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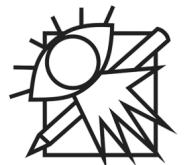
Sceptical Climate Part 2:

CLIMATE SCIENCE IN AUSTRALIAN NEWSPAPERS

Professor Wendy Bacon



**Australian Centre for
Independent Journalism**



Sceptical Climate Part 2: Climate Science in Australian Newspapers

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Cover graphic: *Global Annual Mean Surface Air Temperature Change, 1880 - 2012*. Source: [NASA GISS](#)

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The role of media in a democracy is to truthfully report contemporary events and issues to the public. This includes scientific evidence about the crucial issue of climate change. If people are confused or ignorant about potential threats, they cannot be expected to support action to confront them. This report looks at coverage of climate science in ten Australian newspapers between February and April in 2011 and 2012 and asks: What is the quality and nature of climate science reporting in Australia? What role are these publications playing in informing the public about climate science?

1. Preface by report author Wendy Bacon

Australia is a medium sized wealthy country that emits [more greenhouse gas emissions per capita](#) than any other country in the OECD. Since 2007, climate change has been high on its political agenda. In 2009 no topic occupied more media attention (Media Monitors, 2009); political leaders of both major parties have risen and fallen over fairly modest proposals designed to reduce emissions. In 2011, the Gillard Labor government's proposal for a carbon pricing policy led to a polarised debate that was often strident. The policy finally became law in October 2011. In September 2013, a new Abbott conservative Liberal National Party government was elected on a promise to abolish that policy.

The coverage of the carbon policy debate was the subject of the Australian Centre for Independent Journalism's first report on the media's role in reporting on climate change, [Sceptical Climate: Part One](#). That report included an investigation of coverage by ten major print publications of the carbon policy between February and July 2011. It found that overall, the coverage was very strongly opposed to the Gillard's government's carbon policy. Negative coverage outweighed positive coverage by 73% to 27%. The coverage by News Corp, which dominates Australia's print media, was even more biased (Finkelstein, 2012, p. 58). It published 82% negative stories compared to 18% that were positive. By comparison, Fairfax Media was more evenly balanced with its Melbourne masthead *The Age* being the only newspaper which was more positive than negative.

In 2013 the political debate continues, while climate scientists warn that time is running out to act on global warming. The Intergovernmental Panel on Climate Change has just published its [fifth report](#). Scientists have found with 95% confidence that human greenhouse gas emissions are causing global warming. Evidence grows of the damaging impacts of climate change, including melting ice, sea level rise and extreme weather events. (IPCC, 2013). [Australia itself is threatened by more extreme hot weather and bushfires](#), an accelerating loss of species and flooding of coastal communities. Small neighbouring countries in the Pacific such as Kiribati are threatened with inundation and lack of fresh water.

This second report focusses attention on the coverage of climate science and addresses these questions: What is the nature of Australia's press coverage of climate science? Do patterns of coverage of climate science reflect political debate? Are Australian audiences receiving adequate and accurate information about climate science?

The Australian Centre for Independent Journalism starts from the perspective that the media's role in a democracy rests on the public's right to know. There are few media stories of more obvious public interest than that of climate change, which scientists are warning threatens the lives, security and livelihoods millions of people and whole species.

While the media often criticise others for poor communication, journalists too carry responsibility for communicating both the science and policy of climate change to the public. The way in which the media represents issues and news sources influences and to some extent, produces public opinion. The media can also ignore issues, rendering them invisible for some audiences. If people do not know about scientific developments that point to threats or solutions to problems, they cannot be expected to support proposed actions.

Concern that the media is failing the Australian people in its coverage of climate science is not new but never as high on the news agenda as now in late October, 2013.

A limited amount of research has already been conducted about reporting of climate science and climate change in Australia. This research has already provided evidence that sections of the Australian media promote climate scepticism. This research project confirms many of the findings of that earlier research and builds on them. (McKewon, E., 2009; Chubb, P.A., & Bacon, W., 2010; McKnight, D., 2010; Manne, R., 2011; Bacon, W., & Nash, C.J., 2012 & 2013; Painter, 2013)

Before resigning as Australia's Chief Scientist in March 2011, Penny Sackett told a Senate Committee that her greatest concern was that the conclusions of climate scientists were not being effectively communicated to the public. (['Carbon tax is a first step in climate fight'](#), *SMH*, February 28, 2011). On September 26, 2011, Australia's new Chief Scientist Professor Ian Chubb called for an end to attacks on the credibility of science and the scientific method. He called on the scientific community "to stand up to be counted on important issues of science. I don't think it is helpful that it is left to very few". (['Climate scientists urged to make voices heard'](#), *The World Today*, September 26, 2011). When asked about the media coverage of climate science, Professor Chubb described it as "very ordinary". "I think the proportions of arguments given, the weight given, the space given to arguments seems to me to be more in the nature of illustrating, demonstrating conflict rather than the contest of ideas," he said. (['Climate scientists urged to make voices heard'](#), *The World Today*, September 26, 2011).

In February 2011, the Gillard Labor government established the Climate Commission. Part of the role of the Commission was to provide an authoritative and expert source of information about climate science. It could and did intervene to point out distortions in

media reporting of climate science. One of the first acts of the new Abbott Liberal National Party government was to abolish the Commission. A Climate Council, funded by citizens, has replaced it.

When massive bushfires broke out in the Blue Mountains in NSW in late October, conflict over the reporting of climate science shot to the top of the news agenda when the Prime Minister Tony Abbott rejected reports that climate change is increasing the probability of extreme fire weather days and is lengthening the fire season. [On October 25, he described ABC reports about the link as 'hogwash'.](#)

The Climate Council continues to insist that the link between Australian bushfires and climate change does exist. This puts Australians in the unusual position of having their government reject the views of leading scientists in the field of climate research.

The Sceptical Climate Report is a contribution to public discussion about coverage of climate science. It is the largest research project of its kind on climate science reporting in Australia. It aims to show the patterns of reporting across ten publications during 2011 and 2012. It uses examples and case studies to further explore these patterns, including the way stories evolve and are constructed.

This report is a collaborative effort. I would like to thank and acknowledge the contribution of the [Australian Centre for Independent Journalism](#) and its Director Associate Professor Tom Morton and Manager Jan McClelland and our team of researchers, editors and publishers. I would particularly like to thank Arunn Jegan for his crucial commitment to the management of the research and the web designers at [Collagraph](#) for their ideas and work to push this report to be as useful and accessible as possible.

Professor Wendy Bacon

August, 2013

Wendy Bacon is a Professorial Fellow with the Australian Centre for Independent Journalism and a freelance journalist. She is a contributing editor for New Matilda. In recent years, she has published with Crikey.com, The Conversation, The Guardian Australia and Fairfax Media.

2. Key Findings

This summary contains key points from the report, with links to the relevant sections and data from which the findings are drawn.

Although this report covers a different time period, the key findings for this study of [ten Australian newspapers](#) from February to April in both 2011 and 2012 can be considered in light of the [key findings of Sceptical Climate Part One](#).

Part One of our study found the coverage of climate change in Australia in 2011 was mostly framed within a vociferous political debate about climate change policy. Many stories about climate change policy made no significant reference to climate science at all. ([See Section 4.2](#)).

The focus of this study is the coverage of climate science. It includes all articles between February and April 2011 and the same period in 2012 that mentioned the findings of climate science. Some of these stories are also framed within the debate about climate change policy. Others mention climate science findings in the context of other environmental issues. Other focus on climate scientists or climate science research findings.

QUANTITY OF CLIMATE SCIENCE

- There were 602 articles across the two three-month periods in ten publications that made significant reference to climate science.

- Just under one third of 602 articles did not accept the scientific consensus that human beings are major contributors to global warming.
[See Section 4.6](#)
- 35% of stories that made significant mentions of climate science did so in the context of climate change policy.
[See Section 4.2](#)
- There was a decrease of nearly 20% in articles referencing climate science in ten publications between February and April in 2012 compared to the same period in 2011.
[See Section 4.2](#)
- There was a marked difference in the quantity and quality of coverage about climate science being received in different Australian regions and by different audiences.
[See Section 4.2](#)
- Publications targeting high-income readers, *The Sydney Morning Herald*, *The Age* and *The Australian*, provide more coverage of climate science than those targeting lower income readers.
[See Section 4.2](#)
- *The Australian*, which is Australia's only national newspaper targeted at a general audience, published the most articles (24% of 602 articles making significant mention of climate science).
[See *The Australian* below](#)
- Fairfax Media's *Sydney Morning Herald* and *The Age* each published more articles about climate science than all publications apart from *The Australian*.
[See Section 4.2](#)

- Readers in Western Australia and the Northern Territory receive very little information about climate science. *The West Australian*, which is the only metropolitan newspaper in Perth, averaged only one article every three weeks over these periods with a significant reference to climate science.

[See Section 4.2](#)

- *The NT News* had an average of only one article with a significant mention of climate science every five weeks.

[See Section 4.10](#)

- The biggest drop of 50% in articles between 2011 and 2012 was in the biggest circulation publication, the *Herald Sun* in Melbourne.

[See Section 4.2](#)

GENRE OF CLIMATE SCIENCE ARTICLES

- 41% of articles (244) across the ten publications that made significant mention of climate science were news stories.

[See Figure 4.3.1](#)

- Of 244 news articles that made significant mention of climate science, 61 or 25% were less than 150 words long.

[See Figure 4.3.4](#)

- *The Courier Mail* had the highest proportion (66%) of news.

[See Section 4.3](#)

- There were very low levels of features, which provide extra sources and perspectives, about climate science

[See Section 4.3](#)

- *The Australian*, *The Age* and the *Sydney Morning Herald*, all of which are targeted at higher income readers, published most of the features about climate science.

[See Section 4.3](#)

- *The Daily Telegraph*, *Herald Sun*, *The Advertiser*, *The West Australian*, *The Mercury* and the *NT News* had very low levels of features about climate science. The last four are dominant news sources in South Australia, Western Australia, Tasmania and the Northern Territory respectively.

[See Section 4.3](#)

- 31% of 602 articles were commentary about climate science. This finding highlights the significant role assigned by editors to opinion writers who promote their own attitudes towards climate change. Most commentary is written by non-scientists.

[See Figure 4.3.1](#)

- 44% of words in 602 articles were allocated to comment pieces that covered climate science compared to only 22% of words to news articles about climate science.

[See Section 4.3](#)

- The *Herald Sun* had the highest proportion of commentary (65% of articles and 81% of word count.) and the lowest levels of news (27% of articles and 11% of words.). This is partly explained by the dominant role of Andrew Bolt, a prominent News Corp climate sceptic opinion writer. [See Section 4.6](#) for more on Bolt's role.

[See Section 4.3](#)

PROMINENCE OF CLIMATE SCIENCE COVERAGE

- Australian print publications did not feature climate science stories prominently during February to April in 2011 and 2012.

[See Figure 4.4.1](#)

- Approximately 70% of climate science coverage appeared after page 8.

[See Figure 4.4.1](#)

- News Corp publications, *Herald Sun*, *The Courier Mail* and *The Advertiser* placed more than 90% of stories that made significant reference to climate science after page 8.

[See Figure 4.4.1](#)

- There were 26 front-page articles in 10 publications making significant mention climate science during this period. 17, or nearly two-thirds of these, appeared in 2012.

[See Figure 4.4.1](#)

- The *SMH* was more likely than any other publication to publish articles prominently. It published 8% of articles (7) on the front page. All of these articles assumed a consensus position on climate change. 51% of *SMH* articles were on pages 2 - 8.

[See Figure 4.4.1](#)

REPORTING OF PEER REVIEWED RESEARCH

- Most Australians receive very little information from their media about peer-reviewed climate science findings.

[See Figure 4.5.1](#)

- Only 11% of all words in articles about climate science were dedicated to articles that explicitly referenced peer-reviewed climate science.
[See Section 4.5](#)
- 79% of articles that did refer to peer-reviewed science were published in *The Australian*, *The Age*, the *Sydney Morning Herald* or *The Advertiser*.
[See Section 4.5](#)
- The biggest circulation publications in Australia, the *Herald Sun* and *The Daily Telegraph* provided almost no coverage of peer-reviewed science during February to April 2011 and 2012.
[See Figure 4.5.1](#)

SCEPTICISM AND CLIMATE SCIENCE COVERAGE

Scientists (over 97%) overwhelmingly agree that the activities of human beings cause climate change. This is referred to as the consensus position. The term 'climate sceptic' refers to those who do not accept this consensus position. Articles were coded according to whether they 'accepted' the consensus position; 'suggested doubt' about it; or outright 'rejected' it. The latter two positions are both sceptical of the consensus position. [Get more detail on the categorisation in Section 4.6.](#)

- Climate scepticism gets substantial favourable exposure in mainstream Australian media.
[See Section 4.6](#)
- 32% or nearly one-third of 602 articles that covered climate science either rejected or suggested doubt about the consensus position.
[See Section 4.6](#)

- In 2012, 36% of stories did not accept the consensus position.
[See Figure 4.6.1](#)
- The number of articles about climate science fell between 2011 and 2012 but the number not accepting the scientific consensus that human beings are causing dangerous climate change grew.
[See Section 4.6](#)
- Despite very high levels of certainty that human activity causes dangerous climate change and evidence about the dangerous impact of that change, the proportion of articles accepting the consensus position on anthropogenic climate change dropped between 2011 and 2012.
[See Figure 4.6.1](#)
- When measured according to words allocated to article, 31% of words were allocated to articles that did not accept the consensus position about anthropogenic climate science in 2011. This grew to 44% or nearly half of all words in 2012.
[See Figure 4.6.2](#)
- Some articles that overtly accepted the consensus position about anthropogenic climate change were produced in ways that undermined the credibility of climate scientists or the case for urgent action. This was particularly so in *The Australian*.
[See Section 4.6](#) for details and [Section 4.8](#) for examples
- Across the ten publications, more words (45,775 or 13%) were allocated to articles that completely rejected the notion of anthropogenic global warming than the number words in articles that referred to peer reviewed climate science research. (27748 or 8%).
[See Figure 4.6.2](#)

- Fairfax Media's *Sydney Morning Herald* and *The Age* accept the consensus position on anthropogenic climate change. They published only 9 and 6 articles respectively which might suggest to readers that the consensus position was in doubt.

[See Section 4.6](#)

- The most sceptical publications were *The Daily Telegraph* (73% of words) and *Herald Sun* (81% of words) and *The NT News* (62% of words). *The Daily Telegraph* and *Herald Sun* were also [the most biased against the carbon policy](#).

[See Figure 4.6.2](#)

- Unlike other News Corp publications, *The Mercury* and *The Courier Mail* were accepting of the consensus position. In 2013, the *Courier Mail* has become more sceptical. This reflects its recent use of Andrew Bolt as a columnist.

[See Figure 4.6.1](#)

Commentary and scepticism

- Most comment articles did not accept the consensus position. In 2012, 44% of comment pieces outright rejected the consensus position about anthropogenic climate change.

[See Figure 4.6.4](#)

- 97% of comment pieces in the *Herald Sun* either questioned or rejected the consensus position about anthropogenic climate change.

[See Figure 4.6.4](#)

- News Corp columnists [Andrew Bolt](#), Piers Akerman, Miranda Devine and Terry McCrann all produce sceptic pieces.

[See Section 4.6](#)

- Andrew Bolt plays a significant and strategic role in the production of climate scepticism in Australia. He is employed and heavily promoted by News Corp. He also has his own show *The Bolt Report* on *Channel Ten* and is featured almost daily on right wing radio station *2GB*.

[See Andrew Bolt in Section 4.6](#)

- When considered from the viewpoint of word count, Andrew Bolt wrote a total of 13,281 words, which is 49% or nearly half of all words in articles that included material about climate science in the *Herald Sun*.

[See Andrew Bolt in Section 4.6](#)

- Apart from the 20 articles in the *Herald Sun*, Bolt wrote five sceptical articles in *The Advertiser*, four sceptical articles in *NT News* and 5 of 21 in *The Daily Telegraph* that rejected the consensus position. He was also published during this period in *The Cairns Post* and *The Townsville Bulletin*.

[See Andrew Bolt in Section 4.6](#))

- There are hundreds of climate sceptic posts on Andrew Bolt's blog that News Corp promotes as "[Australia's most read political blog](#)". Readers comments are overwhelmingly sceptic. *The Australian* occasionally picks up on Bolt's sceptic columns and promotes them through further stories.

[See Andrew Bolt in Section 4.6](#)

- Bolt rejects established scientific bodies and scientists as authoritative sources on climate change. His opinion pieces target climate scientists, journalists, policy advisors and politicians who accept the consensus position, by accusing them of telling lies, misleading the public and being hypocritical.

[See Example One: 'Secrets Out: No gain from carbon tax pain' in Section 4.6](#)

- Bolt describes those who support the consensus position as 'warmists' who by definition are driven by ideology and are unreliable.
[See Andrew Bolt in Section 4.6](#)
- Bolt's campaign against climate science is linked to his opposition to publicly funded science and media which he tends to portray as elitist and dangerously left-wing.
[See Section 4.6](#)
- News Corp does not balance Bolt's voice with climate science journalism, which leaves him as the dominant voice on climate science for many of his readers.
[See Andrew Bolt in Section 4.6](#)
- Bolt uses a strategy of repeating messages and his work is often shared and reposted by sceptic bloggers.
[See Andrew Bolt in Section 4.6](#)
- Climate sceptics have a strong presence on some of Australia's most successful commercial talkback shows throughout Australia who draw on and promote Andrew Bolt and other well known sceptics.
[See Andrew Bolt in Section 4.6](#)

Scepticism pushes out other climate science stories

- In challenging times for media businesses, resources for rigorous reporting are stretched in mainstream journalism. This includes all forms of science reporting, including climate change reporting.
- By turning climate science into a debate, scepticism occupies space in Australian non-sceptic media that might otherwise be given to articles covering climate science.
[See Climate Scepticism Becomes a Story in Section 4.6](#)

- 28% of articles that made significant mentions of climate science published by the *Sydney Morning Herald* in 2012 were either about scepticism or issues revolving around the sceptic lobby and prominent sceptics. This journalism contributes to public understanding of scepticism but may leave less time for climate science reports.

[See *Climate Scepticism Becomes a Story* in Section 4.6](#)

- *Media Watch*, *Crikey*, *The Conversation* and several bloggers have provided valuable independent critiques of coverage of climate change.

[See Section 4.8](#)

- Recent research by the [Reuters Institute for the Study of Journalism](#) has established that the Australian coverage of four significant reports about climate science had more sceptic voices than the coverage in other countries studied including the United States and United Kingdom which also produce more media scepticism than other countries. Along with that research, the findings of this study suggest that Australia may have the highest concentration of scepticism in its media in the world. Such high levels of scepticism should be a matter of concern to the Australian public, governments, the scientific community and journalists.

[See Section 3. Background](#)

NEWS CORP VERSUS FAIRFAX MEDIA IN SYDNEY AND MELBOURNE

The two Fairfax Media publications *The Age* and *Sydney Morning Herald* were compared to News Corp's *Herald Sun* and *The Daily Telegraph* in [Section 4.7](#).

- Fairfax Media publications papers had about 43% more articles (163) that made significant reference to climate science compared to the News Corp papers (114).

[See Figure 4.7.1](#)

- News Corp had much higher levels of comment articles (51%) and lower levels of news (29%) than Fairfax did.

[See Figure 4.7.2](#)

- Fairfax Media had close to three times as many words in news articles about climate science compared to News Corp.
- In 2012, more than half the coverage of climate science in the News Corp publications was 'comment'.

[See Figure 4.7.2](#)

- 85% of Fairfax articles accepted the scientific consensus position on anthropogenic climate science compared to only 34% of stories in News Corp.

[See Figure 4.7.3](#)

- In 2012, the differences became greater. Levels of acceptance of the scientific consensus position on climate science in *The Age* and the *Sydney Morning Herald* increasing from 83% to 86% while the levels of acceptance in the *Herald Sun* and *The Daily Telegraph* dropped from 44% to 22%.

[See Section 4.7](#)

- In 2012, 45% of the articles in the two News Corp tabloids rejected the consensus position while another 33% questioned it.

[See Section 4.7](#)

- 15% of stories on climate science in Fairfax newspapers compared to 1% in the News Corp newspapers referred to peer reviewed research.

[See Section 4.7](#)

- While coverage in all publications decreased in 2012, Fairfax remained consistently accepting of the scientific consensus position on climate science, while News Corp became more sceptical.

[See Section 4.7](#)

- Higher income and more highly educated audiences of *The Age* and the *Sydney Morning Herald* are much more likely to read news and features about climate science and reports of peer reviewed research than News Corp readers.

[See Who are the readers of News Corp and Fairfax Media in Sydney and Melbourne in Section 4.7](#)

THE NT NEWS: EXAMPLE OF LOW COVERAGE WITH HEAVY DOSE OF SCEPTICISM

- During the period February to April *The NT News* published 8 articles in 2011 about climate science (with a total word count of 3,033 words) and 11 articles in 2012 (with a total word count of 4,142 words) ([See Figure 4.2.3](#)).

[See Section 4.10](#)

- 7 comment articles comprised 72% of total words in *The NT News* articles that made significant mention of climate science.

[See Section 4.10](#)

- Of 19 articles, 11 articles were coded as conveying an acceptance of the consensus position on climate science, 4 were coded as suggesting doubt about the consensus and 4 as clearly rejecting it.

[See Section 4.10](#)

- 62% of total words in all these articles did not accept the consensus position.

[See Section 4.10](#)

- *The NT News* readers received only one news story of more than 100 words that reported the findings of climate scientists.
[See News in Section 4.10](#)
- Andrew Bolt wrote 6 columns or 57% of all *The NT News* words in the sample. Some of his articles were promoted near the front of the publication.
[See Opinion Pieces in Section 4.10](#)
- Bolt's aggressive sceptic discourse overwhelms occasional very brief news coverage of climate science in *The NT News*. Material climate science impacts on the Northern Territory that were discussed in key government and science reports were not reported by *The NT News*.
[See the Conclusion in Section 4.10](#)

THE AUSTRALIAN

- *The Australian* casts itself as a national agenda setter. It produced 24% of all articles making a significant mention of climate science, compared to 15% in the *Sydney Morning Herald*, which had the second highest number of articles.
[See Section 4.8](#)
- Nearly half (47%) of the articles and 50% of the words in *The Australian's* coverage did not accept the consensus position.
[See Section 4.8](#)
- While only 5% of articles were coded as rejecting the scientific consensus about anthropogenic climate change, the remarkable characteristic of *The Australian's* coverage is the high proportion (45%) of articles coded as questioning the scientific consensus position or communicating that its validity was a matter of debate.
[See Figure 4.8.1](#)

- While scientists overwhelmingly agree on anthropogenic climate change, *The Australian* represents climate science as matter of opinion or debate rather than as a field for inquiry and investigation like all scientific fields.

[See Section 4.8](#)

- *The Australian* was more sceptical in 2012 than 2011, with 59% of the words allocated to climate change coverage either suggesting doubt or rejecting the scientific consensus in 2012.

- A substantial proportion of the articles that were coded as accepting the consensus position were written in ways that undermined the credibility of climate scientists and those that support climate change policies opposed by *The Australian*. Other articles overtly accepted the scientific consensus position or specific scientific findings but underplayed their seriousness or a need for urgent action. (Case studies and examples are included).

[Examples can be found in Section 4.8](#)

- News articles published by *The Australian* were less sceptical than commentary, but news articles that questioned the scientific consensus position on climate change tended to be 51% longer than news articles that accepted it.

[See Section 4.8](#)

- Commentary about climate science published by *The Australian* was almost equally divided between commentary that accepted the consensus position compare to commentary that did not.

[See Examples of Sceptical Commentary in Section 4.8](#)

- Commentary about climate science published by *The Australian* increased in 2012 and was more sceptical.

[See Examples of Sceptical Commentary in Section 4.8](#)

- Some news articles published by *The Australian* that communicated an acceptance that anthropogenic climate change is occurring were structured in ways that undermined the credibility of climate scientists; news angles were selected that highlighted research that suggested climate change impacts could be less than previously reported.

[See News Example Four: Good news story about coral research in Section 4.8](#)

- *The Australian* attacks journalists at Fairfax Media and the ABC who cover climate change in ways that clearly communicate an acceptance of the scientific consensus position on anthropogenic climate change.

[See Cut and Paste in Section 4.8](#)

- *The Australian* promotes and publishes the work of climate sceptics without critiquing their work or the interests they promote.

[See Climate scepticism as a collaborative effort in Section 4.8](#)

- *The Australian* frames the climate science in terms of an ideological battle and its critics as dogmatists who threaten free speech and rationality.

[See Section 4.8](#)

EXTREME WEATHER

- Climate scientists have established a link between both the frequency and intensity of extreme weather events and climate change.

[See Evidence linking extreme weather and climate change Section 4.9](#)

- During February and April 2011 and 2012, most stories about extreme weather events made no mention of climate change.

[See Section 4.9](#)

- However the link between extreme weather events and climate change is a strong theme in climate science coverage. The disaster theme was a strong one.

[See Figure 4.9.1](#)

- 31% of all articles (602) in the 2012 period mentioned extreme weather in connection with climate science, but a substantial proportion of these rejected the scientific evidence that has established a link with climate change.

[See Section 4.9](#)

- Extreme weather events receive far more coverage than other adverse impacts linked with climate change such as loss of species and acidification of oceans. The public is receiving very little coverage of these impacts.

[See Section 4.9](#)

ISSUES FOR FURTHER RESEARCH

- Further research is needed to see if the decline in coverage of climate science continued in 2013 and to what extent it was a consequence of failing corporate media models that are affecting other fields of reporting as well.
- Further research is also needed to establish whether the proportion of total climate science coverage media that promotes scepticism has increased or declined since April 2012.
- More research needs to be done into the impact of media on specific audiences and political opinion. This research needs to take account of the complexity of media flows including how stories are transmitted between publications and the interaction between mainstream media, audience response and social media and blogs.

- Further research needs to be carried out on the interaction between sceptic sources and sceptic journalists
- Further research also needs to be carried out into the most effective way to communicate climate science findings to audiences that are poorly served by media.
- The findings in this report present a challenge for media accountability in Australia. There needs to be more public discussion about how the findings of climate science can be communicated to all sections of the public, including those who receive the lowest levels and most sceptic coverage.

3. Background Issues: Science, Journalism and Truth Claims

The key findings of this project and their implications for public policy and the media need explanation and discussion. Before proceeding to a more detailed account of the findings, this section briefly explains some of the norms and practices underlying scientific research and journalism. It then discusses some of the arguments raised in favour of publishing the views of sceptics in the light of these practices. It concludes by suggesting some other factors that are relevant to explaining how particular media cover climate science.

DEVELOPING SCIENTIFIC KNOWLEDGE THROUGH PEER REVIEWING

Scientific method is about testing hypotheses against observed evidence.

Scientific research is a social and collective practice. Academic journals and some scientific organisations do not publish research papers until other people with similar expertise have critically examined them. This process is called 'peer review'.

The process is usually anonymous so that critique is not influenced by fear of penalty or hope for favour. This does not mean that no false claims are published, but there is a process by which they can be tested and adjusted. As Dessler and Parson explain: "...as other scientists repeat an observation or examine a question using different

approaches and get the same answer, the community increasingly comes to accept the claim as correct" (Dessler, A.E., & Parson E.A., 2010, p.39).

Even though scientific knowledge is always open to question, a reliable way to find out the state of 'truth claims' in science is to survey peer-reviewed literature. This is particularly so for those who do not have expertise in the relevant scientific field. This includes nearly all journalists.

Nearly a decade ago in 2004, Naomi Oreskes, in a well-known study of peer-reviewed literature on climate science, analysed 928 abstracts published in refereed scientific journals between 1993 and 2003 that were listed in the ISI (Institute for Scientific Information) database with the keywords 'global climate change'. She found that 75% of abstracts either explicitly or implicitly accepted the scientific consensus on the reality of anthropogenic climate change. Another 25% did not explicitly take a position; none disagreed with the consensus position (Oreskes, N., 2004).

In 2009, Doran and Zimmerman published a survey of more than 3000 geoscientists mostly from US institutions. They found that 96.2% of climatologists who actively publish peer-reviewed research on climate change responded yes to the question: "When compared with pre-1800s levels, do you think that mean global temperatures have generally risen, fallen, or remained relatively constant?" An even higher proportion, 97.4% responded yes to a second question: "Do you think human activity is a significant contributing factor?" (Doran, P.T., & Zimmerman, M.K., 2009).

As the level of active research and specialisation in climate science increased in the sample population, so did agreement that humans are significantly changing global temperatures.

Doran and Zimmerman noted the difference between the scientific consensus amongst climate change scientific experts and views of the US population, of whom only 58% had agreed that human activity is a significant contributing factor to climate change in a US Gallup Politics Poll (2010). They concluded that the challenge was how to bridge the gap between scientists and the public that mistakenly perceives debate among scientists on an issue where there is almost none.

Other researchers conducted a study in 2010 (Anderegg, W.R.L., et al, 2010) that showed that the expertise and prominence of climate researchers, convinced by the evidence of the anthropogenic climate change, vastly overshadows that of climate change sceptics and 'contrarians'. This difference was even starker when top researchers in each group were considered. They recommended that strong weight be given to expert credibility in the relative weight and attention given to these groups.

Last year, US scientist and blogger James Lawrence Powell did his own survey of academic abstracts to assess the number of articles rejecting anthropogenic climate change that had been published in peer reviewed journals. He presented his findings in a accessible [pie-chart](#) and concluded:

"Scientists do not disagree about human-caused global warming. It is the ruling paradigm of climate science, in the same way that plate tectonics is the ruling paradigm of geology. We know that continents move. We know that the earth is warming and that human emissions of greenhouse gases are the primary cause. These are known facts about which virtually all publishing scientists agree."

This year, John Cook and an international team of researchers expanded Orestes study by examining 11 944 climate abstracts from 1991–2011 matching the topics 'global climate change' or 'global warming'. The study found only 0.7% rejected anthropogenic global warming and 0.3% were uncertain about the cause of global warming.

Among abstracts expressing a position on AGW, 97.1% endorsed the consensus position that humans are causing global warming. (Cook, J., et al, 2013).

JOURNALISM AND REPORTING OF CLIMATE SCIENCE

Journalists, like scientists, also make truth claims based on evidence. This is not to say that journalism is the same as science, but that journalists, like scientists, are also concerned with notions of evidence and truth.

All major Australian news organisations operate according to professional codes or sets of standards that commit organisations to reporting with fairness and accuracy. Respect for truth is a fundamental principle of [Australian Journalists' code of ethics](#). This reflects the Federation of International Journalists' code which reads: [Respect for truth and for the right of the public to truth is the first duty of the journalist](#). This means that both collectively and individually, journalists are supposed to strive to report the truth - or in other words, provide an accurate account based on evidence of what is happening at the time of publication. Journalists commit themselves to disclosing all essential facts and not distorting evidence.

Journalists develop truth claims by applying methods of verification including direct observation or testimony, documentary evidence and so on. A journalist might be aware of 'truth claims' for which there is no independent supporting evidence. Only if supporting evidence emerges will the story be publishable. If contrary evidence later emerges, a journalist would not be expected to ignore it. These are the standards against which Australian climate change reporting and our key findings can be judged.

In practice, news reporters often do not have the time or resources to independently check the validity of all truth claims. For this reason, journalists routinely assess the credibility of sources. In daily reporting when journalists approach the publication of truth claims by scientific sources, they use markers of expertise to assess their credibility, such as publication in leading peer reviewed journals and institutional recognition by established bodies that foster and rely on peer reviewed research. Journalists are expected to be transparent revealing conflicts of interest that could affect the credibility of sources. For example, journalists should check if a drug company has sponsored medical research. If so, it should be explicitly acknowledged.

These practices of science journalists reflect a well established tendency for reporters to preference authoritative sources with status (Hall, S., 1978; Ericson, R., et.al.,1989).

If these conventional practices were being applied, you would expect media coverage of climate science to reflect a very strong preference for the consensus position. Indeed, given the extremely high level of consensus, one would expect that reporting to have entered what media researcher Daniel Hallin called the “sphere of consensus”. (Lester, L., 2010, p.93).

This is not to say that journalists should not be prepared to look at the truth claims of dissident scientists or those who are less well established but these claims need to be assessed against established evidence. (See below for more on this point).

This study confirms that the Australian media is generating substantial amounts of material that rejects the consensus position. Some Australian publications are even reporting more scepticism than the views of established climate scientists. In other words, these more sceptic publications are communicating material that nearly all scientists consider to be false and misleading.

Although this study is the first in Australia to measure levels of scepticism across a substantial slice of Australian media, other researchers have identified similar tendencies. In 2004, Max Boykoff and Jules Boykoff found that the quality US press amplified or over represented the minority of researchers who reject the consensus position in reporting climate change. (Boykoff, M.T., & Boykoff, J.M., 2004 & 2007).

Previous Australian research has also shown that some sections of the Australian media have also given far more prominence to 'climate scepticism than one would expect from a review of peer-reviewed science. (McKewon, E., 2009; Chubb, P.A., & Bacon, W., 2010; McKnight, D., 2010; Manne, R., 2011; Bacon, W., & Nash, C.J., 2012 & 2013). (Some of this literature is further reviewed in [Section 4.6 Scepticism and climate science coverage](#).)

Most recently, James Painter (2013) of the Reuters Institute for the study of journalism told the ABC science show that his recent comparative study of climate coverage had found:

“Australia had the most articles, and the highest percentage of articles with sceptics in them, ahead of the United States, the United Kingdom, France, Norway and India. This finding tallied with a previous report we had published which strongly suggested that climate scepticism was common in the English-speaking media in countries like the UK, USA and Australia. It is nothing like as common in the media in developing countries, such as Brazil, India and China, and in France”

The book '[Climate Change in the Media - Reporting Risk and Uncertainty](#)' includes a framing analysis of 61 articles from the Sydney Morning Herald, The Australian, and the Herald Sun published at the time of two 2007 IPCC reports, a 2012 IPCC report on extreme weather and articles about Arctic Sea ice melt since January 2010. The analysis by Lyn McGauer and Libby Lester found a high level of an 'uncertainty'

frame in the Australian publications that was less likely to be tempered by an increasing certainty frame than in other countries. There were more sceptic voices than in other countries (Painter, 2013, p.85).

