

Sinking Islands? Tuvalu and Climate Change in the Sydney Morning Herald

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ABSTRACT

Tuvalu is one of the islands considered by the Intergovernmental Panel on Climate Change to be at the front-line of climate change impacts, due to its small physical size, low elevation and limited natural resources. As Tuvalu grapples with issues of sovereignty, sustainability and resilience raised by climate change imperatives, a major daily newspaper in Sydney, Australia has portrayed Tuvalu as vulnerable island paradise, unfortunate victim-state and tiny brave protester against international heavy-weights. The purpose of this study was to use thematic and content analysis to investigate the nature of the coverage of Tuvalu's climate change challenges in The Sydney Morning Herald. The frequency of Tuvalu-related articles in the context of climate change over the period from January 1997 to January 2003 was assessed, and major themes associated with climate change issues faced by Tuvalu were identified. The study findings indicate that while Tuvalu featured infrequently in this newspaper, more than half of the articles and letters featuring Tuvalu mentioned it in relation to climate change issues. The most common themes depicted Tuvalu as vulnerable to climate change induced sea-level rise and the Tuvaluan people as exposed to the risk of becoming environmental refugees. As an institution of public culture where social and physical understandings of climate change imperatives in Tuvalu are interpreted and transformed, The Sydney Morning Herald contributes to a discourse that emphasises Tuvalu's vulnerabilities, and marginalises its capacity for resilience.

Introduction

Climate change debates crystallise in relation to Tuvalu. The ecological systems of Tuvalu's nine islands, and the socio-economic systems of its people, are facing considerable climate change risks according to synthesis of climate change research conducted by the Intergovernmental Panel on Climate Change (IPCC). The possibility of sea level rise occurring in Tuvalu, in particular, has generated considerable political and public debate. Participants in this debate frequently appeal to the nature of international obligations of governments responsible for the domestic emission of large amounts of greenhouse gases, and to the legitimacy and efficacy of mitigation, adaptation and relocation response options for the government and people of Tuvalu.

Many articles concerning Tuvalu and climate change have been published in the international news media. The general public in countries outside Tuvalu have limited direct contact with Tuvalu and its people. Television, radio, printed news and internet sites are important locations of international public discourse on climate change and Tuvalu. This paper is concerned with the role played by the Australian news media in the construction of Tuvalu's climate change imperatives. My objectives are to investigate how Tuvalu and Tuvaluan people are represented in the *Sydney Morning Herald* (SMH) in the context of climate change, and to examine how response options are discursively positioned in this publication. Gaining insights into how climate change issues are defined and addressed is important for Tuvalu and other communities at risk from the adverse effects of climate change.

Tuvalu

Tuvalu is a state of nine islands situated in Western Polynesia. Known as the Ellice Islands until the 1970s, the Tuvaluan islands were declared a protectorate by Britain in 1892. They were administratively amalgamated with the Micronesian Gilberts in 1915 (Macdonald 1975). Together the two island groups formed the Gilbert and Ellice Islands Colony. This grouping was dissolved at the end of 1975 when the Ellice Islanders' desire for separation was realised and the country was renamed Tuvalu. In 1978, Tuvalu achieved independence and in 2000 became a member of the United Nations. Tuvalu has the meaning 'group of eight' and refers to the eight islands that have long supported inhabitants. These islands are Funafuti, Nanumanga, Nanumea, Niutao, Nui, Nukufetau, Nukulaelae and Vaitupu. Niulakita, the ninth in the group, was not settled permanently until colonial powers acquired it to act as a safety valve for the then very crowded island of Niutao (Goldsmith 2002).

The islands are the surface expressions of carbonate deposits on extinct volcanic mounds, forming a roughly linear archipelago in the central Pacific (Rodgers 1991). Five of the nine islands that today make up the Tuvalu group have been characterised by McLean and Hosking (1991) as true atolls, with a peripheral ring-shaped reef surrounding a lagoon (Funafuti, Nanumea, Nui, Nukufetau, and Nukulaelae). Three islands are of reef patch form, with small land-enclosed ponds and land areas that cover large portions of the available reef platform (Nanumaga, Niulakita and Niutao). One island has composite characteristics of the atoll and reef

patch forms (Vaitupu). The climate is hot with high humidity. Tropical cyclones are infrequent but a few have caused considerable damage and drought periodically occurs (Rodgers 1991). Terrestrial vegetation and animal life is limited in diversity but marine life is rich and varied.

