Frontline

Climate change reporting in an Australian context: Recognition, adaptation and solutions

EXECESTS

This exeges is is based on the production of three features that explore local impacts of climate change. The features are part of a journalism research project that investigated the question: How can journalistic practice generate an accurate, balanced account of climate change issues in Australia? The journalist rejects an approach that positions environmental reporting—or the 'green beat'—as a form of advocacy journalism. In contrast, the researcher positions her journalism practice within mainstream Australian journalism. The researcher sets out to produce reports, which adhere to the conventional journalism norms, including those of 'balance' and 'accuracy'. She explicitly critiques and rejects the phenomenon known as 'balance as bias', explored by Boykoff and Boycoff (2004) which, by over accessing climate sceptic sources, obstructs the reporting of climate change as an important economic, social, political and environmental issue. This exegesis explains and defends a different approach that focuses on local reporting rather than large-scale events in distant places. Robert Entman's definition of framing is used to explain how climate change issues were addressed in each narrative

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HE NEWS media play an important role in informing citizens by acting as a 'window' to political debate (Patterson & Seib, 2005, p. 192). If climate change is 'the most significant verifiable threat facing

humankind in the 21st century' (Boyce & Lewis, 2005, p. 3), media, as a tool enabling public information and government accountability, (Entman, 2005, p. 48) should give audiences a significant and appropriate 'window' onto the issue.

However, climate change has been regarded as a difficult subject for the media, partly because journalists are required to translate 'complex, scientific concepts to a "lay audience" (Wilson, 2000, p. 201). In attempting to report on climate change, many journalists get trapped by the purported 'scientific debate' advanced by climate change sceptics (Wilson, 2000, p. 202). It would appear that the imbalance in information has led to an imbalance in information. In 2010, *Proceedings of the National Academy of Scientists in the US* reported on a project that surveyed 1372 climate researchers, and found that between 97 and 98 percent agreed that anthropogenic climate change is occurring, and yet despite this, the report stated there was 'growing public doubt about [...] scientific agreement' in the field (p. 1). A 2011 survey in Australia showed that while 82.8 percent of people believe climate change is happening, only 50.4 percent believe humans contribute to its effects (CSIRO, pp. 4-5).

This discrepancy has been attributed to mainstream media overemphasising the views of a 'voluble minority' who profess that global warming is either not occurring, or not important (Boykoff & Boykoff, 2004, p. 126; Howard-Williams, 2009, p. 31). This frame of specious climate change 'debate' was deliberately rejected in this practice-based project for which the research question was: *How can journalistic practice generate an accurate, balanced account of climate change issues in Australia?*

This exegesis explains my exploration of the question through the production of three features. Entman's work on framing is used to explain how I constructed my pieces to present a certain point of view or meaning: that climate change is a major issue that will have serious consequences; and that it needs to be combated through social, political and economic action. The framing of each piece deliberately avoided any debate on the validity of the science of climate change itself. All debate is kept within the parameters of the way in which Australians are dealing with climate change, not the veracity of anthropogenic climate change as such. While seeking to foreground the seriousness and urgency of climate change effects, I also distinguish my work from alternative journalism, particularly Atton's conception of advocacy in journalism. Advocacy journalism tends to be associated with the enhanced

coverage of 'opinions of small minorities' (Atton, 2002, pp.11-13) whereas I position climate change reporting as having the same political and social significance as any other round. Rather than adopting the position of advocate, I apply principles of fairness, balance and pursuit of the truth espoused by professional journalists' code of ethics across all fields of coverage (MEAA, 2012).

Each feature article addressed a different climate change challenge. A summary of each article is provided below:

Recognition of climate change effects

The effects of sea level rise and inundation on the City of Port Phillip Sea level rise caused by climate change could see some areas of the City of Port Phillip in Melbourne become uninhabitable. Flooding already occurs in the low-lying canal areas of the suburb of Elwood, so how can we plan for events 10-100 years in the future? Who is responsible for the infrastructure needed to prevent inundation: local, state or federal government?

Adaptation to climate change

Water Usage in the Goulburn Valley

Should Victorian farmers learn to use water more conservatively? Negotiations are underway for a new National Plan for Australia's biggest river basin, the Murray Darling which is in the midst of an environmental crisis. Stone fruit farmer and environmentalist John Pettigrew says farmers need to change their ways, learn to use less water and accept that more water needs to be returned to the environment. He says farmers but use less water so future generations can continue to farm. But how viable is this?