How can such a marked dissonance between accepted science and reporting of science be explained? Why aren't sections of the Australian media communicating the conclusions of climate scientists to the public? Why do patterns of coverage across the media differ markedly?

These are questions for which the Australian public can expect answers from journalists.

Here are some arguments put forward by those who argue in favour of granting media access to sceptics.

BEING OPEN TO ALL SIDES OF THE DEBATE

A common argument is that journalists need to be open to all sides of a debate. According to this view, the promotion of sceptic views is seen as a form of free speech. Their marginalisation alone justifies their inclusion.

But as experimental psychologist Stephen Lewandowsky et al (2012) has argued, empirical differences between scientific findings cannot be dismissed as merely a matter of opinion. Scientific 'debate' [focuses on evidence](#).

Policy and ethical debates may flow from such scientific debate. The task of journalists is to distinguish between the debate and the evidence on which it is based. Journalists need to engage with the politicisation of science but can not resile from coming to grips with empirical evidentiary differences.

Reporters do need to keep an open mind but this does not mean that they should publish views that nearly all other informed people have found to be false simply for the sake of doing so. It might be that a dissident view is based on a misunderstanding. Take for example, the sceptic view that the phenomenon of global warming had stopped because the last fifteen years have not been hotter than the year before. Any journalist who checked this assertion with a climate scientist would immediately be told that the issue of time scales (Eg. decades compared with decades) is relevant in climate change. To report the initial claim without explaining it clearly in this context is to deliberately foster misunderstanding.

One of the successes of scepticism has been to create a pseudoscientific debate. The phenomenon of scepticism then gets covered as an issue in its own right, which further feeds into a general impression that there is a real scientific debate.

BALANCE

Those who grant media access to sceptics often argue that they are providing what journalists call 'balance'.

In a much discussed study, Boykoff & Boykoff identified the application of the journalistic norm of 'balance' as a factor in understanding why journalists over-represent dissident views. (Boykoff, M.T., & Boykoff, J.M., 2004 & 2007, Boykoff, 2013). Through this discussion, the notion of 'bias as balance' was developed for a situation in which "competing points of views on a scientific question" are presented "as though they had equal scientific weight, when actually they do not." (['Balance-bias battle of climate science coverage'](#), September 3, 2010, *The Drum*)

Balance is applied in a range of ways when discussing journalism. It can mean adding a source from a different perspective, the choice of two or more people of opposing views in a broadcast debate, the selection of a range of sources with differing views across news media over time or using columnists with different political perspective to demonstrate fairness.

'Balance' can be used to rationalise decisions made for other reasons. For example, an advertiser might choose to withdraw advertising unless a story is run. An editor in this situation could use the notion of 'balance' to justify the otherwise unethical decision to publish the story.

Balance is an important principle in journalism, but it has long been acknowledged that it can become a strategic ritual (Tuchman, G., 1972) or used in what is referred to as 'he said, she said' journalism. When reporting of this kind becomes a device for amplifying views without evidentiary basis, the overriding journalistic principle of pursuing the truth is betrayed.

When there are significant conflicting interpretations of evidence between scientists, reporters should explain this. For example, in the early days of research work on the link between lung cancer and smoking, journalists might have quoted sources who did not agree. However once the link was accepted by the overwhelming body of medical opinion, sources in the tobacco industry denying the link soon lost credibility.

Investigative journalists then turned their attention to identifying how economic interests were influencing those denying the link.

There are many areas of uncertainty in climate science - for example, the impact of global warming on the frequency of cyclones is a matter for further research. Reporters tackling these issues will provide

'balance' by drawing on a range of scientific sources to clarify differences and uncertainties. This can be done without casting doubt on the consensus position.

OPINION VERSUS NEWS

This study shows that much of the sceptical material published by the Australian media is 'comment' or in other words, 'opinion'. Some argue that providing an article is marked as 'comment' or 'opinion', the author does not need to adhere to the same standards of evidence as news reporting even if the commentary contains assertions of fact. There are several problems with this argument. Firstly, audiences do not necessarily distinguish between opinion and news. Commentary containing strong factual assertions is often published prominently, overwhelming news items which are often shorter. Secondly, the line between opinion as news has become blurred as the news genre has become more openly opinionated and subjective. Thirdly, as with the argument about 'open debate', this argument that opinion should not adhere to journalistic standards of truth and accuracy is often linked to the notion of the media as a forum for free speech. There is a difference however between the broad notion of free speech and the narrower notion of free press that exercises privileges on behalf of the public and is accountable to it.

HOW CAN JOURNALISTS APPROACH DISSIDENT CLAIMS?

Some have argued that journalists should leave climate science to the scientists and simply report evidence that has been peer reviewed or independently assessed. Critical and independent journalists will not agree. While daily reporters develop techniques and conventions for assessing the credibility of sources, in-depth and specialist reporters

have a responsibility to interrogate experts on behalf of the public. Journalism's central preoccupation is with the truth or discovering which claims are valid or which claims are not.

If a reporter is contacted by a source holding views contrary to mainstream scientific opinion, a range of actions are possible. A reporter can first establish the basis for the difference and then canvas views from a range of experts. Has the dissident view been critiqued? Has the dissident responded to that critique? What is the nature of the evidence or proof of alternative scientific claims? Is there evidence that dissidents are being marginalised to protect powerful interests? Or are dissidents being funded by interests with a stake in particular policies? What interests or motivations underlie the difference between parties with differing views? Occasionally, stories of scientific fraud or suppression are exposed by following such methods.

There are examples of Australian journalists engaging with the views of sceptics. [Graham Readfearn](#) is professional journalist who worked as an environmental reporter with News Corp before [resigning](#) to start his own climate science blog. He continues to be published by other media outlets including [The Guardian](#).

There are also examples of scientists who have engaged with climate change sceptics and become bloggers producing [a form of journalism](#). One of these is John Cook who is not a climate scientist. He was trained as a scientist and now produces [Skeptical Science](#) which critiques scepticism.

These and other critics of scepticism tend to produce material which shows that climate sceptics have a flawed approach to scientific method.

OTHER FACTORS

Like science, journalism is also a social practice. Journalists, editors, managers and owners of media are all part of the production process. They make decisions about who to hire, what to broadcast, what informal editorial policies and reporting resources to deploy in particular rounds, what sources are selected, what ethical and professional practices will be tolerated and what language and images will be used and genres developed.

These factors interact with each other to produce media. Media researchers have shown that these production processes can result in systematic distortions, the marginalisation or preferencing of particular social groups, amplification of some issues and strategic silences around others. (A well known example of the latter is the widespread reporting of the existence of weapons of mass destruction in Iraq in the lead-up to the US invasion in 2003). The 'maps of meaning' produced by media are interpreted and refashioned by audiences.

In an overview of environmental journalism, Lester, drawing on Cottle, suggests that while journalistic norms and values do shape journalistic work, there are other "complexities and confluence of factors at work" (Lester, L., 2010, p. 41; Cottle, S., 2006).

Factors that could be considered in explaining the patterns that emerge from the findings in this report include:

- Media ownership;
- Company and publication cultures;
- Ideological influences;
- Political goals of publications;
- Informal editorial policies and selection of reporters and columnists;

- Economic factors such as allocation of journalistic resources and syndication;
- Professional reporting practices including selection of sources and choice of language;
- The link between the 'framing' of stories and editorial policy;
- Policies in relation to targeting audiences and attracting advertisers;
- The presence of well organised sceptical lobby group with strategies aimed an gaining media access.

Although the influence of these cannot be explored in detail in this report, some of these factors are mentioned in [the conclusion to this report](#).

4.1 Research design and methodology

This report uses the methodological approaches of content analysis and case study analysis to investigate media coverage of climate science in Australia.

The content analysis covers 10 Australian newspapers over three months in two consecutive years. The chronological parameters were between February 1st and April 30th in 2011 and 2012. This was different from the sample period for our first study which was February 1st, 2011 to July 31st 2011.

The content analysis has been supplemented with a series of case studies and examples to provide further depth of understanding of how journalistic and editing strategies are used to produce particular types of coverage.

We selected ten newspapers. These were: *The Australian*, *The Age*, *The Sydney Morning Herald (SMH)*, *The Daily Telegraph*, *Herald Sun*, *The Advertiser*, *The Courier Mail*, *The Northern Territory News (NT News)*, *The Mercury* and *The West Australian*. (Note: Mastheads that have a Sunday edition were merged. For example, *The Age* figures include *The Sunday Age* figures.

Figure 4.1.1 shows Audit Bureau of Circulation (2012) figures for circulation and Roy Morgan Research (2012) figures for readership, ownership and format of selected newspapers.

Figure 4.1.1: Ten Australian newspapers: 2012 ownership and circulation statistics.

Newspaper	Location	Owner	Circulation 2012	Readership 2012	Format 2012	Target audience	Notes
The Advertiser	Adelaide, SA	Newscorp	166178	449000	Tabloid	General audience	Is the only metropolitan daily in Adelaide
The Age	Melbourne, Vic.	Fairfax	157480	566000	Broadsheet	Higher income readers	In March 2013 The Age weekday editions moved to tabloid format
The Australian	National	Newscorp	122428	405000	Broadsheet	Higher income readers	Is the only national non-specialist newspaper
The Courier Mail	Brisbane, QLD	Newscorp	185770	503000	Tabloid	General audience	Is the only metropolitan daily available in Brisbane
The Daily Telegraph	Sydney, NSW	Newscorp	333424	781000	Tabloid	Lower income readers	The second biggest circulation newspaper in Australia
Herald Sun	Melbourne, Vic.	Newscorp	450090	1116000	Tabloid	Lower income readers	The biggest circulation newspaper in Australia
The Mercury	Hobart, Tas.	Newscorp	40033	92000	Tabloid	General audience	Is the only metropolitan newspaper available in Hobart
The Northern Territory News	Darwin, NT	Newscorp	17782	36000	Tabloid	General audience	Is the only metropolitan newspaper available in Darwin

Newspaper	Location	Owner	Circulation 2012	Readership 2012	Format 2012	Target audience	Notes
The Sydney Morning Herald	Sydney, <u>NSW</u>	Fairfax	157931	612000	Broadsheet	Higher income readers	In March 2013 the <u>SMH</u> weekday editions moved to tabloid format
The West Australian	Perth, <u>WA</u>	Seven West Media	176105	493000	Tabloid	General audience	Is the only metropolitan newspaper in Perth. Feeds into Channel 7 Yahoo Website.

[Download data as .csv](#) or [view on GitHub](#)

Seven of these publications are owned by News Corp which dominates the Australian print/online media landscape. These include *The Australian*, which is Australia's only national newspaper targeted at a general audience, and six metropolitan newspapers including the Melbourne based tabloid *Herald Sun* and the Sydney tabloid *The Daily Telegraph*. The other News Corp publications *The Mercury*, *The Advertiser*, *The Courier Mail* and the *NT News* are the only publications in their respective capital cities. The other publications are the Fairfax owned *SMH*, Melbourne based *The Age* and *The West Australian*, which is owned by Seven West Media and dominates the media in Western Australia.

Given the emergence of internet based media, some may question the choice of newspapers as the focus for analysis. Increasingly, readers access their information from a range of internet publications and ideally these would be included as well. Internet analysis was not possible for this project as it is more time consuming as content shifts more regularly.

However, American research has shown that the news content of internet versions of mainstream newspapers is not significantly different from the print version although it may be presented differently (Hoffman, L.H., 2006). In Australia although some extra wire stories may be added, national and metropolitan newspapers still provide the core of their own web versions and that they remain influential in setting the daily news agenda. For example, news headlines are often used to set the agenda for morning radio and TV programs. For this reason, we consider that our selection provides a good snapshot of the nature of the coverage during this period, although it needs to be supplemented with further research that examines the way that news is presented and prioritised.

METHODOLOGY

The [Dow Jones Factiva](#) database was used to retrieve all articles which mentioned climate science and its findings. Researchers removed those items that only included incidental mentions of climate change policy. For example, articles that only included references to the *'Minister for Climate Change'* were not included and if *'climate change'* merely appeared in a list of items in a story on a quite different topic, the article was excluded.

Pieces in which climate change science was not the main focus of the article but which nevertheless included even a small amount of significant content about climate change were included. For example, if there is a reference to quantity of greenhouse gas emissions, the article was included. We also removed articles that focused solely on the Australian political debate around climate policy without any significant reference to the phenomenon of climate change. A six month sample including such climate policy articles in 2011 formed the basis of [our first report](#).

Where the same article is published in more than one outlet, each occurrence is counted as a separate article.

This resulted in a sample of 602 articles.

Social science and media students from the University of Technology Sydney and the University of Sydney were selected as researchers to be part of the study. They were trained in coding according to selected criteria. Academic researchers also participated. All raw data was entered into spreadsheets and checks were conducted to ensure accuracy in coding.

Articles were coded into spreadsheets according to:

- **date**
- **word count**
- **topic** (Climate policy & climate science and climate science only, extreme weather)
- **genre** (Feature, News, Editorials, Comment)
- **headline**
- **stance** (towards climate science consensus)
- **reliance on peer-reviewed scientific journal articles**
- **types and identity of sources quoted.**

It should be noted that all figures in this report have been rounded to a whole figure, for example 3.26% was rounded off to 3%.

CASE STUDIES

The content analysis has been supplemented with examples and case studies of different aspects of this research.

In some cases, the development of the case studies involved investigating the origins of stories or checking whether reports or story angles were pursued by particular publications. Factiva database searches were used to investigate these issues.

4.2 Quantity of climate science coverage

The content analysis in this report aims to establish patterns in the coverage of climate science across ten Australian news publications from February to April in 2011 and 2012.

This section focuses on the quantity of coverage of climate science and breaks it down into two broad categories.

It is important to note that the quantity of coverage in a publication is not an indicator of other aspects of its nature or quality. On the other hand, if a daily media outlet publishes very little information, there can be no quality. More detailed analysis of the nature of the coverage will be provided in later sections of the report.

All articles were included in our sample that reported climate science findings or made significant reference to climate science findings. As described in the [methodology section](#), articles with only an incidental mention of climate change were removed and this resulted in a sample of 602 articles including 332 articles published in 2011 and 270 articles in 2012. Between the two periods, there was a drop of 19% in the number of articles.

[Figure 4.2.1](#) compares the number of articles in each chosen masthead across the two periods. It shows that there were marked differences in the quantity of coverage between the ten publications. These differences remained fairly consistent over 2011 and 2012. This means that how much climate science related material Australian readers of daily news publications receive depends on which publications they read.

Figure 4.2.1: Total articles covering the climate change science, across 10 Australian newspapers from Feb. to Apr. 2011 & 2012.

Newspaper	2011 sample	2012 sample	Grand total
The Advertiser	25 (8%)	25 (9%)	50 (8%)
The Age	39 (12%)	32 (12%)	71 (12%)
The Australian	79 (24%)	64 (24%)	143 (24%)
The Courier Mail	28 (8%)	25 (9%)	53 (9%)
The Daily Telegraph	30 (9%)	35 (12%)	65 (11%)
Herald Sun	33 (10%)	16 (6%)	49 (8%)
The Mercury	23 (7%)	13 (5%)	36 (6%)
The Northern Territory News	8 (2%)	11 (4%)	19 (3%)
The Sydney Morning Herald	51 (15%)	41 (15%)	92 (15%)
The West Australian	16 (5%)	8 (3%)	24 (4%)
Total	332 (100%)	270 (100%)	602 (100%)

[Download data as .csv](#) or [view on GitHub](#)

All publications declined in the number of articles between the two periods with the exception of *The Daily Telegraph* and *NT News*. The latter had very little coverage in either year.

The Australian, which is Australia's only national newspaper targeted at a general audience, had the most articles with a total of 143. Nearly a quarter of all articles with significant references to climate science (24%) were published in *The Australian*.

The two Fairfax papers, *SMH* and *The Age* followed with 92 and 71 articles respectively, which means that *The Australian* had 36% more articles than any other publication.

News Corp's Sydney daily, *The Daily Telegraph* had 65 articles, more than any other News Corp daily publication.

The Courier Mail and *The Advertiser*, the only daily newspapers in Brisbane and Adelaide, had 53 and 50 articles respectively.

The *Herald Sun*, *The Mercury* and *The West Australian* had the largest proportional drops between 2011 and 2012. The *Herald Sun* had the biggest drop of 49%, with 33 articles in 2011 falling to 16 articles in 2012.

Seven West Media, which owns *The West Australian* and dominates the media in Western Australia, had only 24 articles including only 8 in 2012. Over the two periods, *The West Australian* averaged less than one article every three weeks. The low rates of climate change coverage in *The West Australian* should also be considered in relation to its claimed readership of 547,000 in 2011.

News Corp's *NT News*, which is the only newspaper in Darwin, had only 19 articles. This equates to an average of only one article with a significant mention of climate change every five weeks. [A case study of NT News is included in this report.](#)

These results show that audiences in West Australia and the Northern Territory have been receiving very low levels of coverage of climate change.

TYPES OF CLIMATE SCIENCE STORIES

Climate science is a multi-disciplinary field that is relevant to a wide range of research, policy, geographical and social contexts. The total sample of articles that reported climate science findings or made significant reference to climate science findings included stories about a broad range of scientific research relevant to climate change; stories which mentioned climate science in the context of broader environmental issues; political discussion about climate change policy; and stories which were either by climate sceptics or about climate scepticism.

The 602 articles were divided into two broad categories:

1. Articles in which references to climate science were focussed on scientific findings or issues surrounding scientific findings. This did not mean that the main focus of the article was necessarily about climate science. Articles about climate science scepticism or sceptics were included in this group. 392 of 602 articles (or 65%) were in this category, which is referred to in this report as '**climate science focus**'.
2. Articles which mentioned climate science findings in the context of broad discussion of government or political policy in relation to climate change. In 2011, most of these were about the carbon policy. Many stories in this category had only a minimal mention of climate science, such as a brief reference to greenhouse gas emission findings in the context of political coverage of climate change policy. 210 (35%) of these articles were in the second category, which is referred to in this report as '**climate science in policy context**'.

As this analysis shows, a significant proportion (35%) of coverage of climate science in the Australian media during this period occurred in the context of domestic political policy, particularly during 2011.

Most of the decline (35%) in the total number of articles between 2011 and 2012 was in the second category of articles that referred to climate science in the context of political policy.

As was shown in [‘Sceptical Climate Part 1: Climate Change Policy’](#), there was a large amount of coverage of the intense domestic debate around the introduction of a carbon emissions trading scheme in 2011. The debate and related coverage had decreased by 2012.

There was only a 9% drop in the number of articles with a climate science focus between 2011 and 2012.

Of the relevant 332 articles in 2011, 205 (62%) had a climate science focus. Of the 270 articles in 2012, 187 (69%) had a climate science focus.

[Figure 4.2.2](#) shows a breakdown of the number of articles for each publication into those with a focus on climate science and those which referenced climate science in a policy context. This shows that *The Australian* had more articles (90) with a focus on climate science than any other publication, followed by *SMH* with 61. The lowest number of articles with a focus on climate science was in the *NT News* and *The West Australian* followed by the *The Mercury* and the *Herald Sun*. *The Advertiser* and *The Courier Mail* had the highest proportion of articles with a climate science focus.

Figure 4.2.2: Total number of articles divided into climate science focus and climate science in policy context, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	Climate science focus	Climate science in context
The Advertiser	39 (78%)	11 (22%)
The Age	41 (58%)	30 (42%)
The Australian	90 (63%)	53 (37%)
The Courier Mail	43 (81%)	10 (19%)
The Daily Telegraph	36 (55%)	29 (45%)
Herald Sun	31 (63%)	18 (37%)
The Mercury	25 (69%)	11 (31%)
The Northern Territory News	13 (68%)	6 (32%)
The Sydney Morning Herald	61 (66%)	31 (34%)
The West Australian	13 (54%)	11 (46%)
Total	392 (65%)	210 (35%)

[Download data as .csv](#) or [view on GitHub](#)

QUANTITY MEASURED AS NUMBER OF WORDS

The number of words for each article was coded drawing on the information provided by the Dow Jones Factiva database.

[Figure 4.2.3](#) compares the quantity of coverage across publications measured by number of words. The rankings are mostly similar to the count of articles.

When number of articles are counted, *The Daily Telegraph* has slightly less articles than *The Courier Mail* across the two years but had more words overall.

SMH had more coverage of climate science during this period than fellow Fairfax media publication *The Age* with 64,198 words across 92 articles compared to the *The Age* which had 44,402 words across 71 articles.

Sydney and Melbourne are the only two cities in Australia where there are two competing daily publications. When these are compared, Sydney with the *SMH* and *The Daily Telegraph* both had more coverage than Melbourne counterparts *The Age* and *Herald Sun*. Sydney had 157 articles and 95,581 words compared to Melbourne with 120 articles and 71,592 words. In other words, Sydney readers received 25% more words referencing the topic of climate science than Melbourne readers.

[Figure 4.2.3](#) again shows the very low levels of coverage in the *NT News* and *The West Australian* when compared to all other publications.

From the point of view of the number of words, the proportion allocated to articles with a climate science focus was 60% compared to the amount measured by number of articles, which was 55%.

Figure 4.2.3: Total word count of articles covering climate change science across 10 Australian newspapers from Feb. to Apr. 2011 & 2012.

Newspaper	Science	Science & policy	Grand total
The Advertiser	15021 (72%)	5911 (28%)	20932 (100%)
The Age	25341 (57%)	19061 (43%)	44402 (100%)
The Australian	62286 (59%)	43899 (41%)	106185 (100%)
The Courier Mail	17355 (77%)	5222 (23%)	22577 (100%)
The Daily Telegraph	12639 (40%)	18744 (60%)	31383 (100%)
Herald Sun	15915 (59%)	11275 (41%)	27190 (100%)
The Mercury	11735 (63%)	6874 (18609%)	18609 (100%)
The Northern Territory News	4365 (61%)	2810 (39%)	7175 (100%)
The Sydney Morning Herald	41959 (65%)	22239 (35%)	64198 (100%)
The West Australian	4489 (45%)	5399 (55%)	9888 (100%)
Total	211105 (60%)	141434 (40%)	352539 (100%)

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CONCLUSION

It is clear from these results that different audiences in different regions of Australia are receiving different amounts of information about climate science. While differences between the amount of coverage in publications are significant, a full explanation would require more research into overall quantities of journalism in each publication, the extent of variation over time and location due to

failing business models and a comparison across different fields of reporting. Nevertheless, these results confirm other research of Australian coverage of climate change by the authors and others which has established highly differentiated spatiality of news media flows and the comparative in/visibility of information and discussion to spatially and economically defined communities in Australia. (Bacon, W., & Nash, C.J., 2012; Bacon, W., & Nash, C.J., 2013).

4.3 Genre of climate science articles

Journalists treat issues in different ways according to the type of narrative being produced.

In order to gain a deeper understanding of the nature of the coverage, the articles that covered climate science articles were divided into four categories – news, features, comment/opinion and editorials.

News and features are traditionally focused on reportage and information delivery but can include comment as well. Features tend to be longer with more sources. Comment pieces (also called opinion) contain factual assertions as well as analytical, emotional and ideological content. Editorials represent the ‘voice’ of the publication and carry no by-line.

In practice however, as online media production develops, journalism genres are shifting and becoming less distinct. News now tends to include more opinion and descriptive or ‘colour’ (as journalists call it) language. More space tends to be given to commentary which is cheaper to produce.

Features have traditionally been seen as longer than news articles. For that reason, they are more likely to include a range of perspectives and sources. It was clear from our sample that this assumption is no longer well founded. In order to provide a clearer picture, we divided articles into three groups: *features* (More than 800 words); *Short features* (500 - 800 words); and *very short features* (Less than 500 words). Many articles in the very short features group were under 200 words. A genre of very short and highly opinionated features has emerged, which are labelled as ‘features’ in the Dow Jones Factiva database. *The Australian*, for example, has many such articles in its ‘*Cut and Paste*’ section.

Figure 4.3.1: Genre breakdown of articles covering climate science across 10 Australian newspapers Feb. - Apr. 2011 & 2012.

Newspaper	Comment	Editorial	Feature	News	Grand total
The Advertiser	15 (30%)	2 (4%)	6 (12%)	27 (54%)	50 (100%)
The Age	21 (30%)	6 (8%)	15 (21%)	29 (41%)	71 (100%)
The Australian	35 (24%)	7 (5%)	57 (40%)	44 (31%)	143 (100%)
The Courier Mail	7 (13%)	1 (2%)	10 (19%)	35 (66%)	53 (100%)
The Daily Telegraph	26 (40%)	2 (3%)	17 (26%)	20 (31%)	65 (100%)
Herald Sun	32 (65%)	1 (2%)	3 (6%)	13 (27%)	49 (100%)
The Mercury	13 (36%)	0 (0%)	5 (14%)	18 (50%)	36 (100%)
The Northern Territory News	7 (37%)	0 (0%)	2 (11%)	10 (53%)	19 (100%)
The Sydney Morning Herald	26 (28%)	5 (5%)	27 (29%)	34 (37%)	92 (100%)
The West Australian	4 (17%)	2 (8%)	4 (17%)	14 (58%)	24 (100%)
Total	186 (31%)	26 (4%)	146 (24%)	244 (41%)	602 (100%)

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As indicated by Figure. 4.3.1, the genre breakdown across the ten publications remained fairly stable across the two years. There were however marked differences between publications.

Slightly less than two thirds of articles were in the reportage categories of news and features. 41% were news articles.

No publication had an average of more than two news stories about climate science a week. Only *The Australian*, *SMH*, *The Courier Mail* and *The Age* averaged more than one news article about climate science a week.

31% of climate science stories were comment pieces, highlighting the significant role being played by opinion writers in contributing to community understanding and debates about climate change. Overall there was more commentary than features. Across all publications, most of the commentary was written by non-scientists.

The *Herald Sun* stood out with the highest proportion of commentary (65%) and the lowest levels of news (27%). The high levels of commentary in Australia's biggest circulation daily is partly explained by the dominant role of Andrew Bolt, a commentator and climate sceptic who also appears on radio and television. ([Bolt's role is further analysed in Section 4.6.](#))

The Australian had the highest proportion of features followed by the *SMH* and *The Age*. *The Australian* was the only publication with a higher proportion of features than comment pieces.

The Courier Mail had the highest proportions of news (66%) followed by *The Adelaide Advertiser*.

The *SMH* and *The Australian* had more editorials than other publications with 6 and 7 respectively.

NUMBER OF WORDS AND GENRE

The number of words was also used as a measure of the amount of space allocated to each genre.

From the perspective of wordcount, 44% of space was allocated to commentary compared to only 22% to news. The *Herald Sun* had the highest levels of space allocated to commentary with 80% of words allocated to comment pieces and only 11% allocated to news and 6% to features. The *Herald Sun* can be compared to *The Courier Mail* which carried 81% of news and features reportage with only 17% commentary. This suggests that the editorial policy in relation to climate science of the *Herald Sun* places a strong emphasis on attitude formation rather than information provision.

Figure 4.3.2: Total word count of articles covering climate science categorised by genre, across 10 Australian newspapers Feb. - Apr. 2011 & 2012.

Newspaper	Comment	Editorial	Feature	News	Grand total
The Advertiser	11330 (54%)	785 (4%)	3124 (15%)	5693 (27%)	20932 (100%)
The Age	18518 (42%)	4062 (9%)	11553 (26%)	10269 (23%)	44402 (100%)
The Australian	36108 (34%)	3680 (3%)	45895 (43%)	20502 (19%)	106185 (100%)
The Courier Mail	3763 (17%)	542 (2%)	8816 (39%)	9456 (42%)	22577 (100%)
The Daily Telegraph	18726 (60%)	362 (6%)	2445 (25%)	3796 (38%)	9888 (100%)
Herald Sun	22009 (80%)	576 (2%)	1685 (6%)	2920 (11%)	27190 (100%)
The Mercury	11216 (60%)	0 (0%)	3061 (16%)	4332 (23%)	18609 (100%)
The Northern Territory News	5155 (72%)	0 (0%)	607 (8%)	1413 (20%)	7175 (100%)
The Sydney Morning Herald	23994 (37%)	2842 (4%)	21636 (34%)	15726 (24%)	64198 (100%)
The West Australian	3044 (31%)	603 (6%)	2445 (25%)	3796 (38%)	9888 (100%)
Total	153863 (44%)	13452 (4%)	106072 (30%)	79152 (22%)	352539 (100%)

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Features

There were very low numbers of features of more than 500 words in all but *The Australian*, the *SMH* and *The Age* that target higher income readers. These readers tend to hold higher educational qualifications than lower income readers. While more research is needed, this suggests that in regards to climate science reporting, an information divide is being produced by the Australian media. These findings confirm the findings in [Sceptical Climate Part 1](#)

The Australian had more than twice as many features as any other publication. It published a total of 57 articles, of which 22 were between 500 and 800 words and 21 were more than 800 words. The *SMH* followed with 27 articles of which 16 were between 500 and 800 words. Only 7 were more than 800 words. *The Age* published fewer features than the *SMH*.

Of the NewsCorp tabloids, *The Daily Telegraph* had the most with 17 features but only 8 of these were over 500 words. Over the three-month period in 2012, *The Daily Telegraph* published only two articles referring to climate science that were more than 500 words.

The *Herald Sun* had very few features and only two that were longer than 500 words.

The Advertiser, *The West Australian*, *The Mercury* and the *NT News* also had very low levels of features. These publications are the dominant source news in South Australia, Western Australia, Tasmania and the Northern Territory.

Figure 4.3.3: Number and length of *feature articles* covering climate science across 10 Australian newspapers Feb. - Apr. 2011 & 2012.

Very short features : < 500 words

Short Features : Between 500-800 words

Features : > 800 words

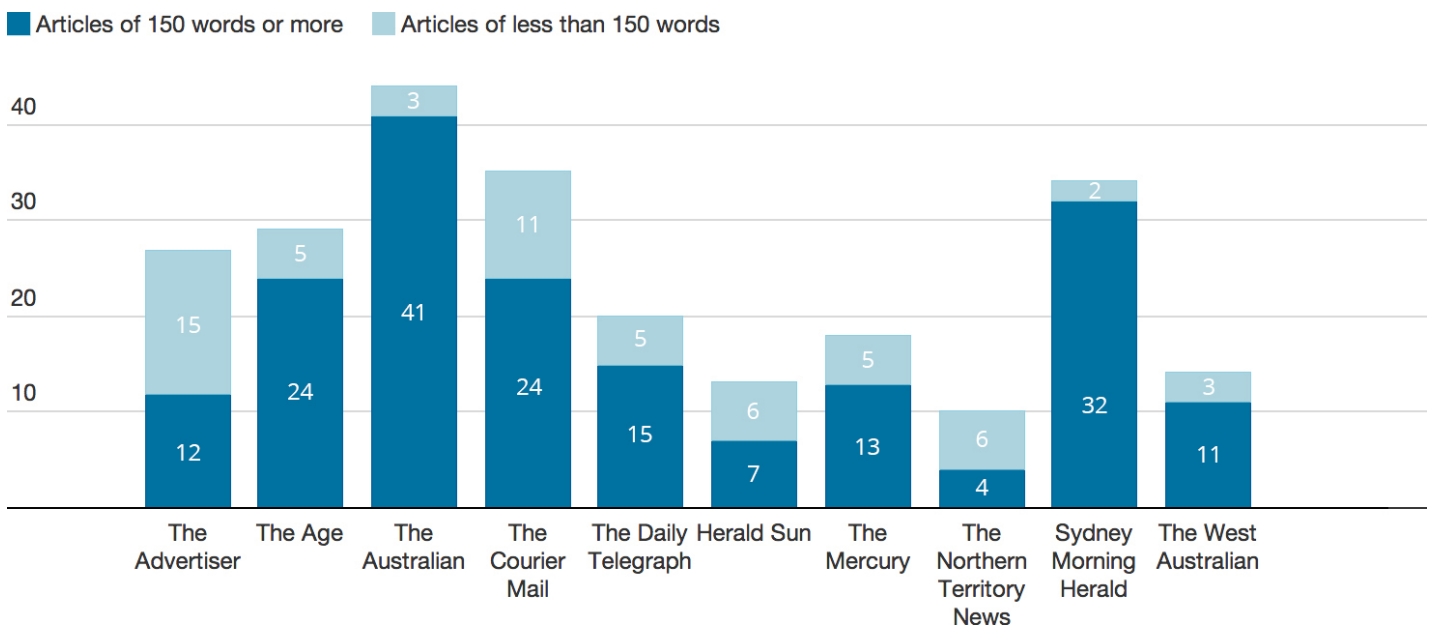
Newspaper	Very short features	Short features	Features	Grand total
The Advertiser	2 (33%)	4 (67%)	0 (0%)	6 (100%)
The Age	2 (13%)	7 (47%)	6 (40%)	15 (100%)
The Australian	14 (25%)	22 (39%)	21 (37%)	57 (100%)
The Courier Mail	1 (10%)	5 (50%)	4 (40%)	10 (100%)
The Daily Telegraph	9 (53%)	5 (29%)	3 (18%)	17 (100%)
Herald Sun	1 (33%)	1 (33%)	1 (33%)	3 (100%)
The Mercury	1 (20%)	2 (40%)	2 (40%)	5 (100%)
The North Territory News	2 (100%)	0 (0%)	0 (0%)	2 (100%)
Sydney Morning Herald	4 (15%)	16 (59%)	7 (26%)	27 (100%)
The West Australian	1 (25%)	2 (50%)	1 (25%)	4 (100%)
Total	37 (25%)	64 (44%)	45 (31%)	146 (100%)

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News

News articles vary in length. Very short articles are more likely to quote no sources or only one source than longer articles, thus narrowing the range of perspectives and explanation offered to the reader.

