Clean energy futures and place-based responses: a comparison of letters-to-the-editor in two Australian regions

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Abstract

A region's cultural environment—how people communicate and how local media represent the immediate social and natural environment—is indicative of local dominant normative values that underpin potential capacities for climate change mitigation and adaptation. This article explores this premise with a comparison of two regions in Australia: Northern Rivers (New South Wales) and Ipswich-Lockyer (Queensland), and draws attention to readers' letters published in two daily newspapers, *The Queensland Times* (Ipswich) and *The Northern Star* (Lismore), with a specific focus on the Clean Energy Legislative Package. *Leximancer* software is used to analyse the content of readers' letters published over a nine-month period coinciding with the passage of the legislation through the Australian parliament. The results indicate important differences in local discourses and suggest a focus on local socio-cultural landscapes and their capacities for community dialogue are potentially useful for understanding how communities talk about, and the extent to which they will accept climate change policies.

Keywords: Clean Energy Futures, Australia, climate change, regional press, letters to the editor, Leximancer.

Introduction

Globally, climate change affects more stakeholders than any other issue, with governments, corporations, and non-government agencies playing a central role. To Carvalho and Peterson, however, climate change 'can be effectively addressed only through sustained citizen engagement', with the required far-reaching transformations demanding citizens to be involved politically and democratically (2012, p. 7). This article draws attention to citizen engagement in the 'domestication' of climate change, and particularly the controversial Clean Energy Futures Legislative Package, *aka* the 'Clean Energy Bill,' or 'carbon tax', by comparing readers' letters in two non-metropolitan daily newspapers.[i] Our study contributes to an international field of inquiry that addresses media coverage of climate change issues in small-scale geographic communities (see for example Brown, et al., 2011), and recognises that citizen engagement with

climate change issues is diverse, and related to place attachment and identity, referring to the relationship between individuals and their physical and social environment, and the 'power relations amongst individuals, groups and institutions' (Devine-Wright & Howes, 2010, p. 272).

The Politics of Australian Carbon Pricing

In July, 2011, the Australian Prime Minister (PM), Julia Gillard, introduced the Clean Energy Bill to the Australian parliament to introduce measures to reduce Australia's greenhouse gas emissions, support energy efficiency technologies, invest in renewable energy sources, and put a price on carbon (Department of Industry, Innovation, Climate Change, Science Research and Tertiary Education, 2013). The Bill would affect 500 of Australia's biggest polluters; households and agriculture would be exempt. Low income households would receive tax cuts to assist with meeting the expected increase in the cost of living associated with carbon pricing.

The introduction of the Bill was controversial. During the 2010 federal election campaign, Gillard announced she would 'rule out a carbon tax', if she won government, although she did not rule out the possibility of introducing a market-based mechanism (Kelly & Shanahan, 2010). The election returned a 'hung' parliament, with the Australian Labor Party (ALP) and the rival Liberal/National Coalition each winning 72 of the 150-seat House of Representatives. In the Senate, The Greens gained the balance of power. Gillard was able to form government with the support of three independents and The Greens, with the latter demanding the formation of a multi-party climate change committee (*Sydney Morning Herald* 27, February, 2011). Gillard formed the committee in September 2010 comprising Labor, The Greens, Independent Members of Parliament (MPs), and a panel of climate change experts (Department of Climate Change and Energy, 2011). The Coalition Opposition, led by Tony Abbott, refused to join (Morton, 2010). In February 2011, Gillard unveiled the agreement reached between The Greens and her government to introduce a carbon pricing mechanism (Keane, 2011). Deputy Opposition Leader, Julie Bishop, described it 'a betrayal of trust for the Australian people', claiming it represented a 'fundamental breach of an election promise', insisting that Gillard promised there would be no 'carbon tax'. To Bishop the agreement was an 'example of the Labor Party being in government, but The Greens being in power' (Leslie, 2011). On 10 July, 2011, Gillard announced the details of the carbon pricing mechanism, and later that month, released drafts of the Clean Energy Legislative Package for public consultation (Australian Government, 2011). The Clean Energy Bill was passed in the lower house on 12 October, 2011, and in the Senate on 8 November, 2011, with the legislation implemented on July 1, 2012.

The Bill attracted sustained criticism during its passage through both houses of parliament, and was central to Abbott's electoral success, in September 2013, which he labelled as 'a referendum on the carbon tax' (Griffiths, E. 2013).

