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Australian climate concern and the 'attitude-behaviour gap'

Abstract: Anthropogenic climate change poses considerable challenges to all societies and economies. One significant contributor to human-induced climate change is tourism transportation, particularly aviation. This paper addresses the relationship between climate change concerns, the energy-intensive nature of tourist consumption, and unrestrained tourist air travel behaviour in the context of Australia. Following Barr, Shaw, Coles and Prillwitz (2010), it seeks to understand public climate concern within the context of routine everyday ('home') lives and occasional tourist ('away') decision-making, with a specific focus on air travel. It draws upon 20 in-depth semi-structured interviews conducted in Australia between March and June 2011. The findings highlight the contradictory nature of environmental concerns and consumption decisions in everyday and tourist contexts. This is evident in widespread domestic consumer practices that are motivated, all or in large part, by climate concerns, set against almost complete disregard and neglect of responsibility to modify existing air travel practices. Our results highlight the magnitude of the challenge involved in shifting deeply entrenched air travel behaviours despite the growing urgency of radical emission reductions. It also highlights the need to consider consumer responses to climate change not in isolation, but in relation to industry drivers and strong government policy interventions.

Keywords: Climate change, Australia, attitude-behaviour gap, tourism, air travel, emissions, carbon tax.

Introduction

In 2007 the Intergovernmental Panel on Climate Change established the scientific consensus that anthropogenic climate change is an inescapable reality (IPCC, 2007). Climate change science has been subject to intense scrutiny (Garnaut, 2008). The environmental, social, political and economic consequences of climate change are both regionally and globally far reaching (Stern, 2007; Garnaut, 2008). Climate change now requires radical emission reductions, which in turn requires the urgent transformation of our lives, societies and economies (Stern, 2007). One important but problematic aspect of the required transformation relates to contemporary transport mobilities in the developed world (Chapman, 2007; Higham, Cohen, Peeters & Gössling, 2013), with high levels of discretionary personal air travel coming under increasing scrutiny (Gössling, Hall, Peeters & Scott, 2010). Monbiot (2007) highlights the considerable challenge associated with mitigating aviation greenhouse gas emissions, given high current and projected growth in demand for air travel, and the absence of significant capacity for further technical gains in aircraft efficiency (Scott, Peeters, & Gössling, 2010). Indeed, despite forecasting global international tourism flows of 1.8 billion by 2030 (UNWTO, 2012) - a level of requisite aeromobility that is incompatible with carbon mitigation - the United Nations World Tourism Organisation concedes that climatically sustainable tourism requires fundamental shifts in consumer and business behaviour (UNWTO-UNEP 2008; Dwyer et al., 2012).

The necessary shift in air travel consumption behaviour presents a perplexing challenge (Semenza et al., 2008). Recent studies, mainly from the context of Northern Europe, have reported increasing public awareness of anthropogenic climate change among the travelling public (Hares, Dickinson, & Wilkes, 2010; Higham & Cohen, 2011; Cohen & Higham, 2011) while also highlighting a concerning disconnect between attitudes and tourist behaviour (Miller et al., 2010; Barr, et al., 2010). The democratic freedom to travel is implicated in this disconnect (Cohen & Higham, 2011). Thus, an increasingly informed and concerned public has not, as yet, resulted in voluntary air travel behaviour change (McKercher, Prideaux, Cheung, & Law, 2010; Higham, Cohen & Cavaliere, 2014). This disconnect has been highlighted by Barr et al. (2010) who demonstrate that even among those who are committed to pro-environmental behaviours in their everyday domestic lives, few are prepared to reduce their personal aeromobilities or otherwise compromise their holiday plans in the interests of environmental sustainability.

Few developed nations should be more acutely aware of the immediate consequences of climate change than Australia. The Garnaut Climate Change Review (2008), a benchmark review of the impacts of climate change on the Australian economy, was commissioned by the Commonwealth, state and territory governments in 2007 to independently assess the impacts of climate change on the Australian economy and make policy recommendations. It provides the most comprehensive assessment of climate change and the Australian economy to date, noting that the consequences of climate change in Australia are already manifest, in the form of changing rainfall patterns, changes in the frequency and intensity of flood, drought, and cyclones and the prevailing conditions for catastrophic bushfires (Garnaut, 2011: 8). Within the context of the Australian economy, the contributions of the tourism sector, both in terms of climate change cause and effect, is also noteworthy (Becken & Hay, 2007; Dwyer et al., 2012).

Recent research in Australia highlights a prevailing tourism industry inertia in climate action. Turton, Hadwen & Wilson's (2009) scoping study on the impacts of climate change on Australian tourism destinations reports scepticism, uncertainty in climate changing projection models, concern about the efficacy of local/regional responses to the global climate challenge and reluctance to invest in climate change adaptation. These findings arose despite acceptance of the threat of climate change, and rising concerns about negative media coverage of climate change and related natural disasters. The implications of climate change for Australian tourism, in terms of attractiveness (e.g., spread of infectious disease), safety (e.g., risk of environmental disasters such as bush fire, flood, inundation of coastal destinations) and resource depletion (e.g., coral bleaching and biodiversity loss) and negative media attention are serious concerns (Turton et al., 2009; Garnaut, 2011).