Figure 4.3.4: Number and length of news articles covering climate science across 10 Australian newspapers Feb. - Apr. 2011 & 2012.



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Figure 4.3.4 divided the news articles into those with more than 150 words and those with less than 150 words. Of 244 news articles, 61 or 25% were less than 150 words long. *The Australian*, the *SMH* and *The Age* had a low proportion of news articles that were less than 150 words.

The low levels of news in the *Herald Sun* have been noted above. Of 13 news articles in the *Herald Sun* only 7 were more than 150 words. *The Daily Telegraph* had 15 news articles of more than 150 words which was twice as many than the *Herald Sun*. Only the *NT News* with four had less news articles of more than 150 words than the *Herald Sun*.

These findings highlight the low levels of news about climate science received by Australian audiences over this period.

The stance of the coverage in relation to the climate science consensus position will be further analysed in [Section 4.6, *Scepticism and climate change coverage*](#).

Note:

It is possible that Fairfax media and news.com.au republished some wire news stories about climate science on their websites during this period. If so, these are not captured by this analysis. This is a low cost way of adding information and value to the publication during the ongoing crisis in the business model that supports corporate journalism. These stories rarely feature prominently on websites. While these articles do add to the overall stock of published information, reliance on wire service copy has implications for readers as wire stories are less likely than items produced in-house to contain additional material supplied by reporters that might contextualise research in local contexts. There is also less likely to be follow-up stories on further developments in the relevant research.

4.4 Prominence of climate science coverage

News editors tend to give more prominence to stories which break news or are closely tied to the ongoing news agenda. In print media, significant stories tend to be published towards the front of publications or specific sections within the publication.

In order to find what prominence editors attached to coverage of climate science, articles were coded according to where they were placed in the publication - on the front page, the first 8 pages or after page 8.

Overall, the Australian news media did not feature stories about climate science prominently during February to April in 2011 and 2012.

There were only 26 front-page articles across all publications referencing climate science during this period. 17, or nearly two-thirds of these, appeared in 2012.

Approximately 70%, or over two-thirds, of articles referring to climate science appeared after page 8 during both periods.

Tabloid newspapers were more likely to place articles after page 8, with all News Corp tabloids carrying more than 80% of their stories after page 8. The *Herald Sun*, *The Courier Mail* and *The Advertiser* had more than 90% of stories after page 8.

Figure 4.4.1: Placement of climate science articles, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	After page 8	First 8 pages	Front page	Grand total
The Advertiser	46 (92%)	4 (8%)	0 (0%)	50 (100%)
The Age	38 (54%)	29 (41%)	4 (6%)	71 (100%)
The Australian	82 (57%)	48 (34%)	13 (9%)	143 (100%)
The Courier Mail	50 (94%)	3 (6%)	0 (0%)	53 (100%)
The Daily Telegraph	56 (86%)	8 (12%)	1 (2%)	65 (100%)
Herald Sun	48 (98%)	1 (2%)	0 (0%)	49 (100%)
The Mercury	30 (83%)	5 (14%)	1 (3%)	36 (100%)
The Northern Territory News	17 (89%)	2 (11%)	0 (0%)	19 (100%)
The Sydney Morning Herald	38 (41%)	47 (51%)	7 (8%)	92 (100%)
The West Australian	13 (54%)	11 (46%)	0 (0%)	24 (100%)
Total	418 (69%)	158 (26%)	26 (4%)	602 (100%)

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The Australian had 13 front page stories, which was more than any other publication. Three of these articles were later coded as questioning the scientific consensus on climate change.

The *Herald Sun*, *The Courier Mail*, *NT News*, and *The West Australian* had no front page stories.

The *SMH* was more likely than any other publication to publish articles prominently. It published 8% of articles (7) on the front page. All of these assumed a consensus position on climate change. 51% of *SMH* articles were on pages 2 - 8.

4.5 Reporting of peer reviewed research

Journalists and editors select their stories and sources of information according to news criteria, editorial policy, space and time constraints. In choosing expert sources, journalists draw on markers of status and experience.

One example of this is the use in news articles of research published in peer-reviewed journals. Journalists assume that because research that has been peer-reviewed is subject to review, it is likely to be reliable. This is not to suggest that journalists should not report other scientific findings or that peer reviewed findings should not be critiqued and discussed.

In [Section 3 Background](#), the nature and importance of peer reviewed scientific research was briefly discussed.

In practice, much science news reporting is heavily reliant on press releases from peer-reviewed science journals. Previous research has shown that newspapers regularly publish these with little or no follow-up by reporters. ([ACIJ/Crickey, 2009](#)). For those reporters who do have the time or desire to follow up peer-reviewed science reports further, it is now possible to search journal websites for previous work by authors and comments by other scientists on the research.

Articles were examined to see whether the reporter explicitly referenced a peer-reviewed journal or other peer reviewed research. 61 or almost 10% of articles referring to peer reviewed scientific journals or other sources of peer reviewed research were identified. (It may be that some other research referred to by reporters was peer-reviewed.)

48 or 79% of these were published in four of the ten publications - *The Australian*, *The Age*, the *SMH* and *The Advertiser*. *The Australian* published 14 articles referencing peer-reviewed research, more than any other publication.

No article referencing peer-reviewed research was identified in *The Daily Telegraph*. *The Herald Sun* made only one reference across the two periods. *The West Australian* and *The Mercury* did so once in each period.

Figure 4.5.1: Number of articles that relied on peer reviewed climate science publications, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	No	Yes	Grand total
The Advertiser	40	10	50
The Age	59	12	71
The Australian	129	14	143
The Courier Mail	45	8	53
The Daily Telegraph	65	0	65
Herald Sun	48	1	49
The Mercury	34	2	36
The Northern Territory News	19	0	19
Sydney Morning Herald	80	12	92
The West Australian	22	2	24
Total	541	61	602

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More than half of the 61 mentions were from [Science](#) Journal (17) and [Nature](#) Journal (15). In all, 15 different peer reviewed journals were mentioned in the 602 articles.

The low levels of peer-reviewed science reporting may reflect a tendency found by other researchers for reporters to focus on major events such as conferences rather than the release of scientific research. (Boykoff, M.T., 2010).

Given that 97% of climate scientists support the consensus position that human activity has contributed to climate change, it is not surprising that most reports relying on peer reviewed journals assume the consensus position. It should not be assumed however, that simply because a story references a peer-reviewed journal, it will necessarily be supportive of the consensus position, as the examples below illustrate. Five of 61 articles relying on peer-reviewed research that supported the scientific consensus either questioned or rejected the consensus position on human induced climate change. All of these were in News Corp publications.

EXAMPLES OF ARTICLES REFERRING TO PEER REVIEWED RESEARCH JOURNALS

Herald Sun and Cyclone Yasi

Only one mention of a peer-reviewed science journal was identified in the *Herald Sun*. This single mention occurred in a comment piece by Andrew Bolt in the context of an attack on the Greens Senator Christine Milne, economist Professor Ross Garnaut and others who had been quoted linking Cyclone Yasi, which hit the Queensland coast in February 2011, with climate change. Bolt supported his attack with a positive reference to the work of climate sceptic physicists Robert Knox and David Douglass of the University of Rochester, New York

who had published a paper entitled '[Recent energy balance of Earth](#)' in the *International Journal of Geosciences* in November 2010 claiming that there was no statistically significant warming of the oceans since 2003. Bolt did not inform his readers that this research was very controversial in the scientific community and had already been described by leading climate scientist Kevin Trenberth as '[rubbish](#)'. This may have been because he regards no climate scientist who accepts human induced climate change as having any credibility. The research paper of Knox and Douglas was discussed positively on many climate sceptic websites.

SMH, Extreme Weather and Climate Change

On April 27 2012, Deborah Smith, then a senior science reporter for the SMH, produced a news story '[Extremes in weather more likely - scientists](#)' about a study reported by *Science* magazine that found wet areas of the globe have "become wetter and dry areas drier during the past 50 years due to global warming". The researchers measured the saltiness of the world's oceans and found that "the intensification of rainfall and evaporation patterns, which is occurring at twice the rate predicted by climate change models, could increase the incidence and severity of extreme weather events in future". Smith interviewed four of the research team, including two from Australian research organisation CSIRO. This story stood out from others because of the number of sources quoted.

An edited shortened version of the Smith article with only one source was also published in [The Age](#). No other publication published this story.

Warm Water Shrinking Antarctica's Ice Shelves

Also on April 27, 2012, *The Advertiser* published a story ['Warm water shrinking Antarctica's ice shelves'](#) based on a research report in the journal *Nature*.

This article, which was well reported in international and [specialist science media](#), began: "Antarctica's massive ice shelves are shrinking because they are being eaten away from below by warm water, a new study has found." The rest of the report explained that the researchers, who had previously been sure about why the "western chunk of Antarctica is losing 7m of its floating ice sheet each year", had found by using new measuring tools that climate change was playing an "indirect role - but one that has larger repercussions than if Antarctic ice merely were melting from warmer air".

No other publication in the sample reported on this study. A Factiva search identified that a very short version of the same report did appear in two editions of News Corp's free publication *MX*. An AP [wire service story](#) about this research was also published online, but did not appear in the print version of *SMH* or *The Age*.

A shortage of space can explain why significant information remains unreported, especially when editors are selecting from a wide range of wire service news. However further Factiva research revealed almost no further reports on Antarctic climate change research.

In September 2013, only the [SMH reported that the IPCC had found that Antarctic melt had increased its contribution to sea level rise](#). *The Conversation* provided more detail in its report ['IPCC: where to for Antarctica and the Southern Ocean?'](#).

CONCLUSION

This analysis shows that during this period, some Australian audiences and some regions received far more information from peer-reviewed research sources about climate science from their local mainstream print media than others. Most audiences receive little information at all.

The use of wire service copy to fill editorial gaps means that there is little chance of audiences receiving updates on further research developments.

Reporters are given few opportunities to follow up on peer reviewed research by interviewing further sources who can add perspectives to journal press releases.

4.6 Scepticism and climate science coverage

Recent research has found that nearly all scientists agree that increased greenhouse emissions due to human activity are causing climate change ([See background section](#)). A key issue in this study was to establish the extent to which reporting of climate science in ten Australian publications communicated an acceptance of the consensus position.

BACKGROUND

Given the high rate of scientific consensus that the activities of human beings are the main contributors to global warming, one might expect the reporting to mirror that conclusion. Journalists generally tend to rely on authoritative sources in their reporting. (Hall, S., et al, 1978; Ericson, R., et al., 1989; Roberts, J., & Nash, C.J., 2009). This pattern generally applies to science and environmental reporting (Conrad, P.,1999; Lester, L., 2010). In other words, science reporters tend to follow the general pattern of reporting what people of power, status or expertise tell them.

Previous research shows however that when there is an overt political controversy over the implications of scientific findings threatening powerful economic interests (For example, the debate about tobacco use being causally linked to cancer), journalists tend to amplify conflict and uncertainty about the evidence (Orestes, N., 2010).

Studies of international media coverage of climate science have shown that journalists have amplified uncertainty about climate science by over-reporting and emphasising the views of those who reject the consensus view (Boykoff, M.T., & Boykoff, J.M., 2004; Boykoff, M.T., & Boykoff, J.M., 2007; Chubb, P.A., & Nash, C.J., 2012).

Some attribute over-reporting of climate sceptic views to the application of the journalistic norm of balance or giving 'both sides of the story'. However patterns are not consistent across journalistic cultures. There are different styles of reporting climate science in different national contexts (Brossard, D., et al., 2004) and between publications within national contexts (Bacon, W., & Nash, C.J., 2004; Bacon, W., & Nash, C.J., 2013). There is nothing 'routine' or 'natural' about the way in which the journalistic norm of 'balance' is applied in justifying the inclusion of sceptical voices and perspectives in climate science reporting.

Researchers who have further investigated these patterns have found that political values and economic interests underpin editorial stances about climate change and journalists' selection of relevant 'facts' and 'authorized agents of definition' of scientific issues (Myers, A., 2013; McKnight, D., 2012; Nash, C.J., & Bacon, W., 2012). Seen in this light, arguments that favour the use of climate sceptic sources in order to achieve 'balance' can arguably be seen as demonstrating an ideologically motivated lack of professionalism in failing to 'compare like with like' in the supposed balance.

In 2011, the Reuters Institute for the Study of Journalism published a report comparing the coverage of climate sceptic voices in the print media in Brazil, China, France and India, the United Kingdom (UK) and the United States (Painter, J., 2011). The study found that there were more sceptic voices in selected UK and US press and these voices were more likely to be politicians than in the other countries. Sceptic voices, which were mostly found in the opinion pages compared to the news pages, were more prevalent in right-leaning than left-leaning media. For example in the UK, the left leaning *Guardian-Observer* had fewer articles with sceptical voices than the right-leaning *Daily Mail* and *Sunday Telegraph* (11% compared to 19%). A key conclusion of this research was:

“In general the data suggests a strong correspondence between the perspective of the newspaper and the prevalence of sceptical voices within it, particularly on the opinion pages. By most measures (but not all), the more right-leaning tend to have more such voices, the left leaning less.” (Painter, J., 2011, p.4)

It should be noted that this study differs from the ACIJ studies as it focuses only on skepticism rather than skepticism as an aspect of reporting the coverage of climate science.

Further discussion about the application of balance in journalism can be found in the [Background Issues section](#).

CODING OF ARTICLES

Assessing levels of scepticism is not a straightforward issue. The author agrees with Boykoff’s recent article that argues that researchers need to be alert to different forms of scepticism (Boykoff, M.T., 2013). For instance, there is a difference between arguing the scientific consensus position is a hoax and arguing that there is insufficient or inadequate evidence to support it.

The researchers analysed every article to establish whether it communicated agreement or disagreement with the consensus position. The use of these two basic categories was found to be too simplistic. Four categories were developed for coding:

- **Accepted:** These articles communicated acceptance of the consensus position either explicitly or implicitly.
- **Rejected:** These articles outright rejected the consensus scientific position on anthropogenic global warming, e.g. by calling it a hoax.

- **Suggested doubt:** These articles communicated doubt by suggesting for example, that there was insufficient evidence for, or substantial debate in the scientific community about, the existence of anthropogenic global warming.
- **Unable to discern:** Coders were not able to allocated the article to one of the other categories (very small number of articles).

The level of scepticism was measured as a proportion of the proportion of articles that 'rejected' or 'suggested doubt' about the consensus position. Neither of these categories accept the consensus position.

This approach to measuring the level of scepticism may be regarded by some as overly conservative. Some articles may be written in a way that highlights scientific uncertainty although there is an acknowledgement of the consensus position towards the end of the story. There were more such articles in *The Australian* than any other publication. If an article either assumed the consensus position or included a quote that was a clear statement from an authoritative source accepting the consensus position, it was coded as 'accepts', even though it may have been interpreted as undermining the claims of climate scientists or those arguing for change. Some readers may be more susceptible than others to messages about the failings of climate scientists.

Other articles which were about the climate skeptic movement also needed careful coding. Climate scepticism is a movement that needs to be covered in the same way as any other political movement. Articles can quote climate sceptic sources in ways that make it clear that the reporter is not promoting the source's perspective. These articles were coded as accepting the consensus. Other journalists may structure an article to communicate climate science as an open debate. These articles were coded as 'suggesting doubt'. Coding was

difficult in some cases. Where there was lack of agreement or uncertainty, coding was checked and further discussed before the article was finally assigned to a category.

SCEPTICISM FINDINGS

65%, or a little less than two-thirds, of articles across both periods were produced in a way which communicated to the reader an acceptance of the climate change consensus position. This underrepresents the agreement amongst more than 97% of scientists that human activity is a causal factor in climate change.

In 3% of cases, coders were not able to discern whether or not the author of the article was communicating acceptance or not.

65 or 11% of articles clearly rejected the notion of anthropogenic climate change and a further 21% were interpreted as suggesting doubt about it. In another words, 32% or nearly one-third of all articles either rejected or suggested doubt about the consensus position.

Figure 4.6.1: Breakdown of articles according to whether they communicated acceptance, suggested doubt or rejected the consensus position on climate science, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	Accepts	Suggests doubt	Rejects	Unable to discern	Grand total
The Advertiser	32 (64%)	9 (18%)	5 (10%)	4 (8%)	50 (100%)
The Age	59 (83%)	6 (8%)	1 (1%)	5 (7%)	71 (100%)
The Australian	74 (52%)	60 (42%)	7 (5%)	2 (1%)	143 (100%)
The Courier Mail	48 (91%)	1 (2%)	1 (2%)	3 (6%)	53 (100%)
The Daily Telegraph	24 (37%)	20 (31%)	21 (32%)	0 (0%)	65 (100%)
Herald Sun	15 (31%)	10 (20%)	23 (47%)	1 (2%)	49 (100%)
The Mercury	32 (89%)	2 (6%)	1 (3%)	1 (3%)	36 (100%)
The Northern Territory News	11 (58%)	4 (21%)	4 (21%)	0 (0%)	19 (100%)
The Sydney Morning Herald	79 (86%)	9 (10%)	1 (1%)	3 (3%)	92 (100%)
The West Australian	20 (83%)	3 (13%)	1 (4%)	0 (0%)	24 (100%)
Total	394 (65%)	124 (21%)	65 (11%)	19 (3%)	602 (100%)

2013-11-08: This table has been updated to correct an earlier copying error in The Age row. The error did not effect the key findings or analysis.

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Contrary to increasing certainty that human activity causes climate change, the acceptance level for that position dropped from 70% in 2011 to 60% in 2012 across the sample of articles.

The number of articles rejecting the consensus grew from 27 (8%) in 2011 to 38 (14%) in the 2012 sample. So although the overall number of articles fell, the number rejecting the consensus increased. In 2012, 36%, or more than one third of the articles either suggested doubt or rejected the consensus position compared to 22% in 2011.

Figure 4.6.2: Breakdown of articles, by word count, according to whether they communicated acceptance, suggested doubt or rejected the consensus position on climate science, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	Accepts	Suggests doubt	Rejects	Unable to discern	Grand total
The Advertiser	10559 (50%)	4947 (24%)	4349 (21%)	1078 (5%)	20932 (100%)
The Age	36931 (83%)	4479 (10%)	742 (2%)	2250 (5%)	44402 (100%)
The Australian	52422 (49%)	48116 (45%)	5248 (5%)	399 (<1%)	106185 (100%)
The Courier Mail	20759 (92%)	529 (2%)	726 (3%)	563 (2%)	22577 (100%)
The Daily Telegraph	8576 (27%)	9384 (30%)	13423 (43%)	0 (0%)	31383 (100%)
Herald Sun	4017 (15%)	5977 (22%)	15988 (59%)	1208 (4%)	27190 (100%)
The Mercury	16958 (91%)	408 (2%)	966 (5%)	277 (1%)	18609 (100%)
The Northern Territory News	2750 (38%)	1289 (18%)	3136 (44%)	0 (0%)	7175 (100%)
Sydney Morning Herald	56918 (89%)	5049 (8%)	828 (1%)	1403 (2%)	64198 (100%)
The West Australian	7680 (78%)	1839 (19%)	369 (4%)	0 (0%)	9888 (100%)
Total	217570 (62%)	82016 (23%)	45775 (13%)	7178 (2%)	352539 (100%)

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The overall drop in words between 2011 and 2012 was 38%. However while the words allocated to articles which accepted the consensus position almost halved, the number of words allocated to articles which rejected the consensus position increased.

66% of the word count was in articles which communicated an acceptance of the consensus position in 2011 compared to 54% in 2012, whereas the percentage of words allocated to articles that rejected the consensus position rose from 9% to 19%.

The words count in articles which questioned the consensus also dropped but remained approximately the same proportion of the total sample.

To summarise, there was an overall drop in words on the issue, which was concentrated in the word count in articles which accepted the consensus position; the word count of articles promoting climate scepticism increased.

Further research is needed to see if decline in the communication of acceptance has continued or changed since April 2012. There is also a need for research to establish how failing media company business models are impacting on levels of reporting, including whether some rounds or specific topics are affected more than others.

When considered from the point of view of the level of the acceptance of the consensus position, there are very distinct differences between different publications and between News Corp and Fairfax Media as groups which will be further examined in [section 4.7](#).

Only 10% of articles in the Fairfax media either rejected or suggested doubt on the consensus position which is far lower than the 41% of News Corp articles that either rejected or suggested doubt the consensus position. When measured according to word count, News Corp allocated 49% to material that rejected (19%) or suggested doubt (30%) compared to the percentage (50%) of articles that accepted the consensus position.

There are only two cities in Australia where there are competing Fairfax and News Corp publications - Sydney and Melbourne. More analysis of how these publications compared in their coverage of climate science is found in [section 4.7](#).

Across the ten publications, more words (45, 775 or 13%) were allocated to articles that rejected the climate science consensus position compared to the number words in articles that referred to peer reviewed climate science research based on the consensus position (27,748 or 8%).

Articles Rejecting the Consensus Position

68% or more than two-thirds of the articles rejecting the consensus were published in News Corp's *Herald Sun* (23) and *The Daily Telegraph* (21). A further 5 were published in *The Advertiser*, 4 in the *NT News*, 7 in *The Australian*. In other words, half of the ten publications, all owned by News Corp, published 92% of the articles rejecting the consensus position.

On the other hand, News Corp's *The Courier Mail* and *The Mercury* both published only one article each that rejected the consensus position. *The West Australian* also only published one clearly sceptic article although its overall level of coverage of climate change was very low.

Unlike News Corp, Fairfax Media accepts the consensus position on climate science. It does not promote scepticism. The *SMH* and *The Age* published only [one article](#) each rejecting the consensus period across both periods. Both were comment pieces by the climate sceptic & ex-Coalition Senator Nick Minchin published on the occasion of a documentary '[I Can Change Your Mind About Climate](#)' broadcast by the ABC that featured Minchin and climate change advocate Anna Rose.

An earlier study comparing *The Daily Telegraph* and the *SMH* in December 2009 identified only two articles by climate sceptics in Fairfax Media compared to far more in the News Corp publication. (Chubb, P.A., & Bacon, W., 2010).

Creating Doubt about the Scientific Consensus

The Australian was more likely than any other publication to suggest doubt on the consensus position. 52% of its articles were coded as accepting the consensus position and only 5% rejected it. However, 42% of articles were produced in a way that could raise questions or suggest doubt in the mind of the reader about the consensus position. So nearly half (47%) of articles in *The Australian* either suggested doubt or rejected the consensus position.

The Australian allocated substantially far fewer words to articles accepting the consensus position in 2011 than 2012: the number of words declined by more than 55% from 36, 056 to 16, 366. From the perspective of word count, *The Australian* was more sceptical in 2012 than 2011, with 59% of the words allocated to climate change coverage either suggesting doubt or rejecting the consensus in 2012. (For more on *The Australian's* coverage of climate change see [Section 4.8](#)).

The *SMH* and *The Age* published only 9 and 6 articles respectively which might have suggested to the reader that the climate science consensus position was in doubt.

Example of comment pieces that could create doubt

An example of an article creating doubt: on March 27, 2011 the *SMH* published an opinion piece '[Climate change can't be stopped, but we can adapt](#)' written by Institute of Public Affairs research fellow Chris Berg who argued: "If the past is any guide to the present, that's how

we'll deal with further changes in climate (whether caused by human activity or not): through adaptation." While this piece opposed the Gillard government's carbon emissions trading scheme, it mostly was written as if climate change was occurring but clearly left open the possibility that it might not be anthropogenic.

In another example, on April 19, 2012 *The Age* published a piece about a documentary about the debate around climate change called ['I Can Change Your Mind About Climate'](#). The article highlighted the thesis of the film which was that positions on climate change are largely formed by personal values. While a legitimate story, a reader who was not already familiar with the evidence for anthropogenic climate change could conclude that its existence was in doubt. This article is a good example of how pro-climate sceptic campaigns achieve part of their success by simply by forcing climate scepticism onto the news agenda and turning it into a story for reporters who might otherwise be covering impacts of climate change on the environment or climate policy developments.

Example of a news report that could create doubt

The leader of the Catholic Church in Australia Cardinal George Pell made a submission to the Senate Estimates Committee claiming that increases in carbon dioxide tended to follow rises in temperature, not to cause of them. He also stated, on the basis of having read *Heaven and Earth*, a book by climate sceptic Professor Ian Plimer, that temperatures [were higher in the Middle Ages](#).

On February 21, 2011, the head of the Australian Bureau of Meteorology, Dr. Greg Ayers, appeared before a Senate Committee. During his evidence, [he spoke at length](#) about how Cardinal Pell had been misled by Plimer.

A month later, on March 28, 2011 *The Advertiser* took up the story in an article headlined 'Cardinal George Pell wrong on climate change, says Bureau of Meteorology director'. It began:

"Adelaide scientist Ian Plimer's support for Cardinal George Pell's climate-change view has sparked a dispute between the priest and the weatherman. Bureau of Meteorology director Dr Greg Ayers said the country's most senior Catholic had been "mised" in his views, in which he questions the connection between carbon dioxide and rising temperatures, by Professor Plimer's book 'Heaven and Earth - Global Warming: The Missing Science'."

Cardinal Pell is quoted in the article as saying that Dr Ayers was a "hot-air specialist". He was supported by Professor Plimer, based at the University of Adelaide, who was quoted as saying it was entirely appropriate that Cardinal Pell should express his views on climate change:

"The Cardinal represents 30 per cent of the people in this country," Professor Plimer told The Advertiser. "He is concerned about the potential economic effect of this issue and has every right to ask whether his flock is going to survive. ""

The majority of this news article recorded the views of Cardinal Pell and Professor Plimer. This article was coded as creating 'doubt about the consensus position' although the headline (Which would have been produced by a sub-editor rather than the reporter) could be read as suggesting that Pell was wrong.

This article also provides an example of the dilemma for reporters when climate sceptics are well known to the public. Articles about public figures tend to be newsworthy. The reporter could however have reported the story in a way that gave readers as much information about Dr Ayers' statements about why he thought

Cardinal Pell was mistaken as was given to Cardinal Pell and Professor Plimer, especially as readers could not be assumed to know Dr Ayer's position as the paper had not previously covered the story.

Comparison of article genres according to stance on climate change consensus position

[Figure 4.6.3](#) shows a breakdown of total sample by genre according to whether articles accepted, rejected or questioned the consensus position. This shows that the highest proportion of scepticism was in the 'comment' category (Further details of levels of comment or opinion pieces can be found in [section 4.3](#)).

More than half of all comment pieces produced across the ten publications rejected or questioned the consensus position. Nearly a third clearly rejected it. 20% of pieces explicitly rejected the consensus position in 2011 compared to 44% in 2012.

This compares with more than 80% of the news that was produced in a way that explicitly adopted or assumed the consensus position. (This finding needs to be considered in the light of the very low levels of climate science news in some publications. [See section 4.3 on genre.](#))

Figure 4.6.3: Breakdown of articles by genre and whether they communicated acceptance, suggested doubt or rejected the consensus position on climate science, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	Accepts	Suggests doubt	Rejects	Unable to discern	Grand total
Comment	87 (47%)	40 (22%)	57 (31%)	2 (1%)	186 (100%)
Editorial	16 (62%)	9 (35%)	1 (4%)	0 (0%)	26 (100%)
Feature	94 (64%)	44 (30%)	5 (3%)	3 (2%)	146 (100%)
News	197 (81%)	31 (13%)	2 (1%)	14 (6%)	244 (100%)
Total	394 (65%)	124 (21%)	65 (11%)	19 (3%)	602 (100%)

[Download data as .csv](#) or [view on GitHub](#)

Nearly two thirds or 94 features accepted the consensus position. 50% of features over 500 words were published by Fairfax Media's the *SMH* (36%) and *The Age*. 90% of these were based on an acceptance of the consensus position. 54% of features in *The Australian* were produced in a way that could create doubt in readers about the accepting the consensus position.

How comment pieces are used to build support for climate scepticism

Note: The words 'comment' and 'opinion' will be used interchangeably in this section.

Comment pieces in the media give writers and broadcasters an opportunity to persuade readers to adopt particular positions on issues. The aim of the comments pieces can be as much about building attitudes as delivering information; this is particularly the case when issues are hotly contested politically.

Climate change opinion pieces are frequently republished across other mastheads and discussed on talkback radio and blogs.

Figure 4.6.4: Breakdown of comment/opinion articles according to whether they communicated acceptance, suggested doubt or rejected the consensus position on climate science, across 10 Australian newspapers from Feb. - Apr. 2011 & 2012.

Newspaper	Accepts	Suggests doubt	Rejects	Unable to discern	Grand total
The Advertiser	7 (47%)	3 (20%)	5 (33%)	0 (0%)	15 (100%)
The Age	15 (71%)	5 (24%)	1 (5%)	0 (0%)	21 (100%)
The Australian	17 (49%)	14 (40%)	4 (11%)	0 (0%)	35 (100%)
The Courier Mail	4 (57%)	1 (14%)	1 (14%)	1 (14%)	7 (100%)
The Daily Telegraph	4 (15%)	5 (19%)	17 (65%)	0 (0%)	26 (100%)
Herald Sun	1 (3%)	8 (25%)	23 (72%)	0 (0%)	32 (100%)
The Mercury	12 (92%)	0 (0%)	1 (8%)	0 (0%)	13 (100%)
The Northern Territory News	1 (14%)	2 (29%)	4 (57%)	0 (0%)	7 (100%)
The Sydney Morning Herald	24 (92%)	0 (0%)	1 (4%)	1 (4%)	26 (100%)
The West Australian	2 (50%)	2 (50%)	0 (0%)	0 (0%)	4 (100%)
Total	87 (47%)	40 (22%)	57 (31%)	2 (1%)	186 (100%)

[Download data as .csv](#) or [view on GitHub](#)

As [Figure 4.6.4](#) shows the *Herald Sun* was extremely biased in its commentary on climate change. Only 1 (3%) opinion piece relevant to climate science in the *Herald Sun* was positive. 23 (72%) opinion pieces clearly rejected the consensus and 8 opinion pieces raised doubts about it. The results of this report show that *Herald Sun* readers received on average, close to one article per week over the six month

period that made reference to what it describes as ‘alarmist’ climate science. Some of these pieces dealt specifically with climate science, [others discussed climate change in the context of more general political commentary.](#)

The Daily Telegraph published 17 comment pieces (65%) which made overt statements rejecting the climate science consensus position with another 5 (19%) as questioning the consensus position. By contrast, *The Mercury* published only one sceptical column, which was by News Corp columnist Piers Akerman. In contrast to all other News Corp publications, *The Mercury* has a regular environmental columnist Peter Boyer who frequently publishes pieces which strongly advocate an acceptance of the climate science consensus position and action on climate change.

As previously stated in this report, Fairfax Media rarely publish stories promoting the climate sceptic position.

The *SMH* carried 26 opinion pieces altogether, only one of which rejected the consensus position. There were authored by 19 separate opinion writers. At least 15 pieces were written by in house journalists or regular columnists, a number of whom are no longer with Fairfax Media.

The Age published 21 comment pieces. At least 12 of these were produced by senior Fairfax reporters or regular opinion writers, all of whom accepted the consensus position. The newspaper also published pieces by well known advocates of the consensus position including Clive Hamilton and Guardian columnist George Monbiot.

The Age published one piece, written by well known sceptic Nick Minchin, that rejected the consensus position.

Several of *The Age* pieces were coded as raising doubts about the consensus position. For example, on March 29, 2011, *The Age* published [an article by industry analyst Martin Fell about the merits of an emission trading scheme](#), included these words in the first paragraph:

“This is not an article that promotes climate change scepticism. I am not a denier. Like 99 per cent of the population, I am a don't knower.”

While this article was coding as ‘suggesting doubt’ rather than as ‘rejecting the consensus’, Martin Fell co-authored a book in 2013 titled, [Taxing Air: Facts and Fallacies about Climate Change](#), with fellow sceptics Bob Carter, Bill Kininmonth, *The Age* cartoonist Bill Spooner, Steven Franks and Bill Leyland.

On April 19, 2012 *The Age* published a piece about a documentary on the debate around climate change called [‘I Can Change Your Mind About Climate’](#). This article was coded as ‘questioning the consensus’ for reasons discussed above. However, a week later *The Age* published a strong piece by West Australian cognitive scientist [Stephen Lewandowsky](#) specifically urging readers not to “get bogged down by deniers. Focus instead on the integrity of the science.” ([Read article here](#))

This piece directly tackled the question of ‘false balance’ in the Australian media and criticised the documentary makers for perpetuating the idea that there were two sides in the climate science debate:

“This mistaken quest for balance represents a core failure of parts of the Australian media and it permeates tonight's documentary in multiple ways.

The ads for the show refer to “believers” and “sceptics”, which ignores the fact that science is the most sceptical endeavour known to humankind and which confuses scientific knowledge with matters of belief.

Balancing science with “scepticism” is akin to designing a moon mission by balancing the expert judgment of astronomers with the opinions of the tabloid horoscope.

To recognise this false balance one needs to look no further than tonight’s documentary and cast a sceptical eye over the “experts” in Minchin’s corner: They include a couple with no relevant training or peer-reviewed publications, whose idea of scientific debate is to post picture books of thermometers on the internet “to undermine the credibility of the establishment climate scientists.”

35 opinion pieces were published in *The Australian* during the period covered by this report. 17 (6 in 2012), or a little less than half of these were coded as communicating acceptance of the consensus position, 14 (10 in 2012) as communicating doubt about it and 4 (3 in 2012) as rejecting it.

