴⁰¹ The article relies on the ideas of human self-interest and the importance of proximity (self/other, geographical and temporal) to define climate change as a complex problem.

Kohn uses the construction of climate change as a complex issue as a foundation to argue for the importance of democratic policy responses. Some environmentalists, like James Lovelock, have suggested that the severity of climate change and the rapidly-closing window of time for action mean that governments should adopt a wartime-like hiatus of democracy.⁴⁰² But noting that dictatorships ‘are conspicuously bad at complex problems’, Kohn argues that

The more complex and extensive a problem is, the more it matters that as many people and organisations as possible are engaged in solutions ... connected in networks that share knowledge and power. Developing democracy is as vital in our response to climate change as developing green technologies.⁴⁰³

Kohn thus frames climate change as a problem that people have a democratic obligation to engage with. Similarly, *Guardian* features writer Susanna Ruskin writes that an interview with environmental activist and author Bill McKibben

³⁹⁹ Kohn, “Fair Weather Societies.”

⁴⁰⁰ *ibid.*

⁴⁰¹ *ibid.*

⁴⁰² Leo Hickman, “James Lovelock on the Value of Sceptics and Why Copenhagen was Doomed,” *The Guardian*, 29 March 2010, <http://www.guardian.co.uk/environment/blog/2010/mar/29/james-lovelock> (accessed 15/12/2011).

⁴⁰³ Kohn, “Fair Weather Societies”.

during which he suggested that ‘part of the difficulty with global warming is that human beings, brought up with the idea that the planet is billions of years old, do not really accept that it can be quickly and easily spoiled’, left her inspired to ‘do more in my own life’ to reduce climate change.⁴⁰⁴ Ruskin suggests that the attempt to reconcile rapid climate change with the common conceptions of extremely long-term planetary lifespans lends climate politics an existential quality. It cuts to the core of how people understand life on earth with nature as a passive backdrop to social and economic progress.

Environmental author John Sharry addresses the same topic in *The Irish Times*. Sharry suggests that recent tumultuous economic events in Ireland have led to widespread disillusionment with existing social and economic structures. The financial crisis ‘has taken its toll on the mental health of the nation’, from ‘seeing ourselves as an economic miracle’ to ‘being held internationally as an example of excess and poor management.’⁴⁰⁵ At the root of the problem, argues Sharry, is the ‘unsustainable path’ of consumerism-driven growth, environmental degradation and resource depletion, ‘not to mention future dangerous climate change’, and ‘we’ must ‘collectively make a choice to face what is ahead.’⁴⁰⁶ Ireland is at ‘the pivotal point of psychological change ... moving from denial to an acceptance of reality’.⁴⁰⁷ Sharry calls for brave leadership and hopeful collective action, admitting that social and economic change may not be easy or at times comfortable, but that it presents ‘an opportunity to learn about what matters and about the important things in life.’⁴⁰⁸ It is an idealistic call, but one that frames climate change as a solvable political problem that is reliant on collective action and democratic policy choices.

⁴⁰⁴ Rustin, “A Life in Writing: Bill McKibben.”

⁴⁰⁵ Sharry, “Though the Situation is Grim it is Not Hopeless.”

⁴⁰⁶ *ibid.*

⁴⁰⁷ *ibid.*

⁴⁰⁸ *ibid.*

The *Irish Times* and *Guardian* articles quoted above engage with the complexities of climate change that make it a difficult issue to understand. They frame climate change as a complex but addressable problem that requires democratic action. There is no comparable article in *The New Zealand Herald* dataset. And the articles discussed above are exceptions to common framings, rather than representative of the newspapers. They are almost drowned by the major representations of climate politics as an elite global game, with ramifications for people far away in the global south, disconnected from the readers of newspapers in the global north.

9. Defining Important Agents

Previous chapters have explained that the dominant climate change narratives across the entire dataset are political and economic, rather than scientific. With a few notable exceptions, the science of climate change is presented as settled, authoritative and accepted and the debates in the newspapers' climate change journalism are political. While the dominant narratives of global politics are simplified into conflict/strategy frames across all three newspapers and nationalistic self-definition in *The New Zealand Herald* and *The Irish Times*, all these newspapers also contain some competing and alternative frames and some resemblance of public policy debate. This debate is carried out almost exclusively by elite agents.⁴⁰⁹ It is to these agents that this thesis now turns.

All three newspapers overwhelmingly give voice to elite political agents; non-elites are almost entirely absent. It might seem obvious that climate change journalism published at the time of a major global summit focuses on elite agents. The Cancun conference period was chosen as a focus for this research because it can be expected to be a time when climate change is high on mass media agendas, and therefore more prominent than usual in the minds of audiences and readers. At critical moments like the Cancun conference, the democratic roles of the media are very important. Just as local sports clubs hold enrolment drives during major sporting events while sport is on people's minds, global events like the Cancun conference present opportunities for people to consider the politics of climate change and potentially become involved in the political policy process. Elite agents are important, especially during international summits, but they are not the only important agents. The overwhelming prominence of elite agents and the definition of climate change

⁴⁰⁹ This thesis uses the term "agent" to describe people and groups who are identified in the newspapers, to avoid confusion with dramatic actors. However, some sources quoted, such as Entman, use "actor" synonymously.

as a global political issue shut non-elite agents out of the dominant framing. Global politics is framed as an elite game, one which ordinary people do not know the rules to and are not supposed to play. In the global south, non-elite individuals are framed as passive recipients of climate-related human and economic costs. In the global north, non-elite individuals are framed, in almost total absence from the newspapers, as the inert subjects of non-descript macroeconomic policy.

The range of voices presented in the climate change coverage is an area of difference across the three newspapers, although elite voices dominate all the newspapers. *The New Zealand Herald's* positive framing of the National Party-led government's cautious climate change policy reflects both the newspaper's general centre-right leaning and its history of giving voice to climate change sceptics (see chapter two). In *The New Zealand Herald*, domestic government sources are privileged and no domestic environmental or anti-government opposition is acknowledged. In *The Irish Times*, the attention given to key figures in the Irish Green Party reflects the place of the party in a coalition government at the time of the Cancun conference. *The Irish Times* contains the most socially progressive framing of climate change politics. This reflects the positively framed, climate-related social development messages of the Irish Green Party. *The Guardian's* climate change journalism is critical of the Britain's Conservative-Liberal Democrat coalition government, reflecting the newspaper's left-wing bias. In *The Guardian*, a wide range of elite voices is heard, from British Prime Minister David Cameron to actor Scarlett Johansson, although almost all advocate similar messages promoting governmental and intergovernmental action to mitigate climate change.

Table 9.1 presents the incidence of particular types of agents mentioned or quoted in the three newspapers. Many, such as the environment ministers of

Britain, Ireland and New Zealand, are quoted or mentioned in more than one article (refer to appendices one, two and three for detailed lists of all agents quoted or mentioned and the frequency they feature in the three newspapers). Some categories, such as NGOs, are split into “group” and “person”: for example, Oxfam is mentioned as an organisation in some articles but in others specific individuals who work for and represent Oxfam are quoted. The data is coded by article, so it does not matter if an agent was quoted once or five times in the same article, both instances lead to a coding of 1. The table therefore does not show how relevant, important or authoritative the agents are framed as being, but that is explored qualitatively in the following paragraphs. Mentions of the IPCC and the UNFCCC are not included in this analysis, unless they are associated with particular individuals who are quoted or mentioned such as UNFCCC executive secretary Christiana Figueres who features in two *Irish Times* items.⁴¹⁰

Table 9.1 shows the high frequency of foreign government agents in all three newspapers. This is reflective of the prominent state-centric international political framing in the newspapers. Examining the other global political agents that the newspapers feature frequently highlights some differences between the newspapers, specifically around who they frame as being important to global politics and thus how political power and relevance is constructed in the framing. *The Irish Times* has a high frequency of international organisations (IOs) and individuals associated with them, and while *The New Zealand Herald* and *The Guardian* also feature international organisations, they do so much less frequently. Connie Hedegaard, the EU commissioner for climate change, features in all three newspapers: four times in *The Irish Times*, three times in *The Guardian* and once in *The New Zealand*

⁴¹⁰ This is because articles were also coded according to whether they mentioned the Cancun conference, regardless of if the Cancun conference’s governing IOs were mentioned by name (shown previously in Figure 8.1).

Herald. US president Barack Obama is the only other individual who features in all three newspapers.

Table 9.1: Frequency of Agents Mentioned or Quoted

	<i>The New Zealand Herald</i>	<i>The Irish Times</i>	<i>The Guardian</i>
National Government agent	9	10	19
Local Government agent	1	0	1
Parliamentary Opposition agent	0	0	2
Bureaucrat / Government Official	2	1	3
Foreign Government agent	24	21	39
International Organisation (person)	5	11	8
International Organisation (group)	4	5	5
Scientific Organisation	11	4	13
University – Science Related	4	1	9
University – Other	0	1	2
NGO (person)	1	18	6
NGO (group)	0	8	7
Activist	3	2	10
Think-tank / Lobby Group	2	2	2
Individual – Global South	1	3	8
Individual – Global North	0	0	1
Celebrity	4	0	16
Business	9	14	10
Other Organisation	2	2	1
TOTAL MENTIONS OF AGENTS	95	103	161
TOTAL ITEMS/ARTICLES ANALYSED	23	23	41

The Irish Times also has a high frequency of NGOs and individuals associated with them; the frequent mentions of and quotes from former Irish Prime Minister Mary Robinson, who has subsequently fronted IOs and NGOs, contribute to this high occurrence of NGO agents. NGOs likewise play a notable part in *The Guardian's* climate change journalism, but *The New Zealand Herald* only features a NGO once, in a quote from Oxfam New Zealand executive director Barry Coates about the Cancun conference.⁴¹¹ *The Irish Times* thus frames a diverse range of agents as relevant to the global politics of climate change – not just state governments but also IOs and NGOs – while the other two newspapers, especially *The New Zealand Herald* paint a much more state-centric view of global politics by frequently mentioning, quoting and focusing on state government agents.