Set against this broad context, the tourism industry in Australia is energy intensive and heavily reliant upon aviation (Becken, 2010). The Garnaut Review (2011) notes that Australia must respond to climate change, and that national interests will be served by committing to strong global efforts to mitigate climate change. The forms that effective climate change mitigation should take – on the part of industry, government and the public - is an open and hotly debated question (Hall, 2013; Young, Higham & Reis, 2014). This article addresses climate change within the context of Australian air travel practices, both domestic and international. Framed by the concept of the 'attitude-behaviour gap', and in particular how this gap is understood through representations of tourism experiences as an escape from the everyday, and of understandings of personal identities as contextually dependent (cf. Cohen, Higham & Reis, 2013), it examines consistencies and inconsistencies in climate awareness and environmental behaviours in everyday ('home'/routine) and tourist ('away'/non-routine) contexts, with specific reference to holiday flying practices.

Responding to the dispersed climatic impacts of discretionary air travel

Tourism is a privileged, discretionary and oil intensive activity (Hall, 2004; Becken, 2010). Accurate cross-sector comparison of carbon emissions is challenging, in part due to methods of defining and measuring tourism emissions (Scott, Hall & Gössling, 2012). However, the contribution of the global tourism production system to anthropogenic climate change is significant (Pang, McKercher & Prideaux, 2012): 4.4% of total global carbon emissions (Peeters & Dubois, 2010). Transportation typically accounts for 60-96% of the total energy consumption associated with leisure tourism (Gössling, 2009). Aviation causes significantly more biosphere damage than all surface modes of transportation due to high relative emissions intensity and radiative forcing (Gössling & Peeters, 2007). Currently, 40% of total tourism emissions are derived from aviation (UNWTO/UNEP-WMO, 2008; Gössling, 2009). Furthermore, aviation emissions are rapidly growing in real terms (Dubois & Ceron 2006; Gössling & Peeters 2007; Mair, 2009), as consumers in western societies continue to be seduced by the high volume/low cost of budget airlines (Casey, 2010), and an appetite for discretionary air travel gains traction in the expanding middle classes of developing world nations (e.g., China, Indonesia and Brazil). Air travel emissions are also growing in relative terms, as international aviation remains exempt from carbon pricing, while other sectors of the global economy respond to the call for radical emissions reduction (Scott, 2011; Scott, Hall, & Gössling, 2012).

The global climate challenge is to stabilise temperature rise within 2°C. Given that 1°C has already been exceeded, and the tipping point to runaway climate may already have been passed (Monbiot, 2007), a growing chorus of voices is demanding meaningful responses to the need for urgent and radical emission reductions (World Bank, 2012; Higham, Cohen, Peeters & Gössling, 2013). This is a challenge that must be addressed at a number of different levels. The aviation industry continues to argue the case for technical solutions and operational gains (see Duval, 2012), however, continued growth in demand for air travel points to the inadequacy of such measures (Scott, Peeters, & Gössling, 2010). In terms of policy mechanisms, the EU has led international efforts, as yet without success, to bring international aviation into the Emissions Trading Scheme (ETS); however it is forecast that the scheme is unlikely anyways to reduce international travel flows or its absolute emissions (Gössling & Cohen, 2014). The failure of a global carbon pricing mechanism for aviation (Duval, 2012) has been accompanied by cynicism towards the United Kingdom's Air Passenger Duty (APD), which is widely perceived to be a punitive tax that is divorced from meaningful environmental measures to address the climate crisis. The failure of the ETS negotiations has provided the International Civil Aviation Organisation (ICAO) (2012) with a 12 month extension to consider "industry mechanisms" which may include alternative biofuels and operational innovations (Sustainable Aviation, 2011). IATA (2012) stands by a vision of future 'green aviation', although Gössling, Hall, Peeters & Scott (2010:119) note that "technology and management will not be sufficient to achieve even modest absolute emission reductions".

The continuing failure to address the structural issues associated with the global capitalist (re)production of aeromobility (Gössling & Nilsson, 2010; Young et al., 2014) is clearly evident. In the current absence of meaningful industry responses to air transport supply and government measures such as carbon pricing, the burden of responsibility (and anxiety) has been transferred to the (travelling) public (Young et al., 2014). The effectiveness of such an approach has been theoretically and empirically questioned (Barr, Gilg, & Shaw, 2011; Miller, Rathouse, Scarles, Holmes, & Tribe, 2010; Cohen, Higham & Cavaliere, 2011). Gössling et al. (2007), for example, report the low consumer uptake of carbon offsetting programmes (Mair, 2011), which are not only viewed with distrust and apathy (Higham & Cohen, 2011), but also considered a cynical transfer of responsibility for the high carbon emissions of the aviation industry to the consumer (Higham, Cohen & Cavaliere, 2014; Young et al., 2014). Given the failure to implement effective government measures, and in the absence of meaningful industry responses, the significant and

urgent challenge of moving tourist air travel onto a sustainable pathway (Becken & Hay, 2010) has largely befallen individual consumers (Higham et al., 2014), either through voluntary behaviour change, or perhaps indirectly through political processes.