In the middle of 2004, Tuvalu's population count was estimated to be 9,600 according to the most recent census (undertaken in 2002). Population density is high by Oceanic standards, at 369 people per square kilometre and 47 per cent of the population was counted as urban at the census (Secretariat of the Pacific Community 2004). Funafuti, the administrative centre, is more densely populated than the other islands, resulting mostly from inter-island migration into Funafuti (Sem et al. 1996). Life expectancy is 61.7 for males and 65.1 for females¹ (Secretariat of the Pacific Community 2004). There is free and universal access to health and basic education services. Male and female adult literacy is 95 per cent. Combined gross school enrolments are 74 per cent for males and 75 per cent for females. Eighty five per cent of the population has access to safe water and 49 per cent has access to sanitation, based on World Health Organisation Estimates from 1995 and 1997 (UNDP 1999). The land tenure system operates through extended family groups and is supported by legislation, providing access to subsistence resources (Knapman et al. 2002). According to Mellor (2003), the subsistence sector continues to play a significant role in Tuvalu's economy, providing employment opportunities that complement cash employment. As a result, conventional unemployment is almost non-existent in Tuvalu (Mellor 2003).

The Tuvaluan economy is based on an eclectic mixture of government ventures in global markets (such as the sale of the commercially attractive Dot TV internet domain), remittances from Tuvaluan workers (particularly commercial seamen), aid and subsistence production (Connell 1999; Mellor 2003). The Tuvalu Trust Fund is a considerable source of financial support to the Tuvaluan government. It was established in 1987 with contributions from several donor countries and Tuvalu itself. The real capital value of this fund is maintained, with market-driven returns providing revenue in some years (Mellor 2003).

Tuvalu has limited export earnings. Copra exports once made a small contribution to the economy but these ceased when copra prices were low on world markets in the early 1990s (Connell 1999). Tuvalu's exclusive economic zone sea territory has been identified as a valuable sustainable fishing resource (Knapman et al. 2002). However, commercial exports of fish have been limited and some external appraisals of Tuvalu's economy have been pessimistic about the likely success of an export fishing industry being established (Knapman et al. 2002; Mellor 2003).

Tuvalu and climate change

The foregoing brief overview of Tuvalu's social and economic characteristics places my study in context. Tuvalu is a young nation, grappling with its development and negotiating its path through the terrain of globalisation. Tuvaluans

¹ Reference period for life expectancy is 1997-2002

face many challenges; here my focus is on the challenge presented by climate change. The immediate past Prime Minister, Saufatu Sopoanga has spoken of the threat presented by climate change to Tuvalu as follows:

We live in constant fear of the adverse impacts of climate change. For a coral atoll nation, sea level rise and more severe weather events loom as a growing threat to our entire population. The threat is real and serious (Sopoanga 2003).

In its summary of research into climate change impacts, the IPCC indicates that small island states such as Tuvalu are likely to face exacerbated coastal erosion and land loss, increased flooding, increased soil salinization and saltwater intrusion into groundwater, increased frequency of coral bleaching in reef systems and other impacts on bio-physical systems (IPCC 2001). According to a vulnerability assessment conducted by Sem et al. (1996), Tuvalu's vulnerability to extreme weather events could be exacerbated by climate change and variability, and changes in sea levels.

Any effects of climate change in Tuvalu will occur in bio-physical and social systems already under pressure from population growth and high population density, such as increased building activity on Funafuti, increased internal migration to Funafuti (with an associated increased demand for services and employment), and inadequate waste management systems (Connell 1999; Tesfaghiorghis 1994; Zurick 1995). Although fishing and agricultural livelihoods in Tuvalu may prove to be resilient to weather extremes and climate variability, questions of how adaptation to climate change will occur in Tuvalu are being raised by the Tuvaluan Government, by different development and environmental organisations, and by members of the research community (Barnett and Adger 2001; Niuatui 1991; NSSD 2004; Ralston et al. 2004; Sopoanga 2003; United Nations Department of Public Information 2004).