(This article was produced before the Murray Darling Basin Plan was legislated by the Australian Parliament in February 2013).

Finding solutions.

Wind farm laws may prevent Australians achieving renewable energy targets

Victorian wind farm planning laws may prevent Australians achieving the Renewable Energy Targets. Two Melbourne University academics have published a study revealing that scarcely any land is available for wind farm developments. This restricts the means of reaching clean energy targets. But others argue wind farms are noisy, dangerous and it is necessary to restrict them.

The project aimed to contribute to the body of knowledge on global warming and the media by:

- explaining real, localised effects and ramifications of climate change,
- adhering to principles of professional journalism, rather than 'radical' notions of advocacy (Atton, 2002),
- carefully constructing an accurate, factual story-telling framework (Entman, 2007) for each story to avoid the phenomenon of 'balance as bias' (Boykoff & Boykoff).

Conceptual framework

The media should keep audiences 'adequately briefed' with knowledge to take part in the processes of self-government (Curran, 2005, p. 120). But when it comes to the dissemination of complex 'specialist knowledge' like the subject of climate change, there is a question of how well the media are able to translate the information (Curran, 2005, p. 130, Cox, 2006, p. 164). In exploring the answer to my research question, I sought to present information in a way that is scientifically sound, but comprehensible to a wide audience by marrying data with the experiences of 'real people'. Both the 'movers and shakers', and the people who are 'shaken and moved' need to be considered (Ricketson, 2004, p. 99). 'Facts' need to be communicated through authoritative political and scientific sources and local people directly affected.

Robert Entman's (2007) theory of framing explains how the ways journalists present and structure their work promote particular narratives (p. 164). In this context, he discussed the issue of media bias; a concept, which he argues, is 'under-theorised'. According to Entman, there are three different meanings of bias. Bias can be a 'distortion or falsification of reality'; it can be 'content bias', in which one side is demonstrably favoured over another side of a story or conflict; or it could be 'decision-making bias', where the motivation or mindset of the journalist comes into play (Entman, 2007, p. 163). Bias and framing are always at play in journalism, and are particularly relevant for understanding the coverage of climate change because of the systematic way media have distorted scientific reality and 'competing points of view' (Butler & Pidgeon, 2009, p. 45) with the result that scepticism about the existence of anthropomorphic climate change is widespread. As a result, some journalists have failed to frame the issue in accordance with professional norms of news-

worthiness (Curran, 2005, p. 130) as arguably 'the most significant verifiable threat' humans are facing (Boyce & Lewis, 2005, p. 3).

According to McCombs, it is the 'traditions and routines of journalism' that lie at the core of a media 'agenda' (2005, p. 164). Journalists constantly 'apply judgements to information' (Patterson & Seib, 2005 p. 193) as they produce news. Applying meaning is particularly important when it comes to slow-burning environmental events, like climate change, which Cox (2006) refers to as 'unobtrusive events' (p. 170). Cox asserts that because these issues are 'longer-term developments' and easily lose news currency, if the media ares to adequately communicate such events, journalists must 'find an event to link to the story' (2006, pp. 170-171). For my stories, I chose specific, localised events occurring in particular communities to convey the significance of the wider issue of climate change.

Global climate change will 'impact heavily on species, ecosystems and landscapes' (Tol, 2002, p. 53), which means that reporters covering the issues must move beyond the confines of general political discourse into the discourse of scientific inquiry (Holmes, 2009, p. 100). But while pursuing a 'discourse of scientific inquiry', and promoting awareness and understanding of climate change issues, I wanted to produce accessible work that would fit within standards of journalistic professionalism (Giles & Hallin, 2005, p. 7). This leads to the question: Does promotion of awareness and understanding constitute a form of advocacy journalism?