As with its overall reporting, *The Australian’s* opinion pieces tended to be more sceptical in 2012 than 2011. During this period, *The Australian* published pieces by Bob Carter, Bill Kininmonth and David Evans who are all members of the climate sceptic organisation [Climate Action Coalition](#). Regular columnist Chris Pearson also produced climate sceptic pieces until he died in 2013. Unlike at Fairfax Media, very few reporters at *The Australian* produced opinion pieces about climate change. (This may suggest that few reporters at *The Australian* share its sceptic editorial stance.). Two journalists Mike Steketee (who has since left News Corp) and Graham Lloyd each produced a piece that communicated clear acceptance of the consensus position.

[Section 4.8](#) contains a more detailed case study of *The Australian's* reporting of climate change for three months in 2011.

Climate Scepticism in Newscorp Tabloids - the role of the Herald Sun

The newspaper that most actively promotes climate scepticism is also the biggest selling newspaper in Australia, the *Herald Sun*. Only 15 articles over three months in 2011 and 2012 published by the *Herald Sun* accepted the proposition that human beings are contributing to climate change; 47% or 23 articles rejected the proposition. In all, 67% of articles either rejected or questioned the consensus position.

Considered from the point of view of words, the position is even more extreme. Only 15% (4017 words) of the words published by the *Herald Sun* were in articles which communicated an acceptance of the consensus position and 3029 of those words were in 2011. In 2012, 77% of words published by the *Herald Sun* which referred to climate science rejected the consensus position.

The *Herald Sun* commentary was even more biased. Of 32 opinion pieces published by the *Herald Sun*, only one accepted the consensus position. 23 pieces (72%) rejected it and 25% communicated doubts about the consensus position.

The next most sceptical publication is *The Daily Telegraph*, that published 65 pieces, 21 or nearly a third of which clearly rejected the consensus position and another 20 (31%) that communicated doubts about it. Therefore, nearly two thirds rejected or questioned the consensus position.

The Daily Telegraph moved to a more sceptical position over the period with 83% of articles either questioning or rejecting the consensus position in 2012, which was an even higher level of scepticism than the *Herald Sun* in 2012.

17 or nearly two-thirds of *The Daily Telegraph* comment articles rejected the consensus position and 5 (19%) of which questioned it.

28% of articles in *The Advertiser* either rejected or questioned the consensus position, with nearly two thirds accepting it. More than half of the opinion pieces in *The Advertiser* either rejected or questioned the consensus position. While these findings reveal lower levels of scepticism, they are still high when one considers that 97.2% of scientists accept the consensus position.

By contrast, *The Courier Mail* published 53 articles, 48 (91%) of which accepted the consensus position.

Andrew Bolt

A relatively small number of reporters, opinion writers and editorial writers contribute to the production of climate scepticism through News Corp. Some of the most active sceptic opinion writers include Andrew Bolt, Piers Akerman, Miranda Devine and Terry McCrann, all of whom are right-wing columnists who cover a range of contemporary events. Of these, the most prolific is Andrew Bolt. He plays a significant and strategic role in the production of climate scepticism in Australia. He is employed by News Corp and Channel Ten and featured on John Singleton's right wing radio station *2GB* .

News Corp heavily promotes Bolt as Australia's "most read columnist". His [Herald Sun page](#) links to the latest Channel Ten's [Bolt Report](#) and [his blog](#), which is advertised as the "most read political blog". It also provides information about his daily media schedule on [2GB](#).

Bolt wrote 38 comment pieces between February - April 2011 and 2012 that were either focussed on climate science or made reference to it in the the context of broader discussion. This was three times as

many comment pieces as any other contributor and more than a third (36%) of all articles in News Corp tabloids that questioned or rejected the consensus position.

When considered from the viewpoint of word count, Andrew Bolt wrote a total of 13,281 words, which is 49% or nearly half of all words in articles that included material about climate science in the *Herald Sun*.

Bolt's dominance of the *Herald Sun's* news agenda can be seen by comparing his output to the 15 *Herald Sun* articles in the sample which accepted the consensus position. Bolt produced 20 articles, with an average length of 664 words. By contrast, the 15 articles accepting the consensus position included 12 news articles averaging 268 words each, a small promotional item of 71 words about a documentary about climate change in the European Alps screening at a German film festival, a comment piece by Jill Singer who has since left the *Herald Sun* and a 'Learn' informational piece (The article was for schools about climate change with links to government climate science resources that appeared on page 59 during the 2011 flood period. It stated that "warming of the climate system is unequivocal.").

Bolt's influence extends far beyond his home state of Victoria. Apart from the 20 articles in the *Herald Sun*, Bolt wrote all five sceptical articles in *The Advertiser*, all four sceptical articles in *NT News* and 5 of 21 in *The Daily Telegraph* that rejected the consensus position. Eight other Bolt articles were coded as suggesting doubt about the consensus position. (As coding was done on the basis of each individual article, this was probably overly generous as only Bolt's newest readers would not know that he is a vehement sceptic.)

Bolt was also republished during the sample periods in News Corp regional publications such as the *Townsville Bulletin* and *Cairns Post*, although these articles are not included in this sample. There are also hundreds of references to climate sceptic views on [Andrew Bolt's blog](#).

During this period, he was promoted by climate sceptic radio hosts on Macquarie Radio's *2GB* and *MTR* (Which has since closed) during 2011, and on Fairfax Radio's *4BC* and *2UE*. He continues to have several spots each week on *2GB*. In terms of Australian audiences, Bolt's is a very big one.

Given his influence, a consideration of how Australian media covers climate science needs to include an analysis of the strategies used by Bolt to persuade his readers they should reject the findings of the vast majority of climate scientists. These strategies include personal abuse, cherry picking specific findings to refute the entire body of findings of climate scientists, portrayal of advocates of climate action as ideologically motivated with totalitarian tendencies and criticism of journalists who report on climate science. He presents himself as someone who is fighting a battle to reveal 'truth' and 'secrets' which 'warmists' want hidden to protect their vested interests. Once the 'facts' are established a triumphal, mocking tone is adopted.

The Australian Centre for Independent Journalism provided [examples of Andrew Bolt's tactics of abuse in Sceptical Climate Part One](#).

Bolt's approach needs to be considered in the context of a broader international game played out with other media, politicians, climate sceptics and audiences. The following two examples provide an insight into his relationships both with fellow sceptical individuals and organisations and also those he casts as his opponents.

Example One: 'Secrets Out: No gain from carbon tax pain'

On April 4, 2011, Bolt published a 982 word article called ['Secrets Out: No gain from carbon tax pain'](#). The article begins:

“Climate Commissioner Tim Flannery choked recently when I confronted him with the global warming industry’s dirty secret. But he wouldn’t – or couldn’t – deny it. The secret is this: Nothing that we in Australia do about global warming will actually lower the world’s temperature.”

The column was mostly based on excerpts from a question and answer session that Bolt and radio host [Steve Price](#) conducted on Macquarie Radio’s Melbourne station *MTR* on March 25 ([listen here](#)), a day when Flannery was visiting Victorian city Geelong on behalf of the [Climate Commission](#) which was established by the Australian government to be a source of information about climate change.

Bolt began by asking Flannery whether his activities were funded by the government. Flannery acknowledged that they were, but said he and the Australian Climate Commission were “independent” and were “trying to engage people on the climate issue.” Shortly afterwards, Bolt asked Flannery a question that he has often asked people he calls ‘warmists’: “On our own, cutting our emissions by 5 percent by 2020, what will that lower the world’s temperatures by?” During the interview Flannery’s protested that the questions were ‘bogus’ and the answers, complex, Bolt insisted he was just trying to get ‘basic facts’. Having got an answer from Flannery that even if all emissions were cut, average temperatures would not drop for “hundreds, perhaps even a thousand years right, because the system is overloaded with CO2 and that has to be absorbed and that only happens slowly”, the interview was brought to a close. Bolt followed up with an interview with the CEO of the Grattan Institute John Daley. He ends his recount of his interview with: “Now, if you wouldn’t even buy a \$29 kitchen wipe with answers like these, why buy a global warming scheme that would cost us billions of dollars - and possibly cost you your job?”

Bolt promoted his interview on his blog as a major news breakthrough and was rewarded when it was taken up as a news article by *The Weekend Australian*. Under the heading, [‘No Fast Result in cuts-](#)

[Flannery](#) the news article led with: “The Gillard government’s chief promoter of the climate change debate has admitted even a global effort to cut carbon emissions would not lower temperatures for up to 1000 years.”

Flannery wrote to *The Weekend Australian* objecting to the way his answers had been represented. The article was criticised by the ABC’s *Media Watch* on April 4, 2011 but remains at the time of publication of this report on the *NT News*, *Herald Sun* and several sceptic websites [websites](#) today. (Transcripts and Flannery’s letter to *The Australian* can be found on the ABC’s [Media Watch website](#)).

The development of this story shows how News Corp editors promote stories across different outlets to build support for scepticism. In this case Andrew Bolt used a radio appearance to create ‘news’ that could then be picked up by other outlets and bloggers. The aim is to build public support against action on climate change rather than to report on climate science. A reader of the transcript of the interview would have noted that Flannery tried to explain why the line of questioning was likely to lead to possible misunderstandings and prevent him from explaining that whatever policies to reduce emissions are put in place, global warming will not reverse for a very long time. His argument was that this does not negate the need for action. Bolt interview strategy was to force Flannery into a statement that could be used against him and other climate scientists.

But it was not just News Corp, *2GB* and bloggers who took up the Bolt ‘scoop’. In the heat of the domestic debate about the Gillard government’s proposal for a carbon policy or ‘tax’ as it became known, the then Opposition Leader Tony Abbott “leapt” on Flannery’s “declaration” that “emissions abatement is a 1000 year proposition”. Abbot’s intervention transformed the the story into a political one. *The Australian* [reported](#) Abbott’s comments and sought a response from the Gillard government. The then Minister for Climate Change Greg Combet was described as having “distanced” himself because he

described the Climate Change Commissioner as 'independent' which is what he is supposed to be. (For more on the coverage of carbon policy see [Sceptical Climate Part One](#).) Both the government and Flannery were placed on the defensive.

Even within *The Australian* itself there was some uneasiness about the treatment of Flannery. In a [short opinion piece](#) on the same day, Graham Lloyd attempted to come to his defence: "The scientific view is that if CO2 emissions are left unchecked, the world will warm by 4C by the end of the century. Flannery's point is we must act to stop the forecast additional 4C temperature rise before we even consider returning to pre-industrial age temperatures."

But other talk back radio hosts and many [blogs](#) had taken up the story. By now, the [news breakthrough](#) was being hailed as evidence that anthropogenic climate change was a "manufactured bogeyman".

The blogosphere is however contested and *Crikey* blogger Jeremy Sear who is known as *Pure Poison*, [chastised](#) the Bolt Blog for stupidity. After Abbott's intervention, *Crikey* [went further accusing him of "outright misrepresenting"](#) Flannery in parliament:

"Further to the shameless and idiotic noisemaking of the trollumnists on which we commented yesterday, it now seems that the unpopular Liberal leader Tony Abbott is now outright misrepresenting Flannery's remarks in Parliament:

But yesterday, as the role of the carbon tax in Labor's massive loss in the NSW election dominated federal political exchanges, Mr Abbott quoted Professor Flannery as he ridiculed the tax as "the ultimate millenium bug".

"It will not make a difference for 1000 years," the Opposition Leader told parliament. "So this is a government which is proposing to put at risk our manufacturing industry, to penalise struggling families, to make a tough situation worse for millions of households right around Australia. And for what? To make not a scrap of difference to the environment any time in the next 1000 years."

What Flannery actually said:

If the world as a whole cut all emissions tomorrow the average temperature of the planet is not going to drop in several hundred years, perhaps as much as a thousand years.

"Not going to drop" is clearly not the same as "make not a scrap of difference". Nor is "several hundred years, perhaps as much as a thousand years" the same as "not... any time in the next 1000 years".

We're talking about a system in which the temperature is increasing. The best we can hope for in the shorter term is to slow that increase down, maybe if we're lucky stop it completely.

...

Even if it'll take a long time to return the system to the earlier levels (and I'm glad to hear that that's even possible), the immediate challenge is to reduce the increase. That's what the proposed action is supposed to achieve, and that's what we're debating.

So Abbott's misrepresentation of Flannery's remark is not only dishonest, it also indicates that he hasn't the faintest idea what his opponents are actually talking about."

Pure Poison then challenged:

“Labor and climate scientists and the Greens and anyone with an interest in rational public debate all need to be out there right now squashing this stupid meme before it takes any more hold on the gullible. Because once this one sinks in, they’ll find something even more outrageously stupid and build up the ignorance even further.”

The *Crikey* piece ended with a challenge to the media: “Let’s see who in the media actually call Abbott on his shameless misrepresentation of Flannery, and the ignorance about the actual proposal that his remarks reveal. Anyone?”

Jeremy Sear’s notion that Bolt’s ‘scoop’ generated a “meme” is a useful one as it suggests a message that reverberates far beyond its original sources. The posts and reposts of Bolt’s article received thousands of comments.

A Factiva database search did not reveal any further follow up of Abbott’s misrepresentation of Flannery. [North Coast Voices blog](#) and the [Opinion Dominion blog](#) both republished the *Crikey* piece.

Example Two: Has global warming stopped?

This example needs to be put in the context of Bolt’s columns on climate change over a longer period.

According to a Factiva search, Andrew Bolt has been producing climate sceptic columns for the *Herald Sun* since April 1999 when as part of an attack on ex Labor MP Peter Garrett who was then the Chairperson of the Australian Conservation Foundation, he wrote:

“Of course, the greenhouse effect seems to be just that: hot air. The best measure of global warming - NASA satellite data - shows the globe is as cool now as it was in 1978, when readings began.” (‘Don’t let Peter Garrett’s talk scare you’, Herald Sun, April 19, 1999).

A persistent Bolt theme has been revelations of data that purpose to show that the earth is cooling or no longer warming.

In 2008, Bolt published five graphs which he argued in his blog and then on the ABC’s *Insiders* with two follow up stories in the *Herald Sun* that he claimed showed that the earth was cooling not warming. Michael James, a director of the Genome Variation Laboratory at the Queensland Institute of Medical Research analysed the graphs in a piece, [‘Andrew Bolt: Master of Climate Representation’](#) for *Crikey* which was an early and persistent media critic. He demonstrated how Bolt’s highlighting of very short term ‘blips’ in data obscured trends over time. As of October 8, 2013, the graphs remain on Bolt’s blog under the heading, [‘Column - Seven Graphs to end the Warming hype’](#).

This sort of critique does not impress Bolt who continues to produce columns in a similar vein.

On January 29 2012, journalist David Rose published an [article](#) in the *Mail on Sunday* suggesting that “the supposed consensus on man-made global warming” was in doubt because the [British Meteorological Office \(MET\)](#) had released new temperature data showing the planet had not warmed for 15 years. In an obvious allusion to Al Gore’s well known film [An Inconvenient Truth](#), Rose argued that this data presented “an inconvenient challenge” to climate scientists. He went as far as suggesting that we could even be “heading for a mini ice age to rival the 70-year temperature drop that saw frost fairs held on the Thames in the 17th Century”.

The MET Office almost immediately put out [a statement](#) refuting Rose's article. It claimed that it had explained its position to Rose before he published the article but that he had not incorporated it in the article. According to the MET Office, Rose's article contained "numerous inaccuracies" and was "seriously misleading". To put climate change predictions into context, it stated:

"The projections are probabilistic in nature, and no individual forecast should be taken in isolation. Instead, several decades of data will be needed to assess the robustness of the projections.

However, what is absolutely clear is that we have continued to see a trend of warming, with the decade of 2000–2009 being clearly the warmest in the instrumental record going back to 1850. Depending on which temperature records you use, 2010 was the warmest year on record for NOAA NCDC and NASA GISS, and the second warmest on record in HadCRUT3."

The MET Office statement was also [published](#) on the popular [Think Progress blog](#) which had already refuted the argument that there was pause in warming.

A journalist seeking to follow up Rose's story would normally be expected to check whether there had been any further developments or if any of his assertions had been seriously contested. If they had checked, they would have easily found the MET Office statement.

In any case, Andrew Bolt should have been aware of the MET Office statement because he had already posted a blog on January 29, 2012 quoting Rose's assertion about the lack of warming. A reader has responded with a comment referring him to the MET Office's response. Bolt later claimed that he was not aware of this.

Three days later, Bolt adapted *The Daily Mail* article to the Australian context and published it on three News Corp publications each under a different headline. *The Daily Telegraph* used '[Global Warming Nonsense gets a true cold shoulder](#)'. *The Advertiser* chose 'Man's gases do indeed affect the climate in some small way, but not necessarily for the worst' while the *Herald Sun* chose '[Time that climate alarmists fessed up](#)' as its headline. According to the Audit Bureau of Circulation and Roy Morgan Research readership figures that can be found in [Figure 4.1.1](#), these publications had a combined claimed circulation of 949,692 circulation and 2,346,000 readership. *The Daily Telegraph* and the *Herald Sun* also published the article online where it remains today. The piece was also published on Bolt's *Herald Sun* blog under the heading, '[Open your eyes. Where's the warming](#)'. Five days later on February 6, the same column appeared in the *NT News* under the heading, 'Scare tactics swamped' extending the audience reach of the article even further.

Each publication conveyed a different meaning through its headline. *The Daily Telegraph's* message was that the notion that anthropogenic global warming is occurring is "nonsense" and should be rejected. *The Advertiser*, on the other hand, conceded that human activities might have a small role in climate change but rather than being a problem, their impact might actually improve conditions. The *Herald Sun* headline suggested that climate science and climate change action advocates were guilty and should 'confess' while the *NT News* heading suggested that the 'scare tactics' of those warning of man-made climate change had been overwhelmed.

Figure 4.6.5: Cartoon from The Daily Telegraph's piece 'Global Warming Nonsense gets a true cold shoulder'.



Illustration: Tiedemann, Source: The Daily Telegraph. [Image permalink.](#)

What follows is an analysis of *The Daily Telegraph* version of the story.

Bolt begins:

“Let’s take stock of the great global warming scare and see how it’s panning out, shall we?”

First, the planet hasn’t actually warmed for a decade or even 15 years, according to new temperature data released by Britain’s Met Office.

Hmm. That’s not what global warming scientists predicted.

Or why not look out of your window?”

He then drew attention to a number of earlier predictions which readers could observe to be false. One of these was “massive coral bleaching of the Great Barrier Reef that warmist Professor Ove Hoegh-Guldberg [predicted](#) would occur every second year from 2010 has not been seen in years.”

Some readers might have wondered whether February 2012 was sufficient enough time to judge whether this prediction Professor Hoegh-Guldberg made was correct. Others who were regular readers might recognise [Professor Hoegh-Guldberg](#) as a previous Bolt target.

[Hoegh-Guldberg](#) is a highly regarded biologist whose work focuses on coral reefs. He has a [substantial record of peer reviewed publications](#). In February 2010, Bolt referred to him as an [“alarmist with a record of dud predictions”](#). In 2006, he accused him of making predictions about possible damage to the reef from global warming in return for “perks”.

In August 2011 in an [article](#) that was part of *The Conversation’s Media and Democracy* series, Hoeg responded to Bolt’s criticisms. He added:

“Despite my having responded to these issues, Andrew Bolt has not removed the misinformation and continues to this day to chant its content on a regular basis. I find it hard to believe that Andrew cannot understand this critical issue. Perhaps he doesn’t.

It is hard to practice as a humble scientist when powerful columnists like Bolt run amok. Drawing attention to their fundamental scientific errors and distortions only brings more insult and abuse.

Hardly what I signed up for when I began training in science over 30 years ago.

Is this simply bad journalism or an attempt to deliberately mislead the Australian public on this issue?”

In the initial publication of Hoegh-Guldberg wrongly stated that Bolt is paid by Gina Rinehart. As soon as Bolt pointed out this error, the publication was corrected. In contrast, Bolt did not engage with Hoegh-Guldberg’s piece.

In October 2012, the Australian Institute of Marine Science released [research](#) which found that the Great Barrier Reef had lost half its coral in 27 years, 10% of which was due to coral bleaching. It found that a major cause of bleaching was ocean warming and that the recovery period was 10 –20 years. According to a Factiva search, *The Daily Telegraph* and *The Advertiser* reported on this study but the *Herald Sun* did not.

Continuing the February 1 column, Bolt makes a series of factual statements:

“Wherever you look it’s the same wake-up-to-yourself story. Sea levels have recently dipped, the oceans have lately cooled, Arctic ice has not retreated since 2007, polar bears are increasing in numbers, global crop yields keep rising and now some solar scientists warn not of global warming, but cooling – a far deadlier threat”.

“Wake up” suggests an audience should stop dreaming and awaken to the truth although no further evidence is included to support the first four of these statements, all of which are contested by recent peer reviewed science. How, Bolt asks, do ‘warmists’ respond to this news? He accuses them for being in denial by suggesting the matter is settled.

Bolt then moves on to a recurrent theme - the media. He refers to *The Age* and the ABC as “obsessed” because they “resist reporting the growing evidence that the late 20th century warming that’s blamed on man’s emissions has halted, and that few of the catastrophic consequences predicted have happened”. An uninformed reader would understand that global warming has halted which is not what the great majority of scientists have found. If journalists do not think that there is any credible evidence supporting the proposition that it has halted, they should not report assertions by sources they consider to be unreliable.

Having dealt with the media, Bolt quotes Danish scientist [Henrik Svensmark](#), Director of the [Center for Sun-Climate Research](#) who investigates the effects of the sun and cosmic rays on climate as claiming: “World temperatures may end up a lot cooler than now for 50 years or more.”

Bolt leaves his readers with the an image of an impending ice age and ends with:

"Who knows if he's right? Best keep an open mind, on this – and on man-made warming. How will the history of this colossal mistake be written?"

By 'open mind', Bolt does not mean the view that all matters are open to critique and questioning. He means an open mind about whether or not man-made warming is occurring.

He does not inform his audience that scientists and science journalists have subjected Svensmark's theories to substantial review and critique. A recent [journal article](#), which appeared after Bolt's piece, reviews previous this discussion. This researcher concluded that the "best estimates of solar influence on the global mean air surface temperature show relatively small effects, compared with the response to anthropogenic changes" and noted that the use by sceptics of the solar research was making scientific investigation more difficult. More discussion about Svenmark can be found on the [Desmogblog.com](#), a site which critiques climate scepticism.

Press Council complaint about 'Time that climate alarmists fessed up'.

Those concerned by stories appeared in print media have two avenues available for complaint. They can write a letter to the newspaper or they can complain to the [Australian Press Council](#). Three separate people complained about the [Herald Sun version](#) of the article, which was similar and slightly shorter than *The Daily Telegraph's*.

Ten months later in mid December, the Australian Press Council responded to complaints that the February 2012 articles had misled readers and misrepresented the evidence by issuing an [adjudication](#).

The adjudication is posted on the [Herald Sun website](#). It is not however on *The Daily Telegraph* website.

The Australian Press Council found that Bolt should have mentioned the MET Office description even if he then rebutted it as unconvincing. It upheld that part of the complaint finding it “was not sufficient in these circumstances to assert ignorance of the response or to rely on the reader’s previous posting to inform other readers about it”.

The Australian Press Council also considered whether Bolt was fair to report that global warming had halted on the basis of a 15 year period of average global temperatures. Climate scientists measure patterns over many years. Decades are compared to previous decades. Pauses and changes in direction do not necessarily indicate the end of long-term trends. Like the MET Office, the complainants argued that it was misleading not to put the short term data in the context of longer trends which showed global warming.

The Council found that Bolt should have acknowledged explicitly that the data on which he based his statements were short-term and “statistically compatible with continuance of the long-term trends in the opposite direction”. However because he had used the word “paused” in his article and emphasised the need for an “open mind”, the Council did not uphold this section of the complaint.

On December 13, the Institute of Public Affairs issued a [press release](#) criticising the Press Council for its cautious criticism of Bolt for thinking it “appropriate for it to dictate to newspaper columnists what they are allowed to write”.

The Press Release quotes the Director of the IPA, [Mr Roskam](#) as saying:

“The free exchange of ideas and opinions is an essential foundation of democracy. Impeding this process by dictating to the media what they are allowed to share with their readers is not just a threat to freedom of speech, it undermines democracy.”

Despite what some people in the community may think, debate on major issues of importance is never over and should never cease. Andrew Bolt and everyone else should be free to question, debate and discuss climate change science and climate policy in any way they choose"...".

Like Bolt, John Roskam is a very active climate sceptic. Two months later he [sent](#) a copy of fellow sceptic Ian Plimer's book *Heaven and Earth* to hundreds of schools. The press release suggested that the IPA sees no role for accountability mechanism that attempts to hold the media accountable for inaccuracies or misrepresentations, even self-regulatory ones.

Two days later, Bolt followed up with [his own response](#) to the Press Council. In this response, Bolt accuses the APC of making false accusations against him in a draft adjudication that revealed a bias towards "warmism". Bolt argues that even if he had been aware of the MET Office's refutation of Rose's article, he should not have had to print its "mendacious lies" in his opinion piece. He completely rejected the APC findings:

"The Press Council has - in my opinion - abused its power to find against one of my reports on global warming.

Here is one more sign of a new war against free speech. I've long suspected the Press Council, grown more aggressive with the Gillard Government's encouragement, is pushing a political agenda on to journalists.

It is funded by newspaper publishers to promote "good standards of media practice" and "freedom of expression". But many of the complaints it now entertains are lodged by activists and others of the Left trying to limit the free speech of others.

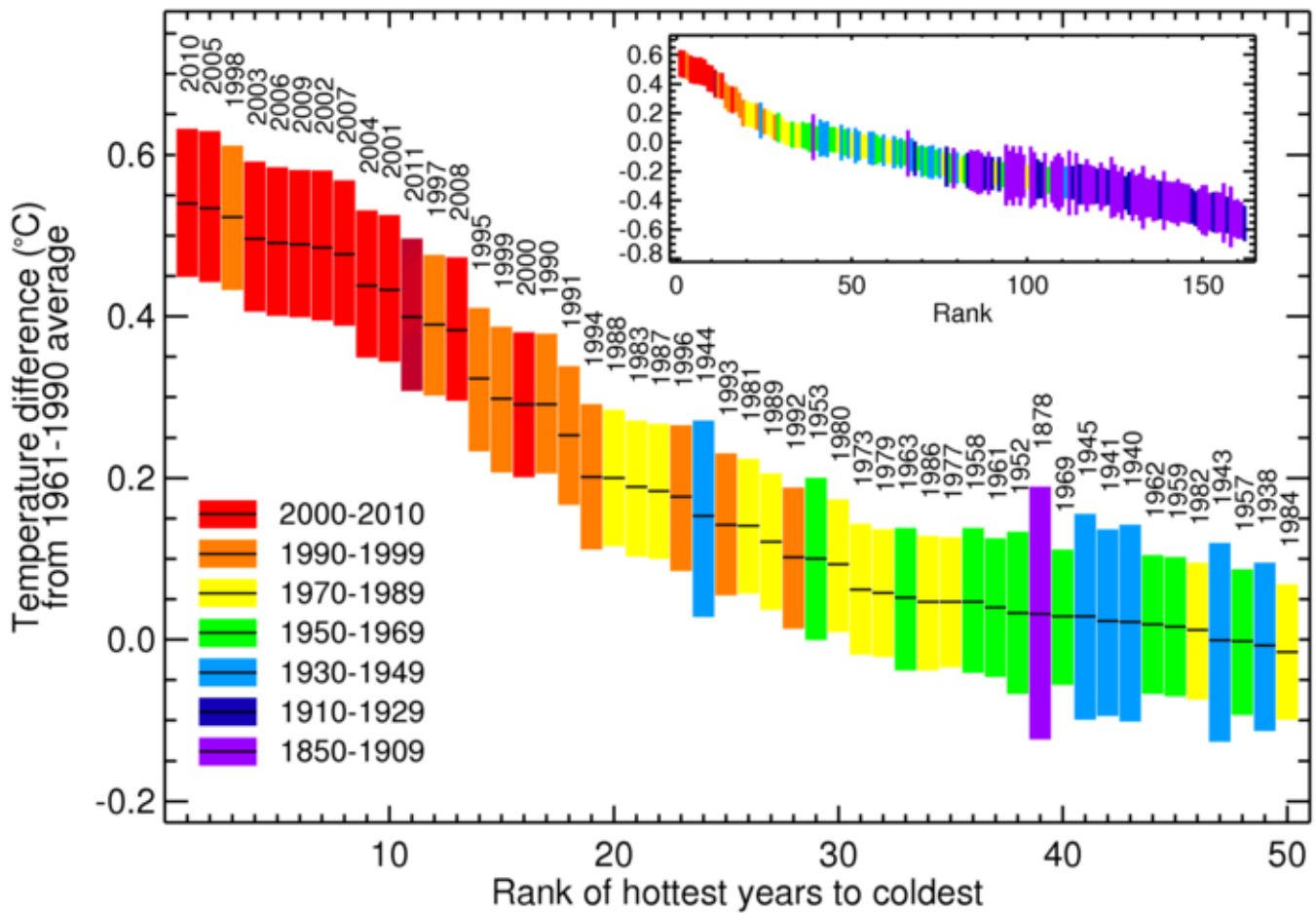
The Press Council has not just let itself be used this way to punish conservatives, not least by wasting their time responding to sometimes absurd and often impertinent complaints.”

Bolt’s tactic is one of aggression towards both critics and adjudicator. His response suggests that he sees no role for the Press Council to entertain complaints against opinion writers, even when they make factual assertions.

The Australian Press Council deals with complaints on the basis of individual stories. Even before the complaint was adjudicated, Bolt continued to pursue his theme of the global warming ‘pause’ across his network.

Later in the year, *The Daily Mail* published [another article](#) claiming that the world had stopped getting warmer. The MET Office again put out a statement that included a graph which put the claim into perspective by looking at global temperatures over a longer period. ([This post](#) discusses Rose’s article and links to the MET’s response.)

Figure 4.6.6: Graph from the MET Office showing years ranked in order of global temperature



Published by Met Office, 14th October 2012. [Image permalink.](#)

Five days later, Bolt published [‘Theory grows colder’](#). He asks:

“HOW many more years of no warming before global warmists admit their theory is broken?”

Data released two weeks ago shows the pause in global warming has now lasted 16 years. This is despite man’s carbon dioxide emissions – blamed by warmists for causing the world to overheat – soaring almost 50 per cent over the past two decades.

More emissions, but no warming. This was not meant to happen."

Bolt failed to respond to the MET Office's argument about the importance of time scale in climate measurement. He does not appear to understand that increases in global emissions will not result in an immediate temperature rise in the complex global climate system just as he did not appear to understand in [Example One](#) that changes in climate will not immediately respond to cuts in emissions.

A further critique by George Mombiot of Rose's earlier articles can be found [here](#).

A broader view of climate change reporting around the time of Bolt column shows that Bolt himself was part of a broader international push by sceptics promoted by News Corp (See [Section 4.10](#)).

Bolt and other sceptic commentators continue to produce material asserting that global temperatures are not warming. As a result the Australian Government's Climate Commission, which was established to "provide all Australians with an independent and reliable source of information about climate science" produced [a report](#) in February 2013, which aimed to clarify that the earth was warming. It was stated clearly that this was necessary because of misrepresentations by sceptics of the data.

"For whatever reason some commentators choose to cherry-pick data, presenting it in a highly selective way to make their case. That has seriously misrepresented what is actually happening, and such behaviour just isn't good science."

The full report can be found [here](#).

The Climate Commission is soon to be abolished by the Coalition Tony Abbott Government, which replaced the Labor government in September, 2013.

Bolt continues however to promote his own view. In a column on September 12, 2013 that was published in the *Herald Sun*, *The Advertiser*, *The Daily Telegraph*, *The Cairns Post* and *The Courier Mail*, he wrote:

"It is pathetic, when the evidence mounts that man's effect on global temperatures has been wildly exaggerated, and cutting our emissions will make zero difference.

Remember five years ago when Tim Flannery, now our Chief Climate Commissioner, warned "that maybe in five years there'll be no Arctic ice cap", thanks to man-made warming?"

In conclusion, News Corp has selected Bolt to play a powerful strategic role in the communication of climate change to Australian audiences. He plays this role in coalition with other climate sceptics, journalists, key climate sceptic personalities and right wing think-tanks such as the Institute of Public Affairs. The aim is to build support for his anti climate action political agenda. He demonises climate scientists, pro climate change action advocates and environmental reporters, successfully turning climate science reporting into a battleground and putting his opponents on the defensive. Rather than accepting scientific bodies and scientists as authoritative sources on climate change, he uses mockery and derision to delegitimise them. He replaces them with favoured sceptic sources that he fails to subject to critique of any sort. His style is accessible and produces a large number of comments from his readers who mostly support him. He builds a sense of solidarity amongst his audience against publicly funded science and media which he portrays as elitists and dangerously left-wing. Critics are dismissed as 'warmists' who by definition are self-interested and unreliable. His strategy depends on repetition of basic messages over time. News Corp tabloids of which the Herald Sun is the largest fail to balance his commentary with climate science reports. This is consistent with Bolt's view that they have no credibility. Bolt reinforces his views through regular talk-back

radio and television appearances. Through all these strategies, the findings of climate scientists are rendered almost invisible in the media sphere inhabited by large sections of the Australian community.

Other News Corp Tabloid Sceptics

Bolt is not alone however. On March 24, 2011, News Corp economics columnist Terry McCrann published [‘When ignorance battles knowledge’](#). McCrann attacked [Professor Ross Garnaut](#) who had been commissioned by the Australian government to update his earlier Climate Change Review. He described Garnaut as “delusional” who by portraying the argument over anthropogenic climate change as an “awful battle between ignorance and knowledge” had “positioned himself well and truly with the nutters and the deniers.” He furthered to say that: “Those that deny the so-called supposedly settled science is a total croc. Those that deny that far more scientists and by far the better – and the honest – scientists, don’t accept the supposedly settled science.”