In *The Irish Times* and *The New Zealand Herald* the two main framings of elite policy agents mirror the framings of global politics discussed previously. In general, elite agents are strategic players in a complex and sometimes cutthroat global political game; more specifically, “our” elites (like Ireland’s former prime minister Robinson and New Zealand’s climate negotiations minister Groser) are important and respected participants in the global climate policy process. For example, Groser is often quoted and mentioned in *The New Zealand Herald*, and is the focus of a *Herald* story titled ‘Groser to take key role in climate talks’.⁴¹² These examples of New Zealand elites playing key roles in Cancun conform to narratives of New Zealand “punching above its weight” on the international stage. They reinforce the elite framing of *The New Zealand Herald's* coverage in such a way as to suggest that “our” diplomatic elites are doing the best they can for New Zealand ‘in the world as

⁴¹¹ Davison, “NZ Has Modest Goals from Climate Change Talks.”

⁴¹² Fallow, “Groser to Take Key Role in Climate Talks.”

they find it.’⁴¹³ Likewise, *The Irish Times* credits Robinson with saving ‘five million lives’ in the global south through vaccination and trumpets her return to Dublin to establish a foundation for climate justice.⁴¹⁴

Domestic government agents also feature frequently across all three newspapers. In *The New Zealand Herald* this is usually to comment on the Cancun conference and New Zealand’s place in the global politics of climate change, while in the two northern hemisphere newspapers domestic government agents feature both in relation to the global politics of the Cancun conference and national climate change legislation. In *The New Zealand Herald* the national government agents are international climate change negotiations minister Tim Groser (mentioned or quoted in five items), environment minister Nick Smith (three items) and agriculture minister David Carter (one item). In *The Irish Times*, Green Party leader and environment minister John Gormley is quoted or mentioned in five items, and the health commissioner, state minister, transport minister and anonymous sources from the Green and Fianna Fail parties feature in once item each.

The Guardian contains a greater range of government, and parliamentary opposition, agents than the other two newspapers do. Energy and climate change secretary Chris Huhne features in seven items, prime minister David Cameron in six and chancellor George Osborne in two; the chair of the Energy and Climate Change Select Committee, the environment, food and rural affairs secretary feature once each. Two crossbench (independent/non-aligned) members of the House of Lords also feature once each: Lord Turner, chair of the Committee on Climate Change and the Financial Services Authority, and Lord Stern, former World Bank economist and author of the 2006 Stern Report on Climate Change. *The Irish Times* and *The New Zealand*

⁴¹³ Fallow, “Power Plays Threaten Climate Summit.”

⁴¹⁴ “Five Million Lives Saved.”

Herald feature no parliamentary opposition voices, while *The Guardian* features Green Party leader Caroline Lucas and former Labour Party leader Gordon Brown once each.

Activists are also mentioned and quoted to a notable extent in *The Guardian*. These range from high-profile Australian environmental activist James Lovelock to Nestor Cuti, a Peruvian water activist, to a historical reference to Martin Luther King. *The Guardian* items analysed include a 2541-word profile of climate activist Bill McKibben, the longest article in the entire dataset.⁴¹⁵ The relevance of activists in the politics of climate change is expressed more so in *The Guardian* than in the other two newspapers, who only mention or quote two activists each. In *The New Zealand Herald* Chinese political dissident Liu Xiabao is mentioned in relation to the Nobel Peace Prize (as are Al Gore and the IPCC, also winners of the prize, in the same item, which is why the item is included in the dataset), and Wikileaks founder Julian Assange is also mentioned. In *The Irish Times* the activists mentioned are John Gibbons, an environmentalist blogger, author and occasional contributor to the newspaper, and George Monbiot, blogger and *Guardian* columnist. The environmental activists in *The New Zealand Herald* and *The Irish Times* all have relatively high public profiles in the global north, whereas *The Guardian* also includes less well-known activists from the global south.

The New Zealand Herald and *The Guardian* have higher frequencies of scientific voices than *The Irish Times* does. These voices represent both universities and other scientific organisations like Britain's Met Office and New Zealand's National Institute for Water and Atmospheric Research (NIWA). Their frequency contrasts with the general infrequency of scientific stories in the newspapers, but is more easily explained by the fact that many of the agents feature in the same articles, making their spread across the

⁴¹⁵ Rustin, "A Life in Writing: Bill McKibben."

whole dataset low. In *The Guardian*, most of the scientific agents are British, whereas NIWA is the only New Zealand scientific agent in *The New Zealand Herald* and all other scientific agents featured are from overseas, mainly Britain, Australia and the US. The frequency of scientific agents mentioned or quoted is much lower in *The Irish Times* and relatively evenly split between domestic and foreign: two are Irish, two are from fellow EU members Britain and Sweden and the final one is from the US.

The Irish Times and *The Guardian* also feature non-scientific academics, but *The New Zealand Herald* does not: in *The Irish Times* this is a professor of economics from Brussels and in *The Guardian*, Michael Jacobs, who is a climate change policy-focused economist at the London School of Economics, and Robert Macfarlane, a travel writer and academic. *The New Zealand Herald's* absence of local expert scientific and climate change-related voices reflects the findings of Todd Bridgman's research: that in relation to a different global political problem – the global financial crisis – the public voices of New Zealand universities are faint.⁴¹⁶ There is ample scope for individual academics in both physical science and social science faculties and for universities collectively to take a much more prominent role in the public politics of climate change in New Zealand and Ireland, based on their relative absences from the pages of *The New Zealand Herald* and *The Irish Times* during the Cancun conference.

Business agents featured in *The New Zealand Herald* include biogas and fertiliser companies, farmers, a microfinance institution and an online natural cosmetics retailer. Of the three newspapers, *The New Zealand Herald* is alone in its publication of an opinion piece by a representative of a lobby group that represents industrial emitters, David Venables of the Greenhouse Policy

⁴¹⁶ Todd Bridgman, "Empty Talk? University voices on the global financial crisis," *Policy Quarterly* 6, 4 (2010): 40-45.

Coalition. Most of the business agents in *The Irish Times* feature together in one item, a sidebar of notable recent developments in sustainable business activities, some of which are specific, for example a US\$30 million investment by Panasonic in American electric car company Tesla, and some of which are very general: ‘Walmart is promoting green farming practices among its global network of food suppliers.’⁴¹⁷ Other than auditor Ernst & Young, the Association of British Insurers, Norway Post and the International Post Corporation, all the business agents in *The Guardian* are energy companies or associated businesses.

In *The Guardian*, the heavy reliance on elite agents as sources and subjects for climate change journalism potentially corroborates of Davis’ theory of journalistic capture. *The Guardian* is one of many newspapers published daily in London. It has a clear and recognised leftish slant. It has a commitment to high-quality journalism, exemplified in the newspaper’s governance and funding structure which puts quality ahead of profit. *The Guardian* is an elite newspaper. In a city like London with numerous daily and weekly tabloids, *The Guardian* responds to a large cohort of liberal, educated readers. Amongst these are likely to be policy elites closely engaged with the politics of climate change, be they from government departments, NGOs or groups representing industrial emitters. *The Guardian* at times almost takes on a self-satisfied progressive tone in its climate change journalism, suggesting that we – the journalist and the readers – understand the gravity of the problem, but the corporate elite and Conservative-led government are, of course and as always, blocking progress. Nonetheless, there is space for members of the Conservative-led government to speak in *The Guardian* as well; climate change minister Huhne is a Liberal-Democrat. The pages of the newspaper are not an echo chamber. Climate change journalism in *The Guardian* exposes

⁴¹⁷ “News in Brief.”

readers to a wider range of competing opinions and points of view, than in *The Irish Times* or *The New Zealand Herald*.⁴¹⁸

While “ordinary” individuals are absent, there are celebrities in climate change journalism in *The New Zealand Herald* and especially in *The Guardian*, but none in *The Irish Times* unless Robinson is categorised as such, which she was not in this research. Ten of the sixteen occurrences of celebrities in *The Guardian*, including actors Bill Nighy, Gael Garcia Bernal and Scarlett Johansson and author Ian McEwen, are identified as Oxfam supporters or ambassadors, and account for twelve of the sixteen mentions of celebrities in *The Guardian*, and are the authors of an open letter urging ‘world leaders’ to ‘seize this moment at Cancun’ because time ‘is running out, but it’s not too late to prevent a climate catastrophe.’⁴¹⁹

In total there are thirteen opinion or comment items in the *Guardian* dataset, not including editorials. These items contribute to the relatively diverse range of agents in *The Guardian*. The various contributors generally frame their comments globally, although some are focused on domestic climate change and energy policy. During the Cancun conference, *The Guardian* ran a feature called “Views on the Talks: Cancun” which was composed of short comment pieces from climate-relevant elites, including British MPs from both sides of the House of Commons and Pakistan’s lead Cancun negotiator. British Conservative MPs express the need for ‘interim measures’ because a global climate treaty is assumed to be unachievable⁴²⁰ and a preference ‘to speed up the pace of adaption [to climate change] at home’ rather than focus on global

⁴¹⁸ Pooley, “How Much Would You Pay to Save The World.”