Atton (2002) classifies the 'green beat' as a form of environmental activism, or advocacy journalism (p. 83). He states that advocacy media 'adopt very different news values from mass media, introducing "alternative social actors [such as] the poor, the oppressed, the marginalised" (Traber, 1985, p. 2 in Atton, 2002, p. 16). My work may have its roots in environmental awareness, but by my sources were not 'alternative'; they include both 'ordinary people' (people without markers of power, status or expertise but not necessarily marginal) and mainstream characters with status. I saw my work as a product of framing of an important public issue (Entman, 2007, p. 164), not advocacy of a marginalised topic. Within the literature on framing, the line is blurred—and often inadvertently so—between framing something as two sides of a debate, and presenting news in a way that involves 'explanatory news, problem-solving frames, and emphasis on possible solutions' (Thorson, 2005, p. 213). By applying 'fairness and balance in my reporting, my aim is

to produce explanatory news by covering relevant sides of the debate in my features not in the sense of balance for the sake of balance but from the stand point of relevance to the issues at stake.

In Melbourne, where this project was produced and I practise as a journalist, metropolitan newspapers, *The Age, The Australian* and the *Herald Sun* have environment reporters, just as they have politics or sport reporters. The role of these reporters is one of stitching 'spaces of environmental science, governance, and daily life together' (Boykoff, 2009, p. 434.).

Unfortunately, environmental coverage often falls short of these expectations. Indeed, media coverage of climate change that 'emphasises scientific uncertainty' or creates the impression that the scientific consensus position is an 'alarmist' one is a media phenomenon found in climate change coverage throughout the western world (Dirikx & Gelders, 2008, p. 102). The justification for coverage that gives voice to sceptic views is often that journalists must 'balance' their sources and give equal airtime to opposing views for the sake of professional objectivity. A groundbreaking study of this phenomenon was an analysis of climate change coverage in the US prestige press by Max and Jules Boykoff (2004). The Boykoffs state that journalists found themselves compelled to take part in a 'juggling act' to balance evidence of climate change with opposing statements, but they fail to realise that in doing so, they are mitigating the 'meaningful, accurate, and urgent coverage of the issue of global warming' (2004, p. 125). By giving 'disproportionate space to sceptics' and using their views to 'balance' the science, the media aids the interests of those who benefit from the denial of humans induced global warming. This creates confusion about the facts, and a climate of doubt that limits the pressure on governments to take action. (Painter, 2011, pp. 10-11).

Another weakness is some environmental and climate change reporting is that coverage of issues discussion on issues like species degradation and melting polar ice caps can tend towards being messianic. Audiences have been told that global warming will be the 'end of the world as we know it', and threats caused by climate change are 'inconceivable' (Dyson, 2005, p. 14). It has been suggested that such a fearful a picture of global warming can have a 'distancing effect' on audiences who feel the threat is 'bigger than the possibility to do something about it' (Dirikx & Gelders, 2008, p. 102). My strategy of reporting practical responses to local issues, rather than ominous warnings of 'gloom and doom' was also a strategy designed to avoid this

problem. My reading of the scientific issues led me to the conclusion that effects will be widespread, and extremely newsworthy in actual local contexts. For this reason, I represented climate change *as such* as an indisputable fact and constructed my pieces to tell a story of issues and debates *within* this fact.

Swedish academic Peter Berglez (2011) says misinformation and intimidation of the audience can be avoided by using media 'logic'; journalists must give more consideration to the way they construct news (p. 451). He contends journalists are beginning to comprehend climate change more fully because in Sweden, the climate issue has transcended from a 'marginal news topic' to a normal part of everyday news, which has 'anchored a scientific certainty' (p. 250). While this might be true of Sweden, climate change reporting in Australia has not fully transcended this divide. A number of research reports have demonstrated that mainstream media in Australia have over accessed and amplified sceptic voices which deny anthropomorphic climate change. (Bacon, 2011; Chubb and Bacon, 2010; Chubb and Nash, 2012; Painter, 2011). In an effort to pursue 'media logic' I made the conscious decision to report on issues based on the most accurate scientific and political information available. There is a place for 'ordinary voices' but they should not be given leverage to the point where they are able to undermine the validity of established scientific research and findings.

I framed each issue in a local context linking to a wider climate change issue. The objective was to avoid a false balance, instead telling a local narrative as a subset of climate change issues. I wanted to engage the audience with the dilemma not of *whether* to act but instead, *how* to act (Boyce & Lewis, 2009, p. 10). To counter this, the narratives start small, with an anecdote or description on *how* to act, before delving into the wider issue. While this could be regarded as formulaic, I adopted the technique for strategic purposes.