The rest of the column was a vehement rejection of the Gillard Government’s carbon policy. McCrann’s column is a very strong expression of opinion. It would certainly unsettle any reader who was either ignorant and uncertain about the very strong support for the recognition of anthropogenic science amongst climate scientists.

News Corp Miranda Devine also promotes climate scepticism. On March 15, 2011, Professors Will Steffen, David Karoly and Matthew England produced a paper for the Climate Commission. On the same day, Devine responded with a *The Sunday Telegraph* column [‘The reality of a wet, cold summer has failed to dampen activists’ enthusiasm for alarmism.’](#). This column was also published in News Corp’s Perth weekend newspaper *The Sunday Times* and in the *Herald Sun* under the heading, [‘Scientific worship a matter for change’](#).

It was also published online.

She began by comparing the authors of the paper and three leading climate scientists with the 'three wise monkeys' who close their eyes to what they do not want to see - an approach that is the antithesis to a scientific approach:

"THE three wise monkeys of Australian climate science, Professors Will Steffen, Matthew England and David Karoly, posted a self-justifying report on the Climate Commission website last week linking recent floods, heavy rain and low temperatures to global warming."

According to Devine the purpose of the report was to excuse earlier predictions of drought by Tim Flannery that had not eventuated. She says the "real culprits are opportunistic politicians and mad greenies, whose apocalyptic warnings overcame prudence and common sense." She suggests science has become an "alternative religion".

Her preferred expert for this column was [Richard Lindzen](#) whose "clear summary of the sceptic case is worth reading for anyone sitting on the fence".

Devine states that Lindzen does not deny that the earth is warming but quotes him as saying that:

"The evidence is that the increase in CO2 will lead to very little warming, and that the connection of this minimal warming (or even significant warming) to the purported catastrophes is also minimal. The arguments on which the catastrophic claims are made are extremely weak and commonly acknowledged as such. They are sometimes overtly dishonest."

Devine concludes by saying "Alarmists want science to act as the servant of politicians pushing for 'carbon control'. That is not its role."

This column shows how sceptic columnists not only de-legitimise climate scientists while at the same time boosting the credibility of their choice sceptic sources in the eyes of their readers. Anyone who supports the notion of anthropogenic climate change is by definition biased, blind or obsessed. Climate sceptics are portrayed as victims.

Journalists should report critically on climate science in the same way as any other field. However to do so they need to be well informed. The role of journalists should be to explain and where justified critique prediction but not in a way that distorts overall scientific findings. Scientific predictions are probabilistic in their nature. Inevitably some may turn out not to eventuate. Seizing on a prediction that has not eventuated to defeat a whole body of work is not productive. A journalistic investigation into why the prediction has not eventuated would be appropriate.

Climate Scepticism Becomes a Story

While the development of the internet has greatly expanded the space and scope of communication, journalism and mainstream media space is still a scarce resource (Lester, L., 2010, p.46). This is even more a consideration as old business models that sustained corporate journalism fail and media shed reporters, including science reporters. For this and other reasons, climate scepticism partly works by occupying space that might otherwise be allocated to other stories.

The 2012 articles in the sample were coded according to whether there was a mention of climate scepticism. This established that even the *SMH* and *The Age*, which were the most accepting of the consensus position in their editorial practices, devoted a substantial amount of allocated space to stories about sceptics or scepticism. For example 28% or 13 articles published by the *SMH* in 2012 were either about scepticism or issues revolving around the sceptic lobby and prominent sceptics. This is not surprising or unwarranted because the production

and promotion of climate scepticism is an issue in Australian politics. Nevertheless when reporting resources are scarce, such reports may replace other potential stories about climate change thus rendering them invisible.

Journalists concerned about climate change devote time to exposing the economic interests that support climate sceptics. This has been done extensively by [Naomi Oreskes](#) in *Merchants of Doubt* (2010) and [Guy Pearse](#) in *High & Dry: John Howard, Climate Change and the Selling of Australia's Future* (2007).

On July 3, 2011 (outside the sample period for this report), the *SMH* and *The Age* published a piece by leading climate sceptic [Professor Robert Carter](#) under the title '[The Science is not settled](#)'. While the inclusion of sceptic opinion is justified by some journalists on the basis of 'balance', other reporters argue that newspapers should not publish opinion that editors believe will mislead the public on factual matters. The publication of the Carter piece followed a piece by Chief Scientist Professor Ian Chubb explaining how scientific inquiry informs risk assessment. ('[Don't wait until it is too late](#)', *SMH*, June 26, 2011). The follow up piece by Carter could have promoted the idea among readers that Chubb's statements about climate science should not be relied upon..

On February 18, 2012, Environmental reporter Ben Cubby produced [a short investigative article on Professor Carter's funding sources](#).

"THE paper trail connecting the climate change sceptic movement in Australia and the conservative US expert panel the Heartland Institute goes back at least to 2009, documents obtained by the Herald show.

The Heartland Institute, a leading group that funds activities designed to sow doubt about climate change science, was embarrassed this week when its strategy and budget documents found their way to a US blog.

The institute described the leak as a theft and said a police investigation was underway, while apologising to the 1800 companies and individuals whose identities were revealed as donors.”

The story provided evidence that the Heartland Institute provided funds to the [Australian Climate Change Coalition](#), a group which lobbies against policies designed to reduce emissions in Australia. Carter is a senior scientific advisor to the Coalition.

“When the Sydney Morning Herald asked Professor Carter if people should be concerned about his impartiality given that he is on the Heartland Institute’s payroll, he said: “No more so than you should be concerned that a CSIRO employee is paid by the government.”

Professor Carter would not discuss the details of the “monthly payment” of \$US 1667 (\$1547) to him in the Heartland Institute’s budget.

“It’s not something I would comment on in public - that’s grossly insulting,” he said. “At time to time, I have worked as a scientific adviser for them. I have acted as a consultant from time to time. From time to time, I take payments when people seek my professional opinion on something.”

But that was a different thing to being paid to change his opinion on climate science, he said.

"The idea that a professional scientist - and a particularly distinguished scientist, if I may say - gives an opinion which has been paid for, is offensive."

The function of the International Climate Science Coalition has less to do with science than with public relations, a strategy and budget document released by the group last year said."

The Climate Science Coalition objected to the article which led to this note being added:

Editor's note:

The International Climate Science Coalition has disputed the statement in this article that its function has "less to do with science than with public relations". A response from its executive director, Tom Harris, is published below. The Herald stands by its [story](#) in all respects.

Mr Harris writes: *As explained on our website: "The ICSC is a non-partisan group of independent scientists, economists and energy and policy experts who are working to promote better understanding of climate science and policy worldwide. We aim to help create an environment in which a more rational, open discussion about climate issues emerges, thereby moving the debate away from implementation of costly and ineffectual 'climate control' measures. Instead, ICSC encourages assisting vulnerable peoples to adapt to climate variability and continuing scientific research into the causes and impacts of climate change."*

In other words, we focus on public education."

Readers of the SMH would have assessed for themselves the impartiality of the ICSC. If they looked further on the internet, they would have discovered many further [sources of information](#).

Journalists cannot ignore the phenomenon of climate scepticism. If they do, they acquiesce in the promotion of widespread misrepresentation. But when they do engage, they become the subject to attack. For example, Ben Cubby who wrote the stories about Bob Carter was subsequently [attacked in the NSW Parliament](#) by MP Peter Phelps. Phelps also described Cubby's source, Climate Commissioner ANU Will Steffen in the following terms:

"Steffen is just another anthropogenic global warming parasite offering people advice about cutting down the use of fossil fuels, none of which seems to involve academics avoiding air travel to international anthropogenic global warming conferences. Indeed, in this ever-changing world in which we live there is only one certainty: More conferences and more chances to save the world. The anthropogenic global warming scam continues."

Commercial Radio and Climate Scepticism

This report is focused on print publications and to a lesser extent their online versions. The link between the most sceptic of outlets has already been mentioned in [the section on Andrew Bolt](#). In considering the promotion of climate scepticism the link between columnists and talkback hosts is most significant.

More research needs to be done to establish the audience reach of climate scepticism produced by talkback radio.

In March 21, 2011, ABC1's *Media Watch* [analysed](#) produced a report on climate sceptic hosts at the highest rating commercial talk stations in each of Australian mainland capital cities, including Sydney's 2UE radio station.

According to its analysis, all but Melbourne's 3AW and Adelaide's 5AA had climate change sceptics amongst their weekday presenters. The Media Watch report also pointed out that "Sydney's 2GB has two out of four: breakfast host Alan Jones and afternoon host Chris Smith".

A full transcript of the report and responses from climate scientists and the huge discussion that followed the program can be found [here](#).

In September 2013, [2GB](#) weekday presenters include Ray Hadley, Alan Jones, Brian Wilshire, Chris Smith Steve Price who has a regular spot with Andrew Bolt. All these broadcasters have been involved in attacks on climate scientists. Climate sceptics regularly get extended interviews on 2GB which claims to "broadcast across Australia".

In 2013 rating surveys, 2GB is the most listened to Sydney radio station across both AM and FM, claiming an overall 13.5 per cent share of the Sydney radio market, 2.4 per cent ahead of its nearest rival and 5.8 per cent ahead of the leading FM station.

CONCLUSION

Rather than 'balancing' the coverage of climate science, promotion of climate scepticism has dominated coverage in News Corp's largest newspapers. Much of this material remains online. This consistent promotion is part of an ongoing campaign against government policies aimed at addressing climate change and is intermeshed with other campaigns against publicly funded media and environmental protection bodies and liberal corporate media.

Scientific and media sceptics decline to grant climate scientists who support the consensus position the professional legitimacy or status that they would normally be granted.

ABC's *Media Watch* and some other sections of the ABC, independent outlets and bloggers play a valuable role in attempting to hold media based climate sceptics accountable but are unlikely to reach audience whose media consumption is largely confined to tabloid demagogues and talkback shock jocks. A number of Australian and international blogs provided well documented commentary on climate scepticism including [Readfearn](#), [Climate Code Red](#), and [Skeptical Science](#).

4.7 Case study: Comparing News Corp and Fairfax Media newspapers in Melbourne and Sydney

Sydney and Melbourne are the only state capitals in Australia that have two metropolitan daily newspapers. These are Fairfax Media's *The Age* and the *SMH* and News Corp's *Herald Sun* and *The Daily Telegraph*. A comparison between these provides some information about the quantity and quality of coverage of climate science being received by different audiences in those cities.

[Figure 4.1.1](#) provides the claimed weekday circulation and readership figures for these publications in 2012.

The Age and *SMH* had a combined weekday circulation of 315,411 and readership of 1,178,000 in 2012.

The *Herald Sun* and *The Daily Telegraph* had a combined circulation of 883,514 and readership of 1,897,000.

These figures do not take into account tablet, laptop and mobile audiences. They may also may not be completely accurate as they are based on claims made by the companies themselves. They show however that the two News Corp tabloids claim circulation of 2.8 times that of the two Fairfax Media publications as well as about half a million more readers.

Newspaper Works provides information about newspaper audiences which is the basis of the analysis below. Fairfax Media provide some information about their audience to attract advertisers. The information we have analysed is from the Newspaper Works weekday figures.

WHO ARE THE READERS OF NEWS CORP AND FAIRFAX MEDIA IN SYDNEY AND MELBOURNE?

Overall, readers of the four newspapers are more likely to be male. The great majority of readers are over 35 and more than a quarter of all readers are over 65. More than 25% of readers are retired.

The biggest difference between Fairfax Media and News Corp audiences is in occupation. Readers of Fairfax Media are more likely to be professional and managerial while the readers of News Corp tabloids are far more likely to be skilled, semiskilled or unskilled. Both have similar proportions of white collar readers. Fairfax readers are likely to be wealthier and more highly educated than News Corp readers.

According to [Newspaper Works](#):

- [The Herald Sun claims](#) that 54% of its readers are male. 77% of them are over 35 and 24% of all readers are over 65. Of their readership, 15% are classed as employed professionals or holding managerial jobs, 22% are white collar, 26% are skilled, semiskilled or unskilled workers, 25% are retired, 4% have home duties and 7% are students or not working.
- [The Daily Telegraph claims](#) that 57% of its readers are male and that 79% of them are over 35 and 27% are over 65. Of their readership, 14% are classed as employed professionals or holding managerial jobs, 20% are white collar, 24% are skilled, semiskilled or unskilled workers, 30% are retired, 4% have home duties and 7% are students or not working.

- [The Age claims](#) that 53% of its readers are male and that 76% of them are over 35 and 27% are over 65. Of their readership, 28% are classed as employed professionals or holding managerial jobs, 25% are white collar, 12% are skilled, semiskilled or unskilled workers, 25% are retired, 3% have home duties and 7% are students or not working.
- [The Sydney Morning Herald claims](#) that 55% of its readers are male and that 80% of them are over 35 and 30% are over 65. Of their readership, 28% are classed as employed as professionals or holding managerial jobs, 22% are white collar, 10% are skilled, semiskilled or unskilled workers, 29% are retired, 2% have home duties and 7% are students or not working.

On its website, Fairfax Media provides additional information about the income of its readers. According to its [advertising overview](#), 92% of *SMH* readers have an income of more than \$60,000 per year. ([The median salary in Australia is approximately \\$30,004](#)). One third have a university degree compared to 25% of the general population. Most of their readers are in NSW and nearly all on the Eastern seaboard.

Within Sydney, their readers tend to be in the wealthier North Shore and Eastern and to lesser extent Inner West suburbs.

The Age [claims](#) that 83% of its readers have an income of more than \$60,000 and 15% more than \$100,000. 37% have a university degree. Most of their readers are in Victoria and the great majority of them in Melbourne. The rest are also nearly found on the Eastern seaboard.

PREVIOUS COMPARISON OF *SMH* AND *THE DAILY TELEGRAPH* DURING COP15, 2009

Chubb and Bacon (Chubb, P.A., & Bacon, W., 2010) reviewed climate change coverage in *The Daily Telegraph* and the *SMH* during December 2009. This study was part of a 20 country comparative study of news coverage of the COP15 conference in Copenhagen. In each country, a broadsheet and a 'life world' (term used in Europe) or tabloid newspaper was chosen. Overall the coverage of the major international event of COP15 was covered in a highly domestic political frame.

This study found that the *SMH's* coverage had both more stories and a greater diversity of perspectives and sources than *The Daily Telegraph*. The latter also published more stories actively supportive of climate scepticism. Only a minority of stories focussed on the scientific dimension of climate change. Those that did mostly focused on conflict between scientists and sceptics.

Overall during December 2009, the weight of coverage, particularly in the *SMH*, was based on the assumption that the climate science was correct. However both papers ran stories by climate sceptics; for example well known sceptic Ian Plimer published a piece in *The Daily Telegraph* under the heading, ['Carbon Dioxide is in No Way the Villain'](#) and one four days later in the *SMH* ['Self-Appointed Moralists Cloud Meetings Agenda'](#). *The Daily Telegraph* columnist Piers Akerman wrote eight columns on climate change during December 2009. [He argued](#) that the 'green movement' was seeking "massive wealth redistribution and a re-organisation of nation states". In [another column](#), he accused climate scientists of "steadfast refusal to acknowledge widely-accepted scientific knowledge about climate science and the subsequent distortion of material to influence debate debases the entire scientific process and philosophy".

Akerman continued:

“In effect, the global warming claims of the so-called science has been ripped apart. The crowd who gathered in Copenhagen were there pushing a fraud.

There we have it. As yet, the global warming crowd have failed to produce any observation-based evidence that carbon dioxide levels have led to rising temperatures, but have shown that they are willing to distort data, manipulate facts and censor those who disagree with their ideology. May all those who have peddled this dangerous and unscientific nonsense wake to a lump of coal in their stocking on Christmas Day”.

Akerman’s columns were written in the aftermath of ‘Climategate’ in which 1,000 private emails between climate change scientists were stolen and published online. The uproar that followed challenged public faith in global warming science, and prompted investigations that debunked sceptics’ allegations that the mails showed the [planet wasn’t warming](#).

Climategate was a major media event and provided a massive distraction in the lead up to the much anticipated COP15 UN conference. It took many months before investigations into allegations against climate scientists were complete. This [wikipedia entry](#) provided a useful summary of Climategate. Eight committees investigated the allegations and published reports, finding no evidence of fraud or scientific misconduct. However, reports suggested scientists avoid future allegations by rebuilding public confidence in their work, for example by opening up access to their supporting data. This account from [a site](#) which monitors scepticism explains the events up until March 2012. Despite the investigation findings, climate sceptics [continue to actively promote the allegations](#).

The Daily Telegraph also continued to publish sceptic columns which referred to Climategate. But according to a Factiva search, it did not report the fact that the investigations cleared the scientists.

By not reporting relevant facts, it could be argued that the *Daily Telegraph* misrepresented the overall truth about the Climategate allegations.

COVERAGE OF SMALL ISLAND STATES AND CLIMATE CHANGE

In 2013, Nash and Bacon published an analysis of the coverage of small island states and climate change in Australian news publications during selected periods during in the lead-up to and after COP15 in Copenhagen (Bacon, W., & Nash, C.J., 2013). This research found that *The Age* and the *SMH* had about twice as many reports as the *Herald Sun* and *The Daily Telegraph*, although coverage of the issue of climate change and the Pacific was low overall and *The Daily Telegraph* carried now reports at all over 20 months from Cop 15 onwards. *The Age* and the *SMH* also carried more features which are more likely to have some depth of perspective and sources than the *Herald Sun* and *The Daily Telegraph* which ran none. The *Herald Sun* ran 5 comment pieces, all by Andrew Bolt and *The Daily Telegraph* ran 4 including one by Andrew Bolt and one by sceptic Cardinal Pell. This demonstrates how News Corp's coverage of climate change, whatever this issue, is coloured by its scepticism that is mobilised in the interests of its political and economic agenda. Of the Fairfax Media reporters, the most active on this issue was environmental reporter Adam Morton who wrote 18 stories for *The Age*. During this period, *The Age* strongly supported global action on climate change during this period.

COMPARING NEWS CORP AND FAIRFAX COVERAGE OF THE 2011 CARBON POLICY DEBATE

In [Part One](#) of this report on Climate change reporting in Australia, the Australian Centre for Independent Journalism analysed 6 months of coverage of the Gillard government's carbon policy across the same ten publications that are the subject of this report. We did not specifically compare the Sydney and Melbourne News Corp publications with the Fairfax publications in that report. A [further analysis](#) of the data shows that News Corp's *Herald Sun* and *The Daily Telegraph* had 26% less stories on that topic than the two Fairfax Media publications.

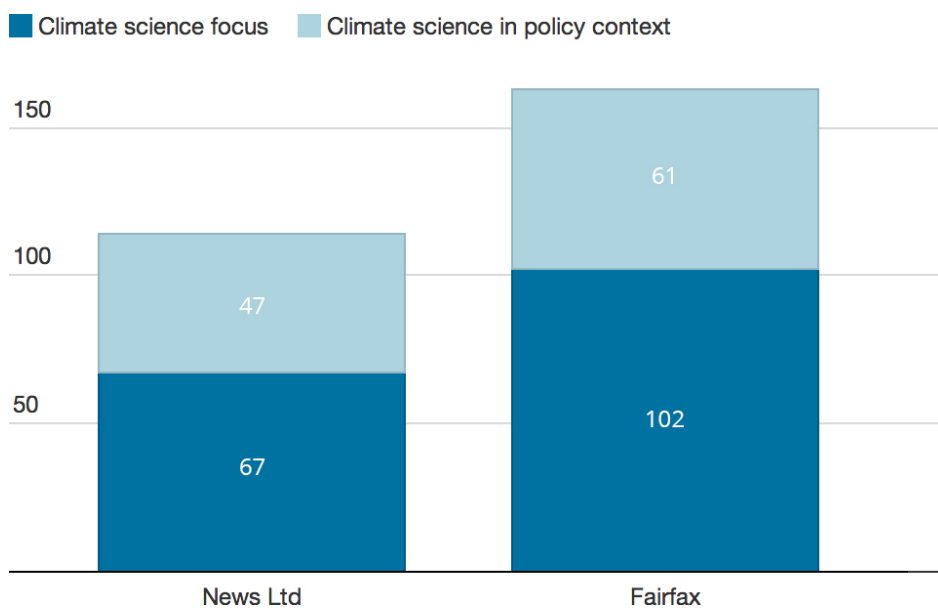
[Part One analysed headlines](#) to assess whether they were positive, negative or neutral towards the Labor government's carbon policy. *The Daily Telegraph* (65%) and *Herald Sun* (59%) had the most negative proportion of headlines while *The Age* (39%) and the *SMH* (42%) had the least negative. *The Age* and the *SMH* had the most positive headlines while the *Herald Sun* and *The Daily Telegraph* had the least.

When the content of the articles was assessed and neutral articles were removed from the sample, as [Figure 4.5.2 from Sceptical Climate Part One shows](#), *The Daily Telegraph* and *Herald Sun* were extremely negative towards the policy while the *SMH* and *The Age* were more even handed with *The Age* being the only publication to publish more positive than negative articles.

CLIMATE SCIENCE REPORTING IN *THE AGE & SMH* COMPARED TO *THE DAILY TELEGRAPH* AND *HERALD SUN*, FEBRUARY - APRIL, 2011 & 2012

The output of the two News Corp publications, *The Daily Telegraph* and *Herald Sun*, was compared to the output of Fairfax Media's *The Age* and *SMH* across the two years.

Figure 4.7.1: Number of articles in 'Climate Science Focus' and 'Climate Science in Policy Context' categories comparing News Corp and Fairfax Media in Melbourne and Sydney from Feb. - Apr. 2011 & 2012.



[Download data as .csv](#) or [view on GitHub](#)

More information about how the sample was divided into these two categories can be found in [Section 4.2](#).

This study found that the two Fairfax papers had about 43% more articles (163) compared to the News Corp papers (114).

There were fairly similar proportions of stories that referenced science and policy and stories about climate science across the two companies. 37% (61) of Fairfax articles were articles that referenced climate science in a policy context and 63% (102) had a climate science focus. This compared to News Corp, which had 41% (47) articles that referenced climate science in a policy context and 59% (67) had a climate science focus.

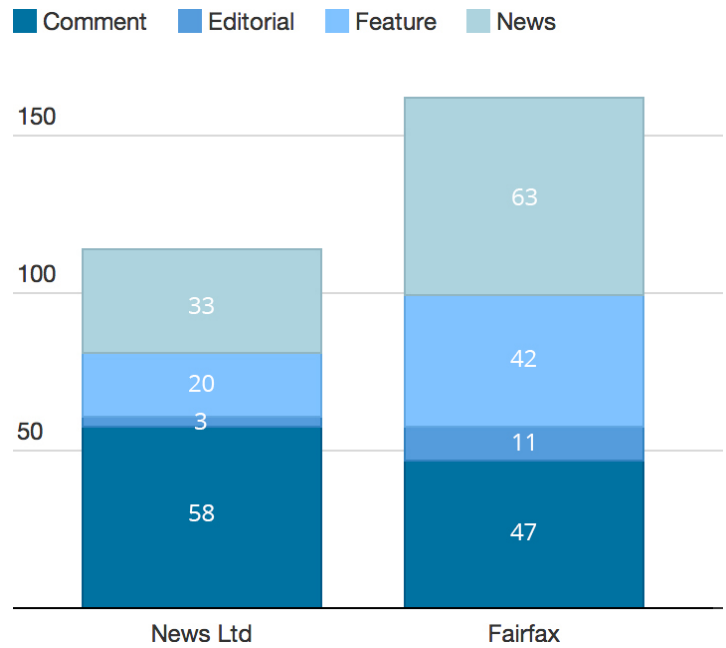
Comparing coverage by genre

From the point of view of the genre however, the results markedly diverged. Features traditionally allow reporters to provide more perspectives, factual context and to quote a range of voices, although as we have pointed out a new form of small feature has emerged ([See Features section in 4.3 Genre of climate science articles](#)). Fairfax published twice as many feature articles that referred to climate science than News Corp. When considered from the point of view of words allocated, the difference was even greater. Fairfax media carried nearly four times as many words in feature articles than News Corp. In all, *The Age* and the *SMH* combined carried 33,189 words of features compared to 8,935 in News Corp publications. Most of the latter was in *The Daily Telegraph*. The proportion a features declined in Fairfax from 33% to 18% suggesting that the higher levels of features may not be maintained as resources within Fairfax are stretched due to editorial constraints.

On the other hand, the News Corp publications had much higher levels of comment articles than Fairfax (51% compared to 29%). We have analysed this commentary in [Section 4.6](#). Much of the tabloid factual content about climate change is included in comment pieces.

As [Figure 4.7.2](#) shows, the difference in genres patterns was more stark in 2012 than 2011. In 2012, more than half the coverage in the News Corp publications was 'comment' compared to only 19% in the Fairfax publications. Fairfax had 59% of news coverage in 2012 compared to 29% in News Corp.

Figure 4.7.2: Number of articles in different reportings genre, comparing News Corp's *The Daily Telegraph* and *Herald Sun* with Fairfax Media's *The Age* and *SMH* between Feb. and Apr., 2011 and 2012.



[Download data as .csv](#) or [view on GitHub](#)

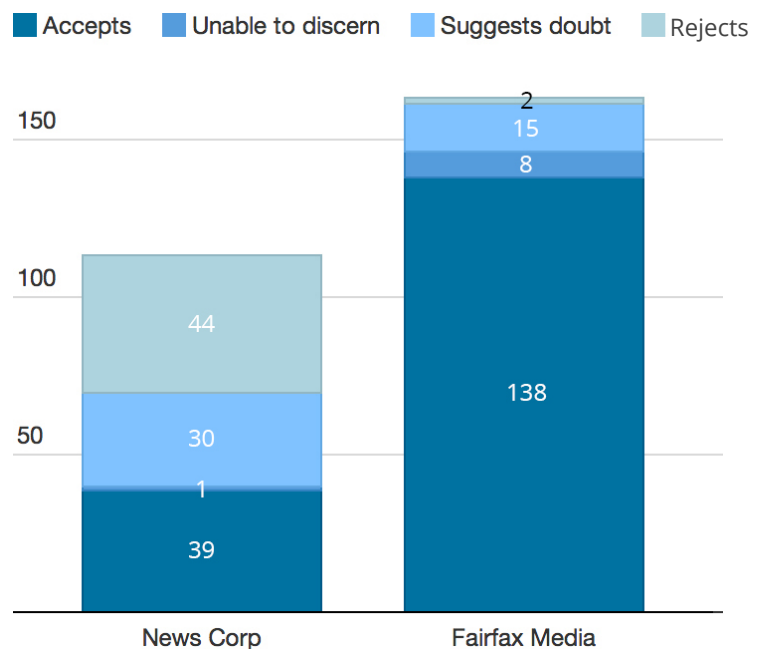
When it came to acceptance of the climate science consensus, there was a marked difference with 85% of Fairfax articles either explicitly or implicitly accepting the consensus position. By comparison, only 34% of stories in News Corp papers were based on an acceptance of the consensus. Fairfax Media's publications produced only two stories between them that rejected the consensus compared to 39% of articles in the News Corp papers.

In 2012, these differences became greater with the levels of acceptance in *The Age* and the *SMH* increasing from 83% to 86% while the levels of acceptance in the *Herald Sun* and *The Daily Telegraph* dropped from 44% to 22%. 45% of the articles in the two News Corp tabloids rejected the consensus position while another 33% questioned it.

There was also a difference when it came to reliance on peer-reviewed research, although in both cases the level was low. In the Fairfax newspapers there were 24 (15%) stories and News Corp had only 1 article (1%) that relied on peer reviewed research.

When the two News Corp publications were grouped, there was an overall drop in the number of articles (19%) and the allocated word space (40%) between 2011 and 2012. Despite this overall drop, there was a 10% increase in the number of articles (but a decrease of words by 11%) that rejected the consensus position; this compares to a drop of 61% of articles that accepted the consensus position and 76% drop in word count – a stark contrast indeed.

Figure 4.7.3: Number of articles divided by whether they communicated acceptance, suggested doubt or rejected the consensus position on climate science, comparing News Corp's *The Daily Telegraph* and *Herald Sun* with Fairfax Media's *The Age* and *SMH* between Feb. and Apr., 2011 and 2012.



[Download data as .csv](#) or [view on GitHub](#)

When grouped, the Fairfax publications had the number of words dropped by 42% while the number of articles dropped by only 19%; that is to say, there were fewer and shorter articles reporting on climate science. There was a drop of 42% in the word count compared to a 16% drop in the number of articles that accepted climate change.

This means that the overall drop in both News Corp and Fairfax Media was comparable. In both News Corp and Fairfax Media, articles about climate change are getting shorter.

But Fairfax remained consistent in its acceptance of the climate science consensus position although it allocated less space to the topic. The *Herald Sun* decreased its coverage but also carried an even smaller proportion of material that accepted the scientific consensus than before.

Sydney Compared to Melbourne

When Sydney output was compared to Melbourne output, the two Sydney publications produced 157 articles compared to 120 published by the Melbourne publications. The biggest proportional drop was in the *Herald Sun*. When considered from the point of view of words, Sydney publications produced 95,581 words compared to 71,592 from Melbourne.

In order to gain a better understanding of variations in reporting and their consequences for audiences, it would be important to compare these results with similar studies in other fields of reporting. It would also be important to study the effect of Fairfax Media's move to tabloid style in March 2013 on the content of the newspaper and the impact of the move to digital formats on the prominence given to climate change stories.

CONCLUSION

During the periods February to April 2011 and 2012, News Corp tabloids served their audiences in Melbourne and Sydney with a very different fare of information about climate science. The higher income and more highly educated audiences of *The Age* and the *SMH* are more likely to read news about climate science and reports of peer reviewed research and features quoting a range of sources with competing perspectives. They rarely receive climate sceptic material and are more likely to have read investigations of the economic interests underpinning climate scepticism. There is some evidence however that the depth and quality of the *SMH* coverage is diminishing. This requires further investigation across a range of reporting rounds.

Climate science reporting in the News Corp tabloids publications on the other hand is dominated by commentary and heavy doses of climate scepticism along with scathing commentary on journalists and scientists who research and publish material that accepts the climate consensus position. The readers of the *Herald Sun*, Australia's largest circulation newspaper, is the most sceptical. Apart from occasional news stories based on press releases from climate research organisations, readers receive almost no information that would enable them to understand the complexities or likely impacts of the impact of climate change domestically or internationally. The research findings of climate scientists are largely rendered invisible for News Corp audiences. It's tabloid publications produce no critique of the sceptic position.

Sydney audiences are receiving more journalism about climate science than Melbourne audiences. This differences may be relevant to the geographical information divide that exists between states as a consequence of News Corp monopoly in several states.

Both Fairfax Media publications have an editorial stance which accepts the consensus position. They are of course available outside Victoria and NSW but company information suggests that other readers are highly concentrated on the Eastern seaboard.

These patterns are not new however and confirm that the stark differences in climate science reporting is not a new phenomenon but has been occurring at least since 2009. Differences need to be seen in context of the intensely contested arena of domestic carbon policy. News Corp's treatment of climate science is especially politicised but, as was explained in [Section 4.6](#) that politicisation demands the attention of those against whom its commentary is directed.

This research suggests that daily media are producing a climate science information divide in Australia. This divide benefits readers on higher incomes who tend to be more highly educated. Independent daily online media such as [Crikey](#) and [The Conversation](#) provide additional journalistic information about climate science and the controversies which surround it but these also tend to be read by audiences who already tend to access more information rich media. This further exacerbates the divide.

4.8 How *The Australian* builds doubt about climate scientists and their findings

The Australian is the only national general newspaper in Australia. According to [Newspaper Works](#), it claimed a circulation of 122,428 and readership of 405,000 in 2013 of whom 60% are male. Its readership are 35% professional or managerial, 24% retired, 21% are white collar workers and 12% are skilled, semiskilled or unskilled. 58% of their readers are over 50. Like the Fairfax Media publications, *The Australian* is targeted at higher income readers who are also more likely to be better educated.

The Australian promotes itself as a serious national political agenda-setter. It favours neoliberal policies, market solutions to most economic and social problems and tends to oppose government regulation that would fetter its favoured business interests. In 2011 in his Quarterly Essay, Robert Manne described *The Australian* as a “remorselessly campaigning paper” and an “unusually ideological paper, committed to advance the causes of neoliberalism in economics.” When Labor formed government in 2010 with the backing of a Greens MP and several independents, [The Australian declared](#) that Labor must free itself of the Greens who were “bad for the nation” and should be “destroyed at the ballot box”. During the period of this study, [its editorial stance](#) was highly critical of the Gillard Labor government, the Greens and their carbon policy.

PREVIOUS RESEARCH ABOUT *THE AUSTRALIAN* AND ITS COVERAGE OF CLIMATE CHANGE

Previous research has found that *The Australian* actively promotes climate scepticism. (McKewon, E., 2012; McKnight, D., 2010; Manne, R., 2011). *The Australian* has disputed these claims. That research provides a background against which the findings of this study can be interpreted, a brief summary is provided below.

The Australian's coverage of climate change 1997 -2007

David McKnight reviewed the period from 1997 to 2007 and found that “newspapers and television stations owned by News Corporation, based on their editorials, columnists and commentators, largely denied the science of climate change.” and that its corporate view framed the issue as one of political correctness rather than science. He concluded: “Scientific knowledge was portrayed as an orthodoxy and its own stance, and that of ‘climate sceptics’ as one of courageous dissent.” McKnight was unable to identify “a substantial body of articles establishing the science and challenging the climate dissidents’ claims”. (McKnight, D., 2010, p.700).

In December 2010, *The Australian's* environment editor Graeme Lloyd [defended](#) the paper’s editorial and opinion writers’ coverage of climate change against the charge of scepticism.