Social and behavioural change at ‘home’ and ‘away’: The ‘attitude-behaviour gap’.

The urgency of social and behaviour change in the highly mobile sections of developed societies is clearly evident (Gössling, Hall, Peeters & Scott, 2010). Indeed, increasing academic attention has been paid to the climate crisis in relation to tourist attitudes (Becken, 2007; Gössling, Scott, Hall, Ceron, & Dubois, 2011) and behaviour (Miller et al., 2010; McKercher & Prideaux, 2011; Kroesen, 2013). The findings of these studies coalesce around a discord that forms a barrier between environmental awareness and concern, and behaviour change. There is evidence to suggest that some consumers in western societies are beginning to internalise and process the environmental excesses of contemporary consumption (Barr et al., 2010; Higham & Cohen, 2011). However, at the same time, the public has demonstrated little appetite for engagement with sustainable tourism practices (Miller et al., 2010), contemplating the broader consequences of high levels of personal aeromobility (McKercher & Prideaux, 2011; Higham & Cohen, 2011), or compromising established air travel habits (Cohen et al., 2011; Kroesen, 2013).

This apparent deadlock has been broadly addressed in tourism studies, and is described as the ‘attitude-behaviour gap’ (Lassen, 2010; Antimova, Nawijn, & Peeters 2012; Hibbert, Gössling, Dickinson & Curtin, 2013). Although widespread in discourses of ethical consumption and environmental psychology more widely (Kollmuss & Agyeman, 2002), it appears to be particularly acute in the context of tourism (Cohen et al., 2013). Engagement in tourism practices, it seems, equates for many to disengagement from the problems of daily life – both local stresses and global crises such as climate change (Higham & Cohen, 2011). As such, those who concern themselves with environmental issues in daily life, and may engage in pro-environmental practices in their day-to-day domestic routines, are no more likely to give priority to environmental concerns when engaging in holiday decision-making (Barr, Shaw, Coles and Prillwitz, 2010; Juvan & Dolnicar, 2014).

Cohen et al. (2013) appraise the ‘attitude-behaviour gap’ in relation to domestic (home) and tourist (away) behaviours. Their discussion addresses two divergent sociological schools of thought on how tourism is represented in society. The first, a modernist view, considers tourism to largely occur as a bounded experience outside the rhythms and routines of day-to-day existence. Perceived as extraordinary experiences and typically involving conspicuous consumption, tourism in this sense is associated with freedom, escape, abandon and attenuation for daily practices (Pearce, 1993). This implies that through the experience of tourism, established behaviours may enter a period of abeyance due to perceived freedom from social expectation and scrutiny (Kim & Jamal, 2007). This weakening of concern for everyday behavioural norms in tourism spaces may extend to global environmental crises such as climate change (Higham & Cohen, 2011).

The second view on tourism that Cohen et al. (2013) describe, a postmodernist interpretation, represents tourism practices as increasingly blended into the fabric of everyday life (Edensor, 2007; Hall, 2013; Larsen, 2008). Here, tourism loses its status as an extraordinary activity: the increasing fluidity of contemporary life (Bauman, 2000) contributes to a breakdown in a binary division between tourism and the everyday. Yet, in this second view, a postmodernist perspective is accompanied by recognition that personal identities are also fluid, and, as such, distinct ‘selves’, and in turn behaviours, are dependent on context. Tourism is recognised as an arena where different identities may be practiced, performed, played out and discarded, with the conclusion that behaviour is too fragmented to expect consistency across contexts (Cohen et al., 2013; Hibbert, Dickinson & Curtin, 2013).

Both of these perspectives: one that positions tourism experiences as an escape from the everyday, and the other that views identities as situational, suggest that just because individuals act in a particular way in domestic life, does not mean that those behaviours transfer consistently (or at all) into tourism contexts (Barr et al., 2010; Cohen et al., 2013). Situational (context) dependence has implications for understanding the transferability of pro-environmental attitudes and behaviours across differing life contexts (Miller et al., 2010). These theoretical perspectives provide valuable insights into the behavioural dissonance that is inherent in the ‘attitude-behaviour gap’, and the inconsistencies of behaviour that may pervade ‘home’ and ‘away’ contexts.