⁴¹⁹ Scarlett Johansson et al., “Leaders Can Seize the Moment in Cancun,” *The Guardian*, 23 November 2010, 35. These were coded as “celebrity” rather than “NGO (person)” because they are more commonly associated with their professions as actors or authors than with their NGO work.

⁴²⁰ Tim Yeo, “Views on the Talks,” *The Guardian*, 30 November 2010, 18.

mitigation.⁴²¹ This contrasts with the opinions of the Oxfam CEO expressed the previous day in *The Guardian*, concerned that the Conservative-led government was returning to ‘the dinosaur days’ of ‘dirty coal’⁴²² and of another contributor who criticised the government for ‘ignoring the bigger picture and leading us blindly into rising world temperatures from which there will be no return.’⁴²³ In *The Guardian* Boykoff’s suggestion that a ‘wider cast’ of agents have become important public discussants of climate change rings true.⁴²⁴

In contrast, *The Irish Times* has only two contributed opinion items in the dataset, one by an activist and journalist that explains climate science and one by psychologist John Sharry which suggests that having ‘hope in hard times ... is an opportunity to learn about what matters.’⁴²⁵ *The New Zealand Herald* has three contributed opinion items in the dataset, but only one is written by a New Zealander. They are not balanced, but they have the effect of partially balancing each other. One is by David Venables of the New Zealand Greenhouse Policy Coalition, a group that represents major industrial greenhouse-gas emitters in New Zealand, which warns that New Zealand should avoid burdening itself through domestic climate policy like the existing ETS in the absence of a comprehensive global agreement on emissions reduction.⁴²⁶ Venables puts a very positive spin on New Zealand: ‘we are going to look good ... we are further ahead than from where we could reasonably be. We are also leading where we can do the most good’, ‘New Zealand is well placed’ and has ‘status among the big players.’⁴²⁷ There is no mention of

⁴²¹ Caroline Spelman, “Views on the Talks,” *The Guardian*, 30 November 2010, 18.

⁴²² Barbara Stocking, “David Cameron Must Live Up to his Green Commitments,” *The Guardian*, 29 November 2010, 37.

⁴²³ Sarah Gorton, “David Cameron Must Live Up to his Green Commitments,” *The Guardian*, 29 November 2010, 37.

⁴²⁴ Boykoff, *Who Speaks for the Climate?* 14

⁴²⁵ Gibbons, “The Not-so-strange Paradox of Global Warming’s Northern Freeze”; Sharry “Though the Situation is Grim it is Not Hopeless.”

⁴²⁶ Venables, “NZ Must Play Cards Well at Climate Change Table.”

⁴²⁷ *ibid.*

climate science, emissions targets or human costs: Venables measures climate change mainly in financial terms.

This contrasts with another *New Zealand Herald* opinion piece by Connie Hedegaard, the EU's climate commissioner, who stresses that the EU is 'ready to agree' on an 'ambitious and legally binding framework for global climate action' but the US and China are not, and that current policies and pledges 'are not enough to keep global warming below 2C'.⁴²⁸ Importantly in relation to Venables' argument, Hedegaard stresses that, like New Zealand, the EU has an ETS to 'reduce the cost of cutting emissions ... [and] drive investment in innovative low-carbon technologies.'⁴²⁹ Finally, British peer Lord Hunt provides a perspective on Chinese climate politics, arguing that unless the global north commits to 'deep cuts in their own emissions' China will continue to use language about increasing energy efficiency (especially in coal plants) rather than decreasing emissions, linguistically sidestepping any limit or cap on emissions.⁴³⁰ Viewed together these three comment or opinion pieces in *The New Zealand Herald* do reflect public debate, but as all three are globally oriented, the debate is constructed at a level distant from individual readers. The opinion pieces do not so much represent discourses of what to do about climate change but discourses of global political tension and conflict.

Individuals who are not celebrities or activists and are not associated with organisations or governments are largely absent from all three newspapers. In *The Irish Times* and *The New Zealand Herald*, no individuals from the global north feature; the only one in *The Guardian* is a lawyer involved in a court case against Greenpeace activists.⁴³¹ The individuals who do feature in the pages of the newspapers are from the global south. They are the Colombian

⁴²⁸ Hedegaard, "Big Nations Must Deliver on Climate Change Pact."

⁴²⁹ *ibid.*

⁴³⁰ Lord Hunt, "China Needs to Ween Itself off Old King Coal," *The New Zealand Herald*, 1 December 2010, A13.

⁴³¹ Webb, "Governments Not Telling Truth about Climate, says NASA Scientist."

spinach seller Ugandan nomadic farmers discussed in chapter six, and as Table 9.1 shows, only *The Guardian* mentions them frequently. Individual citizens are shut out of the mediated discourses of climate change in *The Guardian*, *The New Zealand Herald* and *The Irish Times*: they have no voice, and no one speaks for or about them either. Little attempt is apparent to situate readers within the Cancun- and climate change-centred narratives. Vox-pops from randomly selected people on the street are not usually helpful in the provision of informed and veracious news, but the perspectives of community and citizen groups, threatened workforces and climate-affected people can be valuable in providing a non-elite perspective. Readers in Auckland, Dublin and London are unlikely to associate with the struggles of nomadic cattle herders in central Africa, or subsistence farmers in the Andes. The experiences of these “others” is unlikely to resonate, their experiences are too different from the lives of the readers of the newspapers analysed. The lack of “close to home” climate journalism is a serious problem for the democratic policy response to climate change. If personal connection with the politics of climate change is important for journalism, then there are very few narrative paths through which readers of *The Irish Times*, *The Guardian* or *The New Zealand Herald* could be reasonably expected to discover it.

10. Conclusions

This thesis analyses how the *The Irish Times*, *The Guardian* and *The New Zealand Herald* primarily situate the solutions to the problem of climate change in governmental and intergovernmental spheres. They divorce global political action from everyday lived experiences and individual action. The local politics of climate change are silent. Climate change is framed as a global problem: the global south experiences the problem and the global north holds the power to address the problem. The elite national and global political spheres that are the main subject of climate change journalism are framed as conflict-ridden.

State governments cannot individually control climate change within their borders, and no one state can control global climate change. There are potential geographically-specific consequences that are disproportionate to states' historical greenhouse gas emissions. Climate change policy could potentially mean significant changes for many individuals. Climate change as a policy problem requires innovative ways of thinking, in order to be able to understand the unobservable, monetise the non-tangible products and externalities of economic output, globalise the local and localise the global. The complexity of climate change demands a cooperative response on many levels. These factors make climate change a complex problem that requires unprecedented global action, and which, this thesis argues, deserves to be taken seriously by the mass media because of the crucial and powerful roles of the media in democracies. How newspapers frame climate change has implications for and can be reflective of public opinion and policymaking.

This thesis suggests that mass media have become practiced at reporting the elite politics of climate change as polarised and tactical. Moderate opinions and compromise-seeking solutions are marginalised. But if there is to be an

effective democratic response to climate change it will be mediated. This thesis suggests that climate change journalism in *The New Zealand Herald*, *The Irish Times*, and *The Guardian* would benefit from expanding the range of locations in which the politics of climate change are framed as taking place and increasing the diversity of agents who are framed as important. Doing so would not automatically engage readers with climate change, but it could be influential in bringing the politics of climate change closer to home for readers.

The comparative analysis that this thesis employs points to some key factors that differentiate the newspapers and that could guide further research, but which should be tested against a larger sample of newspapers and other media outlets. One is the influence of domestic political factors, especially the shape and development of domestic climate change legislation. The international position of countries also shapes climate change journalism: being in the EU is important for *The Irish Times* and *The Guardian*, whereas the lack of a similar regional political identity affects *The New Zealand Herald*. Another factor is the position of newspapers within media markets, and the size of the media markets: in competitive, saturated and tabloid-heavy newspaper markets, *The Guardian* and *The Irish Times* provide more wide-ranging climate change journalism than *The New Zealand Herald*, which lacks a competitive broadsheet or tabloid rival, does.⁴³² Commercial resources are also important: the newspapers that sent journalists to Cancun provide more comprehensive climate change journalism than *The New Zealand Herald*, which did not.

⁴³² Some British tabloids publish Irish editions in Dublin, such as *The Irish Sun* and *The Irish Daily Mail*, but there are no daily tabloids published in Auckland.

Limitations of the Research and Possibilities for Further Study

This research focused on the Cancun conference, as it was a high-profile climate change event that could be expected to attract coverage in the mainstream media. There is therefore a bias in the study towards the high-profile, elite agents who gathered at Cancun, and towards the strategy games that they are framed as playing. The Cancun conference as an event highlights elite, international policy machination but does not preclude other perspectives. Non-elite agents and climate activists gathered at Cancun and communities in many countries organised local awareness raising events. A valuable area for further research would be to compare climate change journalism at major events like the Cancun conference with climate change journalism when no major climate change events are occurring. The narratives of elite conflict and strategy games that this thesis highlights may not be so apparent at other times.