In its National Summit on Sustainable Development,² the Tuvaluan government, Island Council Presidents, Island Head Chiefs, and private and community sector representatives articulated a need to introduce national climate change adaptation and mitigation strategies (Resolution Seven). In particular, there are aims to 'promote awareness on adaptation strategies at all levels' and to 'increase awareness on the issue of sea level rise and climate change' (NSSD 2004, 11). This focus on adaptation in formal policy is one element of the Tuvaluan government's stance on climate change. Government representatives have also been vocal advocates of mitigation in forums such as the United Nations, the United Nations Framework Convention on Climate Change (FCCC) Conference of Parties, and the Pacific Forum, articulating support of the United Nations FCCC and the Kyoto Protocol, and expressing disappointment in those countries that do not show similar support. Tuvaluan leaders have also lobbied the Australian and New Zealand governments for migration opportunities. In the past, Tuvaluan leaders have sought migration opportunities for workers to travel abroad and send

² The National Summit on Sustainable Development was held in June-July 2004. The outcomes of the Summit will provide a basis for a national development strategy, currently being prepared for approval by Parliament in November.

remittances home (Connell 2003). It is unclear the extent to which labour interests have been a motivating factor behind more recent attempts by the Tuvaluan government to gain increased migration opportunities in Australia and New Zealand, which have been reported in the news media as motivated by risks posed by rising sea levels. The government is exploring ways to advance mitigation, adaptation and possibly relocation strategies. Tuvaluan leaders are emphasising a significant role for developed countries in helping them to achieve these objectives.

Tuvalu and climate change discourse

Various discourses relate to the uptake of climate change mitigation and adaptation strategies with which Tuvaluans are most concerned. Connell (2003, 98) identifies a 'garbage can' discourse by which diverse environmental changes on Tuvalu are attributed to climate change, while other environmental problems (such as increasing urbanisation) are neglected. Barnett and Adger (2001) have identified as potentially problematic the framing of climate change impacts on atoll states such as Tuvalu in terms of vulnerability, highlighting loss of confidence in future sustainability by aid agencies, foreign investors, and atoll states themselves.

The tension between global and non-global climate change imperatives has been examined from a discourse analytic perspective by Adger et al. (2001). They consider that climate change imperatives are illegible to social processes at non-global scales, when climate change is framed as a global issue with impacts on the international economy and requiring international action. In particular, they raise the concern that localised adaptation to climate change is marginalised by two dominant discourses. These are a managerial discourse and a moral discourse with underpinnings in concerns about profligacy. Adger et al. (2001) also identify an established discourse of denial that is somewhat influential in questioning climate change knowledge by appealing to apparent inconsistencies in empirical evidence. This denial discourse posits that either climate change is not scientifically provable or that it is not a serious issue.

According to the managerial discourse, which draws authority from science, institutional failure and population growth are the major contributors to climate change. The managerial discourse suggests that the most appropriate level for action to be taken is the international arena. One of the key concerns raised in this discourse is with correcting deficiencies in fossil fuel markets. It thus supports economic mechanisms such as the Kyoto Protocol. Another concern of the managerial discourse is with population growth, which is largely a characteristic of developing world demographics. This discourse portrays developing countries as both bearing a significant burden of responsibility for population issues and as injured parties in the context of climate change's major impacts. The managerial discourse advocates a precautionary approach to managing the climate change problem (Adger et al. 2001). The profligacy or moral discourse diagnoses over-consumption as the most significant factor contributing to climate change, and maintains that this issue needs to be addressed to prevent a climate change catastrophe. Industrialised countries are thus identified as the main culprits of climate change, with authority drawn from both science and appeals to morality. The moral discourse proposes a more radical set of solutions than the managerial

discourse, advocating 'preventative action and a new economic order' (Adger et al. 2001, 700). Both discourses emphasize the fragility of communities that depend on natural resources, and highlight their disempowerment, particularly those in developing countries (Adger et al. 2001).

The news media is one (of many) entry points into the empirical workings of discourse (van Dijk 1988). Being one of today's most complex and prominent environmental issues, climate change is the subject of considerable dispute, or 'discursive struggle' (Jørgensen and Phillips 2002, 6) and is regularly represented in the news media. News media texts are sites of public culture where social and physical understandings of climate change are interpreted and transformed. As Trumbo (1996, 270) puts it, 'the media, in this view, provide a series of arenas in which symbolic contests are carried out among competing sponsors of meaning.'