Australian tourism and the climate crisis

Aviation in Australia is considered the “fastest-growing transport type, reflecting growing income and an increased proportion of international and domestic spending on tourism” (Garnaut, 2008: 509). Outbound Australian tourism doubled between 1998-2010, increasing at an annual average rate of 8.5% (TRA, 2011). This trend has intensified in the last five years with Australians increasingly preferring to travel overseas rather than domestically (TRA, 2011). Domestic air travel has also grown rapidly in the last five years, particularly with the emergence of new cost competitive airline services (e.g., Jetstar; Virgin Australia) (Garnaut, 2008). In 2006 aviation accounted for upward of 32% of Australia’s total greenhouse gas emissions (Macintosh & Downie, 2007). Aviation emissions globally have continued to increase rapidly in recently years (Lee, Lim & Owen, 2013). The case remains that aviation emissions will not be stabilised at levels aligned with risk-averse climate targets without reduced demand (Mcintosh & Wallace, 2008). The National Climate Change Adaption Framework (Council of Australian Governments, 2007) identified the tourism industry as one of those key sectors that are vulnerable to the impacts of climate change in Australia. Accordingly, the impacts of climate change and the policies designed to mitigate it are recognized as major issues (Leiper et al., 2008; Zeppel, 2013).

Despite the average loading of aviation being significantly higher in emissions intensity than the loading of any other passenger transport mode (Garnaut, 2008), mitigation strategies in Australia have not reached so far as to thoroughly address the impacts of air transport on climate change. In 2011 the Australian Federal government released its carbon mitigation strategy *Securing a Clean Energy Future – The Australian Government Climate Change Plan*, which centred on the development of an emissions trading scheme (or ‘carbon tax’) which came into effect in July 2012 (Dwyer, Forsyth & Spurr, 2012). The Australian ETS introduced by the Gillard (Labour) government included domestic aviation, although the domestic aviation carbon tax became a political issue and was immediately repealed in 2014 by the new Abbott (Liberal) Federal government. International aviation was exempt from carbon taxation from the start. Despite growing awareness of climate change and its consequences (Leviston et al., 2011) demand for air travel in Australia continues to grow rapidly (Mair, 2011), to an extent that is inconsistent with a commitment to carbon mitigation (Macintosh & Downie, 2007; TRA, 2011).

The Garnaut Review (2011) makes little specific mention of aviation, focusing mainly on the technological improvements (e.g., fuel efficiency) in public land-based transport, and an emissions trading scheme to account for the external costs of emissions (Garnaut, 2011). Meanwhile, Zeppel’s (2012) analysis of climate change initiatives by Australian tourism agencies confirms that there is little or no concerted effort in place in Australia to reduce or control international air travel CO₂ emissions. As Macintosh and Downie (2007, p. vii) observe, “government enthusiasm for the airline industry is increasingly at odds with the objectives of climate change policy.” Equally, Australia’s air travel emissions have been largely ignored by the academic community. Despite Australians having among the highest per capita emissions in the world, research on public

perceptions towards the climate impacts of air travel has centred mostly on Europe (e.g. Dickinson et al. 2013 on Poland; Kroesen 2013 on the Netherlands, Hares et al. 2010, Barr et al. 2010, Miller et al. 2010, Cohen & Higham 2011 on the UK, and Higham & Cohen 2011 on Norway), with limited evidence from Asia (McKercher et al. 2010), Africa (Dillimono & Dickinson, 2014) or Australia (Bergen-Seers & Mair, 2009; Mair, 2011). In order to address this context, we set out to provide empirically-informed insights into the attitudes and behaviours of the Australian public with regards to both domestic (daily/routine) and tourist (non-routine) consumer decision making, with a particular focus on air travel.

Empirical methods

For the purposes of this research we adopted a qualitative research approach, with data collected via a series of in depth, one-on-one interviews (Fontana & Frey, 2005) to address public understandings of and responses to climate change (Becken, 2004; Gössling, Hall, Peeters & Scott, 2010). Our interviews began by addressing awareness of, and attitudes towards, climate change with specific attention paid to causes of anthropogenic climate change. We then addressed public responses to the climate crisis, both in daily domestic life, and in reference to broader (non-routine) holiday decision-making (Barr, Shaw, Coles and Prillwitz, 2010). The relevance of climate change to consumer decisions relating to air travel, both domestically within Australia and internationally, was of particular interest to our research (Hares et al., 2010; Higham & Cohen, 2011). Cognitive discord between attitude and behaviour (van der Linden 2014), and *a priori* knowledge of the frequent dissonance between environmental behaviours in ordinary (domestic) and extraordinary (tourist) consumer practices (Barr et al., 2010) provided our theoretical and analytical lens for this research.

The empirical material was collected via semi-structured, open-ended interviews with 20 Australian nationals (minimum age 18 years) residing in northern New South Wales (NSW). Participants were selected using convenience and snowball sampling techniques (Kemper, Stringfield & Teddlie, 2003). A research team member who is based in northern NSW initiated the sampling process by identifying, through her contacts in the area, individuals from various backgrounds who would be willing to participate in the project. In some instances participants were asked to suggest other individuals, outside the contact network of the researcher, who might be willing to participate in the study. During this process, there was a conscious attempt to involve study participants of diverse social and economic status, levels of education attainment, and age. We were deliberate also in seeking to achieve equal gender representation in the interview programme (Table 1).