This thesis analyses newspapers, which are only one mass medium of political journalism. Broadcast journalism is not examined in this thesis, but is fertile ground for further analysis, especially given the power of imagery that television journalism can employ. Television journalism, like newspaper journalism, faces multiple pressures from a changing media landscape in which commercial considerations impact on journalistic practices and news is often produced according to market wants rather than citizen needs. But further research is required to examine the similarities and differences between newspapers and broadcasters in relation to climate change journalism.

Globally, newspapers face pressures as they lose readers and advertisers to new media in a diversifying media landscape. Riffe and Freitag warn that focusing on 'news content that may be of decreasing importance to many

consumers' can limit the usefulness of content analysis.⁴³³ Ellis argues that while newspaper journalism is not dying, the printed-on-paper daily newspaper could be, replaced by handheld tablet computers.⁴³⁴ How individual newspapers make this transition will in part determine their ongoing relevance and ultimate survival. But Ellis argues that *The Guardian* and *The Irish Times* will be 'likely survivors' because of the strengths of their trust models of ownership that provide economic buffers and foster valuable journalism.⁴³⁵ *The New Zealand Herald* also seems relatively likely to continue publishing, in large part due to its lack of direct competitor print newspapers.

Online or "new" media are of increasing importance in national and global media landscapes, but go unexamined in this research. The internet holds the potential to play a key role in fostering public engagement with climate change, as it does with any political issue, although as Matthew Hindman, Stephen Coleman and Jay G. Blumler, among others, argue, this democratic potential is generally unfulfilled.⁴³⁶ O'Neill and Boykoff suggest that online or new media climate politics are subject to the same opportunities and limitations as most other political issues are online (and which deserve a depth of analytic explanation that is prevented here by the scope of the thesis): free information and information overload, ease of expression and the ease of anonymity, low cost individual access and high-cost corporate strategies, the structure of search engines, content creation and loss of message control, open debate and echo chambers, and the socio-economic, age-relevant and gendered digital divide.⁴³⁷

⁴³³ Riffe and Freitag, "A Content Analysis of Content Analyses," 11-12.

⁴³⁴ Ellis, "A Ghost in the Chair," 54.

⁴³⁵ *ibid.*, 298.

⁴³⁶ Matthew Hindman, *The Myth of Digital Democracy* (Princeton, NJ and Oxford: Princeton University Press, 2009); Stephen Coleman and Jay G. Blumler, *The Internet and Democratic Citizenship: theory, practice and policy* (New York: Cambridge University Press, 2009).

⁴³⁷ Saffron O'Neill and Maxwell Boykoff, "The Role of New Media in Engaging the Public with Climate Change," in *Engaging the Public with Climate Change: behaviour change and communication*, edited by Lorraine Whitmarsh, Saffron O'Neill and Irene Lorenzoni (London and Washington, D.C: Earthscan 2011): 233-251.

The internet has added to the pressures on old media formats, but as Ellis, who is a former editor-in-chief of *The New Zealand Herald*, argues, ‘newspapers were in trouble well before the dawn of the internet’.⁴³⁸ *The Irish Times*, *The New Zealand Herald* and *The Guardian* all have significant online presences and engage to differing degrees in opening online spaces for deliberation and fostering citizen journalism initiatives. During the Cancun conference, *The Guardian* print edition encouraged readers to seek more information and opinion about Cancun and climate change on *The Guardian’s* website, boasting ‘interactive timelines and all the data you need to make sense of the issues at stake’ and inviting readers to ‘find out how you can help us create the world’s best and most accessible guide to climate change.’⁴³⁹

Neil Gavin has examined *The Guardian’s* embrace of new media, specifically an online article by environmentalist journalist George Monbiot and its associated comment stream, finding that the comment stream does not resemble ideals of public debate but is often disorderly and incoherent, at times dull and at others descending to childlike bickering.⁴⁴⁰ These are interesting findings, but they are probably influenced by Gavin’s choice of journalist: Monbiot is an articulate and opinionated social commentator and a talented journalist known for his ‘sleuthing extravaganza’ against an oil company-funded public relations campaign of climate change misinformation, but he is a regular contributor to *The Guardian* not a staff reporter or editor, and while he seems to fit comfortably into the newspaper’s image he is not

⁴³⁸ Ellis, “A Ghost in the Chair,” 44.

⁴³⁹ “The US Embassy Cables: climate change: the Cancun summit on the web,” *The Guardian*, 4 December 2010, 7.

⁴⁴⁰ Neil Gavin, “The Web and Climate Change Politics: lessons from Britain?” in *Media and Climate Change*, edited by T. Boyce and J. Lewis (Oxford: Peter Lang, 2009): 129-142.

necessarily representative of *The Guardian's* online news journalism as a whole.⁴⁴¹

New Zealand research by Kenix suggests that mainstream and alternative online news media websites frame climate change in similar ways.⁴⁴² Including all online content as well as all print content in this research was beyond the scope of time and resources, but is a bountiful area for future examination. But as Pooley argues, the more important task may be to translate the passionate and informed climate debates that happen sometimes on the internet into the pages of newspapers, rather than to encourage newspaper readers to seek better information and discussion online.⁴⁴³

A larger sample of newspapers would have helped this research draw stronger conclusions as to the causal factors behind the framing of climate change. *The Guardian* operates in a highly saturated newspaper market, and therefore does not necessarily represent “mainstream” discourse, whereas *The New Zealand Herald* has no direct competitors. A larger sample could have allowed stronger comparative conclusions to be made about climate change discourse in Britain, Ireland and New Zealand, rather than the conclusions being limited to one newspaper in each country. However, including the full range of London-based newspapers in the research would have added another dimension: the differences between British tabloid and broadsheet newspapers. Especially in New Zealand where agriculture is integral to the economy, greenhouse gas emissions and national identity, comparing climate change journalism in urban and rural newspapers could also be a fruitful area for further research.

⁴⁴¹ James Hoggan, *Climate Cover-up: the crusade to deny global warming* (Greystone Books: Vancouver, 2009): 163.

⁴⁴² Kenix, “Framing Science.”

⁴⁴³ Pooley, “How Much Would You Pay to Save the World?” 20.

Restricted by scope, this research only analysed mediated or journalistic framing of climate change. The community of agents involved in the politics of climate change is vast, and a fuller understanding of both journalism and public debate about climate change could be gained by analysing the communication and framing strategies that these agents employ.

The research design could have been more detailed and multifaceted. The content analysis methodology could have been expanded to include more complex statistical tests of relationships, which could have the effect of improving reliability and increasing statistical sophistication. The use of specific content analysis software could also have lent a greater amount of statistical sophistication to this research.

The need for further research into what kinds of frames promote engagement with climate change is clear if journalists are to play essential democratic roles as part of a global response to climate change. This research did not seek to test audience effects, but to examine the newspapers for discursive clues to identify dominant frames. Extant literature that tests the specific effects of different narratives and frames about climate change, such as the research of O'Neill and Nicholson-Cole, can provide indications of what to look for. In conducting framing analysis it can at times be difficult for those doing the coding and analysis to make confident judgments about all the possible received meanings of phrases, narratives and frames. Van Gorp stresses that

After all, the linkage between the explicit elements of the news text and the central framing idea, which is part of a larger cultural level, requires some interpretation by the person who is doing the analysis. The researchers who are doing a frame analysis are also individuals

and it is difficult for them to withdraw from their own cognitive knowledge.⁴⁴⁴

As Steve Smith acknowledges, 'there is no view from nowhere' and research findings are therefore influenced by the researcher's own perceptions, which stem from a particular way of being and knowing in a particular political-economic context.⁴⁴⁵ This research has attempted to address this issue by providing clear indications of quantitative content analysis results as well as quoting evidence to support all major qualitatively-nuanced findings, but in no sense does this thesis pretend to provide the last word on the subject of climate change journalism.

Summary

Science is built on theories and probabilities; the theories and probabilities of dangerous anthropogenic climate change as articulated by the IPCC are generally accepted by the global scientific community. Journalism, on the other hand, has epistemological roots in fact-finding and debate, which are in some ways oppositional to the probability-laden language of science. The development of sound climate change policy requires democratic debate on the subject of how best to address it, but it can be hindered by a free speech free-for-all in which climate sceptics and advocates for industrial greenhouse gas-emitters ferment public doubt over climate science leading to declining support for climate policy specifically and growing scepticism and distrust of political elites generally. This thesis argues that mass media have a democratically significant responsibility to help facilitate appropriate and reasoned public political discussions about climate change, following Lorenzoni and Pidgeon's argument that meaningful and effective 'action is

⁴⁴⁴ Van Gorp, "Strategies to Take Subjectivity Out of Framing Analysis," 90.