[In a response published](#) by *The Australian* on December 10, 2010, McKnight drew on his research to identify a number of editorials that had not been discussed by Lloyd and pointed to the ideological framing of the climate change debate: “For many years *The Australian* has been unable to see climate issues except through a distorted ideological lens.” For example, an editorial on January 14, 2006, argued

that the environment movement was about “more theology than meteorology” and “[S]upport for Kyoto cloaks the green movement’s real desire: to see capitalism stop succeeding”.

McKnight quoted another editorial that accused ‘deep green Luddites’ of believing that “the only way to avert the coming apocalypse is to close down all the power plants, take all cars off the road and return to a pre-industrial Arcadia”...

McKnight concluded:

“On climate issues The Australian still gives voice to a global PR campaign largely originated by the oil and coal companies of the US. On this score genuinely sceptical journalism is missing in action. Instead, an ideological sympathy with climate sceptics has been concealed behind a fig leaf of supposed balance.”

The Australian [subsequently published](#) another response to McKnight by climate sceptic Jo Nova who accused McKnight of wanting to censor views of sceptics whom she cast as whistleblowers: “Ponder the irony that McKnight, the journalism lecturer, is demanding The Australian adopt the policy espoused by the dominant paradigm, the establishment, and censor the views of independent whistleblowers.”

The sceptics’ claim that journalists who argue against the promotion of their views are censors is one that is continually repeated. (See [Section 3.0, Background](#), for a further discussion of how journalists respond to the charge of censorship.)

Covering the launch of a sceptic’s book in 2009

In 2009, UTS researcher Elaine McKewon provided support for McKnight’s findings. She researched the coverage of the launch of a book by climate sceptic, University of Adelaide Professor of Mining

Geology, Ian Plimer, *Heaven and Earth: Global Warming: The Missing Science*. and the controversy that accompanied it. Plimer argues that there is no connection between human activity and climate change (McKewon, 2009).

Heaven and Earth received sustained coverage during April - June 2009. Of 219 separate print and online articles, more than half (56%) were favorable to Plimer, which is far more than would be expected given its attack on the consensus position. More than half of all coverage was in News Corp, two-thirds of which (64%) was favorable to Plimer. More than two-thirds (67%) of *The Australian's* coverage was favourable and less than one third was unfavourable.

During this period, *The Australian* did publish a piece about Plimer's book by Professor Robert Manne who accused the paper of making a moral mistake in promoting a book that would create confusion about climate science and serve the interests of the fossil fuel lobby. This was followed up, however, by a piece by regular columnist Christopher Pearson headlined: '[Chairman Manne's no to dissent](#)'. Pearson's argument that Manne was closing down dissent is one that is repeatedly used by climate sceptics.

McKewon was critical of the media for not revealing Plimer's connections to the [mining industry](#), his lack of experience as a peer-reviewed author of climate science and his connection with conservative think-tanks associated with the the fossil fuel industries. (McKewon 2009: 2).

The Australian's climate change coverage 2004 - 2011

Most recently Manne, in his 2011 *Quarterly Essay* entitled 'Bad News', returned to the subject of *The Australian's* coverage of climate change. He included a content analysis of all articles about climate change (a broader category than 'climate science' reporting which is the subject

of this report) published by *The Australian* between January 2004 and April 2011. Manne concluded: “no one who was objective could arrive at a ratio of less than three to one for news items and opinion columns unfavourable rather than favourable” towards climate action.

When opinion columns were analysed, Manne’s findings were starker. The contributions from those who were sceptical about or denied the consensus view of climate change outnumbered by ten to one columns by consensus scientists or others. Regular columnists included economics editor Alan Wood (22), Christopher Pearson (21) and Janet Albrechtson (14).

The only regular columnists who supported the consensus were Mike Steketee (8), who has since left *The Australian* and ABC broadcaster Phillip Adams (8). (For a detailed analysis of *The Australian’s* editorials and a discussion of the findings see Manne, 2011, pp.37–54).

Journalists are sensitive to accusations of bias as they imply distortions of the truth. Fairness and truth are core ethical values. So it is perhaps not surprising that *The Australian’s* editors were stung by Manne’s critique.

Four senior staff responded to Manne. [The responses portrayed](#) his claims of bias as a symptom of a broader leftist mindset opposed to free debate. Environmental editor Graham Lloyd [separately responded to the criticism](#) of the climate change reporting. He argued that the editorial stance of *The Australian* was one of clear acceptance of anthropogenic climate change and quoted from an editorial published at the time of the 2007 IPCC report which stated that “global warming is unequivocally happening, and ... humans are, in the panel’s view, highly likely to be causing most of it.” He accused Manne of ignoring material which supported the consensus and unfairly quoting an 2006 editorial:

“Manne quotes half a kicker headline from an editorial of January 12, 2006, which said ‘climate change may be a mirage’. The second half of the headline, which Manne neglected to report, was ‘global poverty is not.’”

On the basis of these alleged distortions, Lloyd questioned whether Manne’s analysis of 800 articles is ‘trustworthy’.

It is difficult to imagine how the words, ‘climate change may be a mirage’, in whatever context they were written, could be read as consistent with the consensus position.

Manne was [granted 1000 words](#) to respond to *The Australian’s* 14,000 words of critique of his essay. He argued that he did not support censorship of sceptical views but wanted readers to understand the “intellectual irresponsibility and folly” of publishing denialist articles by “contrarian” scientists who in the real world are outnumbered 99 to one but who, in the opinion pages of *The Australian*, outnumber those representing the consensual core of the science 10 to one.”

HOW THE AUSTRALIAN COVERED CLIMATE SCIENCE BETWEEN FEBRUARY AND APRIL IN 2011 AND 2012

This overview of previous research provides convincing evidence that *The Australian* has been promoting sceptical views since at least 2002. Nevertheless *The Australian* denies this charge. This report builds on the earlier research and investigates how journalists working in different genres deploy a range of reporting techniques to support or raise doubt about the consensus position. This approach helps explain how *The Australian* manages tensions between the professional journalism practices of its reporters and the pursuit of its political goals.

Rather than grouping all the articles as Manne did, the research has used a different methodology that investigates articles on carbon policy separately from those relevant to climate science. Many articles on carbon policy are located within the field of political reporting and have no reference to climate science. For this reason, we published one report on the [coverage of carbon policy](#) and this second one on climate science, although the categories do overlap and need to be considered in the context of each other.

Sceptical Climate Part One on the coverage of the carbon policy between February and July 2011 showed that *The Australian* carried [twice as much](#) coverage of the policy as any other publication. A [third of its headlines](#) were neutral but of the rest, 80% were negative towards the policy. When [the content of articles](#) was considered, 44% were neutral towards the policy and of the rest 84% were negative. In other words, *The Australian* campaigned against the policy and its coverage of climate science needs to be considered in that context.

The Australian is better resourced with reporters and has more space than any other daily publication in Australia. This is reflected in the number of articles it publishes on climate change. As [Figure 4.8.1](#) shows, *The Australian* published 143 articles between February and April 2011 - 2012 that were relevant to climate science. This was 25% of all articles, and 36% more than the *SMH* which had the second highest number of articles.

As [Figure 4.8.1](#) shows, 52% of the 143 articles were coded as accepting the consensus position. While this is a greater proportion than News Corp's *The Daily Telegraph* and *Herald Sun*, it is still far less than one would expect given the overwhelming support for the consensus position among climate scientists. While only 5% of articles were coded as rejecting the consensus, the remarkable characteristic of *The Australian's* coverage is the high proportion (42%) of articles coded as suggesting doubt about the consensus position.

Considered from the point of view of word count in climate science articles, the results tend slightly against the consensus position with 50% of words raising doubt or rejecting the consensus position and 49% accepting it. (1% were coded 'unable to discern').

These results could be described as more 'balanced' from an internal perspective but still strikingly at odds with [the proportion of scientists accepting the consensus position](#).

As the examples below shows, a substantial number of *The Australian* articles which did acknowledge the consensus position were produced in ways that misrepresented aspects of climate science or furthered the paper's political interest in discrediting advocates of the Labor government's carbon policy.

The total number of articles dropped from 79 in 2011 to 64 in 2012. In terms of word count, the drop was 36%. The biggest proportional drop of 55% was in the 'accepts' category, while the proportion of words suggesting doubt or rejecting the consensus position grew. So while there was less coverage, it tended to be more sceptic.

Overall, this analysis shows that *The Australian* was more sceptical between February - April 2012 than during the same period the previous year. In 2012, 59% of words and 54% of articles questioned or rejected the consensus position.

The articles were coded to see whether there was a different approach to the consensus position within different genres.

Figure 4.8.1: Number of articles in each reporting genre and whether they communicated acceptance, suggested doubt or rejected the consensus position on climate science, published in The Australian newspaper Feb. - Apr. 2011 & 2012.

Genre	Accepts	Suggests doubt	Rejects	Unable to discern	Grand total
Comment	17 (49%)	14 (40%)	4 (11%)	0 (0%)	35 (100%)
Editorial	0 (0%)	7 (100%)	0 (0%)	0 (0%)	7 (100%)
Feature	24 (42%)	31 (54%)	2 (4%)	0 (0%)	57 (100%)
News	33 (75%)	8 (18%)	1 (2%)	2 (5%)	44 (100%)
Grand total	74 (52%)	60 (42%)	7 (5%)	2 (1%)	143 (100%)

[Download data as .csv](#) or [view on GitHub](#)

As [Figure 4.8.1](#) shows, news articles tended to be more accepting of the consensus than other genres. This is not surprising as many climate science news stories are based on releases by research scientists or government organisations that accept the consensus position.

However in terms of average word count, news stories that questioned the consensus position tended to be longer (662 words) than those accepting the consensus (439 words).

Overall, *The Australian's* comment pieces were almost equally divided between communicating acceptance of the consensus position (49%) and those that questioned (40%) or rejected (11%) the consensus. There was however a strong shift away from accepting the consensus in 2012. So while there was slightly more commentary in 2012, it was less likely to accept the consensus position.

As noted in [Section 4.3 on the genre of climate science articles](#) *The Australian* had more than twice as many features as any other publication. It published a total of 57 articles, of which 14 were less than 500 words, 22 were between 500–800 words and 21 were more than 800 words. Features were even less likely than comment pieces to accept the consensus position, reducing from 48% in 2011 to only 29% in 2012. Most of the shift was in the short and very short features category. While there were less short and very short features in 2012, they were less likely to accept the consensus. [Please refer to Section 4.3 for the classification details of short features, very short features and long features.](#)

All seven editorials during this period were constructed in ways that suggested doubt about the consensus position.

Overall the main sources of scepticism in *The Australian* come from editorial, features and comment pieces rather than in its news coverage. However further analysis of news stories suggests that in its news selection and reporting practices, *The Australian* preferences scientific findings that suggest less urgency or cast doubt on the reliability of climate scientists and advocates for action. New findings are highlighted in ways that could confuse readers who are not provided with ongoing results or broader trends in which to judge specific results.

Even when reporting stories that communicate an acceptance of that climate change is occurring, stories are structured in ways that undermine the credibility of climate scientists. News selection tends to favour angles that are negative towards climate science organisations and climate scientists.

These news production practices fed into *The Australian's* overall editorial stance on carbon policy and opposition to the Labor government and the Greens.

What follows is a series of examples from different genres of how the Australia approached climate change reporting during the sample period:

News Example One: Ross Garnaut's Climate Science Update

On March 10, Professor Ross Garnaut published his 90 page 5th [Climate Science Update report](#). The following morning *The Australian* published a 500-word news report on page one headlined '[Climate change may be worse than feared: Garnaut](#)'. The article was about the Gillard Labor government's climate change advisor's 'gloomy' warning that:

"Sea-level rises caused by global warming may be worse than predicted and the world may have to find deeper cuts to greenhouse gas emissions than currently targeted to manage the risks of climate change.

I would now be tempted to say that views that temperatures and damage from a specified level of emissions over time will be larger than is suggested by the mainstream science are much more likely to be proven correct than those that embody the opposite expectations."

The Australian quoted Garnaut as finding that "previous research may have underestimated the impact of increasing levels of carbon dioxide in the atmosphere".

This story was a straightforward report of an event, highlighting key points in Garnaut's summary. Garnaut was the primary and only source so his view of climate change defined the story. However, *The Australian* report ignored Garnaut's criticisms of media coverage of climate change that he expressed in a speech to mark the launch of the report. Garnaut claimed that the media were undermining

support for action by giving equal weight to mainstream peer-reviewed science and sceptical views not backed by published evidence, even though evidence that humans are the primary cause of greenhouse gas emission had strengthened beyond high certainty.

The Age led with the criticism of the media in its report headlined [‘The science is good, the media bad, the situation worse: Garnaut’](#) quoted Garnaut in these terms: “If you take our mainstream media, it 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.” *The Age* also included the recent predictions about sea level rise in their report.

A day after Garnaut made these comments, *The Australian* published a sceptic piece by regular columnist Christopher Pearson, discussed below.

This story provides a good example of how journalists play a key role in producing visibility and invisibility for specific information and activity. Their selection of sources and angles contribute to the overall ‘maps of meaning’ created for their readers. (Bacon, W., & Nash, C.J., 2012).

[News Example Two: Researching tropical cyclones and climate change](#)

[A second news story](#) published on the front page of *The Australian* on April 5, 2011 provides an example of a story that was coded as accepting the consensus position which nevertheless could have led readers to doubt the credibility of research scientists and politicians’ statements about the need for action.

In the early hours of February 3, 2011, a powerful tropical cyclone Cyclone Yasi hit the coast of Queensland. In the aftermath of the cyclone, Greens Senator Christine Milne referred to the cyclone as a “tragedy of climate change”. This led to several vehement attacks on her in News Corp media.

Despite the attacks on Milne, the link between extreme weather and climate change has been established in a number of national and international reports. (Australian Climate Commission, 2013). This is further discussed in [Section 4.9 on reports of extreme weather](#).

Two months later, *The Australian* took up the issue of the impact of climate change on tropical cyclones in a front page story headlined: [‘Fewer more intense cyclones on the way: CSIRO’](#) appeared on page one of *The Australian* on April 5, 2011 during the week in which the [CSIRO conference on Greenhouse Effects](#) was held.

The story covered a range of research about the frequency and intensity of cyclones. The headline fairly presented the findings. However the first paragraph read:

“The number of tropical cyclones in the Australian region could be halved and waves could become smaller on the nation’s east coast, according to CSIRO research commissioned by the federal government that appears to run counter to growing political warnings over extreme weather events.”

The article goes on:

“The surprise results are contained in scientific papers prepared for the Department of Climate Change and obtained under Freedom of Information laws.

The Australian published extracts of the findings online yesterday as Climate Change Minister Greg Combet painted a grim picture of the climate change risks at the CSIRO's Greenhouse 2011 conference, held in cyclone-ravaged Cairns.

'Clearly, one of the most worrying aspects of climate change is what this could mean for the frequency and intensity of extreme weather events such as droughts, heat waves, cyclones and floods,' Mr Combet told the conference yesterday.

'It is these events that impact the most on communities, ecosystems and industry. And, in many instances, the most vulnerable in society will bear the brunt of such impacts.'

In the wake of Cyclone Yasi, Greens deputy leader Christine Milne warned: 'This is a tragedy, but it is a tragedy of climate change. The scientists have been saying we are going to experience more extreme weather events, that their intensity is going to increase, (and) their frequency.' "

The juxtaposition of the lead paragraph next to the quotes from Greens MP Milne and Minister Combet implied that their warnings were inconsistent with the existing research. While Milne had suggested Cyclone Yasi was linked to climate change, both she and Combet had referred not just to cyclones but to a cluster of extreme weather events.

Overall the story correctly reported that current research tends to show that while cyclones in Australia may be less frequent, they are predicted to be more destructive. There is also research which points to storm surges from cyclones becoming more severe.

When the reporters interviewed Dr Deborah Abbs, who completed the research that was the subject of the lead paragraph, she explained that she had made no findings on the likely increasing intensity of

storms because that issue was not part of her research. The CSIRO's Penny Whetton was quoting as pointing out that the organisation had been reporting the likelihood of tropical cyclones decreasing in frequency but increasing in intensity since 2007: "It's not new science,....that is the collective wisdom and it has been for some time." In other words, she pointed out that *The Australian's* story was not a news breakthrough. She referred to a [2007 Bureau of Meteorology and CSIRO Climate Change in Australia report](#) which projected cyclones decreasing in frequency but increasing in intensity.

While the story did report on a range of cyclone research, it is hard not to conclude that its main purpose was to discredit Milne and Combet and highlight findings that would lessen a sense of urgency about the need for government intervention.

The Australian did publish more material about the conference, including a short news items predicting that sea level rise would be on the upper levels of 2007 predictions and a very brief reference to the health of the Great Barrier Reef being at risk "unless carbon emissions were not dramatically curtailed". There was also a long feature article on the importance of uncertainty in climate science by environmental reporter Graham Lloyd that was written in a way which assumed that human beings are causing global warming.

News Example Three: Climate refugees

On April 21, 2011, *The Australian's* reporter Amos Aikman published another front-page story ['World still waiting for '50 million climate refugees by 2010'](#).

The first paragraph of the story read:

“A UN climate body has been forced to back away from damaging claims that the world could be flooded with up to 50 million ‘climate refugees’ - by last year.”

The article reports that a map, which recorded a 2005 prediction of 50 million climate refugees by 2010, had been withdrawn by a UN climate body. In fact, the map had been withdrawn by a Norwegian NGO working in collaboration with the United Nations Environmental Program. This organisation had not claimed the world would be “flooded” by refugees.

The issue of climate change and migration is an important one. Informing the public about a UN prediction that has not eventuated is a legitimate story. This story however was not a major news breakthrough or even a new story.

The prediction that there would be 50 million refugees by 2010 was [originally made](#) by British environmentalist Norman Meyers in 2005. He has since admitted that his prediction was based on faulty methodology and was an attempt to provide an assessment in the absence of adequate data. The prediction was always contested in academic circles because the definition of an environmental refugee is not clear and is yet to be recognised within international refugee law (Castles, S., 2002). It is also true that the prediction was picked up and repeated by many organisations promoting action on climate change. For example it was repeated in a [press release](#) posted to the United Nations University website in 2005. It was also used by French media organisation *Le Monde* in a map on climate migration. This in turn was used by [GRID-Arendal](#), the Norway based organisation that collaborates with the United Nations Environmental Program.

The story [‘What happened to the climate refugees’](#) was originally published by a Sydney blogger [Gavin Atkins](#) on the *Asian Correspondent* site on April 11, 2011. Atkins is an admirer of News

Corp bloggers, Andrew Bolt and Tim Blair, who he thanked when he took a break from making contributions to the *Asian Correspondent* site.

Atkins noticed that some countries that were predicted to be a source of climate refugees on a UNEP map had actually grown in population. He contacted GRID-Arendal who removed the map. Atkins initially posted an explanation that there were technical difficulties with the data and it might not be correct and he later explained that it had originally been sourced from *Le Monde's Environmental Atlas*.

On April 18, 2011 a piece in *Spiegel Online* [provided an overview of the issue](#) which included an explanation of the difficulty of estimating potential numbers climate refugees.

A day later, on April 19, 2011 Andrew Bolt posted the story on his blog under the heading, '[What Climate refugees, What map? What dud predictions?](#)'. He accused the UNEP of erasing evidence of its false prediction rather removing information that might mislead the public.

Two days later [the story](#) was front page news in *The Australian*.

In the third paragraph, the journalist localises the story in the Pacific with a reference to Tuvalu which reads:

"Low-lying Pacific islands, such as the tiny nation of Tuvalu, have been considered potential sources of climate refugees as they are submerged by rising sea levels."

Nowhere else in the article does the author point out that Tuvalu [is still considered](#) to be at risk of being submerged by rising water levels and storm surges and damaged by a complex range of climate impacts.

UNSW Professor Jane McAdam is an international expert in the field of climate migration. She was quoted extensively in the article, explaining that attempts to quantify migration because of climate change are challenging because causes are complex and that over-estimations can cause damage. "If we can't count up 50 million people displaced by climate change today then it looks like a non-issue," she said. Only in the third last paragraph did the story state that McAdam and another academic source accept that climate change is occurring and could trigger migration.

The story reported McAdam's view that "alarmist" predictions that can easily be disproved can run the risk "delegitimising" an issue. However, it did not report her concern that existing legal frameworks do not offer adequate protection to people whose communities may be threatened by climate change or that human rights law is relevant to the rights of displaced people.

McAdam is urging governments to develop a framework for people who are displaced by climate change. She considers that countries with high emissions could be cast as persecutors of citizens of small island nations whose existence is threatened by climate change. Since April 2011, she has been the subject of a *SMH* profile '[Immersed in a fight for lost ground](#)' and was also interviewed by the ABC and *Voice of America*. She has appeared at a major conference on climate change and migration and published several books on this issue. (McAdam, J., 2010, 2012, 2012). According to a Factiva search however, she has never again been used as a source by *The Australian*.

The analysis of this article shows that news is constructed in ways that explicitly acknowledge that human-induced climate change is real while creating uncertainty about climate researchers and the validity of claims from those who are affected by climate change, such as the people on Tuvalu. This story was coded as 'accepting' the consensus

view but nevertheless was produced in a way that may well have created doubt about the validity of climate science or urgency of climate change in the minds of some readers.

When considered in the context of overall coverage, it becomes clear that journalists make strategic choices to make some issues and sources visible and others invisible. Their framing of issues also influences their meaning. (Bacon, W., & Nash, C.J., 2012).

This example also demonstrates the danger of republishing earlier claims, such as those of Norman Myers, without verification. Claims should be checked with other experts in the field. The hostile communications atmosphere in which NGOs and journalists work only highlights a need for verification. In the case of journalists, this is supposed to be part of their standard professional practice.

News Example Four: Good news story about coral research

On February 3, 2012 *The Australian* published [‘Study finds coral reef growth thrives in warmer waters’](#). The story leads with:

“A government-run research body has found in an extensive study of corals spanning more than 1000k of Australia’s coast-line that the past 110 years of ocean warming has been good for their growth. The findings undermine blanket predictions that global warming will devastate coral reefs, and add to the growing body of evidence that coral reefs are more resilient than previously, thought up to a certain point.”

The peer-reviewed study was by the Australian Institute of Marine Science. It quoted several scientists supporting the results. Towards the end it stated: “The key question is: how warm can the water get before the positive effects are reversed”. The report also

acknowledged that it was much hard to measure the longer terms effects of global warming which seemed to sit at odds with the leading paragraph.

The Australian had already published a report headlined '[Coral offers climate hope](#)' on January 21, 2012 about the resilience of coral reefs to warmer environments.

A Factiva search did not reveal any report by *The Australian* of a major symposia of reef researchers held in Queensland on October 12, 2012 at which 2500 scientists called for a action on pollution and greenhouse gas emissions. The statement was summaries in [an article in Fairfax Media's *The Canberra Times*](#):

"A statement, said to represent the participants, called for action on pollution and greenhouse gas emissions, which are making the world's oceans more acidic as they absorb extra carbon dioxide from the air.

'This combined change in temperature and ocean chemistry has not occurred since the last reef crisis 55 million years ago,' it said. 'A concerted effort to preserve reefs for the future demands action at global levels, but also will benefit hugely from continued local protection.'"

Reefs are caught in a pincer movement between local pollution and overfishing on the one hand, and rising temperatures and ocean acidification on the other.

"Dealing with the local threats would put corals in a stronger position to stave off the global problems of heat and acidification, which are expected to intensify later this century, said Jeremy Jackson, a senior scientist emeritus at the Smithsonian Tropical Research Institute."

The symposia which included many research papers as well as this public statement would appear to have been at least as newsworthy as the resilient coral reports. This example of news reporting of coral research shows how *The Australian* selects and structures its science news to fit within its overall political agenda on climate change. Unless readers receive information from other sources as well as *The Australian*, they could be left with the impression that climate change is not a major threat to Australian reefs. While other factors are a serious threat to reefs, climate change [interacts with other factors](#) to threaten marine environments.

(More reports on reef research can be found on [The Conversation website](#)).

News Example Five: Himalayan Glacier Melt

An article on February 10, headlined '[Highest peaks have cut no ice in past 10 years](#)' focused on a peer reviewed research article in the journal *Nature*. The *Nature* article, which attracted international media attention, is a useful example of how media publications can create different meanings in their approaches to a climate science story. Environmental reporter Graham Lloyd began his report by framing it in the context of an episode that occurred in early 2010 which became known as 'Glaciersgate':

"HIMALAYAN glaciers are back on the frontline of climate change controversy, with new research showing the world's greatest snowcapped peaks lost no ice at all over the past 10 years.

Claims the Himalayan ice peaks would disappear by 2035 instead of 2350 cast doubt over the credibility of the UN's Intergovernmental Panel on Climate Change 2009 report. Now even the 2350 estimate of disappearing ice is open to question."

Glaciergate had been extensively covered by *The Australian*. A Factiva search reveals that of 23 references to Himalayan glacier melt since 2000, 15 of them made significant mention of the IPCC error and its consequences, including ten that were reports specifically about the incident. Five were [reprints](#) from the News Corp owned *The Times*.

There is no doubt that a serious error had been made in an IPCC working paper report. It was eventually tracked back to a comment made to a journalist who later quoted it in an article for the *New Scientist*. The statement which was that Himalayan glaciers could melt by 2035 was included in an NGO report and later inappropriately repeated in an IPCC report. The scientist who exposed it described it as a “bad error” but “not a conspiracy”. He continued the involved in IPCC activities. The reporter Fred Pearce who published the original interview described the incident as an ‘appalling cock-up’. The incident was damaging to the head of the IPCC Rajendra K. Pajendra who initially defended the statement. Later he acknowledged the error and withdrew the claim. The IPCC subsequently reviewed its procedures. The error and its aftermath were extensively covered by News Corp publications and sceptics as an example of why there needed to be an overhaul of the entire IPCC

Measuring glacier melt is a difficult task because of the limited amount of resources available to track many glacier ranges and because of variations across different regions. Since its intensive coverage of the IPCC error, *The Australian* has published only two reports referring to Himalayan glacier. One of these was the February 5, 2012 report that is the subject of this example.

After reminding his readers of Glaciergate, Lloyd went on to report that this latest study had found that while lower Himalayan glaciers were melting, snow was being added. He then quoted one glaciologist who said the results were “unexpected” and another, the author of the study, who had told *The Guardian* that newspaper the melting of icecaps and glaciers remained a serious concern. “People should be

just as worried about the melting of the world's ice as they were before." The story ended by repeating the now notorious error that led to 'Glaciergate'.

This article is a good example of how the choice a journalist makes about how to frame a story embeds different meanings for its audience. The key finding of the *Nature* paper was that the world's glaciers and ice caps contributed around 1.5 mm per year to global sea level rise between 2003 and 2010. This estimate is smaller than calculated in previous studies. The secondary finding was about the Himalayan glaciers were melting but adding snow. The different findings led to several alternative story frames of which Lloyd's was one. *The Independent*, for example, headlined its report 'Billions of tons of water from world's glaciers, satellite reveals'. Lloyd's framing reminded readers of the IPCC mistake and highlighted the lack of certainty about the rate of Himalayan ice melt. More on the *Nature* paper and the different ways in which it was reported can be found in Carbon Brief.

Two days later, *The Australian* did publish a wire service report which quoted one of the authors of the *Nature* article repeating that the 'bad news' was that the Himalayas are still losing a lot of water. A Factiva search revealed no further reports of Himalayan glacier melt since then. It did not for example publish anything about research which led *Time* to report in May 2013 that, "Fears grow of a Himalayan tsunami as Glaciers melt". This research was also the subject of reports by *The Guardian* and a number of Asian media outlets.

In January 2013, *The Australian* was forced to issue a correction after it published an 'exclusive' report headlined 'Sea rise not linked to warming' and reported that there had been 'no increase in the rate of glacier melt over the past 100 years'. The correction followed detailed critiques of the piece by environmental journalist Graham Readfearn and Crikey.

This examples shows how The Australian structures its news reporting and selection in ways which amplify uncertainties and findings that tend to reduce concern about climate change while ignoring developments that might build the community perception that urgent action is needed.

Examples of Sceptical Commentary

The Australian's news item on the Garnaut report appeared on March 11, 2011. One day later on March 12, columnist Christopher Pearson wrote a 1200 [comment piece](#). Pearson, who has since died, was not deterred by Garnaut's warnings. He wrote:

"I'm expecting the debate over anthropogenic global warming will collapse within the course of the next decade under the weight of its own internal contradictions, to borrow a phrase that so-called scientific Marxism once used in reference to capitalism. It's probable that quite soon the recent mild warming trend will come to be seen as par for the course and in no way a threat to the planet or mankind....The development of the global warming debate will (in the future) be analysed primarily in terms of what the sociology of knowledge calls plausibility structures.

What part did the Blair government and its friends at the Royal Society play in turning suspect computer modelling into the state religion throughout so much of the Anglosphere? How did Rajendra Pachauri and the Intergovernmental Panel on climate change get away with so many flawed and incoherent reports? Who were the first reputable scientists to express reservations? Who were the later comers and who can best be described as 'still in denial.' "

And later:

“Although there were several turning points in the debate, Climategate revealed in detail how small, powerful and manipulative a clique the anthropogenic global warming theory’s advocates were.”

Pearson concludes by referring to a poll, conducted by a right-wing sceptic think-tank, Institute of Public Affairs, that found that only one-third of Australians believe anthropogenic global warming poses a serious threat. ([‘Carbon tax wonder tonic proves a tough sell’](#), *The Australian*, March 12, 2011).

This column draws on several recurring themes of climate scepticism including that climate science is the tool of left-wing totalitarian political movements, that those who promote it have vested interests, and that climate scientists are deluded or are lacking in courage. Pearson failed to point out that the scientists associated with the ‘Climategate affair’ have been cleared of manipulating scientific data.

The effect of Pearson’s column, on any readers taking his comments seriously, would have been to cause them to seriously doubt the validity of Professor Ross Garnaut’s report covered in the item on the previous day.

Just two weeks later on March 22, 2011 *The Australian* ran another sceptical opinion piece by Niki Savva headlined: [‘A spiritual guide to climate change’](#) which drew on a common sceptic theme that climate science is akin to a religion being forced on people, rather than evidence based intellectual activity.

*“If Tony Abbott could only embrace the new global religion where belief in climate change is obligatory and in God optional, then he would spare himself the punishment of its spawn, the New Inquisition and be better off politically, if not spiritually.” — ([‘A Spiritual guide to climate change’](#), *The Australian*, March 22, 2011).*

On February 7, 2011, Paul Monk, of Austhink Consulting, exploring the topic of scientific consensus in an opinion piece argued: “Big questions that need to be asked (and answered) regarding the anthropogenic global warming hypothesis.” He concluded:

“as we work towards consensus we should be ‘wary of foreclosing major debates’, proceed through testing variables scrupulously and not through the ‘polemic or denial’ towards a ‘rational consensus’.”

This was precisely the approach that had concerned Garnaut. ([‘History of science shows consensus can be mistaken’](#), *The Australian*, February 7, 2011)

The Australian also ran pieces that accepted the scientific consensus position and action on climate change, including one by the ex-premier of Queensland Peter Beattie on disasters headlined [‘When catastrophes happens readiness is all’](#). (*The Australian*, February 2, 2011.)

Examples of Features in The Australian

While scientific consensus about human induced climate change exists, climate science is a developing and dynamic field that has many areas of uncertainty. An explanation and exploration of these is an important and legitimate focus of reporting. An example of a feature in *The Australian* that explored the issue of scientific uncertainty in climate change using a diverse range of sources was an article by Cheryl Jones in which she explored research on the impact of El Nina weather pattern and climate change ([‘And Science suggests this may not be the end – Cyclone Yasi’](#), *The Australian*, February 2, 2011). This was a strong feature which suited editors’ editorial priorities that amplify uncertainties in climate science but nevertheless was a solid contribution to explaining different types of uncertainty.

Other features raised doubts about the consensus position. On April 9, 2011, *The Australian* ran an extract of more than 3000 words from [‘The Intelligent Voter’s Guide to Global Warming’](#), published in the March and April, 2011 issues of the conservative magazine *Quadrant*. The feature ‘The Intelligent Voter’s Guide to Global Warming (Part I)’ focused on carbon policy but also cast doubt on the scientific consensus around global warming, (*The Australian*, April 9, 2011). The authors concluded: “As proposed by Danish author Bjorn Lomborg, there are many worthwhile causes to fund with our taxes and philanthropic dollars that rank ahead of possible global warming. Adaption to adverse climate change, if and when it does occur, may be the best and only viable strategy.” ([Bjorn Lomborg](#) is a well known critic of the consensus position whose opinion pieces have often been published in *The Australian*. He has many critics, some of whom have intensively critiqued his [work](#)).

Cut and Paste

The Australian has also developed another technique to discredit those who supported policies, media groups or institutions it opposes. It is called the *Cut and Paste* column, which Factiva codes as a feature. It juxtaposes quotes from different sources to critique or supposed weaknesses in the statements of others, including ABC and Fairfax journalists.

For example, on February 11, 2011, *The Australian* ran a column, [‘How to insure maximum panic at the least cost is generated from natural disasters.’](#)

“Ross Gittins in The Sydney Morning Herald on Wednesday:

'SCIENTISTS have long predicted one effect of global warming would be for extreme events to become more extreme, which is just what seems to be happening. And, certainly, the insurance industry, which keeps careful records of these events, is in no doubt that climate change is making things worse.'

ABC1's Lateline on Wednesday:

'Reporter Margot O'Neill: Australia's climate seemed to flip into overdrive this summer. So, are these extremes the new normal? It's what climate change models have been predicting, after all. Big international insurers are mopping up after more than 850 global weather catastrophes in 2010, and they say there's no doubt: global warming is destabilising the climate.'"