The sources in each piece are a mix of experts, politicians, and 'ordinary people'. It was important for each of these sources to carry forward with each of their experiences. Otherwise the issue could become static. Facts build a story, but accounts of experience engage the reader (Kasinger, Richardson & Tanner, 2009, p. 103). My structure needed to allow room for storytelling, but also to allow for facts and figures (Ricketson, 2004, p. 150).

In answering my research question, I sought to cover climate change in a way that was comprehensible to many audience members, who, according to 2011 CSIRO survey of Australian attitudes to climate change, feel confused,

indecisive and inconsistent in their understanding of what climate change is, and how best to deal with it (p. 17). Nevertheless, I did not avoid scientific facts and reports where I considered them relevant. As Dorothy Nelkin argued (1987), the public are more likely to gain their scientific knowledge through the media than any other source.

Max Boykoff (2009) uses Anthony Downs' Issue-Attention theory to explain how audience attention often wanes with regard to stories on climate change (p. 447). Downs' (1972) model asserts that the public perception of most crises in America do not reflect the real-life conditions, but a cycle of interest and boredom in a topic (p. 39). To maximise chances of my reports attracting public attention, my stories needed to be ones that had not been covered, or at least not in the same way as I addressed them. The stories were mostly about individuals who have not been in the public eye; 'ordinary' people telling other people how they are or will be affected by climate change. Particularly within the context of accusations that the media have 'failed' in their duty to inform the public on climate change (Smith, 2005, p. 1473), I aimed to add to community debate, by offering intelligence, evidence-based information.

My three feature articles about localised climate changes were also a response to literature relating to the coverage of climate change in the media. By writing my own pieces of environmental journalism, my aim was to work through the issues outlined in the literature; framing, bias and advocacy.

In tailoring a response to my research question, I asserted considerable agenda-setting bias (Entman, 2007, p.164). I set each issue against a background of scientific consensus—sea level rise and drying of Basin water resources—or political reality—wind farm development restrictions—and laying out the field of the important political and social players in the debate ,which I determined from my position in the journalistic field (Bourdieu, 2005, p. 29-30). The interaction between the stakeholders or actors in the political, social and economic fields propel the story forward. (Bourdieu, 2005, p. 31, Patterson & Seib, 2005, p. 194). I see my role, as an actor in the journalistic field, as akin to 'a kind of transcendent arbiter'. I framed my pieces so that I moved between the players, allowing each to qualify their arguments, and dispute claims of the other field. The purpose of this was to enable readers to decide the veracity of claims for themselves and to meet the professional goals of 'fairness and balance'.

Recognition of climate change effects

The effects of sea level rise and inundation on the City of Port Phillip
The first feature (Fitzgerald, 2013a) explored the framing of a climate change issue. As someone who accepts the scientific evidence that human-induced climate change is occurring, my aimed to produce a feature that would contribute to audiences' understanding of the global issue. I had to present a scenario that was 'meaningful' to my imagined community of Melbourne readers (Atton, 2002, p. 112). I chose sea level rise because it is going to be a significant global problem, and the City of Port Phillip because I wanted to explore the impact on a built-up, metropolitan area.

My article on sea level rise in Port Phillip was primarily about scientific forecasts of sea level rise (City of Port Phillip [Natclim], 2007 and Australian Government, Department of Climate Change, 2009). Storm surge figures and rising sea levels are relevant pieces of information because they 'will increase flooding in low-lying coastal areas' but they would not tell an engaging story. However, factual claims on their own do not make for a compelling narrative. I needed active human sources who were affected by or at least aware of the scientific forecasts. While I was looking for such people, I came across the Elwood Flood Action Group of whose members are already concerned about flooding in their suburb. For them, flooding was not only serious but a phenomenon that they believed, on the basis of scientific evidence, would worsen. Meni Christofakis, who describes living through two floods, is a person the audience can relate to; she became the human conduit for the scientific basis of the article. I connected the personal flood story to the wider issue of climate change, so the local problem could be demonstrated as an important part of the 'exclusive pathways of information' that make up the national and global climate change debate (Atton & Hamilton, 2008, p. 92).