⁴⁴⁵ Steve Smith, "Singing Our World into Existence: international relations theory and September 11," *International Studies Quarterly* 48 (2004): 500.

only likely to take place if individuals feel they can and should make a difference.⁴⁴⁶

Extant research suggests that because climate change journalism crosses boundaries of nature, science, local, global, economic and political news, stories often cross the desks (or laptops) of a diverse range of journalists.⁴⁴⁷ The *New Zealand Herald's* Cancun coverage is predominantly written by economics and political journalists and the environmental journalist Isaac Davison is conspicuously absent, whereas in *The Irish Times* and *The Guardian* the papers' environmental reporters and editors feature significantly. This leads to more varied and detailed climate change journalism in the two northern-hemisphere, trust-owned newspapers. *The Irish Times* and *The Guardian* both sent journalists to Cancun, while *The New Zealand Herald* did not. This speaks to how important an issue climate change is perceived to be editorially and reflects the resources that the newspapers commit to global news coverage. These resources are in turn determined in part by the ownership structures and commercial considerations that the newspapers operate under. Under trust ownership and with principles of journalism enshrined in their governance structures, *The Guardian* and especially *The Irish Times* appear to place more stress on the importance of climate change as a political issue, provide more coverage of Cancun, more differing perspectives and more positive framing of potential solutions than *The New Zealand Herald* does under purely commercial governance.

Boykoff suggests that climate change journalism commonly presents nature as an inert backdrop to active human behaviour.⁴⁴⁸ This is generally true of the Cancun-focussed journalism that this thesis analyses: the elite strategy games

⁴⁴⁶ Lorenzoni and Pidgeon, "Public Views on Climate Change," 88.

⁴⁴⁷ Williams and Clifford, "Mapping the Field;" Pooley, "How Much Would You Pay to Save the World?" 6.

⁴⁴⁸ Boykoff, "From Convergence to Contention," 485.

that characterise climate change politics are played out with little consideration to the environmental forces that they aim to make policy regarding, apart from the occasional suggestion in all three newspapers that ‘whatever is decided, or left undecided, in Cancun will make no difference to the laws of nature’.⁴⁴⁹ O’Neill and Nicholson-Cole argue that scare-stories and climate catastrophe future-focussed and event-based narratives are common and can attract attention, but are unlikely to engage audiences and readers in any meaningful way.⁴⁵⁰ While this thesis finds some evidence of scare stories in the three newspapers, scare stories do not feature prominently.

Previous studies also suggest that global events like COP are likely to result in increased, globally or transnationally oriented media attention to climate change, and when this happens, questions of science are often drowned out by political-economic disputes.⁴⁵¹ This thesis highlights the prominence of global and international narratives of climate change. While New Zealand, Ireland and Britain all share similar institutions and traditions of liberal parliamentary democracy, the three countries have differing identities on the world stage of international politics and New Zealand acts primarily in different regional communities – the Asia-Pacific or South Pacific – to Ireland and Britain as members of the EU. The EU is important in climate change journalism in *The Irish Times* and *The Guardian*, while in *The New Zealand Herald* the Asia-Pacific is only the focus of one climate change article, which is a contributed piece about China written by a British peer, and the South Pacific is completely absent.⁴⁵² Surprisingly, the global south locations discussed in *The New Zealand Herald* are places like Colombia, while low-lying, climate-threatened Pacific Islands that are geographically, economically and culturally closer to New Zealand are accorded no column space. Also

⁴⁴⁹ Fallow, “Power Plays Threaten Climate Summit.”

⁴⁵⁰ O’Neill and Nicholson-Cole, “‘Fear Won’t Do It’,” 375.

⁴⁵¹ Cox, *Environmental Communication and the Public Sphere*: 165-7; Boykoff, *Who Speaks for the Climate?* 22.

⁴⁵² Lord Hunt, “China Needs to Ween Itself off Old King Coal.”

surprisingly in *The New Zealand Herald*, Australia, New Zealand's largest trading partner and closest neighbour, does not feature prominently. The lack of a strong regional policy-community identity in *The New Zealand Herald* contributes to the framing of New Zealand as a minor, vulnerable state in the global game of climate politics.

Ireland, New Zealand and Britain all operate within ETS; New Zealand's is domestic while Ireland and Britain fall within the EU ETS. New Zealand's policy independence in this regard is central to the framing of New Zealand as a principled independent player in international relations. On the other hand, their location within the EU is important for the framing of global climate politics in *The Irish Times* and *The Guardian* as it frames Ireland and Britain as playing on the right team against international climate adversaries like the US and China.

Especially in the US, climate journalism often highlights the conflict between competing scientific points of view and simplifies complex nuances into bipolar opposites, leading to balance as bias.⁴⁵³ This research finds little evidence of balance as bias in *The Irish Times*, *The Guardian* or *The New Zealand Herald*. There is also little scientific focus and very little detailed scientific explanation. The two northern hemisphere newspapers mention doubt about climate science only to rebut it. *The New Zealand Herald* is the only newspaper analysed that frames climate change in terms of scientific uncertainty, although it does not do so often; it also links climate change with 'a summer of cloudless days'.⁴⁵⁴ Although *The New Zealand Herald* seems to generally assume that the scientific consensus is accepted by its readers, it does not obviously attempt to persuade those readers who are sceptical about the existence of anthropogenic climate change and the need for action

⁴⁵³ Boykoff and Boykoff, "Climate Change and Journalistic Norms."

⁴⁵⁴ NZPA, "Heat Now Means We'll be Even Hotter Soon."

to mitigate and adapt to it. Framing climate change as an accepted scientific problem does little to communicate with the large sections of the Irish, British and New Zealand populations who do not accept that climate change is an urgent political problem.

The domestic politics of climate change, although often both framed as subservient to global politics by the three newspapers as well as given less column space, have an impact on the overall importance of climate change in *The Irish Times*, *The New Zealand Herald* and *The Guardian*. The placement of climate change legislation before the Irish Dial and the announcement by Britain's energy and climate change secretary of changes to Britain's Green Investment Bank, correlate with increased levels of climate change journalism in *The Irish Times* and *The Guardian*. In these two newspapers, current domestic policy is framed as inadequate; in *The Irish Times* it is framed as progressing and in *The Guardian* as regressing. Contrastingly in *The New Zealand Herald*, national climate policies are trumpeted as world-leading, and the problem is instead not to do too much about climate change.

The Irish Times and *The New Zealand Herald* both propose opportunities for national self-congratulation about climate change. *The Guardian*, on the other hand, criticises the British government's climate change policies and emphasises the gaps between domestic and global policy commitments and what is actually needed to mitigate and adapt to climate change. *The Irish Times* frames Ireland as a positive international influence on climate politics because of its proposed climate change policies, place within the EU, and a recession-induced reduction in emissions, as well as being supportive of the government's attempt to formulate and pass new climate change legislation. When coupled with the positive sustainable development framing influenced by the positions of the Irish Green Party within a coalition government and in

the newspaper itself, this leads to a relatively high occurrence of social progress framing in *The Irish Times*.

New Zealand's ETS and input into international emissions measurement and reduction research are played up in *The New Zealand Herald* as evidence that New Zealand is already taking strong action on climate change and that caution around climate change policy is needed. In *The New Zealand Herald*, potentially placing the New Zealand economy at competitive disadvantage through the perceived high costs of climate change action – as the newspaper suggests – is at the fore of climate change journalism, which could reflect the strength of major national emitters' lobbies like agriculture and transport, who are given voice in the newspaper. The subsequent need for policy caution contradicts with the framing of New Zealand as a principled and important international agent. New Zealand is disjointedly framed both as a potential victim of much larger and more powerful global agents and as an esteemed international player in *The New Zealand Herald*.

Preceding studies suggest that a widening variety of voices are making themselves heard in public climate change debates.⁴⁵⁵ This thesis finds that a focus on elite political agents is strong in the three newspapers, although in *The Guardian* activists, artists and actors feature also. In *The Irish Times* there is a high frequency of IOs and NGOs, whereas the global political voices in *The New Zealand Herald* and *The Guardian* mostly represent state governments. Personal actions or solutions are largely absent from *The Irish Times*, *The Guardian* and *The New Zealand Herald*. This thesis argues that while the human cost of climate change is located in the global south in all three newspapers, the economic cost of climate change to the global north, suggests the dominant framing, is imposed by geopolitical action to mitigate

⁴⁵⁵ Boykoff, *Who Speaks for the Climate?* 14, Gough and Shakley, "The Respectable Politics of Climate Change."

and adapt to climate change. The problem of climate change is defined differently for those in the global south, as an empirical problem, and those in the global north, as an abstract economic problem. The “close to home” climactic impacts are almost entirely absent from the bulk of all three newspapers’ analysed. The costs to people in the global north come in the form of carbon taxes, ETS, higher energy costs and loss of national competitiveness with unregulated global competitors, whereas the costs to people in the global south stem from the changing climate.

This common framing of the impacts of climate change centred on the global south contrasts with the elite agents who are heard and privileged in all three newspapers. These elites are mostly from the global north. Climate change is presented as an issue to be dealt with by political elites, removed from the lives of individual citizens. In *The New Zealand Herald*, this framing strengthens another dominant framing which locates the politics of climate change at the same geographically distant global level; this global focus is also prominent in *The Irish Times* and *The Guardian*, and although the domestic politics of climate change are given notable attention as well, the local and personal politics are silent. These findings confirm the suggestion of Dirikx and Gelders that governments are often ascribed responsibility for addressing climate change, and citizens and policymakers are encouraged to focus on large-scale rather than personal level actions.⁴⁵⁶

This research finds no strong evidence that any of the newspapers analysed do very much to inform citizens of their interests in the global climate change policy debate. Almost entirely absent from all three newspapers are textual avenues through which readers might find a personal connection with climate change or stimulation of engagement with the issue. There is almost no discussion of direct impacts of climate change or climate change policy on

⁴⁵⁶ Dirikx and Gelders, “To Frame is to Explain,” 739.

individuals; where there is, the individuals are from the global south. *The Guardian's* strong criticisms of both domestic and global climate change politics, coupled with an emphasis on the severity of the problem, arguably present readers with a general call to action, but one entirely lacking in information on how to act. Missing, too, from this call is information on how unchecked climate change – or how climate change mitigation and adaptation – might actually affect readers. A largely directionless call to action is unlikely to succeed, especially if there appear to be no direct consequences of inaction.