A study by Boykoff and Boykoff (2004) has made some inroads into analysing climate change in the news as discourse. They found that contesting discourses of climate change could be identified in the prestige newspapers of the United States on the one hand and among the research community on the other. Their finding was based on investigations into the journalistic norm of balance, which accorded to minority discourses that denied the existence or importance of climate change significance equal to the scientific consensus articulated by members of research institutions such as the IPCC. Boykoff and Boykoff (2004) interpreted the point of disconnection between scientific and news media discourses of climate change as contributing to the lack of agreement at the international level on action concerning climate change imperatives. They conclude that, despite strong findings by the IPCC on anthropogenic interference with climate processes, the message of the IPCC has not been translated by the media into the public arena nor interpreted by the public as salient.

Comparing the discourses in Boykoff and Boykoff's (2004) study with those of Adger et al. (2001), it becomes apparent that climate change discourses operate at many levels and are identifiable in many communicative vehicles. Indeed, any analysis of discourse will necessarily be a stylised account of how discourses intersect, overlap and redefine each other, given the complexity of discursive relations.

The discourses discussed above, and their implications for the socio-ecological systems of Tuvalu, warrant investigation. I am undertaking an analysis of climate change discourses and their meanings for Tuvalu for my doctoral research. This paper focussing on the SMH represents a preliminary study. The larger project aims to advance understanding of the means by which risks, uncertainties and complexities associated with climate change expertise travel back and forth across the domains of governance, research and the media and to examine associated implications for socio-ecological resilience. This aim will be achieved by undertaking an analysis of discourses associated with climate change impacts in Tuvalu and investigating how Tuvaluans perceive risks for their islands in the context of climate change. The aim in this paper is to investigate how Tuvalu, Tuvaluan people and climate change are represented in the SMH, and to examine how response options are discursively positioned in that particular publication.

Sydney Morning Herald data

The SMH is a major 'daily' (Monday to Saturday) newspaper published in Sydney, Australia. It is owned by John Fairfax Holdings. In March 2004 it had a weekday circulation of 221,022 and a Saturday circulation of 375,541 according to Audit Bureau of Circulation figures (Herald Adcentre 2004a). The SMH is read mainly by professionals/managers and white collar workers (Herald Adcentre 2004b; Herald Adcentre 2004c).

Sydney is one of only two cities in Australia with more than one major daily newspaper. The other major newspaper in Sydney is The Daily Telegraph, which in 2004 had a weekday circulation of 409,000 and a Saturday circulation of 345,000 (News Medianet 2004). There is also a national daily newspaper, The Australian, which in March 2004 had a weekday circulation 131,000 and a weekend circulation of 300,000 (News Medianet 2004). Both The Daily Telegraph and The Australian are owned by News Limited.

While many readers of the SMH will obtain news information from several sources such as radio and television news services, other newspapers, magazines and internet sites, the circulation figures indicate that the SMH is an important source of news and public information in Australia. The newspaper seeks to demonstrate its legitimacy as a news source through its masthead, stating that it has been published since 1831 and has numbered more than 52,000 editions in that time.

In this study I have examined the textual elements of news and not audience response. The SMH electronic archive was searched for articles, comments and letters mentioning Tuvalu for the period beginning 1st January 1997 and ending 1st January 2003. The study period was chosen to coincide with the lead-up to the third Conference of Parties negotiations under the United Nations FCCC that culminated in the as-yet unratified Kyoto Protocol, and continuing negotiations in subsequent years. During that time the Oceanic island states engaged in unsuccessful negotiations with Australia in the context of the South Pacific Forum to commit to reduced greenhouse gas emissions. I included in this study news articles, comments and letters in order to help trace the discourse of climate change issues associated with Tuvalu as fully as possible. The total number of these texts identified by searching the electronic archive was 67. The texts were manually examined to include only those that mentioned Tuvalu in the context of climate change or sea level rise or both. I identified 34 texts where appeals to climate change issues associated with Tuvalu were made, either explicitly or implicitly³.

Method

My investigation into Tuvalu and climate change discourse in the news media was informed by environmental discourse studies conducted by Hajer (1995), Dryzek (1997) and Adger et al. (2001). More specifically, my methodology treats texts (written and spoken language) as 'constructions of the world oriented towards social action' (Jørgensen and Phillips 2002, 96). Discourse analysis is the study of the

³ Implicit appeals were mainly of the type that referred to Tuvalu as facing threats such as sinking or submersion without explicit mention of climate change or sea level rise.

rhetorical organisation of texts, investigating how constructions of the world are designed so they appear as stable facts and how alternatives are undermined.