'Domesticating' Climate Change Discourse

Much of what we know about climate change we learn from the media. Media have enormous influence over public opinion, the political process and policy outcomes (Pollock, 2007). They play an important role in framing the political, economic, social, environmental and scientific debates surrounding climate change, by 'giving voice to some viewpoints and suppressing others, and legitimating certain truth-claims as reasonable and credible' (Anderson, 2009, p. 1). According to Abjorenson 'Australia has a concentration of media ownership almost without parallel in liberal democracies' (2007, p. 11). A small number of companies control television and radio, and two large companies own most of the rural and suburban press. *News Ltd*

dominates the capital city and suburban markets, as well as the national market at 46 percent. The regional daily newspaper market is dominated by *Australian Provincial News and Media* (APN), with a 27 per cent share of regional circulation in 2002 (Lewis, 2004).[ii] To Abjorenson 'such concentration of ownership means that unelected media proprietors exercise an enormous amount of political power' (2007, p. 11). Chubb confirms this concern in a study of media coverage of international climate change forums, where he found that *News Ltd* 'identified wholly with conservative political actors', and advanced Abbott's campaign to undermine the ALP's credibility and legitimacy, especially its alliance with The Greens (2012, p. 191).

Globally, journalism and communication research has focused on national and transnational perspectives of the climate change issue, with several Australian authors contributing to these broader discussions (Chubb & Bacon, 2010; Bacon, 2011; Chubb, 2012). Of particular interest is the concept of 'domestication' of the global discourse, defined as a process where international issues are framed in ways that are 'comprehensible, appealing, and "relevant"' and offer a 'narrative framework' that is familiar to domestic audiences (Gurevitch et al., 1991, pp. 206-7). Domestication therefore takes place in the context of contemporary political and economic interests, as well as national histories and traditions (Eide & Kunelius, 2010; 2012). Both the global and the local, national and transnational are co-constitutive in this process. For example, in their analysis of two Sydney-based newspapers, Chubb and Bacon (2010) found that Australian coverage of the 2009 Copenhagen Climate Summit (COP15), largely framed international climate change stories in terms of domestic political contests, confirming similar findings in Carvalho's study of the British quality press (2007).

A further process of domestication takes place from the national to the local sphere. Recent Australian studies show national climate discourses are modulated by local structures of power, and reconstructed for consumption by communities in cities and localities (McKewon, 2012; Speck, 2010; Waitt et al., 2012). These studies indicate that local contexts play an important role in the constitution of the climate change debates and preferred public policy outcomes. Some communities more readily accept climate change mitigation and adaptation policies and programs than others. A scalar approach to media constructions of climate change discourse thus draws attention to the often overlooked social and political contexts of communities (Reader & Hatcher 2012), with 'community' understood as a dynamic social construction of identity that ties individuals, groups, and places together 'through the sense of belonging' (Day, 2006, p. 157). To Devine-Wright and Howes the symbolic meanings attached to proposed changes, in this case climate-change policies, and their compatibility to place-based symbolic environments 'are critical in shaping evaluation and ultimately, the likelihood of opposition or supportive behaviour' (2010, pp. 272-3). Locally constructed values and beliefs play a key role in framing public debates (Lakoff, 2010), and local media play an important role in this process.

Little research has been undertaken in Australia and internationally that examines the role of the local press in the climate change debate, and other than Brown et al. (2011), none have undertaken comparative research. To understand how different places domesticate national climate change policy this article examines the discourse surrounding the passage of the Clean Energy Bill through the Australian Parliament, represented in readers' letters published in two regional newspapers. Before presenting the data, we first review the role of readers' letters in the regional press, and then describe the selected cases.

Local Newspapers, Readers' Letters and Discursive Construction of Community

Local newspapers are important institutions 'connected strongly to forging priorities and shaping understandings, awareness and experiences of space' (Waitt et al., 2012, p. 39). Although many are part of larger corporations, regional and local media must reflect the values and views of their readership and audiences if they are to remain relevant; an approach that is consistent with the idea of a networked media corporation conceding some autonomy to local outlets (Louw, 2001; Pollock, 2007). In contrast to urban newspapers with larger readerships and more diverse revenue streams, past research has found that the community press, particularly those located in smaller regional markets, tend to downplay local social and political conflict, since this is seen as a threat to local social cohesion (Tichenor, et al., 1980; van Vuuren, 2009). Moreover, much of the content in the Australian regional press is syndicated, but letters to the editor are one way profit-driven regional and local media can achieve relevance in local communities. A comparison of readers' letters in two outlets from the same newspaper corporation therefore offers an opportunity to test the claim that the regional press must reflect local values and opinions.

Richardson (2008) suggests that for the local press, authoritative voices are local voices. Letters pages are a principal forum for reader opinion and an important part of a newspaper. They are popular with readers and assist with promoting a newspaper's brand identity 'through representing the quotidian preoccupations of its readership' (Richardson, 2008, p. 58).