Boykoff and Doyle argue that market-based problem-solving ideas are prominent within a global neoliberal hegemony that relies on fossil fuels for economic production; the value of climate change policy is measured using economic yardsticks, and often framed in opposition to economic prosperity.⁴⁵⁷ The framing of emissions reductions as leading to national competitive disadvantage has been identified in American climate change discourse.⁴⁵⁸ A key difference in *The New Zealand Herald*, *The Irish Times* and *The Guardian* however, is that in American climate discourse the competitive disadvantage that emissions reduction portends is usually presented as having a foundation in unclear and unproven climate science. This is not the case in *The New Zealand Herald*, *The Irish Times* or *The Guardian*; none of items that both focus on the Cancun conference and employ economic framing also suggest scientific uncertainty. Scientific uncertainty is not promoted as a justification for policy inaction. Science is not the problem, suggests the dominant framing, the problem is one of economics, geopolitics and national-international policy tensions; policy inaction is both justified financially and economically and blamed on the behaviour of key international agents within a chaotic global political structure.

⁴⁵⁷ Boykoff, *Who Speaks for the Climate?* 5; Doyle, *Mediating Climate Change*, 6, 19-20.

⁴⁵⁸ Nisbet, "Knowledge Into Action," 54.

The dominant frames employed in climate change journalism in all three of the newspapers analysed divorce the power and capacity to act from the impacts of climate change. The power lies with elite political and economic agents in the global north, and the impacts will be felt most severely in the global south. The elite sphere in which the politics of climate change are located in the newspapers analysed is frequently framed in terms of conflict or strategy games amongst powerful domestic and international political and economic agents. Individuals are shut out of the climate debate. Of the three newspapers analysed this is most evident in *The New Zealand Herald*, which, as the sole daily newspaper in New Zealand's largest city, has distinctive political significance.

A paradoxical framing emerges from the dataset. It frames climate change as an important issue that requires serious cooperative global action; this action should be carried out by global elites, but the elites operate in a Machiavellian theatre of conflict and strategy games. The people who must do something about climate change are prevented from doing anything by structural-behavioural conditions. Because the newspapers frame climate change as global, defining the space for action as a global one, but present global politics as a cutthroat world of ruthless bargaining and trade-offs by emphasising the conflicts and difficulties between the global north and global south and between major states, coverage of the Cancun conference allows little space for hope. The underlying tone that reaches across *The New Zealand Herald* dataset is of a slow-moving, conflict-ridden global elite process, where New Zealand and New Zealanders hold very little power to make a change for the better or for the worse. Climate change is someone else's problem, and that someone else is engaged in an elite strategy game. This framing is also found in *The Guardian* which similarly highlights the elite conflict dimension, although also accords key British agents more power in the world of global politics than *The New Zealand Herald* accords key New Zealand agents. While

The Irish Times commonly includes positive social progress-related framing of climate change and endorses domestic action in lieu of a global agreement, it also frames the arena of global climate politics as conflict-ridden and elite-dominated.

This is a symptom of a greater impasse that reflects the conflict between hegemonic forces of neoliberalism that shape the people and behaviour within the global political economy and the demands of climate science that humanity rapidly change its modes of productive behaviour. Neoliberalism (re)constructs people as rational-individual consumer-citizens, both in the global south⁴⁵⁹ and in the global north.⁴⁶⁰ The neoliberal paths to economic growth and development rely on resource-exploitation and consumerism. The flows of natural resources like fossil fuels from the global south to the global north, can be seen constitute a new neoliberal imperialism. But countries of the global north increasingly exploit their own climate-damaging natural resources too, evidenced in the debate over lignite sands in Southland, New Zealand during the Cancun conference.⁴⁶¹ Dominant economic ways of being rely on not changing the way people travel, eat, work or heat their homes, but climate change mitigation and adaption suggests changes to these things and many more. Alternatives are hard; blaming failure to act on corruption, laziness or profligacy amongst global elites and citizens of the global south seems much easier than rethinking economic development and the resource base of economies.

This thesis suggests that climate change journalism is shaped by a number of factors. One is the institutional and commercial resources, and column space,

⁴⁵⁹ Alison J. Ayers, "Imperial Liberties: democratisation and governance in the "new" imperial order," *Political Studies* 57 (2009) 7-8.

⁴⁶⁰ Catherine Needham, *Citizen-Consumers: New Labour's marketplace democracy* (London: Catalyst Working Group, 2003).

⁴⁶¹ "Opening Treasure Trove Comes at a Cost", *The New Zealand Herald*, 9 December 2010, B2.

given to specialist environmental journalists. This relates to the ownership considerations and positions of particular newspapers within differentiated media markets. Another factor is the prominence of climate change legislation and policy in a country, and another is the country's position or identity in regional and global political systems. On a human level, the effects and costs of climate change are framed as geographically and temporally distant from most readers of *The Guardian*, *The Irish Times* and especially *The New Zealand Herald*. Economically, the solutions to climate change are framed within a neoliberal economic paradigm, wherein the bottom line provides the ultimate justification for policy action or inaction. Within this paradigm, climate change policy must be framed as economically beneficial, as it is often in *The Irish Times*, for the problem to be worth addressing. When climate change action is framed as economically and financially detrimental, as it is in *The Guardian* and very frequently in *The New Zealand Herald*, the problem of climate change becomes subservient to other economic concerns. Politically, solutions to climate change are framed according to a view of politics as elitist and top-down in all three newspapers. Although there are a few exceptions, the three newspapers generally reflect a way of thinking about the possibilities for political change that frames political agency as purely a top-down instrument and relieves citizens of their democratic abilities to drive policy change from the bottom up. Put simply, climate change is framed as someone else's problem.

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Appendices

Appendix One: Agents Mentioned or Quoted in *The New Zealand Herald*

<i>Category</i>	<i>Actor</i>	<i>Organisation</i>	<i>Position/ description (location)</i>	<i>Count</i>
Government	Tim Groser		Minister for International Climate Change Negotiations	5
	David Carter		agriculture minister	1
	Nick Smith		environment minister	3
	TOTAL			9
Local Government	Len Brown		mayor of Auckland	1
	TOTAL			1
Opposition				
	TOTAL			0
Bureaucrat / Govt. Official	Sir Peter Gluckman		NZ Prime Minister's Chief Science Advisor	1
	Jan Wright		Commissioner for the Environment	1
	TOTAL			2
Foreign Government	Hosni Mubarak	Egypt	president	1
	Barack Obama	USA	president	4
	Julia Gillard	Australia	prime minister	2
	John Brumby	Australia	opposition leader	1
	Lord Hunt	Britain	House of Lords	1

	Hideki Minamikawa	Japan	Vice-Minister for Global Environmental Affairs	1
	John Howard	Australia	former prime minister	2
	Steven Hutchins	Australia	Labor (government) Senator	1
	Martin Ferguson	Australia	resources minister	1
	Chris Bowen	Australia	immigration minister	1
	Nicholas Sarkozy	France	president	1
	Muammar Gaddafi	Libya	head of state	1
	Silvio Berlusconi	Italy	president	1
	Prince Andrew	Britain	Duke of York	1
	Robert Mugabe	Zimbabwe	president	1
	Martti Ahtisaari	Finland	former president	1
	Juan Manuel Santos	Colombia	president	1
	Jairam Ramesh	India	environment minister	1
	Todd Stern	USA	Cancun chief negotiator	1
	TOTAL			24
International Organisation (person)	Connie Hedegaard	European Union	climate commissioner	1
	Cristina Figueres	UNFCCC	Cancun secretary	1
	Adrian Macey	UNFCCC	vice chair of Kyoto negotiations, former NZ climate negotiator	1
	Sepp Blatter	FIFA	president	1
	Mohamed El Baradei	International Atomic Energy Agency	former director general	1
	TOTAL			5

International Organisation (group)	Organisation for Economic Cooperation and Development (OECD)			1
	World Trade Organisation (WTO)			1
	International Water Management Insitute			1
	International Energy Agency (IEA)			1
	TOTAL			4
scientific organisation	Stephan Heubeck	National Institute for Water and Atmospheric Research (NIWA)	project engineer (NZ)	1
	James Renwick	NIWA	principal scientist (NZ)	1
	Michel Jarraud	UN World Meteorological Organisation	secretary general	1
	Julian Cribb	Julian Cribb & Ass., Canberra	scientist, author and journalist (Australia)	1
		ARC Centre for Excellence in Coral Reef Studies	(Australia)	1
		National Science Foundation	(USA)	1
		Academy of Technological Sciences and Engineering	(Australia)	1
		Tyndall Centre for Climate Change	(Britain)	1