The interviews, which ranged in duration between 35-65 minutes, were digitally recorded, with the prior consent of study participants (Ticehurst and Veal, 2000) to ensure an accurate record of the interviews. This also allowed the interviewer to remain focussed and attentive to the flow of the interview (Saunders et al., 2000). Detailed notes were taken immediately after each interview describing the setting, the relationship between the researcher and the participants, and the researcher's feelings about what had been said, and not said during each interview. These notes proved to be a valuable source of information for generating a better understanding of the responses (Decrop, 1999; Laurier, 1999). The interview programme was concluded when both a sense of data richness and evidence of saturation emerged.

Table 1: Summary profile of Australian interview program participants (n=20)

Name (pseudonym)	Gender	Age	Highest Qualification	Occupation
Jessamin	F	18	High School	Undergraduate student
Camilla	F	24	Undergraduate Degree	Full-time white-collar worker
Justin	M	24	Masters Degree	Postgraduate student
Brian	M	29	Technical Diploma	Casual blue-collar worker
Josi	F	29	Technical Diploma	Full-time service worker
Jen	F	30	Undergraduate Degree	Full-time education professional
Danielle	F	31	Undergraduate Degree	Part-time blue-collar worker
Tina	F	36	Undergraduate Degree	Full-time health professional
Eric	M	38	Technical Diploma	Unemployed (Disability allowance)
Amy	F	43	High School (incomplete)	Part-time service worker
Ian	M	43	PhD	Full-time education professional
Lili	F	43	Undergraduate Degree	Unemployed
Kay	F	46	Masters Degree	Full-time white-collar worker
Lauren	F	47	Undergraduate Degree	Full-time white-collar worker
Tom	M	47	Technical Diploma	Full-time service worker
Alex	M	49	Undergraduate Degree	Unemployed
Grant	M	56	High School (incomplete)	Unemployed (Disability allowance)
Kevin	M	57	Masters Degree	Postgraduate student
Martin	M	57	Technical Diploma	Part-time white-collar worker
Bruce	M	58	Undergraduate Degree	Full-time white-collar worker

Both the conducting of interviews and interpretation of qualitative data emphasised flexibility (Jennings, 2001). Our interview schedule served only as a general guide, allowing us to explore avenues of discussion as they emerged in each interview. Some were not anticipated prior to conducting the interview programme, or were not initially recognized as significant to the investigation when they emerged during the interviews. Interpretation of the empirical material also emphasised the flexibility required to understand “the world of lived experiences from the point of view of those who live it” (Locke, 2001: 8). Interviews were partially transcribed and analysed using an interpretative approach (Kitchin & Tate, 2000) to provide a holistic analysis of the variety of the views of the respondents (Glesne, 1999). The research team read all transcribed material independently, highlighting significant passages and identifying common themes. Our results are presented with the use of pseudonyms in order to ensure confidentiality of responses.

To help overcome criticisms of qualitative data analysis being subjective (Kitchin & Tate, 2000), and to ensure the quality of the findings of the research, the potential for the empirical material to provide alternative legitimate conclusions was checked by applying a blind thematic analysis approach (Patton, 2002). Open coding was performed initially by way of general readings of the transcripts and the application of codes (labels) and sub-codes. Subsequent readings of the interview material were then conducted to draw codes/sub-codes together into general themes (Strauss & Corbin, 1998). Transcripts were read multiple times to ensure that emergent themes from latter interviews were accounted for in the analysis of transcripts read in the beginning of the process (Strauss & Corbin, 1998). Through triangulation we set out to promote dependability (via interpreter triangulation), credibility (via theoretical triangulation) and transferability (via rich description of the context to facilitate analytical transfer) (Decrop, 2004). In describing the data extensively, we set out to use verbatim quotations from participant interviews, and to achieve ‘referential adequacy’ to further promote transferability and credibility (respectively) (Decrop, 2004). Presented within two *a priori* categories (ordinary and extraordinary), here we present and discuss the five themes that emerged from our analysis; *Anxieties*, *internalisation* and *consumerism*

(ordinary/domestic practices), and *suspended simplicity* and *contextual rationality* (extraordinary/tourist practices).

Climate change and ordinary (everyday) consumer practices

Our research found a widespread conviction that anthropocentric climate change and its associated *anxieties* is a very real phenomenon. While some study participants drew on personal observations of the climate, such as Danielle (31) who described changing seasonal patterns and intensifying extreme weather events, others viewed climate change as a natural phenomenon that was being exacerbated by human activities. Eric (38) commented: “I definitely believe that, you know, humans are speeding up the process of CO₂ (emissions). I do believe we are contributing, there is no doubt about that in my mind”. Indeed, in a number of instances, climate change was considered in association with a deep sense of foreboding. Tina described climate change as the biggest threat facing humanity and explained that:

I am very concerned about it and it has in the past, over the past probably seven years caused me a lot of stress and anxiety... I am just learning to let go of the anxiety that is attached to it. But I definitely believe in it. I think it is very real and it's very concerning (Tina, 36).