My analysis followed a methodological eclectic that probed the texts using qualitative, thematic analysis. I explored how accounts of Tuvalu and climate change were discursively organized and constructed, and what discursive effects they accomplished. Following Adger et al. (2001), I explored discursive patterns in the selected news texts by identifying any archetype villains and victims. I considered how characters and story-lines formed constructions of the climate change problem for Tuvalu, paying particular attention to narrative silences and partial, simplified and selective representations (Hubbard et al. 2002). Turning to rhetorical devices, I investigated whether narrative choices privileged drama over balanced representation.

Analysis: representations of Tuvalu in the *Sydney Morning Herald*

My analysis sought to identify how a relationship between Tuvalu and climate change was constructed in the SMH. There are many possible ways in which the meaning of climate change in Tuvalu can be constructed, not only in the media but in research and political dialogue. For some, climate change is a scientifically identified phenomenon, posing risks to ecological and human systems. This construction supports further commitment from researchers and policy-makers, particularly in the quantification of risk. It also cites the scientific consensus that anthropogenic climate change is a reality. The construction pays attention to sea level rise and to other possible impacts of climate change in Tuvalu, canvassing various policy options to respond to a range of climate change risks. For example, Lewis (1989, 273) states that a comprehensive strategy is needed to manage risks presented by possible sea level rise and that 'matters of long-term consequence would best be considered when short-term threats have been accommodated.'

Another construction questions the existence of threats Tuvalu faces from climate change, particularly sea level rise, appealing to research to support its claims. For example, Baliunas and Soon (2002, 44) in a viewpoint article pose the question 'is Tuvalu really sinking?' and appeal to the authority of the director of Australia's National Tidal Facility who states 'there is no indication based on observations that sea level rise is accelerating.' The academic opinion piece by Eschenbach (2004, 538) asserts that 'it is not necessary to invoke global warming or rising sea levels to explain the sudden loss of an atoll through cyclone driven erosion....it is part of the natural cycle of the ocean.'

Neither of these possible constructions, however, is a central theme of the news texts analysed in this study. Rather, as I will demonstrate, the texts portray climate change in Tuvalu as an issue concerning the imminent creation of environmental refugees from the effects of sea level rise, and the moral consequences of this problem for the international community. This construction tends to take inundation of Tuvalu by rising seas as given. The SMH texts made appeals to a discourse that constructs the climate change problem as leading to abandonment of the islands with the only feasible solution being a flow of environmental refugees into less vulnerable countries such as Australia. Yet, there is

no intrinsic connection between climate change and the creation of environmental refugees. By presenting the issue in these terms, the SMH reduces the salience of other possible constructions of climate change, discursively limiting avenues for dealing with the problem. The construction of such a climate change reality for Tuvalu in the SMH was accomplished by the inclusion (and exclusion) of certain content as well as by the use of rhetorical devices. The following six extracts will be discussed:

Extract 1: SMH, 19th July 2001, p1, David Wroe 'Australia refuses to throw lifeline to drowning Tuvalu'

1. The tiny South Pacific nation of Tuvalu which faces being submerged by rising sea levels has pleaded with Australia to help resettle its 11,000 citizens, but it has been given short shrift.
2. While Western governments argue in Bonn this week about the future of the Kyoto protocol on global warming, the Tuvaluan Government is considering abandoning the islands its people have lived on for thousands of years.
3. As their homeland slowly disappears beneath their feet, Tuvalu has approached Australia and New Zealand about resettlement, believing the nation will be uninhabitable within three decades.

Extract 2: SMH, 30th January 1999, Letters p11, John Murray

1. It is indeed a pity that the Government appears to have given short shrift to the request from the tiny nation of Tuvalu to facilitate the future migration of its people in anticipation of its inevitable submersion due to the greenhouse effect caused by distant, wealthier, polluting countries.

Extract 3: SMH, 30th January 1999, Spectrum p7, Neer Korn 'High Net Wealth'

1. There is one pressing problem that no amount of money can solve. The nation's highest point is a mere 4.5 metres above sea level.
2. In an impassioned speech to the global warming conference in Buenos Aires late last year, the Prime Minister said: "We are...the most vulnerable of the most vulnerable of countries to the effect of sea-level rise."
3. It is a subject Paeniu raises at every opportunity. "The effects of climate change, I can tell you, are for real and a matter of life and death for us, inhabitants of these low-lying islands. We would be gone even before we had a chance to prove to the developed countries the consequences of their actions."