These quotes were then compared to the statement below:

"Peer-reviewed paper by Eric Neumayer and Fabian Barthe of London School of Economics and funded by re-insurers Munich Re in Global Environmental Change, November 18, 2010:

'Applying, therefore, both methods to the most comprehensive existing global dataset of natural disaster loss, in general we find no significant upward trends in normalized disaster damage over the period 1980–2009 globally, regionally, for specific disasters or for specific disasters in specific regions.'"

The 'Cut and Paste' piece aimed to discredit Gittens, who is respected Fairfax media economics editor, and O'Neill, who is a senior ABC reporter who produced a report about climate change journalism for the Reuters Institute. (O'Neill, M., 2010). By juxtaposing the journalists' references to insurance industry sources who accepted evidence of a link between climate change and extreme weather with a peer

reviewed study which appeared find no link, The Australian was encouraging its readers to regard these well known professional reporters as inaccurate and alarmist.

Andrew Bolt took up the attack Gittens and O'Neill on his blog on the same day under the heading: ['Nailing another warmist scare endlessly repeated by journalists'](#)(*Herald Sun*, February 11, 2011).

He then repeated the text from the 'Cut and Paste' column in the article.

The story might have been left there is it had not been for a reader of *Crikey's Pure Poison* who followed up the story by checking the original peer-reviewed paper. He discovered that critical parts had been left out by *The Australian* and Bolt's blog. In a short critique ['The Oz, Bolt and a climate of denial'](#) Pure Poison published the complete quote from the complete quote from the peer-reviewed paper, which continued:

"Due to our inability to control for defensive mitigation measures, one cannot infer from our analysis that there have definitely not been more frequent and/or more intensive weather-related natural hazards over the study period already. Moreover, it may still be far too early to detect a trend if human-induced climate change has only just started and will gain momentum over time."

Indeed, the authors had emphasised that the research should not be misused because despite a different research design their conclusions did not contradict earlier studies. They had written, "It is premature to interpret these findings as evidence that climatic factors have not led to an increase in normalized disaster damage".

One can only assume that *The Australian's* editors of *Cut and Paste* had not read the full paper or deliberately decided not to use these parts. As Crikey concluded: "It must be so infuriating when you think you've hit a climate change denial home run, only to find that you've struck out".

On March 19, 2011, *The Australian* used a similar technique to discredit Professor Garnaut, by quoting out of context comments he made about uncertainty in climate science on separate occasions. In the first quote, Professor Garnaut is quoted as referring to statements by the Leader of the Opposition, Tony Abbott, that the science of climate change is "not settled". This is compared to statements Garnaut himself has made about science never being settled in an "absolute sense". It is clear that each statement was made in a different context but nevertheless the impact is designed to undermine the credibility of Professor Garnaut. The effect of this technique is to signal to scientists and policy makers that if they acknowledge areas of uncertainty existing in climate science, they will be mocked for supporting the consensus position. The headline ['The Fatal Unsure- or how a shadow of climate doubt constitutes the mental dark ages'](#) reinforced the impression that those who support the climate change action are rigid and dogmatic.

Editorials by The Australian

On February 11, 2011, *The Australian* commented on the appointment of Tim Flannery as Climate Commissioner:

"he would not have been our choice for climate commissioner, a three-day a week job in which he will get paid \$180,000 a year. Professor Flannery, a mammalogist and paleontologist is no expert on global warming and has made a hash of the subject in the past."

The piece ended with:

“But do we really need Professor Flannery to explain climate change? If he wants to be useful, he should urge the government to start selling uranium to India, pronto.”

While very harsh and defamatory, this editorial falls with the field of opinion and journalistic criticism. In the overall context of *The Australian's* coverage, it reinforces its overall negative attitude to action on climate change.

This was followed by an editorial on February 12, 2011, about droughts and flooding not being unexpected in Australia, ([‘Seeing fire and rain and sunny days that never end’](#), *The Australian*, February 12, 2011).

The editorial argues that Australia needs to focus on planning for disasters including “the danger of allowing bushland to carry high fuel loads near built-up areas needs to be addressed across the nation.” Having raised this issue, the editorial criticises those who would “stand back helplessly and blame the summer’s tragedies on climate change is to surrender responsibility for the things that we can control.” The overall impact is to undermine Professor Garnaut’s report [‘Weighing the costs and benefits of climate change’](#) (2011) which had been widely reported a week earlier as finding that while no specific disaster can attributed to climate change, scientific research does indicate an increase in extreme weather events and the need for action on climate change.

On March 16, 2011, *The Australian* ran another editorial portraying its own position as one of defending science and rationality:

“At The Australian, we leave matters of spiritual belief for the conscience of the individual but we do unashamedly promote the liberating power of rational thought. It is the triumph of reason that sets humankind apart, that has freed us from superstition, enabled

us to prosper, to develop wondrous cultures, to travel and explore from the depths of the oceans to the fringes of the universe. Without the knowledge we have amassed over countless generations, we would live in fear of darkness... yet some of us seem intent on abandoning that legacy in favour of New Age fatalism or Gaia and Mother Earth spiritualism."

It compared its own approach with that of those who promote:

"Fear mongering over climate change has created such anguish that some people fail to distinguish between climate and geology. The climate hysteria has been propagated by scientists, educators and politicians who should know better..." (["Earth's daily woes prompt "off the planet" theories"](#), *The Australian*, March 16, 2011).

This led into another attack on then Australian Climate Commissioner Tim Flannery who had mentioned [the Gaia principle](#) in an interview when discussing climate change. (An account of how *The Australian* turned stories about sea level rises into a prosecution of Flannery was produced by UNSW's Tim Lambert: ["Bad Tidings. Reporting of sea level rise in Australia is all washed up."](#))

Climate scepticism as a collaborative effort

The analysis in this report of News Corp coverage has revealed several instances of where the paper picked up and promoted attacks by the *Herald Sun* columnist Andrew Bolt on climate scientists and policy makers. When Bolt scored his so-called news scoop, which is the subject of [Example One in Section 4.6](#), *The Australian* not only followed up with a prominent news story but also promoted Bolt's interview with Climate Commissioner Tim Flannery favourably in *The Australian* diary column. ('Bolt of climate truth', *The Australian*, March 28, 2011).

This is just one example of how networking occurs across News Corp through its newspapers, blogs, regional papers and into sympathetic talkback radio and commercial television programs.

In late January 2012, climate science sceptics made several moves across the UK, US and Australia.

On January 27, 2012 (two days before *The Daily Mail* in London published its story that is the subject of [Example Two in the analysis of Bolt's coverage in Section 4.6](#)), the News Corp owned *Wall Street Journal* published an open letter by 16 scientists. On January 29, 2011 *The Australian* published the same letter and a news story "Scientists from around the world, including the former head of Australia's National Climate Centre, are calling for calm on global warming, saying alarmist rhetoric is not backed by evidence and is being used to increase taxes." (['Carbon tax alarmism doesn't fit facts scientist warn'](#), *The Australian*, January 27, 2012)

The Australian's story was taken up by the ABC's *World Today* who interviewed the former head of the National Climate Centre at the Bureau of Meteorology William Kininmonth who signed the letter. Kininmonth is a well known member of the climate sceptic organisation [The Australian Climate Science Coalition](#). In response at the end of the ABC interview, Climate Commissioner Flannery pointed out that the 16 signatories were not all scientists and that the interview needed to be seen in the context of Republican presidential race.

Several bloggers investigate *The Wall Street Journal* letter more deeply. One of these is environmental journalist Graham Readfearn who had left News Corp and established a blog dedicated to critiquing climate scepticism. His critique of the scientists' intervention was published on [his blog](#), and on *Crikey*. *The Daily Climate* also [published an investigation](#) which found that half of the 16 'scientists' had ties to the oil and gas industry. [Other blogs](#) posted similar information.

The Wall Street Journal had refused to publish a similar letter from 255 scientists from the National Academy of Sciences supporting the mainstream view on climate change. The signatories made a number of claims that the number of dissenters from the consensus position in the climate science field was growing and about the uncertain state of evidence about the core findings of climate science. They were also described as “distinguished”.

They focussed on the short term warming ‘pause’ that was also being heralded by tabloid press reporters including *The Daily Mail*'s David Rose and the *Herald Sun*'s Andrew Bolt. Professional journalists would normally be expected to subject these claims to scrutiny *before* publishing and at least provide some alternative perspectives. This did not happen at either *The Wall Street Journal* or *The Australian*.

The Wall Street Journal and [The NY Times](#) both published strong statements by mainstream scientists responding to the letter.

Mike Steketee is a senior and respected reporter who for several years had a column with *The Australian*. On February 4, 2012 he published what would be his second last column, headlined—[‘Scientists who trade in doubt’](#). It was a strong critique of the sceptics’ letter. He began by referring back to a time when US Republicans and Democrat politicians had shared a bi-partisan position on global warming and continued:

“Since then, sceptics have won conservative hearts and minds, turning scientific findings into left-wing conspiracy and ideology. Eternal Republican damnation would be the fate of any candidate who dared to advocate the original Gingrich position.

This is another way of saying politics often has little to do with reality. The evidence for global warming and its connection with increased carbon dioxide emissions was overwhelming four years ago and it has only become stronger since. Not that you would realise it from the way data is used selectively.

*This week, 16 scientists from around the world put their name to an article, published in *The Australian* and elsewhere, saying there now had been a lack of global warming for well over 10 years. This led them to argue that 'there is no compelling evidence for drastic action to "decarbonise" the world's economy. It is likely that more CO2 and the modest warming that may come with it will be an overall benefit to the planet.'*

By contrast with the position adopted by the 16 'scientists', Steketee then referred to data collected by leading world agencies which shows that "the 10 hottest years in the past 131 have all occurred since 1998. By the way, the maximum difference in measurements of global temperature by the three agencies in any of these years is 0.05C. In this context, the fact that 1998 was hotter than 2011 does not matter much."

On February 7, 2012 *The Australian* also republished a 1500 word *Sunday Times* piece that provided an overview of the debate about global warming (['Warming data show shades of grey'](#), *The Australian*, February 7, 2012). On the same day it also published a column by Bob Carter ['Scientific Research Sinking in a sea of alarmism'](#).

Bob Carter is associated with the sceptic organisation [The Australian Climate Science Coalition](#) and the rightwing thinktank the [Institute of Public Affairs](#).

A month later, Steketee followed up with another column about climate change. The column was headlined, [‘Scientists who trade in doubt’](#) and was focused on Steketee critique of Bob Carter’s sceptic views and then dealt with the funding he received from the US based Heartland Institute. In response to questions, Carter told Steketee:

“I have no salary and I sometimes do consulting work.”

The article continues:

*“However, Carter’s biography on his website says: *‘He receives no research funding from special interest organisations such as environmental groups, energy companies or government departments.’ Isn’t the Heartland Institute a special interest organisation? ‘Of course not,’ says Carter. ‘They are a think tank.’”*

Whatever it is, it devotes a great deal of its time to lobbying and public advocacy. The Heartland documents show it spending \$US4.2 million of its planned \$US6.6m budget for this year on editorial, government relations, communications, fundraising and publication. Heartland describes the project on which Carter is working as ‘`the most comprehensive and authoritative rebuttal of the United Nations IPCC reports’.

Steketee examined the sceptic claims and found them wanting in evidence and logic. He then investigated the issue of what interests might be behind them. This is exactly what a independent and professional journalist might be expected to do.

Some time later, Steketee was told the paper no longer wished to publish his column. Not long after that he left News Corp.

Steketee’s departure was not the first. Other journalists who had written strong reports on climate science had also left. One of these was rural reporter Asa Wahquist who left the paper in 2010. *Crikey*

[later reported](#) that she had told a journalism education conference that it was “torture” trying to report climate change at *The Australian*. In addition to these departures, Leigh Dayton a well respected science reporter who had written many reports on climate science left the paper in 2012.

The Australian's coverage of climate change has come at a cost. It has paid a price of some of its best reporters to pursue its political agenda on climate change.

2013: THE AUSTRALIAN AND AUSTRALIAN CLIMATE COMMISSION'S REPORT *THE CRITICAL DECADE*

In June 2013, the Australian Climate Commission published their report [The Critical Decade](#). It was sent to all media outlets on the evening before its release. It was published in many Australian media outlets the following day. A wire service report did appear on *The Australian* online but as *The Australian's* editor Clive Mathieson later told ABC's *Media Watch*, it just didn't “make the cut” for the hard copy edition. In the following days, *The Australian's* *Cut and Paste* column and Andrew Bolt both took the opportunity to criticise the ABC for their coverage of the report.

(The Australian Climate Commission was abolished by the Abbott Coalition government in September 13, 2013. Its staff have announced they are beginning a replacement Community Council to disseminate information about climate science).

While *The Australian* ignored this major report, it's environmental reporter Graham Lloyd has continued to publish reports which create confusion about climate science.

On June 24, 2013 then Presenter Jonathan Holmes critiqued two reports by Lloyd, one of which appeared on May 4, 2013 that under the headline: [‘Emissions debate heats up while experts warn of a coming ice age’](#) and continued with “Researchers around the world remain at odds on the causes and future of global warming”. ([‘Emissions debate heats up while experts warn of a coming ice age’](#), *The Australian*, May 4, 2013).

“Researchers around the world suggests a broad group of scientists. But as Jonathon Holmes said on Media Watch, ‘Well, no. Two Taiwanese scientists are worried that particulate pollution from China might have a cooling effect – but neither of them questions the warming effect of greenhouse gases. Only one expert quoted in the article does.’”

(The full critique can be found in [the transcript](#).)

Holmes concluded:

“The Australian gives prominence to the small number of scientists who dissent from the view that global warming is being caused by human activity; and down play or ignore the publications – and the warnings – of the scientists who do. Quite simply, The Australian is misreporting the true scientific debate.”

CONCLUSION

The Australian produces more coverage of climate science than any other print publication in Australia. Over the period studied, it appeared to become more critical of the global warming consensus position. Less articles were published in the three month period in 2012 than in 2011. Those that were published tended to be more sceptical.

This research report confirms earlier research which has found that *The Australian* plays a significant role in promoting climate scepticism. Approximately half of its articles did assume anthropogenic climate change was occurring. However many of these were constructed in ways which undermine the credibility of climate scientists or those arguing for climate change policies that are not supported by *The Australian*. The other half of the articles either questioned or rejected the consensus position.

A substantial number of stories which pay lipservice to the consensus position are structured in ways that misrepresent climate science or undermine the credibility of climate scientists. Other stories promote research which downplays the threat of climate change.

There is evidence that *The Australian* neglects otherwise newsworthy stories that do not fit with its editorial stance.

The Australian singles out journalists at Fairfax and the ABC who cover climate change from the point of view of the consensus for criticism. Meanwhile reporters at *The Australian* who have attempted to report on climate change and scepticism in what they consider a professional way have found this extremely difficult.

In 2013, *The Australian* continues to promote sceptics without critiquing their work or the interests they promote. It thus legitimises their claims.

It frames the climate science in terms of an ideological battle and its critics as dogmatists who threaten free speech. It presents climate science as a matter of opinion or debate rather than an field for inquiry and investigation.

Media Watch, *Crikey*, *The Conversation* and several bloggers have provided important independent critiques of *The Australian's* coverage of climate change.

4.9 Climate change and extreme weather

Disasters cause death, loss of property and infrastructure, long term health problems and economic and social disruption, including homelessness and displacement. They break dramatically into the routine of everyday life, so it is not surprising that they rank highly in news selection.

When disasters or serious accidents happen, they often turn into media events and inspire a large amount of coverage. They produce opportunities for dramatic visual imagery and compelling storytelling. They lend themselves to narratives of suspense, prediction and recovery. In the aftermath, attention is more likely to turn to cause and prevention.

Journalism tends to deal more easily with the present and short term time frames rather than future developments. Communicating and grasping the long term impact of loss of biodiversity, acidification of oceans or ice shrinkage can be difficult. However, people are more likely to accept the significance of climate change if they believe it will have, or already has had, devastating effects on their own lives or the lives of people with whom they identify.

To what extent a particular disaster is reported by the media tends to reflect its geographic and cultural proximity and available visual material. It has often been noted that a single life lost in a disaster close to home will be reported while thousands of deaths in developing countries barely rate a mention (Bacon W. & Nash, C.J., 2003).

Studies on the reporting of humanitarian crises have shown that humanitarian crises involving conflict are most likely to be covered by Western media. However, providing the media has access or compelling images, major natural disasters in developing countries

are more likely to get covered than other international stories that do not involve conflict. For example in 2000, major floods in Mozambique had been ignored by the international media until the image of a woman giving birth in a tree was captured by a freelance photographer. After the photo was distributed around the world by Reuters, the flood story became the third biggest story in a six month period of humanitarian coverage in Australia media (Bacon, W. & Nash, C.J., 2004).

Therefore while local disasters are more likely to get reported than distant ones, international disasters, such as bushfires, triggered by environmental change are nevertheless more likely to get reported than other longer term environmental issues such as acidification of oceans or impact of loss of species.

For these reasons, the link between extreme weather and climate change is likely to be high on the climate change reporting agenda. It is also because an acceptance that global warming will lead to more disasters will build public concern that climate skeptics strenuously resist the assertion that a link exists.

EVIDENCE LINKING EXTREME WEATHER AND CLIMATE CHANGE

An extreme weather or climate event is defined as occurring when a value of a weather or climate variable (e.g temperature) is above or below a threshold value near the upper or lower ends of the observed values of the variable. These events are usually referred to as 'climate extremes'. Establishing a possible link between climate change and extreme weather events is complex.

In August 2013, *The Guardian* [published a Q and A about the link between extreme weather and climate change](#). The author noted:

“Shifts in the number, severity and location of extreme weather events are among the most important impacts of climate change. Basic physics suggest that global warming should affect the occurrence of extreme weather. More energy is being added to the atmosphere, and as it warms, it can hold more water vapour. On this basis alone, cold weather events should decline, heatwaves should increase, and there should be changes in the intensity and frequency of the dry and wet periods that cause droughts and floods.”

However, as the author goes on to argue, the global climate is complex with variability, “including El Niño and La Niña events, as well as important local and regional variations, making it difficult to separate out human influence on extreme weather events from other factors”.

Natural disasters are infrequent, so by definition, trends over time are hard to establish. It is also not possible to attribute individual weather events to climate change, although it is possible to speak about the likelihood that they are linked with climate change.

A [recent review by the Intergovernmental Panel on Climate Change \(IPCC, 2012\)](#) of scientific research on extreme weather concluded that it is “virtually certain” that the number of extreme cold days around the world is decreasing, while the “frequency and magnitude” of warm daily temperature extremes will increase during the 21st century. It is likely that frequency of heavy precipitation or the proportion of total rainfall from heavy falls will also increase. Global sea level is also rising by more than 3 mm per year, which means it is likely that surges that are generated by storms over large bodies of water are becoming higher.

The IPCC (2012) report also stated that uncertainty remains about the extent to which climate change may already be affecting some other types of extreme weather events, such as tropical cyclones and

tornadoes. An incomplete understanding of the physical metrics associated with tropical cyclones and the degree of tropical cyclone variability make this a difficult field of research. The report found that the “average tropical cyclone” maximum wind speed is likely to increase, although the increase may not occur in all ocean basins. It is also likely that the frequency of cyclones on a global level will decrease or remain unchanged.

There is “medium confidence” that droughts will intensify in the 21st century in some seasons and areas, including in central Europe, the Mediterranean, central North America, Southern Africa and Brazil.

The report notes that “attribution of single extreme events to anthropogenic climate change is challenging.” (It does not conclude it is not possible).

As the IPCC (2012) report shows, levels of risk and certainty vary across climate variables and in different regions of the world. This makes it difficult for reporters, editors and sources who are expected to summarise information accurately and succinctly. However, the report also has information about specific findings for particular regions. Since many journalists tend to report in individual locations, rather than do general global reports, they will find it worthwhile to delve more deeply into reports to find the more detailed findings.

The IPCC (2012) summary provides a table explaining terms which are used to describe available evidence: limited, medium, or robust; and for the degree of agreement: low, medium or high. A level of confidence is expressed using five qualifiers: very low, medium, high and very high (p.19). This is useful guide for those who aim to accurately communicate climate change and avoid exaggerating or downplaying evidence. A video also provides a useful introduction to the report, emphasising the possibilities for action to decrease disasters, loss and vulnerability.

The 2012 report concluded with high confidence that “exposure and vulnerability are dynamic” and varying across time, space and depending on economic, social and institutional factors. It found with “high agreement” based on “robust evidence” that inequalities influence local coping and adaptive capacity. Developed countries are often better equipped to respond. There is medium agreement amongst scientists that some areas will become marginal as places to live, causing permanent dislocation and creating new pressures on migration. Many residents may have to relocate from atolls.

Many of the more vulnerable regions are those that also tend to be ignored by Australian and other Western English speaking media.

HOW DID AUSTRALIAN PUBLICATIONS RESPOND TO THE IPCC REPORT?

On March 28 2012, the IPCC issued a [press release](#) [134 kb PDF] about the report. The Australian Climate Commission also issued a [press release](#) explaining the relevance of the report for Australia. *The Age*, *SMH* and *The Courier Mail* published stories about the report and the ABC’s *Lateline* program did as well. The independent university based publication *The Conversation* published three stories referring to the report and independent online daily *Crikey* published a piece on March 30, 2012 by John Connor CEO of the Climate Institute that began:

“Recent reports link current human and economic suffering to climate change occurring now and project much more if we fail efforts on mitigation and adaptation...Whether it is cavalier ignorance, reckless indifference or subconscious refusal to engage, it’d been a couple of weeks where the failure to even take a conservative risk management approach to the climate data is again infuriating, intriguing or downright sad.

This was brought into stark reality by reports from the CSIRO and the Australian Bureau of Meteorology, the World Meteorological Organisation, experts in the peer reviewed Nature Climate Change and by the Intergovernmental Panel on Climate Change (IPCC)...

Scientists are speaking with growing confidence and alarm about recent unprecedented extreme weather events around the world. Australia's recent extremes of droughts, fires, cyclones and floods occur against this clarifying backdrop providing a chilling insight into the future that is almost certainly in store for us."

Apart from *The Courier Mail*, the rest of the News Corp publications failed to report on the substance of the report.

On March 29, 2011, the ABC's environmental reporter Conor Duffy broadcasted a story on [World Today](#) based on an interview with the right wing [Insitute of Public Affairs's](#) climate change spokesperson [Tim Wilson](#) about a tip sheet sent out by the [Global Campaign for Climate Action](#) to its many members suggesting ways they could maximise their efforts to publicise the IPCC. The GCCA suggested that even low certainty findings of increased disasters could be represented as 'cause for alarm'. While this is an arguable position, it led Wilson to tell the ABC:

TIM WILSON: *"I think it's disappointing that there are so many groups that claim to support and be concerned about the environment who are prepared to manipulate science to achieve their political objectives rather than talking about hard facts and what policy we should do in response.*

CONOR DUFFY: *Do you think it does the issue of climate change harm to have people over egging findings?*

TIM WILSON: *It does extreme damage to the credibility of the scientific community and climate science when we have groups out there like these environmental groups over-blowing it.**

The Australian's response to the IPCC report

During February 2012, before the IPCC issued its extreme weather report, *The Australian* had published two articles which discussed the IPCC. The first on February 7, headlined '[Scientific research drowning in a sea of alarmism](#)', which was a comment piece by Bob Carter, was a scathing attack on the IPCC as being 'alarmist'. A second article on February 10, headlined '[Highest peaks have cut no ice in past 10 years](#)', focused on a peer reviewed research article in the journal *Nature*. The article is analysed as [Example Five in Section 4.8 How The Australian builds doubt about climate scientists and their findings](#).

Written by *The Australian's* environmental editor Graham Lloyd, the article placed the research in the context of earlier predictions of Himalayan ice shrinkage that the IPCC had acknowledged to be wrong. The story quoted glaciologist Professor Jonathan Bamber, director of the Bristol Glaciology Centre, as saying that despite the unexpected findings, "People should be just as worried about the melting of the world's ice as they were before." The story also reported that earlier studies could have been 'biased' because researchers focussed on glaciers that were easier to access.

In April 2012, Professor Bamber wrote a piece for *The Guardian* arguing that despite regional variations, such variations "should not, however, distract from the broader and more important story unfolding, which is one of profound and likely irreversible changes to global land and sea ice cover".

A more detailed account of the different ways this glacier research was reported in the international media can be found at carbonbrief.com. A Factiva search could only find one *The Australian*

article on glacier shrinkage since 2012 and this also highlighted a Greenland finding that suggested sea level rise due to glacial melt might not be as high as predicted. *The Australian* failed to follow up when the scientist responsible for that finding published a [background paper](#) which concluded that scientists can now make more accurate projections, “the bad news is warmer air, faster flow, and break off of glaciers into the ocean will increase surface melting and contribute significantly to sea level rise.”

Despite these earlier negative reports about the IPCC, *The Australian* failed to publish a report summarising the 2012 IPCC report on extreme weather but instead took up the Tim Wilson allegations two days after they were broadcast on the ABC. Under the headline [‘Global campaign for climate action pushing spin’](#) *The Australian’s* environmental editor Graham Lloyd lead with the statement:

“A GLOBAL lobby group has distributed a “spin sheet” encouraging its 300 member organisations to emphasise the link between climate change and extreme weather events, despite uncertainties acknowledged by the Intergovernmental Panel on Climate Change.”

Lloyd continued the report by quoting the accusations of Tim Wilson. At the end of the report, he quoted Climate Change Commissioner Professor Will Steffen as saying that the report “showed for the first time the fingerprints of the human-driven warming in some of the extreme events already experienced. ‘ This is an early warning sign that if we don’t get this underlying warming trend under control there’s going to be a lot more heat waves, droughts and intense rainfall events.’ ” The report also quoted John Connor of the Climate Institute as saying that the evidence between extreme weather and climate change was growing.

This is a good example of how a journalist can construct a news story to build uncertainty and confusion around the issue of climate change while at the same time adding material as ‘balance’. Lloyd’s report was

constructed in a way that obscured and downplayed the strength of the key findings of the report, especially the importance of planning for risk mitigation. The article failed to explain that low certainty about particular types of evidence does not mean there is no cause for concern or action.

Later the [GCCA refuted](#) Wilson's accusations and Duffy's report. It continues to argue that its assertion that even low levels of scientific certainty can be a cause for alarm. This does not appear to have been reported in Australia, but is available on the internet.

Climate change and extreme weather: February to April, 2011 & 2012.

2011 in Australia began with major floods in [Queensland](#) and [Victoria](#) as well as [Cyclone Yasi](#), which hit the coast on February 3, 2011 causing major damage in Northern Queensland.

This report found a substantial proportion of articles (227) linked climate change and extreme weather, with 38% of all articles (602) mentioning extreme weather. There was a higher proportion (43%) in 2011 than in 2012 (31%). This is not surprising given the extreme weather events in early 2011.

The *Herald Sun* had the highest proportion of its articles (51%) that linked extreme weather and climate change. This meant that only 24 *Herald Sun* articles over the two three month periods that referenced climate science did not mention extreme weather.

45% of articles in both *The Australian* and *The Age* referenced both extreme weather and climate science compared to 36% in the *SMH*.

Figure 4.9.1: Did articles published in 10 Australian newspapers from Feb. - Apr. 2011 & 2012 referring to climate science also refer to extreme weather?

Newspaper	No	Yes	Grand total
The Advertiser	36 (72%)	14 (28%)	50 (100%)
The Age	39 (55%)	32 (45%)	71 (100%)
The Australian	78 (55%)	65 (45%)	71 (100%)
The Courier Mail	34 (64%)	19 (36%)	53 (100%)
The Daily Telegraph	46 (71%)	19 (29%)	65 (100%)
Herald Sun	24 (49%)	25 (51%)	49 (100%)
The Mercury	27 (75%)	9 (25%)	36 (100%)
The Northern Territory News	16 (84%)	3 (16%)	19 (100%)
Sydney Morning Herald	59 (64%)	33 (36%)	92 (100%)
The West Australian	16 (67%)	8 (33%)	24 (100%)
Total	375 (62%)	227 (38%)	602 (100%)

[Download data as .csv](#) or [view on GitHub](#)

As noted in [section 4.3](#), 244 or 41% of the 602 articles in the entire sample were news articles. [Figure 4.9.2](#) shows that 38% of these were linked to extreme weather. Again there is variation between publications including those owned by News Corp. The *Herald Sun*, which published the lowest proportion (27%) of its articles in the news genre, mentioned extreme weather in 62% (8) of those reports. On the other hand, *The Courier Mail*, which published the highest proportion of news (66%) out of the ten publications, mentioned extreme weather

in only 37% of these reports. These findings suggest that during this period, *The Courier Mail* had not only more news about climate change than the *Herald Sun*, but more diverse news coverage as well.

Figure 4.9.2: Did news articles published in 10 Australian newspapers from Feb. - Apr. 2011 & 2012 referring to climate science also refer to extreme weather?

Newspaper	No	Yes	Grand total
The Advertiser	19 (70%)	8 (30%)	27 (100%)
The Age	16 (55%)	13 (45%)	29 (100%)
The Australian	27 (61%)	17 (39%)	44 (100%)
The Courier Mail	22 (63%)	13 (37%)	35 (100%)
The Daily Telegraph	11 (55%)	9 (45%)	20 (100%)
Herald Sun	5 (38%)	8 (62%)	13 (100%)
The Mercury	13 (72%)	5 (5%)	18 (100%)
The Northern Territory News	8 (80%)	2 (20%)	10 (100%)
Sydney Morning Herald	22 (65%)	12 (35%)	34 (100%)
The West Australian	8 (57%)	6 (43%)	14 (100%)
Total	151 (62%)	93 (38%)	244 (100%)

[Download data as .csv](#) or [view on GitHub](#)

Figure 4.9.3 shows a breakdown of the articles linking extreme weather according to whether they were coded as accepting, rejecting or suggesting doubt about the consensus position on anthropogenic climate science. (The results of this coding have already been discussed in [section 4.6](#)). The findings show that more half of articles mentioning extreme weather in *The Australian*, the *Herald Sun* and *The*

Daily Telegraph rejected or suggested doubt about the consensus position on climate science. So while the scientific evidence of a link between extreme weather and climate science builds, these publications continue to promote doubt about whether there is an anthropogenic link with climate change and the seriousness of the problem. It would not be surprising therefore that unlike the scientists who produced the IPCC (2012) report, many readers might conclude that action on climate change should not be high on the political policy agenda.

It should be noted that *The West Australian* (in which the 8 articles out of 24 mentioned extreme weather and climate change) accepted the consensus position in their reporting of climate change and extreme weather and did not replicate this production of doubt about a link existing between them.

Figure 4.9.3: Did articles published across 10 Australian newspapers from Feb. - Apr. 2011 & 2012, linking climate science and extreme weather, communicate acceptance, suggest doubt or reject the consensus position on climate science?

Newspaper	Rejects	Suggests doubt	Accepts	Unable to discern	Grand total
The Advertiser	2 (14%)	0 (0%)	12 (86%)	0 (0%)	14 (100%)
The Age	0 (0%)	1 (3%)	30 (94%)	1 (3%)	32 (100%)
The Australian	4 (6%)	29 (45%)	31 (48%)	1 (2%)	65 (100%)
The Courier Mail	0 (0%)	1 (5%)	18 (95%)	0 (0%)	19 (100%)
The Daily Telegraph	6 (32%)	4 (21%)	9 (47%)	0 (0%)	19 (100%)
Herald Sun	10 (40%)	5 (20%)	9 (36%)	1 (4%)	25 (100%)
The Mercury	0 (0%)	0 (0%)	9 (100%)	0 (0%)	9 (100%)
The Northern Territory News	1 (33%)	0 (0%)	2 (67%)	0 (0%)	3 (100%)
Sydney Morning Herald	0 (0%)	4 (12%)	29 (88%)	0 (0%)	33 (100%)
The West Australian	0 (0%)	4 (12%)	29 (88%)	0 (0%)	33 (100%)
Total	23 (10%)	44 (19%)	157 (69%)	3 (1%)	227 (100%)

[Download data as .csv](#) or [view on GitHub](#)

CLIMATE CHANGE AND SINGLE EXTREME WEATHER EVENTS

Politicians and campaigners occasionally imply that a particular extreme weather event can be linked to climate change. However, it is currently not possible to link specific events to climate change and the IPCC has found that it is likely to remain 'challenging' to do so in the foreseeable future. (IPCC,2013)

On February 1, 2011, [the ABC published a comment by Senator Christine Milne](#) that Cyclone Yasi was a "tragedy of climate change" and that "scientists have been saying that we are going to experience more extreme weather events, that their intensity is going to increase, their frequency". This comment was further reported in the *Herald Sun* on February 5, 2011 under the heading '[Cyclone saw alarmists beat their drum](#)'; it was an attack on the "deceitful" Greens party and others who had linked the Cyclone with climate change as a "gibbering horde" who were "shrieking".

Three days later, Piers Akerman took up the issue with a further attack on the 'fear mongering' Christine Milne in *The Daily Telegraph* under the heading, '[Inability to read winds of change](#)'. This piece was also published in *The Mercury* under the heading, 'Greens face inconvenient truth'. Akerman also attacked journalists who asked climate change action advocates questions about whether Cyclone Yasi could be linked to climate change. He referred to the ABC Broadcaster Deborah Cameron's "ideological barrow", Al Gore's "inconvenient falsehoods" and certain sources as being responsible for "global warming hysteria".

Milne's remarks may have been open to the interpretation that this specific cyclone was caused by climate change. It also needs to be acknowledged however that while a direct causal link cannot be established, the Australian Climate Commission continued to refer to

Cyclone Yasi and the Queensland floods as the types of weather events that will increase with climate change. Milne correctly said that extreme weather events would increase in intensity, but then added the word *frequency* as well. She did not say that cyclones will increase in frequency. Current [scientific evidence](#) shows that there is a likelihood that cyclones will increase in intensity in Queensland but may become less frequent.