Letters allow both newspapers and their readership to identify popular local news themes, and are often considered to perform a democratic function as a public forum for rational discussion and deliberation. However, readers' letters are not necessarily a representative record of local opinion. Letters pages are also an arena of conflict (Hessing, 2003), which is an important news value; while Young suggests that newspapers use letters as a means to insert otherwise 'taboo, unacceptable, unproven (and unprovable) arguments into the mass media landscape' (2011, p. 2). Moreover, past research suggests letter writers do not reflect majority public opinion: most letters writers are 'white, middle-aged and well-educated males who are firmly situated in community and have the excess time and energy required for a commitment to political activism' (Wahl-Jorgensen, 2002, p. 77). Wahl-Jorgensen (2002) considers letter writing as a form of political activism, and Richardson and Franklin (2004) have shown that party political campaigning has a significant presence in the letters pages of British newspapers (see also van Vuuren, 2013).

Drawing on Foucault and others, Waitt et al. (2012, p. 38) emphasize that local meaning-making is a political process. Put another way, local content in local newspapers is the product of an interaction between local and extra-local structures of power, or 'discursive fields' (King 2007). King (2007) describes discursive fields as fluid and without fixed boundaries, interacting with a multitude of other discourses, while simultaneously expressing patterns of structural relationships that limit the range of meanings and values that might enter a discourse. Social movements, including political parties, constitute their discursive field from a broader set of national and international discourses, adopting some repertoires, while rejecting others. This fluid conceptualisation of discursive field shares similarities with the reconstructed Habermasian public sphere that recognises the formation of multiple public spheres structured symbolically to constitute loose and permeable boundaries that define the identity of their members, and determine what is acceptable public communication (Gitlin, 1998; Asen & Brouwer, 2001; van Vuuren 2006; Eide & Kunelius, 2010).

Central to the construction of symbolic boundaries is the process of framing: the use of language and images in ways that activate specific ideas and associations about an issue,

including social roles, actions, emotions, and ideologies (Lakoff, 2010), in order to define problems, their causes, moral dimensions and treatments (Entman, 1993). Benford and Snow (2000) emphasise that framing is a contested process, with social actors framing preferred meanings for the purpose of influencing others. In this way local media content, including readers' letters and online feedback, contribute to the 'reflexive collective- and individual-level construction and articulation of community values' (Reader & Moist, 2008, p. 834).

A review of the literature suggests a comparison of readers' letters in two regional newspapers can reveal differences in the construction of the discourse arising out of the controversy surrounding the Clean Energy Bill, and that these differences can be accounted for by differences in the geographical and social context. To illustrate this place-based distinctiveness of community discourse, we compare newspapers from communities that shared many geographic features, but with different socio-economic structures. Letters were analysed using *Leximancer*, a computer assisted content analysis application that uses a 'machine-learning' process to identify the main themes in a text corpus.

Case Selection and Methods

The Northern Star in Lismore, New South Wales (NSW) and *The Queensland Times* in Ipswich, Queensland (QLD) serve regional communities about 200 kilometres apart. *The Northern Star* (NS) serves the 'Northern Rivers' region, NSW's fastest growing region. With a total population of more than 280,000 people, Northern Rivers comprises several large regional centres, including Tweed Heads, Lismore, Ballina and Grafton. The region is famous for its superb natural environment including World Heritage listed pristine rainforests and a popular coastline. Tourism is a major industry, with Byron Bay a popular surfing destination, and a network of smaller coastal and hinterland villages that are internationally renowned alternative lifestyle centres. Rural industries are located in the smaller 'specialist' towns such as Murwillumbah (sugar) and Casino (beef). A high proportion of innovative and creative people live in the region, evident in a vibrant independent media sector, including film production, community broadcasting, and community newspapers, in addition to commercial and public service radio stations (Ward & van Vuuren, 2012). The NS has a circulation of 9,509 on week days, and 15,352 on Saturdays, and a readership of around 45,000 (APN, 2014).

The Queensland Times (QT) serves the 'Western Growth Corridor', located immediately west of the state capital, Brisbane. With a population of more than 267,000 people, it is QLD's fastest growing region (Queensland Government Statistician's Office, 2012). The region supports an aeronautical and space industry, transport and logistics, in, and is home to Amberley, Australia's largest air force base employing more than 5,000 people. There are several open cut coalmines in the region, and large tracts of land are being released for industrial development. It lies adjacent to the Lockyer 'food-bowl', comprising agriculture, horticulture, and beef, and there is a growing regional equine industry. Ipswich has its own local commercial radio station that broadcasts to south east QLD region, but most media is Brisbane-based. There are no local alternative media, although there is a weekly publication targeting air force personnel. The QT has a circulation of 8,329 on week days and 10,645 on Saturdays, and a readership of around 35,000 (APN 2014).