Extract 4: SMH, 18th February 2000, p8, Mark Riley 'Tiny Islands Join UN with a Sinking Feeling'

1. With a highest land point of 4.5 metres above sea level, this slice of Pacific paradise is in imminent peril of becoming a paradise lost to global warming.

2. In the words of the immediate past prime minister of Tuvalu, Mr Bikenibeu Paeniu: "We are the most vulnerable of the most vulnerable of countries to the effect of sea-level rise".
3. "Climate change" does not simply suggest the onset of cloudy weather to the 10,588 Tuvaluans; it is a matter of life and death.

Extract 5: SMH, 4th March 2002, p2, Craig Skehan 'Tuvalu disappointed by greenhouse stance'

1. The Prime Minister of the low-lying atoll nation of Tuvalu, Koloa Talake, said yesterday he was sad and disappointed over what he saw as Australia moving further away from supporting binding international measures to combat rising ocean levels.
2. "What will happen to all my 12,000 people?" he said. "The environment is being damaged by global warming which is giving rise to higher sea levels".

Extract 6: SMH, 20th September 1997, p9, Craig Skehan 'Howard Fails to Head Off Bid on Greenhouse Emissions'

1. Australia failed yesterday to head off a bid by atoll nations to commit the annual South Pacific Forum to supporting binding global greenhouse gas emission cuts by developed countries.
2. Mr Howard dug his heels in and refused to budge.

One of the most salient features of the news texts in this study is their silence on adaptation to climate change impacts, their dismissal of prospects for effective mitigation and their construction of relocation as the only response option for Tuvaluans. Adaptation in particular is viewed by many researchers and by the Tuvaluan Government as being an essential component of a threatened community's response to climate change (Barnett 2001; Huq et al. 2003; IPCC 2001; NSSD 2004, 11). Yet the SMH allows little capacity for discussion of possible adaptation measures in Tuvalu because of the direct causal linkages that are constructed between climate change, long term sea level rise and abandonment of islands.

These linkages are established in several ways. Sea level rise is represented as not only an extremely serious concern, 'a matter of life and death' (Extracts 3.3 and 4.3) which renders other climate change impacts significantly less salient, but as inherently linked to resettlement of the population. The fact that Tuvalu is 'a mere 4.5 metres above sea level' is a problem that 'no amount of money can solve' (Extract 3.1). The dramatic vision of a nation 'being submerged by rising sea levels' (Extract 1.1) is employed in such a way that for Tuvaluans, approaching 'Australia and New Zealand about resettlement' is represented as the only possible response to climate change as 'their homeland slowly disappears beneath their feet' (Extract 1.3). The consequences of sea level rise are represented as inevitable loss of land and subsequent population displacement.

The adverse effects of climate change are identified in relation to Tuvalu in a way that is simplified and distorted. Climate change related concerns about drought and short-term variations in sea level due to extreme events, El Nino Southern

Oscillation, changes in wind and regular high tides, which are expected to impact on groundwater salinity and affect crops are mentioned rarely in the news texts in this study. In effect, short-term sea level rise and drought become much-diminished issues for Tuvalu in the SMH, while long-term sea level rise receives magnified attention. With the wider host of climate change impacts receiving scant attention and the dramatic and hence more newsworthy images of Tuvalu in 'imminent peril' (Extract 4.1) from sea levels rising and facing 'inevitable submersion due to the greenhouse effect' (Extract 2.1) being given precedence in the news texts, submersion becomes an almost inevitable event, qualified as likely to happen very slowly only in some instances. The newsworthiness of such images is highlighted in the headlines that depict Tuvalu as 'drowning' (Extract 1) and 'sinking' (Extract 4). Moreover, by repeatedly describing Tuvalu as 'low-lying' (Extracts 3.3 and 5.1) and 'tiny' (Extracts 1.1 and 2.1), vulnerability to sea level rise is discursively exacerbated. When images of submersion are juxtaposed with stereotypical descriptions of Tuvalu as an island paradise, there is a heightened sense of loss: 'this slice of Pacific paradise is in imminent peril of becoming a paradise lost to global warming' (Extract 4.1).