Some expressed deep anxieties based on issues of intergenerational justice. “The fact that I am in my late 50s means that I am unlikely to see some of the really dire consequences... that (the) children of people my age will see. But it is very concerning, there is no doubt about that” (Kevin, 57). Tom (47) expressed similar sentiments: “I believe [that climate change] is human induced, I worry about it a lot, (and) I’m very concerned about the future for my kids”. Our research confirms a general consensus that climate change is a real phenomenon that is the cause of extensive concern.

Responses to the climate crisis ranged from frustration to resignation. Amy (43) blamed corporate greed: “It upsets me. It really upsets me. It’s frustrating... The big companies, it’s all about money. What they can get. They are not thinking of future generations and the planet...”. Frustration of a similar but different kind was expressed by Bruce (58): “I don't think anyone has really addressed a realistic (solution)... very minor consumer-based solutions are really not going to have any drastic effect”. A sense of resentment and resignation accompanied the view that consumer society transfers to individuals the guilt associated with an unsustainable politico-economic system that is based upon capitalist accumulation and consumption (Harvey, 2011). Ian (43) explained that “I feel despair, because there’s no solution that any individual can do and I’ve resigned myself to that fact - that there’s not much that I personally can do”. Some were able to rationalize their position on the presumed accountability of the individual for an unsustainable economic system. Alex, for example, explained his ‘ecosystem perspective’ on climate change as follows:

I look at the climate change debate with a certain amount of scepticism... I am totally sympathetic with the integrity and efforts of people who are trying to devise ways of solving the CO₂ emissions issue... I am not saying that climate change is good for humanity but I would argue that if you are an evolutionist... if you take anthropocentric perspectives out of it then it's a no argument - what does it matter?” (Alex, 49)

The burden of climate change anxiety that is felt by individual consumers has broadly transferred to the conscious decision-making relating to everyday domestic life (Bergin-Seers & Mair, 2009). The *internalisation* of climate concerns is manifest in quite different ways. The majority of study participants explained deliberate efforts to accommodate environmental sustainability concerns in the manner in which they live their lives, indicating a degree of alignment between attitudes and

behaviour in the context of the 'everyday' (Barr et al., 2010). Kevin (57), who described climate change as 'concerning' and 'scary', explained that "I will try and do my little part to maybe reduce it for future generations if that is possible. If it is not too late to change the way things are going". These sentiments were reflected in comments made by Jen (30): "It's a very big issue for us ... so is something that we definitely consider when it comes to how we live...". A commitment to mitigating the causes of climate change was widely expressed, extending to recycling, installing solar power, using public transport and living "with the least sort of environmental footprint impact as I can" (Camilla, 24). Tina, a member of a local Climate Action Group, explained that:

We [our family] have become very energy efficient. In our home we have put solar panels on the roof. We have got solar hot water. We turn all the appliances off standby. We try to use as little power as we can and we have made a lot of changes in our home. I went through a period where I didn't drive for a period of time... anything new, we have cut right back on... we don't buy anything unless we absolutely need it (Tina, 36).

In two cases, climate change was a key factor in choices of place to live and lifestyle considerations. Kay (46) explained that her family relocated from Sydney to the NSW north coast in order to try to live a more self-sufficient existence. Similarly, Lili (43) outlined that "one of the reasons why we wanted to go farming was to kind of do our bit and live a simpler lifestyle. You know, the basics of growing some of our own food and doing things like that". The simpler lifestyle extended to consumer purchases of food and produce. Bruce (58) explained his commitment to "a low meat diet because meat is one of the critical issues... if everybody became vegetarian tomorrow, there would be a significant change in CO₂ (emissions)... If a carbon price is put on to meat, a lot more people will stop eating as much meat but until they put that tax on, nothing is going to (change)". Similarly, in respect to carbon pricing and food miles, Alex (49) stated that "I do consciously choose things that haven't travelled long distances. But I do it because I don't agree with oranges coming from America because it means that the transport costs are too cheap".

An undercurrent of concern, that individuals shouldered the burden of responsibility for the environmental flaws associated with rampant *consumerism*, was expressed in our interviews. The problems of relentless capitalist growth (Harvey, 2011) and consumer society (Young et al., 2014) pervaded the interview programme. Kevin (57) spoke in support of a national carbon tax targeting the corporate sector, in order to make "the large polluters pay and use that to encourage generation and investment in other energy sources... At the individual level I don't think they are doing enough to encourage innovation and individuals to convert to some of the other energy-saving devices". The tensions of responsibility aside, our research found universal commitment to acting upon climate concerns in everyday consumer decision-making. This was best summed up by Jen (30): "we definitely consider when it comes to how we live and the energy that we consume, and the resources that we use... Yeah, I mean we try and reduce our impacts as much as we can". These findings provide consistent evidence of the internalising of climate change, and responsiveness to climate concerns, in the context of the 'everyday' (Barr et al., 2010; Higham & Cohen, 2011).