		Research		
		Royal Society	(Britain)	1
		National Meteorological Institute	(Colombia)	1
	TOTAL			11
University – Science				
	Bob Bury	Leeds Teaching Hospital	radiologist (Britain)	1
	Prof. John Cameron	University of Florida	(USA)	1
		University of California, LA	(USA)	1
		University of East Anglia Climate Research Unit	(Britain)	1
	TOTAL			4
University – Other				
	TOTAL			0
NGO (person)				
	Barry Coates	Oxfam	executive director (NZ)	1
	TOTAL			1
NGO (group)				
	TOTAL			0
Activist				
	Liu Xiabao		political dissident (China)	2
	Julian Assange	Wikileaks	editor in chief	1
	TOTAL			3
Think-tank / lobby group				
	David Venables	Greenhouse Policy Coalition	executive director (NZ)	1
	Stew Wadey	Federated Farmers	provincial president (NZ)	1
	TOTAL			2
Individual – global south				
	Marco Parra		truck driver (Colombia)	1

	TOTAL			1
Individual – global north				
	TOTAL			0
Celebrity	Sir Edmund Hillary		mountaineer, philanthropist (NZ)	1
	Sarah Palin		former politician (USA)	1
	Mike Huckabee		politician (USA)	1
	Al Gore		former politician (USA)	1
	TOTAL			4
Business	Tom Nickels	Transpacific Waste	(NZ)	1
	Muhammad Yunus	Grameen Bank	microfinance (Bangladesh)	1
	Gina Roberts	Aromatics & More	online natural cosmetic retailer (NZ)	1
		Greenlane Biogas	(NZ)	1
		Dieselgas International	(NZ)	1
		Rabobank	Agricultural bank (global)	1
		Space Exploration Technologies	(USA)	1
		Balance	fertiliser company (NZ)	1
		Sasol	historical oil company	1
	TOTAL			9
other groups/organisations	Osama bin Laden	Al Qaeda	former leader, terrorist	1
		National Office of Disaster Relief	(Colombia)	1
	TOTAL			2

Appendix Two: Agents Mentioned or Quoted in *The Irish Times*

<i>Category</i>	<i>Actor</i>	<i>Organisation</i>	<i>Position/ description (location)</i>	<i>Count</i>
Government	John Gormley	Green Party	Minister for the Environment, party leader	5
	John Dalli		Health Commissioner	1
	Ciaran Cuffe		Minister of State	1
	Neol Dempsey		transport minister	1
		Fianna Fail		1
		Green Party		1
	TOTAL			10
Opposition				
	TOTAL			0
Bureaucrat				
	Mary Kelly	Environmental Protection Agency	director general	1
	TOTAL			1
Foreign Government				
	George W Bush	USA	former president	1
	Patricia Espinosa	Mexico	foreign minister	2
	Erik Solheim	Norway	foreign minister	1
	Evo Morales	Bolivia	president	1
	Akira Yamada	Japan	chief Cancun negotiator	1
	Timothy Worth	USA	former Kyoto negotiator	1
	Eileen Claussen	USA	former Kyoto negotiator	1
	Jairam Ramesh	India	environment minister	1
	Todd Stern	USA	climate change envoy	1
	Vladimir	Russia	president	1

	Putin			
	Nicholas Sarkozy	France	president	1
	Manmohan Singh	India	prime minister	1
	David Cameron	Britain	prime minister	1
	Barack Obama	USA	president	2
	Dmitry Medvedev	Russia	president	1
	Wen Jiabao	China	premier	1
	Chris Huhne	Britain	energy and environment secretary	1
	Philippe Calderon	Mexico	president	1
	Mohamed Nasheed	Maldives	president	1
	TOTAL			21
International Organisation (person)				
	Achim Steiner	UN Environment Programme	executive director	1
	Connie Hedegaard	European Union (EU)	climate commissioner	4
	Maire Geoghegan-Quinn	EU	research, innovation and science commissioner	1
	Christiana Figueres	UNFCCC	executive secretary	2
	Tosi Mpanu-Mpanu	UN Africa Group	chair	1
	Peter Smerdon	UN World Food Programme	senior public affairs officer	1
	Faith Birol	International Energy Agency	chief economist	1
	TOTAL			11
International Organisation (group)				
	EU Commission			1
	European Council			1
	World Health Organisation			1

	World Bank			1
	European Environment Agency			1
	TOTAL			5
scientific organisation				
	Dr Gerald Fleming	Met Eireann	(Ireland)	1
	Sivan Kartha	Stockholm Environmental Institute	(Sweden)	1
		National Climactic Data Centre	(USA)	1
		Met Office	(Britain)	1
	TOTAL			4
University – Science				
	Dr Conor Murphy	National University of Ireland at Maynooth	scientist (Ireland)	1
	TOTAL			1
University – Other				
	Prof. Bruno van Pottelsberghe	Solvay Brussels School of Economics and Management Studies	economist (Belgium)	1
	TOTAL			1
NGO (person)				
	Ricken Patel	Avaaz	executive director	1
	Mary Robinson	Gavi Alliance		1
	Mary Robinson	Oxfam	honorary president	2
	Mary Robinson	Mary Robinson Foundation - Climate Justice		1
	Mary Robinson	Ethical Globalisation Initiative		1
	Jan Burck	Germanwatch	senior advisor	1

	Matthias Duwe	Climate Action Network	(former) director	1
	Tim Gore	Oxfam	climate change policy advisor	2
	Gordon Shepherd	WWF	policy advisor	1
	Chee Yoke Ling	Third World Network	legal advisor	1
	Nnimmo Bassey	Friends of the Earth	chair	1
	Concern	Anne O'Mahony	country director (Kenya)	1
	Phil Boomer	Oxfam	campaigns and policy director	1
	Hans Herren	Biovision	president	1
	Wendel Trio	Greenpeace	climate policy director	1
	Gavin Harte	Stop Climate Chaos	spokesperson	1
	TOTAL			18
NGO (group)				
	Climate Action Network			1
	Oxfam			1
	Avaaz			1
	Greenpeace			3
	Ecosystems Climate Alliance			1
	FEASTA			1
	TOTAL			8
Activist				
	John Gibbons		blogger, author, <i>Irish Times</i> contributor (Ireland)	1
	George Monbiot		journalist (Britain)	1
	TOTAL			2
Think-tank / lobby group				
	Elliot Diringer	Pew Centre on Global	executive vice-president	1

		Climate Change		
	Andrew Mude	International Livestock Research Institute	economist (Kenya)	1
	TOTAL			2
Individual – global south				
	Qampa Re Liban		cattle farmer (Kenya)	1
	Diida Galgalo		cattle farmer (Kenya)	1
	Gufu Qampicha		cattle farmer (Kenya)	1
	TOTAL			3
Individual – global north				
	TOTAL			0
business				
	Sir Richard Branson	Virgin	magnate, entrepreneur (Britain)	1
	Jeremy Legett	Solar Century	founder, chairman (Britain)	1
	Allianz Global Investors		investment bank (Germany)	1
	HSBC		investment bank (Britain)	1
	Coal India		energy company (India)	1
	Panasonic		Electronics company (Japan)	1
	Nissan		Automobile company (Japan)	1
	Nokia		Electronics company (Finland)	1
	Vattenfall		energy company (Sweden)	1
	Intel		electronics	1

			company (USA)	
	Tesla		electric car maker (USA)	1
	Walmart		Retailer (USA)	1
	Bord Gais		energy company (Ireland)	1
	Tonn Energy		energy company (Sweden)	1
	TOTAL			14
other groups/organisations		Bill and Melinda Gates Foundation	philanthropic organisation (USA)	1
		Consumer Goods Forum	(Ireland)	1
	TOTAL			2

Appendix Three: Agents Mentioned or Quoted in *The Guardian*

<i>Category</i>	<i>Actor</i>	<i>Organisation</i>	<i>Position/ description (location)</i>	<i>Count</i>
Government	George Osborne		Chancellor	2
	Chris Huhne		Energy and Climate Change Secretary	7
	David Cameron		prime minister	6
	Tim Yeo	Conservative Party	chair of energy and climate change select committee	1
	Caroline Spelman	Conservative Party	environment, food and rural affairs secretary	1
	Lord Turner	Crossbench (independent)	Chair of the Committee on Climate Change and the Financial Services Authority,	1
	Lord Nicholas Stern	Crossbench (independent)	climate economist	1
	TOTAL			19
Local Government	Boris Johnson		mayor of London	1
	TOTAL			1
Opposition	Gordon Brown	Labour Party	former prime minister	1
	Caroline Lucas	Green Party	party leader	1
	TOTAL			2
Bureaucrat / Govt Official	David Kennedy	Committee on Climate Change	chief executive	1
	anonymous source	RAF		1
	anonymous source	Ministry of Defence		1