On the 19th July 2001, the front page of the SMH contained the headline 'Australia refuses to throw lifeline to drowning Tuvalu' (Extract 1). The report concerned the negotiation of migration rights for Tuvaluans into Australia, which the Tuvaluan government had sought from the Australian government. It was reported that 'the Tuvaluan Government is considering abandoning the islands its people have lived on for thousands of years' (Extract 1.2). Four years earlier, the Tuvalu Statement presented by Toaripi Lauti of Tuvalu's Prime Ministerial Special Envoy On Climate Change, as part of a speech to the United Nations FCCC - Conference Of Parties 3, contained the following statement:

Mr President, there is nowhere else on earth that can substitute for our God-given homeland in Tuvalu. The option of relocation as mooted by some countries therefore is utterly insensitive and irresponsible (Lauti 1997).

This speech was not reported in the SMH, illustrating how news stories about Tuvalu in the SMH at times represent only a partial account of the ways in which Tuvalu is grappling with climate change challenges to sustainability and resilience. In contrast to Toaripi Lauti's firm stance expressing his desire to remain in his homeland in the above quotation, the Tuvaluan leaders are represented in the SMH news texts as feeling a sense of hopelessness against the impacts of climate change and sadness at the lack of help they receive from other countries. Their voices are heard in the news texts pleading with the Australian government (Extract 1.1), and negotiating with other governments such as New Zealand (Extract 1.3), to assist them by committing to the reduction of greenhouse gases and by granting their people migration rights. A former Prime Minister, Bikenibeu Paeniu, was twice quoted as saying 'we are the most vulnerable of the most vulnerable of countries to the effect of sea level rise' (Extracts 3.2 and 4.2). Another former Prime Minister, Koloa Talake, was quoted as saying 'What will happen to all of my 12,000 people?' (Extract 5.2). As a rhetorical device, the presence of Tuvaluan leaders' voices expressing their sense of hopelessness adds credibility to the claims that Tuvalu is extremely vulnerable to sea level rise and that its population faces the necessity of abandoning their island homes. This credibility is particularly salient when strong

statements valuing the Tuvaluan islands, such as Lauti's above, are silenced. It is not surprising that the Tuvaluan leaders are not heard to speak of adaptation measures, or for other sources to voice their understanding of adaptation. For them to do so would make little sense in terms of how the discursive boundaries have been constructed in this context.

The construction of Tuvaluan leaders as victims of climate change is achieved by characterising them as powerless, pleading and desperate, but they are also represented as making brave protests against much more powerful nations. For example, one Tuvaluan Prime Minister makes 'an impassioned speech to the global warming conference in Buenos Aires' (Extract 3.2) and another expresses disappointment in Australia for 'moving further away from supporting binding international measures to combat rising ocean levels' (Extract 5.1). These representations are made in such a way that the powerlessness of Tuvaluan leaders in the international negotiating arena, and the unlikely success of mitigation options, is emphasised. The former Prime Minister Bikenibeu Paeniu, for example, warns that the Tuvaluan population 'would be gone before we had a chance to prove to the developed countries the consequences of their actions' (Extract 3.3). Australian leaders are largely represented as disobliging and unsympathetic towards Tuvalu. John Howard, Australia's Prime Minister, and other government leaders are portrayed as insensitive to the plight of environmental refugees and stubborn in their refusal to enter into a dialogue with Tuvalu on the issue of migration rights into Australia. John Howard 'dug his heels in and refused to budge' (Extract 6.2) when the leaders of Pacific states including Tuvalu urged Australia to curb greenhouse gas emissions. Australian policy on refugees in general and Tuvalu in particular is condemned for lacking compassion. Australia's unhelpful role is further highlighted by the sense of irony with which it is noted in several of the texts examined that Australia asked Tuvalu to detain refugees from other parts of the world seeking asylum in Australia as part of the Australian government's 'Pacific Solution' (discussed below), yet would not consider accepting Tuvaluans as migrants (Nguyen 2002; Skehan and Clennell 2001).