Climate change and extraordinary (tourist) air travel practices

Having established that climate consciousness influences many aspects of everyday consumer decision-making, our research also aimed to investigate how these consumer values influence holiday decision-making (Miller et al., 2010), specifically as it relates to air travel practices (Cohen et al., 2011). The results of our study point to consumer decision-making that is deeply contextualized, resulting in *suspended simplicity* in air travel decision-making. The price and convenience of air travel trumped environmental sustainability concerns, which were temporarily

suspended when considering travel opportunities. Camilla (24), who holds a Bachelor of Science degree with an Environmental Science major, explained that price is the key factor: “I am aware of the impacts of air travel, but it probably doesn't influence my travel decision”. Similarly, Alex (49), perhaps contented by his ‘ecosystem perspective’ on climate change, was happy to ignore the carbon emissions of air travel and base his decision-making purely on time and money. “I don't think that if we planned a trip to Europe or America, that the carbon footprint of that trip would be a big consideration. I think we would probably just choose to ignore it”.

In terms of contextualised consumer decision-making, one exception to the rule was Tom (47): “I think the same as I think about the impacts in everyday life, no different in holidays . . . they are the same decisions that I'd made if I was at home”. However, contradicting his concerns for climate change and intergenerational justice, and perhaps providing a partial explanation for the decision-making logic outlined above, Tom also expressed the view that accounting for individual emissions is considered insignificant when viewed in isolation. He explained that: “I don't think that me travelling a little bit more would be a major factor in increasing carbon emissions”. This perhaps points to a fatal problem with reducing the challenge of mitigating air travel emissions to the level of the individual consumer, where rational decision-making is principally informed by price and efficiency.

While some were clearly able to separate their holiday decision-making from the values influencing the everyday, others expressed residual guilt associated with continuing and unmodified air travel practices. Given her resentment of greed and consumerism, Danielle (31) explained her commitment to carbon offsetting as an attempt to mitigate her feelings of personal guilt and anxiety (Higham, Cohen & Cavaliere, 2014). Regarding offsetting schemes she explained that: “Obviously it would be a financial decision in the end but I would feel, I guess, less guilty... You know, because then you would feel like, that you are having less impact” (Danielle, 31). Kay alluded to the contextual disjunction identified here in terms of an inability to transfer climate change awareness and concern into the context of holiday decision-making: “We are 150% aware of our impact... We (have) talked about travelling less but we just can't do it... I have to say I have never heard of anyone saying we will travel less because of the (climate) impact” (Kay, 46). Others deferred any sense of guilt by appealing to individual exception:

I intellectually don't think everyone else should do it (fly) but I should... I am always going to want it (travel)... I think they, yeah we need to totally slow down. But I think going overseas and really savouring parts of the globe is enriching (Lauren, 47).

These sentiments point to widespread consumer agonising over what has been termed ‘binge flying’ (Hill, 2007; Burns & Bibbing, 2009; Randles & Mander, 2009). They point to the unwillingness or inability of consumers to transfer their environmental concerns from the context of the everyday to holiday decision-making (Barr et al., 2010; Higham, Cohen & Cavaliere, 2014). This is a phenomenon that we term *contextual rationality*, wherein environmental dilemmas associated with flying are rationalised in order to overcome anxiety and personal accountability. This theme was expressed by those who wished not for personal sacrifice in terms of travel experiences, but rather for responsibility to be treated equitably and collectively through measures such as government taxation. Tina (36), whose husband's family live in Canada, explained the view that “people in general aren't going to act because it is the right thing to do or because they see it as a problem, or because they care about their grandchildren's future.... I think it should come from the government”. Similarly, in reference to climate change, Kevin (57) explained that “I guess it doesn't change my travel decisions but certainly if there is a travel tax... I have absolutely no opposition to a green tax”. Bruce (58) also supported the carbon tax in principle, but was adamant that structural (not individual) change was required, and that expecting individual uptake of carbon offsetting was simply not a viable or realistic response.

They don't tell you actually what the carbon offset is going to be. So, you know, we will plant one tree for your flight. Whoopee. You haven't saved the planet. It's not going to make a huge difference. So I suppose carbon offsetting and things like that, I feel I can probably do more in my personal life than contribute to those where there is no clarity (Bruce, 58).

The contextual separation that was evident in our interview programme was, in fact, both openly acknowledged individually, and recognised in the decision-making of others. Camilla (24) accepted her own 'home/away' contextual separation: "A lot of the work I do ... focuses on improving resilience to the effects of climate change... I am aware [of] the impact that planes (have) on the atmosphere ... but it probably doesn't influence my travel decision". Similarly, Tom (47) observed contextually contingent climate concerns in the behaviour of others.