	TOTAL			3
Foreign Government	Patricia Espinosa	Mexico	foreign minister	2
	Prince Luigi Amedeo of Savoy-Aosta		explorer (historical reference)	1
	Condoleeza Rice	USA	former secretary of state	1
	Tod Stern	USA	special envoy on climate change	2
	Pablo Solon	Bolivia	UN ambassador in New York	2
	Hamid Karzai	Afghanistan	president	1
	Sheikh Abdullah bin Zayed al-Nahyan	UAE	foreign minister	1
	Hillary Clinton	USA	secretary of state	2
	Richard Olson	USA	ambassador to UAE	1
	William Kennard	USA	ambassador to EU	1
	Barack Obama	USA	president	5
	Alan Solomont	Spain	ambassador to EU/USA?	1
	Jose Luis Rodriguez Zapatero	Spain	prime minister	1
	Ahmed Shaheed	Maldives	foreign minister	1
	Abdul Ghafoor Mohamed	Maldives	ambassador-designate to USA	1
	Jonathan Pershing	USA	deputy climate change envoy	2
	Michael Froman	USA	deputy national security advisor	1
	Jimmy Carter	USA	former president	1
	Ronald Reagan	USA	former president	1
	Farrukh Iqbal Khan	Pakistan	lead climate change negotiator	1

	Al Gore	USA	former vice-president	1
	Hugo Chavez	Venezuela	president	1
	Rafael Correa	Ecuador	president	1
	Evo Morales	Bolivia	president	1
	Bruno Sekoli	Lesotho	chair of least developed countries group at Cancun	1
	Victor Bustinza	Peru	environment ministry climate official	1
	Fernanda Espinosa	Ecuador	environment minister	1
	Tom Strickland	USA	assistant secretary for fish and wildlife parks	1
	George W. Bush	USA	former president	1
	Sean Parnell	USA	governor of Alaska	1
	TOTAL			39
International Organisation (person)	Connie Hedegaard	European Union (EU)	climate change commissioner	3
	Joke Schauvilege	EU	?	1
	Dr Rajendra Pachauri	IPCC	chair	1
	Herman Van Rompuy	EU	president	1
	Achim Steiner	UN Environment Programme	director	1
	Joseph Alcamo	UN Environment Programme	chief scientist	1
	TOTAL			8
International Organisation (group)	UN Habitat			1
	International Renewable Energy Agency			1
	World Bank			1

	World Trade Organisation			1
	Friends of Pakistan			1
	TOTAL			5
	Kirsty Lewis	Met Office	principal climate change consultant (Britain)	1
	Dr Mostafa Jafari		scientist, candidate for chair of IPCC working group (Iran)	1
	Prof. Christopher Field		candidate for chair of IPCC working group (USA)	1
	Vicky Pope	Met Office Hadley Centre	head of climate predictions programme (Britain)	1
	James Hansen	NASA	climate scientist (USA)	2
	Bolivar Caceres	Government Glacier and Meteorology Unit	head glaciologist (Ecuador)	1
	Brendan Cummings	Centre for Biological Diversity	lawyer (USA)	1
		Met Office	(Britain)	1
		Royal Society	(Britain)	1
		World Meteorological Organisation	(Switzerland)	1
		Uganda Wildlife Authority	(Uganda)	1
		Geological Society of London	(Britain)	1
	TOTAL			13
University – Science		National Science Foundation	programme director (USA)	1

	Clovis Kabaseke	Mountains of the Moon University	environmental scientist (Uganda)	1
	Richard Taylor	University College London	Hydrogeologist (Britain)	1
	Bill McKibben	Middlebury College, London	scholar in residence (Britain)	1
	David Humphreys	Open University	environmental scientist (Britain)	1
	Marcus du Sautoy	University of Oxford	Simonyi professor for the public understanding of science (Britain)	1
		Florida Institute of Technology	(USA)	1
		University of Reading	(USA)	1
		University of East Anglia	(USA)	1
	TOTAL			9
University - Other				
	Michael Jacobs	London School of Economics	Senior Fellow on CC and the Environment (Britain)	1
	Robert Macfarlane	Cambridge University	author, travel writer, academic (Britain)	1
	TOTAL			2
NGO (person)				
	Wendel Trio	Greenpeace	climate policy director	1
	Jeremy Hobbes	Oxfam	executive director	1
	John Magrath	Oxfam	climate change researcher	1
	Bernard Tumwebaze	Oxfam	programme manager - Uganda	1
	Aubrey Meyer	Global Commons Institute	co-founder	1
	Sarah Shoraka	Greenpeace	biodiversity campaigner	1

	TOTAL			6
NGO (group)		WWF		1
		Earth First!		1
		Friends of the Earth		2
		350.org		1
		Oxfam		1
		Greenpeace		1
	TOTAL			7
Activist	James Lovelock		author, scientist, activist (Britain)	1
	William Ernest (Bill) McKibben	350.org	author, activist (USA)	1
	Sue Halpern		Author (USA)	1
	Tim Flannery	Macquarie University and Copenhagen Climate Council	scientist, climate activist (Australia)	1
	Mark Lynas		journalist (Britain)	1
	Martin Luther King		reverend, activist (historical reference) (USA)	1
	Sarah Rifaat	350.org	artist, activist (Egypt)	1
	Nestor Cuti		water activist (Peru)	1
	Marlon Santi	Indigenous Nationalities of Ecuador	President (Ecuador)	1
	Julian Assange	Wikileaks		1
	TOTAL			10
Think-tank / lobby group		Pew Charitable Trusts	(USA)	1
	Martin Kohr	The South Centre	(Switzerland)	1
	TOTAL			2
Individual – global south	Amos Mwesige		farmer (Uganda)	1

	Francis Mwhanuzi		farmer (Uganda)	1
	Jackson Bambalira		district chairman (Uganda)	1
	Elias Pacco		farmer (Peru)	1
	Jiovanni Rivapeneira		community leader (Ecuador)	1
	Julio Hanneco		farmer (Peru)	1
	Julio Hernandez		farmer (Peru)	1
	Flores Hernandez		murdered forest ranger (Mexico)	1
	TOTAL			8
Individual – global north				
	Felicity Gerry		lawyer	1
	TOTAL			1
Celebrity				
	Prince William		(Britain)	1
	Robert Frost		historian (Britain)	1
	Thom Yorke		musician (Britain)	1
	Raoul Moat		violent criminal (Britain)	1
	Bill Nighy		actor, Oxfam ambassador (Britain)	2
	Ian McEwan		author, Oxfam ambassador (Britain)	2
	Scarlett Johansson		actor, Oxfam ambassador (USA)	1
	Angelique Kidjo		musician, Oxfam ambassador (Benin)	1
	Miguel Bose		musician, actor, Oxfam ambassador (Panama)	1
	Djimon Hounsou		actor, Oxfam ambassador (Benin)	1
	Gael Garcia Bernal		actor, director, Oxfam	1

			ambassador (Mexico)	
	Helena Christensen		model, Oxfam ambassador (Denmark)	1
	Kristin Davis		actor, Oxfam ambassador (USA)	1
	Sarah Palin		former governor of Alaska (USA)	1
	TOTAL			16
corporates/ businesses	David Porter	Association of Electricity Producers	(Britain)	1
	Herbert- Michael Zapf	International Post Corporation (IPC)	CEO (Germany)	1
	Daj Mijdel	IPC, Norway Post	chairman, CEO (Norway)	1
	Kara Moriarty	Alaska Oil and Gas Ass.	deputy director (USA)	1
		Ernst & Young	auditor (Britain)	1
		Bloomberg New Energy Finance	(global)	1
		Himm Solar	(China)	1
		Association of British Insurers	(Britain)	1
		E.ON	coal burning electricity company (Germany)	1
		Shell	oil company (global)	1
	TOTAL			10
other groups/organisations	Central Intelligence Agency		(USA)	1
	TOTAL			1

Appendix Four: Summary of Content Analysis Coding Matrix

<i>Type</i>	<i>Category</i>
Nisbet's common science policy frames	social progress
	economic development / competitiveness
	morality / ethics
	scientific uncertainty
	Pandora's Box / Frankenscience
	public accountability / governance
	middle way / alternative path
	conflict / strategy
climate change	focus
	secondary
	mention
	no mention
Cancun conference	focus
	secondary
	mention
	no mention
framing of Cancun conference outcomes	positive
	negative
	neutral / equally positive and negative
	none
natural science	focus
	secondary
	mention
	no mention
	scientific consensus
	scientific uncertainty
	science as authority
	sceptical of science
technology / scientific innovation	focus
	secondary
	mention
	no mention
	technology will provide solutions
	technological solutions will not be sufficient
global / international politics	focus
	secondary
	mention

	no mention
domestic politics	focus
	secondary
	mention
	no mention
energy	focus
	secondary
	mention
	no mention
	fossil fuels linked to climate change
	"green" energy technology
	nuclear energy
	peak oil
extreme / unusual weather	focus
	secondary
	mention
	no mention
economics	focus
	secondary
	mention
	no mention
	"green" economics
domestic climate change policy	focus
	secondary
	mention
	no mention
	policy explained in detail
	basic policy explanation
	policy mentioned but not explained
human cost / impact of climate change	focus
	secondary
	mention
	no mention
	human cost now
	human cost in future
	human cost in global north
	human cost in global south
economic consequences of climate change	positive framing
	negative framing
	local framing
	global framing
	no mention

environmental consequences of climate change	focus
	secondary
	mention
	no mention
Green Party	focus
	secondary
	mention
	no mention
personal action / solution	focus
	secondary
	mention
	no mention
business action / solution	focus
	secondary
	mention
	no mention
government action / solution	focus
	secondary
	mention
	no mention
global / intergovernmental action / solution	focus
	secondary
	mention
	no mention