As Meni Christofakis ripped up putrid, sodden carpet from her living room floor, as her aching back gave way while she worked on all fours, she promised herself she'd never again have carpet in her house. Not while she lived by the bay near Melbourne. Not when she had to live through a flood every few years.

The storm water tide had rushed in so quickly that afternoon in 2011 that her Elwood home ended up in the middle of an inner-suburban lake. Before she could think about finding sandbags, the house was soaked and the damage done.

The smell was increasingly nauseating after besieged Melbourne Water had to leak waste into the streets to cope with overflowing pipes and drains. It was the sewage and stormwater that drenched Meni's floors.

'My next-door neighbours went to a hotel for a couple of nights as their little girl was traumatised by the event and had been sick,' Meni explains.

The harrowing flood seemed an unusual event for Melbourne's trendy, densely populated bay side suburbs. But a 2009 CSIRO report, The Effect of Climate Change on Extreme Sea Levels in Port Phillip Bay, states that the sea could rise between 15-23cm in less than 20 years and flooding will be more regular. One of the report's authors, CSIRO scientist Dr Kathy McInnes, says it is not only the gradual sea level rise we have to look out for, Melbournians will also be hit with more frequent storms. The report was part of the Victorian government's Future Coasts Program to assess the impact that global warming and sea level rise will have on Melbourne's coastal metropolitan areas.—From *Mojo*

The story was framed in a way that deliberately created a sense of urgency at the beginning, which is then juxtaposed with the scientific reports. This personal story is then supported by comments from local politicians, as well as local residents. Rather than risking a feeling of hyperbole, the material is selected to accurately reflect an issue that people do not yet know how to deal with. However, the community also included climate sceptics. If I was to give an accurate picture, I could not completely strike them from the debate. While denial is not supported by scientific evidence, the political field includes people who disagree with the existence of climate change, its severity, and whether we need to act to prevent it. I used a denialist source at a meeting, I positioned the quote so that readers could understand that his views were out of step with both scientific evidence and fellow residents.

Adaptation to climate change

Water usage in the Goulburn Valley

I used a similar approach with my second article (Fitzgerald, 2013b) that was about water conservation in Australia's food bowl, the Murray Darling Basin. My local focus was the Goulburn River basin in Victoria.

There have many scientific and political reports stating that farmers need to draw less water from the river system, a position that has been continually contested by some farming and other agricultural interests. The *Water*

Act 2007 stated that climate change has caused water in the basin to become an increasingly scarce resource. I decided to tell the story from the point of view of farmers who were actually already using less water, as a tangible demonstration of the viability of scientific and political recommendations.

The research focus was initially on the wider issue of water shortages, but narrowed when I came across the Environmental Farmers Network (EFN), an advocacy group that had prepared a submission for the release of the Murray Darling Basin Draft Plan. The EFN submission called for the draft to be strengthened and proposed returning more water to the basin (Pettigrew, 2012). The submission was intriguing because Victorian farmers—indeed farmers in general—were mostly against water returns (Victorian Farmers Federation, 2012). In contrast, EFN spokesperson John Pettigrew was adamant that farmers could use less water, and remain productive and adapt to global warming. I was attracted but wary of this position. I did not want to be seen merely as advocate for the Murray Darling environmental cause (Atton, 2002). So through further research, I identified other authoritative voices that supported EFN's position such as that of Helen Reynolds, a crop farmer who has financially benefited from cutting her water usage. I also gained some more 'traditional' perspectives on farming from Victorian Farmers Federation Water Council chairman Richard Anderson. Significantly, I did not question Anderson's belief—or lack thereof—in human-induced climate change as I judged it not to be pertinent or relevant to the evidentiary debate about the impact of levels of water usage on farming production. The piece was underpinned by an acceptance that anthropogenic climate change is occurring. Once again I deliberately avoided the 'balance as bias' trap (Boykoff & Boykoff 2004, Holmes, 2009).

In this piece, as in my first one, I aimed to use my key or character who was in favour of action to create a dynamic feel and an understanding that individuals change their views in response to evidence.

Pettigrew says a strong sense of environmental awareness was not something he has always had, but he has benefitted from spending part of his working life away from the farm... then there was his time at the Goulburn Murray Water Authority. He explains that within that role he had to work out how to deliver water in an environmentally sound way which is something farmers rarely have to consider.