Politically, both regions comprise several federal electorates (Australian Electoral Commission, 2014). In Ipswich, the ALP represents the seats of Blair and Oxley, while the seat of Wright is held by the Liberal National Party of Queensland. Similarly, in Northern Rivers, the seat of Page is held by the National Party, and the seat of Richmond is held by the ALP. All the seats, except Wright, are defined as 'marginal' where the winning candidate won the seat with

less than 56 percent of the two-candidate preferred vote. One important difference, however, is that The Greens won 17.7 percent of the vote in the seat of Richmond in the 2013 federal election, compared to the national average of 8.65 percent, which is indicative of the attraction of Northern Rivers to people seeking alternative lifestyles and business innovation (Ward & van Vuuren, 2012).

Methods

The NS devotes a half page to readers' letters, sometimes supplemented by readers' text messages from the online edition. The QT provides a full page of readers' letters and section of a page to text messages and 'Street talk' (*vox pop*s collected at local shopping centres by journalists and photographer). Occasionally the QT publishes extra letters on an additional page, but it does not include online responses in its paper edition.

For the purpose of this study, all readers' letters, *vox pop*s, printed text messages, and reprinted online comments that mentioned the Clean Energy Bill or 'carbon tax' were collected from the printed editions of both newspapers between February 1, 2011, when the multi-party climate change committee was established, and 30 November, 2011 when the Bill became law. No electronic copies were available at the time of collection, and the scanned letters were digitised using optical character recognition software and compiled in a spreadsheet to prepare for processing with *Leximancer*. Although *Leximancer* provides an automated grounded analysis to generate semantic categories, items can also be coded manually, or 'tagged', thus offering additional analytical flexibility. Letters were tagged to include date of publication, publication, author, and direction of support for the Clean Energy Bill.

Leximancer Analysis

Leximancer uses word occurrence and co-occurrence statistics to extract a list of concepts from an input text. This approach has advantages over hand-coding techniques, which require analysts to design lists of terms and rules based on interpreting the data, or prior to analysis of the text. While hand-coding approaches incorporate checks for coder reliability, they can miss important emergent conceptual relationships that are present in an input dataset. By being grounded by input text rather than an analyst's decisions or a codebook, *Leximancer* can achieve a level of reliability and repeatability that is difficult to achieve using hand-based methods (Smith & Humphreys, 2006).

Leximancer groups sentences into 'blocks' as the unit of analysis to generate its text-based statistics. In our study we used the software's default setting of two sentences per block. The software identifies discrete concepts in the text blocks and also generates a thesaurus with a ranked list of terms associated with each concept. Text blocks can generate one or more concepts. The analyst also has access to the text blocks to manually check the source of the data.

An advantage of *Leximancer* is its visual representation of prominent concepts from an input text corpus. The software generates a two-dimensional map, with concept nodes grouped into coherent sections, and a spanning tree that connects related concepts (Smith & Humphreys, 2006). The larger the size of a node the more prominent that concept is within the data. Nodes are placed near other nodes to generate themes, based on their conceptual relatedness, and connected via a tree structure to reveal the strongest conceptual relationships. However concepts are related to all other concepts to differing degrees. While the two-dimensional concept map tries to present a faithful representation of conceptual inter-relatedness, it is impossible to preserve the exact conceptual relatedness using such a low-dimensional projection. To overcome this limitation, *Leximancer* also generates rank-ordered concept lists indicating the strength of

association between tags and concepts and all other tags and concepts in the map. These lists are a useful way to determine which concepts are featured more strongly in individual categories (see table 1).

This ability to identify patterns in text data through informative visual representations of text content is useful for exploratory data analysis where relationships between key phrases are unknown, or for confirming the validity of an assumption concerning relationships between phrases. In this study, concept maps were generated for the entire corpus of text, with the tags 'Northern Star' and 'Queensland Times' inserted by the software to explore the relationship between the categories and the discovered concepts in the letters (see figure 2).

Results

A total of 295 letters were collected from both publications, with the QT publishing three times as many letters (222) than the NS (73). Although the issue emerged in the letters pages as early as February, the majority of letters in both newspapers were published following the introduction of the Clean Energy Bill to the House of Representatives in July (QT-78%, NS-68.5%). Given this short time-frame, our analysis takes a snapshot, rather than a longitudinal approach. In this section we first present the *Leximancer* output, including the prominence of the concepts for each newspaper, followed by a closer look at the semantic structure of the concepts clustered into themes. We conclude with a comparison of the letters' authors, and the direction of support for the Clean Energy Bill.

Table 1 compares the rank order of the 20 most prominent concepts attributed to each publication (based on 295 letters generating 970 concepts blocks and 54 concepts). 'Prominence' is a combination of a concept's 'strength' and 'frequency'. Frequency refers to the conditional probability that a text extract comes from a particular category (newspaper), and indicates the chance that the concept is coded in the text extracts. 'Strength' is a reciprocal measure and refers to the conditional probability that a concept is present in the text extracts and gives the probability that the text comes from that category (newspaper). Strong concepts distinguish a category from others, whether or not the concept is mentioned often (Leximancer, 2011).