The Australian context

This study has focussed on only a limited number of articles, from one publication and for a selected period of time. As such it is only a limited analysis of the wider discursive context that is associated with Tuvalu's climate change imperatives. Importantly, Tuvalu has not received a great deal of coverage in the SMH, indicating its marginal importance in the Australian news media. It is interesting to note, in illustration, that there was no mention, to my knowledge, of the vote of no confidence in the Tuvaluan parliament against Prime Minister Sopoanga on 25th August 2004. More than half of the news texts during the period from 1st January 1997 to 1st January 2003 which mentioned Tuvalu, however, included reference to Tuvalu and climate change. The unusual problem, constructed as one of a country disappearing under rising sea levels, to some extent makes its salience as a news issue reasonably pronounced. The sense of impending crisis, moreover, both for Tuvaluans and for the countries they enter as environmental refugees, is a dramatic event that contributes to compelling news stories.

While the focus of this article has been on news texts and not audience reception, it is worthwhile considering briefly the context in which the news texts analysed in this study are located. Few Australians would have direct experience of Tuvalu, so any perceptions they have of this country are likely to at least be partially influenced by the media. Australians are also likely to bring to their experience of news accounts of Tuvalu their own versions of refugee issues. The reception of refugees and other immigrants in Australia has been a prominent political and media issue in the last few years, most particularly following the Tampa incident, the September 11 terrorist attacks in the United States, and the 'children overboard' affair in 2001 (Klocker and Dunn 2003; Slattery 2003). The Tampa was a Norwegian vessel whose captain rescued asylum-seekers, mainly from Afghanistan, from a boat that was in trouble in Australian waters. The Australian government refused to accept the asylum-seekers. The 'children overboard' affair involved the Australian Prime Minister and senior ministers accusing Iraqi asylum seekers of throwing children overboard when they were intercepted by the navy in a boat near Christmas Island. The veracity of the 'children overboard' accusations has since been discounted, but there has ensued much political debate on the Australian government's border protection and its policy of detaining asylum-seekers until their claims are processed. The Pacific Solution mentioned above established Australian immigration processing centres in locations outside Australia, for example on Nauru. Given this highly politicized context, many Australians have strong views on the ways in which refugees should be received. Although not as prominent, climate change (particularly Kyoto Protocol negotiations), as well as Pacific relations are also political issues in Australia and feature regularly in the media.

This contextual location is important because representations of Tuvalu in the SMH are bound up in the political climate. Indeed, there were 19 articles concerning Tuvalu and climate change in 2001, many of which focussed on the Tuvaluans as refugees. That was the same year as the Tampa incident and the 'children overboard' affair, a time when border policy politics was pronounced in public discourse. The number compared to two articles in 1999, three in 2000 and seven in 2002.

Conclusion

By constructing Tuvalu's climate change imperatives in terms of imminent sea level rise and the creation of environmental refugees, the SMH displays many elements of the moral discourse identified by Adger et al. (2001). The perpetrators of climate change are the industrialised governments, with Australia singled out as particularly harsh given its situation as one of Tuvalu's most powerful neighbours. Tuvalu, on the other hand, is a developing country portrayed as a victim-state that is vulnerable to the effects of climate change-induced sea level rise. Throughout the news texts analysed, there was consistent appeal to morality that reinforced these roles. The emphasis was on Australia immorally contributing to the severe climate change impacts faced by Tuvalu, and more significantly, the vulnerability of Tuvalu to loss of land through sea level rise. In this case, Tuvalu is seen to be an injured party in the context of the Australia's unsympathetic border policies.

If Tuvalu's future is constituted as particularly bleak by appeals to the risk of long-term sea level rise, vulnerability to climate change becomes bound up with notions of helplessness. This rhetorical construction of Tuvalu's future has political salience, silencing other constructions that emphasise a potentially significant capacity for resilience on the part of Tuvaluans who have 'been able to fashion vibrant communities' on islands with environments typically described as marginal and resource-poor (Sem et al. 1996, 111).

The concerns that are raised from this discourse analysis are thus: what impact might the emphasis on Tuvalu's vulnerabilities be for Tuvalu both in terms of its own capacity to respond to climate change imperatives and in terms of its sustainability more broadly? These questions resonate with implications for atoll states such as Tuvalu that might result from a doomsday discourse emphasising long-term sea level rise and relocation in favour of a broader sweep of adaptation and mitigation measures that advance sustainability imperatives (Barnett and Adger 2001). In other words, does a vulnerability discourse reduce Tuvalu's resilience in the face of climate change, development and sustainability imperatives? This preliminary study does not address this important question, but it does identify a discourse in the SMH that marginalises Tuvalu's capacity for resilience by emphasizing its vulnerabilities.