In his attack piece, Piers Akerman reported research that suggests cyclones are likely to become less frequent in some parts of the world but excluded mention of other evidence suggesting that cyclones may also become more intense and that severe storms may move further towards the poles

This example demonstrates how sources supporting climate change action need to take extreme care in statements about climate change. When they make minor errors or overstate their case, they leave themselves open to reasonable criticism. Any errors or lack of clarity will be seized upon by climate sceptics to further undermine public acceptance of the climate science consensus position.

The issue of uncertainty is particularly tricky, because scientists are always going to be more certain about some aspects of climate science than others. Those who aggressively seize on such comments, such as that made by Milne at the time of Cyclone Yasi, are more interested in obscuring facts than clarifying them. This is demonstrated by the 'got-cha' tone of sceptic commentators' attacks, which are designed to meet their overall goal of undermining the consensus position on climate science. Unfortunately, one of the consequences of attack journalism is that sources, especially scientists become wary of speaking in case what they intend to say is distorted or they make a slip. Journalism that sought to establish the truth would be encouraging open discussion rather than an atmosphere of intimidation.

CONCLUSION

A substantial amount of Australian climate change coverage is linked to extreme weather events. This is not surprising given the dire immediate consequences of environmental disasters such as floods, fire and cyclones. This finding does not mean that climate change is dominating the reporting of disasters. It is more likely that stories about extreme weather events only occasionally mention climate change. Further research is needed to establish how climate change is being reported in the broader context of disaster reporting in Australia.

More dramatic extreme events such as fires and floods are likely to get more coverage than longer term, more subtle trends. There is a range of longer term climate science research issues that journalists need to cover including drought, increasing heat, impact on biodiversity including marine life, acidification of oceans, loss of ice near the Northern and Southern Poles, impact on food security and migration, and loss of land as well as floods and storms. These have had very little coverage during the two three-month periods. It is likely that the application of news values that tend to favour dramatic images and sudden crises will continue to push these aspects of climate change off the news agenda. As a consequence, these will remain hidden or misunderstood by many audiences. Further research needs to be done to establish to what extent this is the case.

In this study, we did not compare the amount of coverage of international extreme weather events with domestic ones. However we can confidently find that the great majority of articles linking extreme weather and climate change focused on the Australian context. This again fits with general patterns of Australian news coverage, which tend to ignore events in large parts of the globe. This

means that most Australian audiences are receiving very little information about the impacts of climate change outside Australia (Chubb, I., & Bacon, W., 2003; Bacon, W., & Nash, C.J., 2003).

Our findings establish that there is a substantial amount of Australia media coverage that does link the topics of climate change to extreme weather, although not necessarily in ways that accept that increased global warming will lead to more extreme weather events. This does not mean that discussion of climate change plays a big role in coverage of disasters. (A different research project would be needed to establish that.)

4.10 Case study: News Corp's Northern Territory News: an example of low level climate science coverage

The Northern Territory News (*The NT News*) is the only daily publication in Darwin. It is owned by News Corp. The Northern Territory had a population of 236,900 in 2012 of whom 120,586 live in Darwin and its surroundings. [The NT News claims a readership](#) of 36,000 on weekdays and 56,000 on Saturdays.

One might expect that *The NT News* would report on key development in climate change science that were relevant to Territorians. So when Professor Lesley Hughes issued a report in November, 2011 warning Central Australia and Darwin were particularly vulnerable to the impacts of climate change, one might have expected *The NT News* to pick up the story. But a Factiva search revealed no report on her research.

The ABC did however do a short report on November 10, 2011 headlined 'NT to face worst of climate change' which in its [online version](#) included these words:

"The basically what we're looking at is an increasingly inhospitable environment in Central Australia in particular, for plants and animals but also for humans.

Dr Hughes says Darwin will also have an increase over the next 90 years.

"For Darwin the impacts are even greater with over 300 days projected for the future over 35 degrees a year. So basically what is already a hot climate will get even hotter," she said."

A closer examination of *The NT News* reveals that the failure to follow-up on this research was not out of character.

Across February to April 2011 and 2012, *The NT News* published a total of 19 articles totalling 7,175 words that touched on climate science- 8 in 2011 and 11 in 2012. The 8 articles in 2011 had a word count sum of 3,033 words and the 11 articles in 2012 had a word count sum of 4,142 words ([See Figure 4.2.3](#)).

The 19 articles consisted of 7 comment articles, with a sum of 5,155 words (72% of total words); 10 news articles with a sum of 1,413 words (20% of total words); and 2 feature articles totalling 607 words (8% of total words).

Figure 4.10.1: A photo from ABC's 'NT to face worst of climate change' submitted by user Rachel Mcdowall



[Submitted to ABC by Rachel Mcdowall Image permalink.](#)

Of the 19 articles, 11 articles were coded as conveying an acceptance of the consensus position on climate science, 4 were coded as suggesting doubt about the consensus and 4 as clearly rejecting it.

When considered from the point of view of words however, it becomes clear that articles rejecting or suggesting doubt about the consensus position on climate science were allocated far more words. 44% of words were in articles that rejected the consensus, 18% in articles that suggested doubt about it and only 38% in articles that accepted the consensus position.

NEWS

The NT News does not have an environmental or science reporter. Most of its news items about climate science were drawn from wire service stories. Over the two three month periods, *The NT News* published two stories bylined by *The Courier Mail's* environmental reporter [Brian Williams](#).

Five stories did communicate the findings of climate scientists. Only one these focused more than 100 words on climate science.

The most substantial was a 186 word story based on Professor Ross Garnaut's third update of his 2008 report on climate change. ('Garnaut warns on emissions rate', February 12, 2011). This story was a cut down version of a 300 word AAP wire service story on Feb 11, 2011, headlined 'Carbon pollution set to double: Garnaut' (AAP, 2011). *The NT News* story reported Garnaut's warning that global greenhouse gas emissions were likely to double by 2030 without an effective response to pollution. The story also mentioned the impact of rapid development in China on global emissions. It did not include the section of the AAP report that reported on a likely increase in Australian emissions unless a carbon policy was put in place. *The NT News* report can be compared to [an article in *The Age* on the same](#)

[subject](#) that reported, “Australia was in a category of its own - a developed country with emissions expected to soar at an even faster rate than earlier predictions due to surging demand for fossil fuel exports. A climate change department analysis this week estimated Australia’s emissions would be 24 per cent higher than 2000 levels by 2020 under current policies”.

On March 19, 2012, *The NT News* published a 302 word story by *The Courier Mail* reporter Brian Williams about Barrier Reef protests. The article concluded with a quote from Labor Environment Minister Tony Burke who said: “We know there are complex management challenges facing the reef.. along with significant threats such as ocean acidification as a result of climate change.” The report concluded with the words: “It (the protest) comes as the CSIRO and weather bureau launch the latest [State of the Climate 2012 report](#), showing Australia continues to warm in response to rising CO2 emissions from the burning of fossil fuels.”

The NT News did not provide any further material to its readers about the CSIRO report or acidification threats to reef environments.

The other very brief articles were:

- “Queenslanders should brace for more ferocious storms in the wake of Cyclone Yasi, climate researchers say”. (‘More to Come’, February 5, 2011; 75 words).
- Warning that Arctic coastlines are crumbling away and retreating at the rate of 2m or more year due to climate change. Article was filed in London. (‘Vanishing act’, April 4, 2011; 45 words).
- Climate change is altering the Himalayas, devastating farming communities and marking – Apa Sherpa is disturbed by the lack of snow on the world’s highest peak, caused by rising temperature. (‘Danger to Climbers’, February 27, 2012; 66 words).

- Announcement that the Federal government had extended the life of its Coasts and Climate Change Council. ('Council will go on', March 6, 2011; 99 words).
- Charles Darwin University's Professor Andrew Campbell is invited to conference on climate change in Washington - quote from him saying "climate variability and extreme events will place increasing pressure on resources". ('US Lecture Invitation', February 6, 2012; 119 words).

In all, 890 words were allocated to these items that included material about climate science findings.

One additional story reported on development of strain of wheat that could survive saline environments created by a range of factors including climate change. ('Wheat grown in salt soil', March 13, 2012; 195 words)

The only other story was about what caused the extinction of Australian megafauna, a field that has created a lot of interest and different hypotheses. In March, 2012, a study was published of evidence found in a crater in Northern Australia. This report supported the hypothesis that humans not climate change were responsible for the extinction.

This story is of interest because it demonstrates how reports which tend to negate concerns about climate change are cherry picked for publication. *The NT News* article was headlined 'People ended Mega Beasts' and lead with: "Northern Australian megafauna was eaten out of existence by humans and not destroyed by climate change". ('People ended Mega Beasts', March 26, 2012; 246 words). Stories based on the same study were also published by *The Australian*, *The Courier Mail*, *The Advertiser* and the *SMH*. Deborah Smith, a science reporter who has since left Fairfax Media, was the only reporter to interview additional sources who did not support the thesis that climate change was not responsible. Scientists continue to publish

studies which attempt to solve the puzzle of megafauna extinction, [including ones that support the hypothesis that climate change was involved](#). They are usually not reported in the mainstream corporate media.

There was one other news article which had minor references to climate science, which quoted NT Deputy Chief Minister Don Tollner telling the NT parliament that “Green Nazis were ruining the NT way”. (‘Hitler was green’, February 16, 2012; 80 Words).

OPINION PIECES

While readers only receive the most superficial news coverage of climate science, they are fed regular sceptic columns. Over February to April 2011 and 2012, seven opinion pieces were published. Six were written by Andrew Bolt who is the dominant voice in *The NT News* climate change coverage. He wrote 57% of all *The NT News* words in the sample. Some of these were promoted near the front of the publication.

Miranda Kerr and Earth Watch

In 2011, the World Wildlife Fund (WWF) decided to use a celebrity to promote its Earth Hour event. This is a common public relations strategy used by NGOs and charities to promote causes to the public (Brockington, D., 2013). The organisation chose model Miranda Kerr who was quoted in *The Independent* as saying, [“Each of us has a responsibility for the sustainability of our planet and each of us can make a difference if we choose to do so.”](#) The strategy was presumably a way of appealing to younger people.

This led to a piece by Andrew Bolt headlined, 'Hypocrites Rule in Global Light Show'. Andrew Bolt accused her of a lot of jet travel and entertaining former Libyan President Col. Muammar Gaddafi. This article poses a question to the WWF: "If we all emitted as Kerr emits, and not as she preaches, would our total emissions soar or fall? In light of that answer, were you fools or frauds to make her your Earth Hour Ambassador?" ('Hypocrites rule in Global Light Show', March 6, 2011; 300 words). If the celebrity strategy was intended to impact on News Corp media consumers, the strategy had clearly backfired.

The article which remains in similar form under the heading '[An Earth Hour with Miranda Kerr would be hot, hot, hot...](#)' on the *Herald Sun* website today along with images of Kerr. The posting attracted 86 comments thus far. These responses provide an indication of how readers susceptible or already in agreement with Bolt's message reacted to the post. Nearly all comments were hostile to the notion of anthropogenic climate change and those advocating action to prevent its damaging impact. Many were extremely sexist. Other picked up Bolt's general refrain of 'warmists' as being opposed to open inquiry and accountability. Here are two examples:

"She's a bloody clothes horse, for God's sake and even the dumbest of the dumbed down know that. Which just goes to show how out of touch are those who bestow these "ambassador" positions on barely-there celebrities. They're not fooling anyone and in fact turn possible converts against their cause."

"Andrew surely you're not that unworldly. Victoria's Secret, Virgin Airlines, the Australian Labor Party et al are warmists because and only because there's a buck or vote in it. Science, conviction, logic, accountability and reason don't spring to mind when "supermodel" is in the conversation or for that matter Julia Gillard or Richard Branson."

Without a good dose of hypocrisy and a gullible following they would all be out of business."

[On several occasions](#), Bolt has meted out the same treatment to Director of the Sydney Theatre Company, Cate Blanchett, who also spoke out about climate change in 2011. From a sceptical point of view such castigation not only mocks the target but it has the additional advantage of discouraging others from stepping forward.

Three weeks after Bolt's attack on Kerr was published, *The NT News* published a very short feature article (286 words) touching on climate science during this period. This piece promoted Earth Hour and quoted the WWF. This provided some balance to Bolt's piece. ('Turn off power for Earth Hour', March 24, 2011; 286 words). There was one other feature article in our sample that had a brief mention of Gina Rinehart and her funding of Australians for Northern Development and Economic Vision (ANDEV- a climate sceptic lobby group) and how she "reportedly paid for climate change deniers to travel to Australia". ('It's mine, all mine', February 4, 2012; 324 words).

A second column of 982 words by Bolt appeared 4 weeks later on April 4, 2011 under the headline, 'Secrets Out: No gain from carbon tax pain' which has [already been analysed in Section 4.6](#). ('Secrets Out: No gain from carbon tax pain', April 4, 2011; 982 words).

A third opinion article of 663 words appeared on February 6, 2012 under the headline: 'Let's take stock of great global warming scare'. [This article was the subject of further examination in Section 4.6](#).

On 12 March, Andrew Bolt blogged as he was watching the ABC's [Q & A](#). During the show, Michael O'Brien, a farmer and panellist on the show made comments that indicated he did not evidence for anthropogenic warming. Both Labor Minister Tanya Plibersek and then Shadow Minister Malcolm Turnbull disputed his view. Bolt was

disgusted and ended his post with “I give up. I’m going to bed. A parade of the stupid, vain and vicious....Ah, the inner-city dinner-party crowd on display”.

This incident led to the fourth column of 656 words, which was an attack on what he perceives to be the mocking dismissive attitude of “city types”. The [piece on the blog](#) attracted 183 comments, nearly all of them supportive of Bolt and hostile towards city people, the ABC, climate scientists, Malcolm Turnbull and Tanya Plibersek. Here is one example:

“Man made global warming is traditionally a city con. Those who live in the country and have grown up understanding climate are not so easily fooled.”

On April 3, 2012, Bolt wrote a further attack of 770 words on Climate Change Commissioner Tim Flannery who had been made a fellow of the Australian Academy of Science. He referred to “exaggerations, errors and false predictions made by Tim Flannery in ‘advancing public awareness and understanding of science’ and asked: “Is this really what the Australian Academy of Science believes deserves one of its highest honours? Or has it decided that in the cause of global warming anything goes - including the integrity of science?”(‘Wheres the Integrity’, April 3, 2012; 770 words).

Three weeks later on April 24, 2012 Bolt wrote another column of 721 words bringing better news to his audience about a Melbourne Theatre Company performance of a play which was interpreted by many as critiquing the climate change consensus position as a form of political correctness. Bolt saw this production as proof that the tide was turning against ‘warmists’. He inviting his readers to join with him by asking, “Haven’t you had it being treated by warmists like a moron with a memory of a goldfish told to panic about permanent drought one year and floods the next?” (‘New play shows climate of change for warming cynics’, April 24, 2012; 721 words).

According to the results of a Factiva search, Andrew Bolt wrote 10 more columns for *The NT News* between April 30, 2011 and February 1, 2012 that either focused on climate change or referred to it in the context of threats to free speech or Labor government policy.

Editors of *The NT News* would not be running these columns unless they believed that Bolt's attack on those he perceives as elites with totalitarian tendencies appeal to readers who feel marginalised. A text from one reader that summed up these feelings was published in the paper on August 1, 2011:

"ANDREW BOLT IS THE VOICE OF REASON THE VOICE OF THE MAJORITY OF SANE RATIONAL PEOPLE IN AUS. I ENJOY HIS OPINION AND HOPE TO HEAR MORE RATIONAL COMMENT. TO STAY THE HYSTERICAL MYTH OF CLIMATE CHANGE. HAS EVERYONE FORGOTTEN ABOUT SOLAR FLARES AND THEIR EFFECT ON OUR EARTH".

Not every reader is a fan however. In an arguably rare critical comment in May 2013, one reader wrote in response to Bolt's complaint that he had been rejected by the ABC:

"..the logical outcome for anyone audacious enough to imagine himself a terrific journalist, notwithstanding a competence limited to insult and vituperation".

The only *The NT News* comment piece not by Andrew Bolt was written by climate sceptic NT [Deputy Chief Minister Dave Tollner](#) who was previously a Country Liberal Party MLA. On April 16, 2011, he argued in 1056 words (very long for *The NT News*) that the Northern Territory should be exempted from the Gillard government's carbon policy and that carbon emission reductions were unrealistic. Tollner's views were also covered in a [news item](#) in *The NT News* which was not included in this study because it did not refer to carbon emissions or any other scientific aspect of climate change.

CONCLUSION

Like other News Corp tabloids, *The NT News* and its columnist Bolt approached climate science from the perspective of a larger campaign against the Labor government and its carbon policies. Bolt's columns, which provide readers with the paper's dominant message, either misrepresent the arguments of climate scientists or personally attack the characters and intentions those who support action to redress climate change. This aggressive sceptic discourse overwhelms news coverage of climate science developments, which is brief, very occasional, lacking follow up or local angles. Material that could be considered newsworthy remains invisible, (Bacon, W., & Nash, C.J., 2013).

Meanwhile the scientific evidence that Northern Australia is vulnerable to the impacts of climate change continues to build and strengthen. In April this year, the Australian Climate Commission published [The Critical Decade](#). Professor Lesley Hughes was a co-author of this report. The report is clearly laid out and begins with a page of key messages which begins with the statement:

“Over many decades thousands of scientists have painted an unambiguous picture: the global climate is changing and humanity is almost surely the dominant cause. The risks have never been clearer and the case for action has never been more urgent”

Page 73 of The Critical Decade report was dedicated to the NT. It pointed to research that showed that Kakadu and Uluru National Parks, tourism, cattle production, rock art, coastal regions and inland remote communities are all vulnerable in different ways to impacts of climate change.

On April 6, 2013, *The NT News* published a 212 word story about the report which was headlined, 'Emissions have us hotter under collar Stuart Blanch'. The story included the information that 'The Critical Decade: Extreme Weather report' had found Darwin suffered double the number of hot days above 35°C in the decade from 2000 to 2009 and that sea level rise could cause yearly major storm surge events in the future. However rather than providing more information on aspects relevant to the Northern Territory, the story was set up as a contest between a 'weather expert' who said the report did not prove a link between climate change and carbon dioxide and Environment Centre NT Co-ordinator Stuart Blanch who called on the Government to cut carbon dioxide levels by developing solar energy.

The last word went to 'weather expert' and 'consultant meteorologist' [William Kininmonth](#) who said the report did not prove a link with carbon dioxide, saying: "They're trying to scare us." Kininmonth is a well known member of the sceptical organisation the [Australian Climate Science Coalition](#). Readers of *The NT News* could hardly be blamed if they did not grasp the urgency of the Climate Commission message.

5. Conclusion

- [5.1: Postscript – NSW Bushfires, October 2013](#)
- [5.2: The symbolic politics of climate change coverage in Australia.](#)

5.1 POSTSCRIPT - NSW BUSHFIRES, OCTOBER 2013

Few fields of reporting are more contested than that of climate change. Journalists, sources and source organisations compete over the visibility (and invisibility) of information and opinions on a daily basis. Indeed, the struggle over the reporting of climate science occupies a considerable share of space allocated to the climate change story.

As we conclude this report in October 2013, that struggle has flared up in a way it has not done previously. [Bushfires have been burning](#) on the fringes of Sydney for a week. One life, hundreds of homes and a massive amount of other property have been lost. Schools are closed and smoke pollution is leading to many hospital admissions. Thousands of volunteers and paid workers are tackling the crisis.

Meanwhile, [a political and media conflict](#) over whether those bushfires are linked to climate change is being played out in the national media and has even come to the attention of international broadcasters CNN and BBC.

Shortly before February 1, 2011, the day on which the sample period begins, Senator Christine Milne, now the Australian Greens leader, told ABC during an interview about [Cyclone Yasi](#) that extreme weather was linked to climate change. As we discuss in [Section 4.9](#), her remark

was interpreted by some as an assertion that global warming had caused the specific cyclone. Her remarks led to vehement attacks on her by News Corp publications. Although her remark was open to different interpretations, she was correct in her assertion that scientific evidence pointed to increasing severity and frequency of some types of extreme weather events.

A year later, the IPCC issued a significant report on climate change and extreme weather, named [SREX](#), (IPCC, 2012). The majority of publications in this study made no reference to that report, although the Climate Commission (which has since been abolished by the new Federal Government) issued a press release explaining its significance for Australia. Instead, ABC radio and the rest of News Corp chased up a media intervention by the Institute of Public Affairs which focussed on the public relations strategy used by environmental NGOs to draw attention to the report, which was arguably was a variation on the theme of 'shoot the messenger'.

Shortly before the publication of this report, after an October Sunday of blazing heat and raging bushfires in Sydney's western suburbs, Sydney's *The Daily Telegraph* published a 'world exclusive' front page story 'Triple Heat' (October 14, 2013) based on a leak of an IPCC report due to be published in March. The story warned:

"DEATHS from Sydney's extreme heat are expected to triple by the end of the century as the city cops the brunt of global warming, a leaked climate change draft report warns. The threat of bushfires will increase, another 800,000 people will fall ill each year from contaminated food and water and more than 270,000 homes will be at risk of collapsing into the ocean from rising sea levels. The unreleased draft of the Intergovernmental Panel on Climate Change's second report ...reveals Australia's southeast is now a

global climate change “hotspot” with the ocean warming faster than anywhere else on the entire planet — and set to increase by 10 per cent more than the global average.”

The story was by *The Daily Telegraph's* political editor Simon Benson, who wrote the only other *Daily Telegraph* front page story in this study. Both stories clearly communicated the scientific consensus point of view. The shocking incineration of scores of cars at Homebush Olympic park where hundreds had gone to swim provided the news peg that shot Benson's story to prominence. The same edition included an editorial stating that *The Daily Telegraph* accepts that there is “almost no doubt that climate change is occurring, and very little that human activity is a contributor. The debate is what to do about it.” The editors warned against allowing hysterical extremists on both sides of the argument..”. It is not clear which of the “almost no doubt” or the “very little” doubt about anthropogenic climate change referred to the 97.4% of climate scientists who accept that human beings are major contributors to climate change.

[The Guardian published its own story](#) based on the ‘leak’, which led with the “*disproportionate harm*” that could be suffered by Australian indigenous communities living in the Northern Australia. This angle had not been included in *The Daily Telegraph* report.

Both stories were taken from Chapter 25 of the [IPCC Draft Working Paper Two](#) that is sitting on a sceptic website. After further review, the report will be officially published in March 2014 in Japan.

The Daily Telegraph story followed a series of earlier News Corp reports that preceded the release of the 5th IPCC report in September. These which were picked up from similar reports in *The Daily Mail* in London that focussed on uncertainty and conflict within the IPCC and the likely revision downward of its earlier warning. These reports turned out to be wrong and led to corrections in both *The Daily Telegraph* and its fellow News Corp publication *The Australian*. Monash University Senior

Lecturer David Holmes critiqued these reports in a piece in *The Conversation* called [‘Politicised media: false balance and the pseudo climate debate’](#), and commented:

“Newspapers have a responsibility to report all issues as accurately as possible, as they have much influence on public understanding – especially of science. That such a monumental blunder about something as serious as global warming could be pardoned by a tiny and feeble ‘correction’ is a breathtaking betrayal of journalistic standards themselves.”

Bolt responded with a familiar attack on Holmes in his column [‘Another media academic wanting sceptics silenced even though they are right’](#). Bolt continued to defend specious sceptic factual assertions as truthful (for example, that the planet has not got warmer each year) on the basis that ‘balance’ demands publication of views that reject the warnings of scientists who accept the consensus position.

This issue is not one of free speech or the right of a few individuals to push their ideas, but of the market power of a dominant company to build support for particular policies and ideas. Media companies prefer not to acknowledge their own power in framing public debate. They argue that readers are free to go elsewhere, although often the outlets they point to are not in the same market or covering the same topics.

The media are sensitive about accusations of bias because their own claim to legitimacy rests on codes and ethics that urge them to seek the truth through fairness, accuracy and impartiality. Existing mechanisms for accountability such as the [Australian Press Council](#) and the [Australian Communications and Media Authority](#) (which deals with complaints about talk back radio) can only deal with complaints on a case-by-case basis. Even if a correction is published, future practice may not change.

The Australian Climate Commission, which had issued the report explaining the earlier IPCC report on extreme weather, has been abolished by the new conservative Abbott Coalition government. The ACC Chairperson Tim Flannery, a *bête noire* of News Corp publications, was removed from his post. His sacking led sceptic columnist Andrew Bolt to call for journalists who had promoted the ‘warming scare’ to be sacked. The ACC has been replaced by a voluntary organisation [The Climate Council](#).

But there are signs of change. Six years ago, the link between bushfires and climate change was almost lost in the coverage of the Victorian bushfires. But when Greens MP Adam Bandt last week made [a statement](#) suggesting that the Federal government plans to abolish the Gillard’s government carbon policy were likely to lead to further fires, he got [some support](#).

On October 23, 2013, the ABC’s *7.30 Report* tackled the issue in a report [‘Scientists say climate change link to bushfires demands action’](#). Its reporter interviewed climate scientists and two leaders of climate change NGOs who stated that there was evidence of a link between climate change and extreme weather. The story also included two critics who did not agree. Bolt nevertheless vehemently debunked the report’s interviewees in his regular slot on 2 GB that evening as “*extremists*” and “*activists*”.

The UN spokesperson on climate change Christiana Figueres made national headlines when she told CNN that there was a [‘clear link between climate change and bushfires’](#).

The Daily Telegraph published a news report of Figueres statements but the same edition also carried three counter articles: a full page opinion piece that attacked the Greens [“Why Greenies only make me see Red”](#), a second full-page Opinion piece by British climate sceptic journalist and politician Matt Ridley headlined [‘Let’s all give thanks to global warming’](#)(September 16, 2013) that attacked the link between

climate change and extreme weather. Ridley's articles about climate science [have been widely critiqued](#) on blogs that analyse scepticism. The Ridley article was republished in *The Courier Mail*. A fourth piece was an editorial headlined 'The UN fire goddess can go to blazes'.

Despite the statement in the earlier editorial that *The Daily Telegraph* editors accept climate change is happening, those who hoped that this might be a sign that the paper's coverage of climate change would begin to reflect that were disappointed.

5.2 THE SYMBOLIC POLITICS OF CLIMATE CHANGE COVERAGE IN AUSTRALIA

These recent events provide a glimpse into the daily tussle over the symbolic politics of climate change in Australia. The value of quantitative studies such as this one is that they reveal patterns of coverage that can be missed in daily information flow and contest over interpretation of events.

The findings of this report should be of concern to all those who accept the findings of climate scientists. More research is needed to confirm patterns over a longer period but this study establishes that a large number of Australians received very little information through their mainstream print/online media of any kind about the findings of climate scientists over the sample period. There was an overall decline in coverage between 2011 and 2012. The West Australian and Northern Territory news carried particularly low levels of coverage. Levels of coverage were higher in Fairfax publications *The Age* and *Sydney Morning Herald* and *The Australian* which are all targeted at higher income audiences.

The most significant finding is that nearly a third of all articles referencing climate science published by ten Australian newspapers during three months in 2011 and 2012 did not accept the consensus

scientific evidence that human beings are the main contributors to global warming. Given the extremely strong consensus about this evidence, this finding presents a major challenge for media accountability in Australia. This conclusion fits with [recent research](#) by the Reuters Institute for Journalism which showed that [in a six country comparison Australia had both the most articles in absolute terms and the highest percentage of articles with sceptic sources in them](#), ahead of the United States, the United Kingdom, France. The other two countries Norway and India had almost no sceptic sources in their media coverage.

The high levels of scepticism in Australia in part reflects our status as the country with the most concentrated newspaper industry in the developed world. News Corp controls 65% of daily and national newspaper circulation. In the state capitals of Adelaide, Brisbane, Darwin and Hobart, it controls the only newspaper. While the influence of newspapers is waning, online versions of the same publications publish content similar to the print versions, although presented differently. This content continues to play a strong role in setting the news agenda for broadcast media.

Nearly all of the sceptic articles in this study were published by News Corp. So it seems safe to argue that News Corp's dominance is a major reason why the Australian press is a world leader in the promotion of scepticism.

According to this study, Andrew Bolt, who recommends the sacking of journalists who consistently report the consensus position, is a major contributor to advancing climate scepticism in Australia. His individual role and that of other sceptic columnists should not distract from the decisions of corporate managers and editors who hire and heavily promote these columnists. While some of these editors claim to accept the consensus position they accord him the power to promote scathing critiques of climate scientists and other media that accept the consensus position. Scepticism is not only the product of opinion

writers, however: as this study shows news selection, editing and reporting practices and the use of sources also embed sceptical positions.

While media ownership plays an important role, not all NewsCorp publications are equal in their promotion of climate science scepticism. During the period of this study, Hobart's *The Mercury* and Brisbane's *The Courier Mail* did not promote scepticism. Since Brisbane editorial director David Fagan left News Corp in June 2013, *The Courier Mail* has begun to publish Andrew Bolt's columns including a number of sceptic ones about climate change.

The sample periods of [Part One](#) and Two of this research overlap but are not the same. This means that a synchronised comparative analysis of the coverage of carbon policy and of climate science cannot be made. It is clear, however, that News Corp coverage of climate science is consistent with the dominant editorial stance of its publications towards political policy and action on climate change.

[A Sceptical Climate Part One](#) showed that Fairfax Media publications *The Age* and *SMH* were fairly evenhanded or 'balanced' in their coverage of the Gillard government's carbon policy with 57% positive articles outweighing 43% negative articles. As this study shows the Fairfax media reports climate science from the perspective of the consensus position. Their journalistic approach reflects the weight of scientific opinion as it would normally apply to scientific subjects.

News Corp on the other hand was very negative towards the policy. Negative articles (82%) across News Ltd publications far outweighed positive (18%) articles, [see link](#). This indicated a very strong stance against the carbon policy adopted by the company. The News Corp publications that were the most negative towards the policy also reflect the highest levels of scepticism. Their approach to climate science appears to reflect their political position in relation to calls for government intervention to reduce greenhouse gas emissions.

Notions of journalistic balance may play a role in climate change reportage but they are not the cause of sceptic coverage. If this were the case, journalists from all professional media organisations would behave like News Corp's *The Herald Sun*, *The Daily Telegraph* and *The Australian*. Explanations lie more in competition for audience, corporate and political goals and competing ideologies than they do in the norms of journalism.

A lack of research of the impact of media on Australian audiences means that care needs to be taken in assertion to the effect of media scepticism on the attitudes of Australians towards climate change. Media impacts are complex. Messages reverberate around the media sphere and are amplified and changed as they flow across publications, between journalists and small and large audiences. Attacks on climate scientists may flow through to attitudes to scientists generally, just as repeated attacks on ABC and Fairfax Media journalists who report on climate science from the consensus position may lead some to reject those media outlets as trustworthy sources of news. The link between News Corp and conservative talk back is a significant one that needs more exploration in this context.

A review of 22 studies by the 2011 Gaunaut Climate Change Review found that while most Australians believe the climate is changing, fewer believe that it is attributable to human activity; and that belief in climate change and its anthropogenic drivers had waned in recent years, matching trends in other Western countries. The Review found that more research was needed. It did not comment on the media or discuss the role of media in its conclusions.

A recent study carried out in Perth, Western Australia found that [people are more likely to believe that humans cause global warming](#) if they are told that 97% of publishing climate scientists agree that it does and that this could override political world views that might predispose them to a sceptical position. (Lewandowsky, Gignac & Vaughan, 2013).

Another recent study published in the journal *Public Understanding of Science* (PDF available [here](#)) earlier this year surveyed over 1,000 Americans in 2008 and 2011 about their media consumption and beliefs about climate change. The researchers found that conservative media consumption (specifically for News Corp's Fox News) decreased viewer trust in scientists, which in turn decreased belief that global warming is happening. In contrast, consumption of non-conservative media increased consumer trust in scientists, and in turn belief that global warming is happening.

Some blame scientists for their failures to communicate their findings in accessible ways. But this can, at best, be only part of the reason why climate science is covered so poorly. Journalism is about finding the story, not expecting it always to be packaged in advance.

This is not to suggest that a serious lack of resources is not interfering in the capacity of journalists to report adequately on climate change. The failure of old paper-based models of print journalism, the concentration of the print media in the hands of two main companies which share resources and reporters across mastheads, and the economic and political goals of the owners of corporate media are all relevant. These factors contribute to a situation in which science news-breaking stories are used to fill gaps as they arise, but in which longer term follow-up of issues is less likely. In this under-resourced situation, journalists are also more likely to edit a press release or a wire story generated elsewhere than to generate the news story themselves.

Others blame 'alarmism' for turning audiences off climate change reporting. While 'alarmism' is a theme in climate scepticism, no reports that could be called exaggerated or alarmist were found in this sample. It is possible that journalists have become more cautious in their reporting and scientists more cautious in dealing with the media.

There were plenty of examples in our study of strong, high quality climate science journalism in 2011 and 2012. Jo Chandler, who has since left *The Age* published a series of features and a book '[Feeling the Heat](#)' about the work of climate scientists in the field. *The Age* also undertook a [major project](#) in which readers were invited to send in their questions about Climate Change. News Corp's Bolt intervened in this process to encourage his readers to send in climate sceptic questions which *The Age* answered in a series of features.

Journalists also play an important role in investigating climate skepticism. *Media Watch*, *Crikey* media, [readfearn.com](#) and *The Conversation* have all played a valuable role in critiquing and holding News Corp accountable. The new online outlet *The Global Mail* and the arrival of *The Guardian* and *Al Jazeera* in Australia have strengthened the reporting of climate change in Australia.

But none of these worthwhile approaches solve one of the most worrying conclusions of this research, which is that an information gulf between different audiences and regions is widening in Australia. The resolution of that problem will have to address the concentration of media ownership in this country, a concentration that is largely responsible for the active production of ignorance and confusion on one of the most important issues confronting Australia.

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