Table 1 clearly indicates differences in the structure of the discourse in each newspaper. The most prominent concepts unique to the QT--*co2, dioxide, labor, gillard, pay, warming, support, time, election, greens*--indicate that the debate focused on the validity of the science that supports the Clean Energy Bill and the political controversy surrounding Gillard's agreement with The Greens to form government. By contrast, the most prominent concepts unique to the NS--*price, industry, future, world, coal, renewable*--indicate that letters make a high number of references to renewable energy, the coal industry, their role in climate change and the future of world. The prominence of concepts shared by both newspapers further supports these differences in each paper's discourse. The concepts *power*, *climate*, *change*, and *energy*, are more prominent in the NS, while *government*, *Australia*, *carbon*, *tax*, and *people*, are more prominent in the QT.

Table 1. Ranked concepts by category, *Northern Star, Queensland Times*.

Category:	*Northern Star*			*Queensland Times*			
Concept	F (%)	Strength (%)	Prominence	Concept	F (%)	Strength (%)	Prominence
price	8	54	2	co2	4	93	1.3
industry	5	51	1.9	dioxide	9	91	1.3
future	6	48	1.8	labor	6	88	1.2
world	9	44	1.6	gillard	5	88	1.2
coal	6	40	1.5	pay	6	88	1.2
renewable	5	40	1.5	warming	5	87	1.2
power	10	39	1.4	support	4	83	1.2
year	5	38	1.4	time	5	79	1.1
climate	11	38	1.4	people	12	78	1.1
change	12	37	1.4	election	5	77	1.1
cost	7	36	1.3	greens	5	76	1.1
planet	5	33	1.2	tax	48	75	1
energy	6	32	1.2	carbon	51	75	1
pollution	7	32	1.2	australia	7	73	1
emissions	5	29	1.1	government	12	73	1
government	11	26	1	pollution	5	67	0.9
australia	7	26	1	energy	5	67	0.9
carbon	45	24	0.9	change	7	62	0.9
tax	42	24	0.9	climate	7	61	0.9
people	8	21	0.8	power	6	60	0.8

Figure 1 presents the concepts mapped into themes to provide a more detailed overview of the semantic structure of the data. The concepts are clustered into six themes, with the newspaper categories positioned at opposite ends of the map, indicating strong differences in their content. If the structure of the discourse in both newspapers was similar then we would expect to see these tags to be positioned nearer each other. Themes are 'heat-mapped', with red indicating the most important and violet the least important themes. The 'carbon tax' theme is most important, followed by 'climate change', 'energy costs', 'politicians', 'global warming', and 'industry'. We will explore these themes in detail, drawing on examples generated by *Leximancer* from the text corpus.
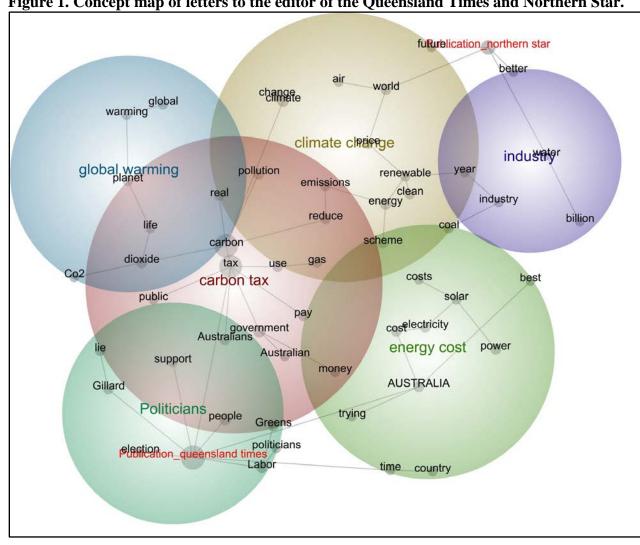
Figure 1. Concept map of letters to the editor of the Queensland Times and Northern Star.

Not surprisingly, the most important theme is 'carbon tax', comprising the concepts *carbon*, *tax*, *Australian, Australians, government*, *public* and *pay*. Although this theme is shared by both newspapers, the heat map locates this theme more strongly in the QT than the NS category. It frames Australia's 'situation' as unique and not comparable to other countries, and claims that the carbon tax will increase the cost of living. The following excerpts from the text corpus, both for and against the Bill, illustrate this theme:

> *The carbon tax that all the fuss is about is not a good idea. It might be the right thing for the Europeans, but we in Australia are in a different situation and it makes no sense to blindly follow suit.* (NS)

I believe we will be between $25 and $40 a week worse off. Everyone who is battling to survive now will be on the bread line within 12 months of this crime coming in. (QT)

The Federal Government's Clean Energy Package is not a tax on households—around 500 of the biggest polluters will be required to pay for their pollution under the carbon-pricing mechanism. (NS)