In this way, Pettigrew could take the role of both a farmer and someone who could put the views of those resisting change into perspective.

Renewable energy

For my article on renewable energy (Fitzgerald, 2013c), an industry that is relatively underdeveloped (Australian Government, 2012), I chose to explore difficulties associated with Australia's most 'technologically mature' (Caripis & Kallies, 2012) form of green energy, which is wind energy. The issue at stake was how local complaints about perceived aesthetic and health risks of wind farms could impact on Australia's ability to reach its renewable energy target.

Once again, the issue of 'balance as bias' arose (Boykoff & Boykoff, 2004). I started with a report by two University of Melbourne researchers who argued that Victorian state planning law had become so restrictive on wind turbine development, that it will have a detrimental effect on the likelihood of meeting the Federal Renewable Energy Target (Caripis & Kallies, 2012). I made contact with members of a community-owned wind farm at Daylesford in Victoria. But the reason that wind farms are so heavily restricted is because there is often severe backlash from local communities, so that I was aware that I needed to examine the anti-wind farm position and mentality. This led me to an anti-wind farm organisation, the Waubra Foundation. This organisation is convinced that wind turbines cause illness because of mechanical sounds and infrasound, also known as low frequency. The reports cited by the Waubra Foundation are not supported by mainstream health organisations anywhere in the world, and the group has already been largely discredited in the media (Parkinson, 2013). Despite this I did interview the Foundation's CEO Sarah Laurie and included her quotes in the story. I was careful to supplement her comments with the generally-accepted evidence on wind farms from the CSIRO, and findings from a Senate inquiry (Senate Community Affairs Reference Committee (2011)). In constructing my story, I did not conced her group equal weighting or equivalence to more established scientific sources (Butler & Pidgeon, 2009, p. 45).

All my articles were 'anchored [to] a scientific certainty' (Berglez, 2011, p. 250) that climate change is an ever-increasing global threat (Newell & Pitman, 2010). In the words of former government climate change adviser Ross Garnaut: 'Mainstream media [...] will often seek to provide some balance between people who base their views on the mainstream science and people who don't. That's a very strange sort of balance. It's a balance of words, and not a balance of scientific authority' (Peiser, 2012). I think appropriate,

'logical' balance is the key to climate change reporting and can be achieved by following the norms of professional journalism ethics from *inside* media logic (Berglez, 2011, p. 451).

Conclusion

This exegesis explores how I attempted in my stories to generate an accurate, balanced account of climate change issues in Australia. I wrote each of my three feature articles from an understanding that climate change is a serious dilemma that will have an effect on local communities around Australia and the world. Without delving into advocacy, I worked on the assumption that coverage of an issue as serious and far-reaching as global warming was in line with professional news values. To avoid casting doubt on the validity of the science of climate change, I framed each story around the effects of climate change and how to deal with them, not the debate about the existence of climate change itself.

An understanding of Entman's definitions of framing and agenda setting was applied to decisions about selection and treatment of sources and the development of narratives that avoided Boykoff and Boykoff's 'balance as bias', which delegitimises findings of climate science. Rather than assuming the position of an advocate of climate change, the approach I adopted was similar to that of any other mainstream reporting round.

I acknowledge that in producing this research project, I had more independence and autonomy in the university environment than would have been possible if I had actually been commissioned for a specific media organisation. Two of the articles have been published by *Mojo*, the publishing outlet of the Monash journalism programme (Fitzgerald, 2013a; Fitzgerald, 2013c) and the third has been published on my own blog (Fitzgerald, 2013b). My context was one of exploration and experimentation in which I did not have to justify my work to editors, management or fit into wider editorial policy. A shortened version of my Port Phillip sea rise piece was published in the Fairfax Media/Metro Media Publishing publication *Port Phillip Review* in December 2012 under the headline *Climate change: Melbourne braces for the deluge.* After discussion, the editors told me they were happy with the 'angle' and the content, but asked me to bolster the 'human interest' angle, placing more of a focus on personal experiences with climate change, than science. While the balance of the piece was not compromised, I followed the editorial line: features should be 'light and relatable', rather than 'heavy and scientific'.

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