The 'carbon tax' theme criticises politicians for breaking election promises by comparing Gillard with former PM John Howard, who introduced a Goods and Services Tax in 2000:

Anyone who wants to criticise Julia Gillard for changing her mind about introducing a tax on carbon only needs to be reminded that John Howard said he would never introduce the GST. (NS)

Yes Howard said no to a GST that is true, but I see you left out the part where he changed his mind and went to the next election saying he would put a GST on and won that election. (QT)

Many authors called on the public to demonstrate opposition to the Bill:

Julia Gillard's announcement of a carbon price (tax) has Australians rallying like never before. We aren't going to take this lying down, so we need to sign petitions, attend protest marches, write letters, to tell the Labor/Green government we are angry and have had enough. (NS)

One letter even suggests the Bill raises the spectre of (national) socialism:

This is not 1936 Berlin, Julia Gillard! What you see with the current socialist government is all that is bad about socialism. (QT)

The second most important theme is 'climate change', and is strongly associated with the NS category. It comprises the concepts *climate*, *change*, *price, future, world, renewable, energy, emissions* and *pollution*, which rank prominently for the NS (table 1). This theme generally supports the Clean Energy Bill, points to Northern Rivers' leadership role in promoting renewable energy, and frames climate change in terms of future generations and future prosperity for Australia:

Our future depends on using clean, renewable energy sources, of which we have plenty. (NS)

We have led the way locally in our take up of renewable energy. Our best scientists and economists advise us that we need to reduce carbon pollution, getting some of our biggest polluters to lower their pollution, and the best way to do that is to price carbon and have an emissions trading scheme. (NS)

We must change our habits of consumption, power generation and use, and attitudes towards the value of the basic necessities of life, ie clean air, liveable temperatures and water. We must wind down dirty industries and our use of harmful chemicals, and be willing to pay the price associated with that. (NS)

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THE overreaction to the carbon price proposed by the government seems to be people who do not understand what this measure will drive in the way of progressive investments in renewable energy. (QT)

I say $8 a week is a pretty cheap price to pay to start providing for a better future for our children. (NS)

This legislation is about Australia's future and the future of our children and grandchildren in particular. (QT)

The 'energy cost' theme comprises the central concepts *cost, costs, electricity, solar, time* and *power*, and is more prominent in the NS. In contrast to 'climate change', this theme is generally against the introduction of the Clean Energy Bill. It refers to the cost of generating electricity and the contribution of solar and other technologies to provide the energy needed to preserve the current standard of living, as illustrated with the following examples:

With the price of electricity soaring, solar power panels and solar power water heaters are the major contributions we can all make to the reduction of carbon... new renewable energy sources should be encouraged, not discouraged. (QT)

I ONLY got solar because of the higher and higher cost of electricity. (NS)

The way I see it we will be charged a carbon tax on the electricity we use; the power stations will be charged carbon tax on the amount of carbon they produce; so they in tum will pass this on to the consumer as an increase in our power bills; so we will be taxed twice. (NS)

[The carbon tax] *will reduce the asset values, share prices, profits, dividends and growth of our biggest companies, destroy jobs and waste community savings on piddling power schemes like wind and solar energy.* (QT)

Modern nuclear technology is the safest and most reliable presently available for powering the grid, with solar p-v having the potential to make a significant contribution. Wind power, solar thermal, geo-thermal and carbon sequestration could also play a part. (NS)

The theme 'politicians' is most prominent in the QT and comprises the central concepts *election*, *Labor*, *politicians*, *Greens*, *people*, *support*, *Gillard*, and *lie.* It concerns the agreement between the ALP and The Greens that gave Gillard the Prime Ministership, and Gillard's 'lie' over the introduction of a 'carbon tax':

The Greens agreed to support Labor if they formed a Climate Commission, which they did. The Climate Commission, made up of experts from various fields, made recommendations which the government adopted. (QT)

The majority of Australians opposed this tax, yet spineless Labor, being blackmailed by the Greens, pushed ahead with it. These so-called 'people's representatives' have proven once and for all that they do not represent the people. (QT)

Our Labor representatives Shayne Neumann and Bernie Ripoll have betrayed us all, voting for a carbon tax which will cost us all dearly. It is a shame that what is clearly

a tax achieves nothing and is supported solely to appease the loony Greens for their support. (QT)

Julia Gillard, you will never sell your carbon tax to the Australian people. The only thing you've managed to sell is yourself, your government and the 'off the planet' Greens --the biggest defeat at the next Federal election. (QT)

Gillard and her fellow liars are about to spend our money on advertisements aimed at swaying public opinion towards supporting a tax on CO2, the gas we exhale and that is needed by all life on this planet. They will no doubt pepper their alarmist nonsense with lies, because those supporting this tax have to lie since the facts don't support their drivel. (QT)

If you and Labor are so sure this carbon tax is what the people want, take it to an election and test it. (QT)

The 'global warming' theme comprises the central concepts *global, warming, planet, life, CO2*, and *dioxide* and is most prominent in the QT. The theme is generally sceptical of the science of global warming as illustrated with the following:

MYTH: CO2 levels have never been so high. FACT: CO2 has been many times higher in the past and life loved it. MYTH: Carbon dioxide is pollution. FACT: CO2 is an essential gas that all life depends on. (QT)

NASA scientists state the sun is entering a cooler period in its regular cycle, so while CO2 levels keep rising the planet is cooling. (QT)

Government climate mercenaries tell us at every opportunity 'the science of global warming is settled'. They refuse to debate climate realists. (QT)

However, this theme also includes letters from readers who accept climate change science:

Whether you like it or not, there is absolutely no doubt that the world is warming up. There is no doubt that about 40% of the carbon dioxide in the air has been put there by human activity. (QT)

We are in danger of leaving a planet with a horrible climate that may not support civilisation as we have come to expect-and maybe not even a reasonable percentage of the present population. (NS)

The theme 'industry' is prominent in the NS and includes the concepts *industry* and *water*. It is generally critical of the Clean Energy Bill, and its impact on local industry, but letters also link the emerging coal seam gas industry in the Northern Rivers to the Clean Energy Bill:

THE Labor Member for Page, Janelle Safin, is in denial over the impact the Federal Government's carbon tax will have on industry in her electorate. Recently l listed impacts the carbon tax would have on the North Coast, including an additional $250,000 in power costs in the first year alone for an average abattoir processing 3000 cattle a week. (NS)

The carbon tax will penalise all of our industry by further increasing their cost base. (NS)

Tyranny has come to Australia, not with the carbon tax, which has been decided by due parliamentary process, but with the coal seam gas industry, The roll out of coal seam gas mining has been aided and abetted by sell-out politicians of the Liberal, Labor and National parties who conspire in the organised theft of citizens' land and the destruction of ancient land rights. (NS)

In summary, the concept map neatly divides the discourse in two. Letters to the QT largely frame the tax as an impost that is based on a climate change lie, Gillard's broken promise, and her agreement with the 'loony' Greens. Much of the discourse in the QT's letters echo the comments made by the Federal Opposition, or the arguments promoted by climate sceptics, and appear as a deliberate campaign targeting Gillard's credibility. By contrast, fewer references to politicians or parties are evident in the NS, with contributors focussing more on the issues, such as taxing industry and the coal lobby, the phasing out of dominant modes of energy production, support for renewable energy, and the moral imperative to ensure a sustainable world for future generations. Examples from the text corpus show some evidence of the domestication of the debate, for example with letters that make reference to local political representatives--Janelle Saffin (NS), Shayne Neumann and Bernie Ripoll (QT), Northern Rivers' leadership in the adoption of renewable energy, and the impacts of the Bill on local industry. It would be a mistake however, to assume that the discursive differences align with strong support for the Clean Energy Bill in the NS and strong rejection in the QT. Support for the Bill was low in both newspapers (12.1 % in the QT, 25.7% in the NS), neutral letters comprised a fifth of the QT sample (20.6%), and a quarter of the NS sample (25.7%). Nearly two-thirds of the letters in the QT (67.3%), and almost half the letters in the NS (48. 6%) rejected the Bill. A final point of difference concerns the frequency of contributions from individual authors. The NS received letters from 61 authors, with the majority of these (86.9%) publishing a single letter. By contrast, the QT published multiple letters from more than half of its 71 authors, suggesting the presence of a vocal group of regular contributors. Authors who wrote two letters over the period of investigation comprise 26.8 per cent of the letters, while those who wrote three or more letters comprise 23.9 percent, with one author contributing 21 letters, about whom we will say more below.

Regional Contexts: Discussion

The *Leximancer* results clearly demonstrate semantic differences between the letters from the two newspaper outlets owned by the same company, indicating support for the claim that these must reflect local values and opinions. How the letters demonstrate the process of domestication is less clear. Aside from a few references made to local political representatives and local industries, the contributions from the local readership are largely framed in terms of federal politics. Letters overwhelmingly referred to the Clean Energy Bill as a tax, and as such it represented a broken election promise, thus amplifying the moral dimension of the issue. Although the Gillard government never claimed the legislation was a tax, the federal Opposition quickly seized the opportunity to frame it as such. The ease with which this frame was widely adopted suggests it resonated with many sections of the community. This was certainly the case in Ipswich, a city whose economy relies on manufacturing, the aerospace industry, the presence of a gas-fired power station, and a history associated with mining. The national discourse was

easily reproduced in the QT, where Gillard was framed as a liar, not only for allegedly breaking an election promise, but also for recommending a treatment (the price on carbon), for a non-existing problem (global warming), the cause of which was based on scientific lies (the impact of carbon emissions).

By accepting multiple letters from more than half of the authors, the QT, through its letters pages, provided opportunities for local groups and individuals to promote their political agendas, and given the marginal status of two of the region's electorates, controlling the newspaper's public agenda can result in political gain. Therefore, the domestication process evident here lies more in the ability for local political activists to control the public debate, rather than a reconstruction of the national discourse, since much of the letter content echoed national and international debates. Of particular interest is the QT's decision to publish 21 letters from one individual: Viv Forbes, geologist, farmer and resident of Rosevale, south of Ipswich. The paper also ran a full page article on Forbes describing him as a local long-time QT letter contributor, and 'determined to do something' about decisions made by politicians (Jackson, 2011, p. 5). To Forbes the 'carbon tax' would harm Australian industry and jobs. He is sceptical of climate science and distrusts government: 'it's only government that's saying this is a problem, and it's only almost exclusively government-paid scientists who are saying it's a problem' (ibid). The article reports that Forbes chairs the Carbon Sense Coalition, and directs readers to its website (www.carbon-sense.com), but did not report that Forbes is a director of Stanmore Coal, which has underground and open-cut coal mining projects across Queensland (http://stanmorecoal.com.au/corporate/), an industry directly targeted by the Clean Energy Futures legislation. The QT's failure to fully disclose Forbes' background suggests the paper accords him the status of a legitimate voice representative of prevailing local opinion in the climate debate, which further illustrates the role of the local media in domesticating national issues. Given that the QT operates in a near monopoly market, there are few opportunities in Ipswich to challenge these views, except in the QT letter pages.

By contrast, Northern Rivers has a vibrant independent media sector, with several alternative weekly publications—the *Byron Shire Echo*, and the *Nimbin Good Times*--that publish a large volume of politically engaged letters to the editor (Ward and van Vuuren, 2013), and therefore offer alternative forums in which to express views and opinions. A comparison between the mainstream and alternative press is forthcoming to explore the implications of this for the domestication process, but it could be expected that with access to several other newspapers, residents in the Northern Rivers are more likely to send their letters to competing local news organisation if these are more likely to publish their opinions and viewpoints to audiences with similar perspectives. The presence of such competition may account for why the NS published a greater proportion of letters that argued for values such as the need to live within limits and leaving a healthy planet for future generations, when compared to the QT. Here, the smaller proportion of letters that rejected the Clean Energy Bill can be accounted for by a local economy based on tourism, especially eco-tourism, as well as a significant 'Green' presence evident from the federal election results. However, despite letters in the NS being more receptive to the introduction of the Clean Energy Legislative Package, the appeal to moral arguments, rather than those rooted in local everyday experiences may not have provided the traction necessary to persuade others to support the Clean Energy Bill.

Conclusion

This comparison of readers' letters published in two regional newspapers shows that local outlets from a larger media corporation must take into account local values and opinions to remain relevant. The *Leximancer* analysis identifies clear differences between the NS and QT, and provided detailed description of the semantic differences evident in the letters published in the newspapers. However, the results only partially demonstrate the process of domestication. The study found letters to be a problematic representation of public opinion, being the result of editorial choices and local political activism, but they do point to a community's dominant voices and values, especially where these are interpreted in the context of local socio-economic characteristics. Local politicians and decision-makers take notice of letters to the editor since they function to patrol a community's symbolic boundaries, signalling what is acceptable to think and say in public. From this perspective letters can be understood as a process of domestication, even where opinions echo those in the national arena.

A focus on letters to the editor shows some promise as an indicator of a community's capacity for talking about and acceptance of climate change policies. However, as a measure of the symbolic and political environment they must be interpreted in conjunction with news and content in other publications and cultural output, as well as detailed knowledge of a community's geography and socio-economic environment. Additional research is necessary to further explore the domestication process. The content of letters can be compared to news and editorial content to determine whether there are differences in the ways these domesticate national and international public affairs. Comparisons of competing publications within a region are also necessary, as well as further comparisons between regions. In line with similar international research interviews with letter authors may reveal what motivates them to write. Similarly, interviews with letter page editors can reveal the choices for selecting some letters and not others. The results presented here indicate that there is enormous scope for this area of research to add to our understanding of the link between community characteristics and the representation of climate change conflicts in local and regional media.

Notes

[i] This research received no funding from the University of Queensland or external organisations.

[ii] APN News and Media Limited, is a publisher in Australia and New Zealand, dominated by two Irish media companies: Independent News and Media, controlled by the O-Reilly family (30%); and Baycliff Ltd and billionaire Denis O'Brien (28.95%), see http://au.investsmart.com.au/shares/asx/APN-News-and-Media-Limited-APN.asp.

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