[A] lot of people got those solar power subsidy deals and, you know, a lot of those people are concerned about climate change and did it for that reason, but those same people would be more than happy to jump in a plane and fly to Europe given the opportunity.

Jen (30) recognised through the interview process an inconsistency between climate concern in her daily life and tourism practices, and suggested that convenience took priority in holiday flying decisions: "I never really thought about climate change in relation to travel much and it's interesting to actually start thinking about it, because I think about it in every other area". Eric (38) not only recognised his own contextual inconsistencies, but steadfastly defended his air travel practices. He expressed reluctance to associate holiday spaces with environmental concern or guilt, identifying enjoyment and the desire to relax as the key considerations informing his decision-making: "Whatever I will do on a holiday it will come more out of my personal enjoyment of doing whatever it may be... If I am on holiday I am there to bloody relax, not feel more responsible and guilty that I am killing the world". He was able to justify his position, calling for structural change rather than individual sacrifice:

There are flaws in every system ... I would be more interested in... smashing down capitalism to a certain degree and creating a whole new system - one where everybody has got food as a minimum requirement and shelter and medicine and... the way the system is now, we are still driven by a very individual money-making ... I still don't see enough of a foundation change (Eric 38).

Our findings provide little evidence of the 'attitude-behaviour gap' in the context of the 'everyday', where increasingly widespread and, in some cases, deep climate concern is broadly reflected in domestic decision-making. By contrast, and in support of Barr et al. (2010), we find that the 'attitude-behaviour gap' in tourist (air travel) decision-making remains widespread. Ian (43) summarised a widely held view: "(talking about change in travel behaviour) I'd say yes, but my behaviour hasn't probably matched my understanding of what needs to happen". It is evident that the modernist and postmodernist worldviews described by Cohen et al. (2013), with behaviour dichotomised between "here" and "there" in the former, and performances of identity fragmented across contexts in the latter, may be implicated in tourism as a dissolute and irresponsible industry. This may in turn offer some explanatory power in addressing the discord between growing consumer climate concern and deeply entrenched discretionary air travel practices (Randles & Mander, 2009).

This research was not without limitations. In the context of qualitative research investigating attitudes and behaviours, it is acknowledged that snowball sampling presents the risk that

interview participants may share similar values and world views, thereby potentially limiting the variability of the sample. Limited reliance on snowball sampling, and deliberate efforts to use a diverse range of personal contacts to recruit participants from a wide range of backgrounds, formed part of the recruitment method. This research also highlights various avenues of further research. It is clear that aviation emissions must be urgently stabilised at levels that are consistent with risk-averse climate targets (Stern, 2007), that this imperative requires a reduction in demand for air travel (McIntosh & Wallace, 2008), and that appealing to individual air travel behaviour change will not achieve the necessary transformation (Barr et al., 2010). This underscores the need for closer examination of the factors that may explain the evident intransigence of the attitude-behaviour gap as it relates to discretionary air travel. It also highlights the need to critically evaluate the policy measures that will be required to move from voluntary to regulated change in demand for air travel. Our research points towards the need for government action to address aviation emissions, despite the political volatility of policies that are intended to achieve a comprehensive system of carbon pricing. An analysis of the effectiveness of Australia's (albeit short-lived) carbon tax on domestic air travel, in terms of achieving a reduction in domestic revenue passenger kilometres (RKM) flown, would be an informative and important contribution to this field of research.

Conclusion

The IPCC (2007) and Stern (2007) make it clear that we are urgently tasked with redefining our lives and societies to achieve radical emission reductions. This process of redefinition is underway among our interviewees in the context of regional Australian domestic decision-making, where we found evidence of considerable consumer anxiety associated with environmental issues more broadly and anthropogenic climate change more specifically. While the efficacy of individual carbon mitigation efforts was openly questioned by a number of our study participants, a realignment of domestic behaviours is taking place. Climate concerns have been internalised and some commitment in 'everyday' lives to a low-carbon future is clearly evident. While there remains a general sense of concern, extending to widespread guilt and anxiety associated with an unsustainable consumer society (Harvey, 2011), the 'attitude-behaviour gap' can be negotiated and largely resolved without great personal sacrifice or inconvenience in the context of the 'everyday'.

Our findings also highlight the widely documented attitude-behaviour gap that commonly prevails in the context of tourist (air travel) decision-making (Randles & Mander, 2009; Miller et al., 2010; Barr et al., 2010; Cohen et al., 2011) and the deeply entrenched dissonance between 'home' and 'away' in consumer decision-making (Barr et al., 2010; 2011). The relative simplicity of climate-related decisions in everyday contexts is suspended in air travel decision making, as the cost and convenience of air travel and the appeal of air travel impose irresistibly on consumer decision-making. But for one or two isolated exceptions, the lifestyle sacrifices, potential compromise of individual social networks, and the lack of satisfactory alternatives to holidays that involve cheap air travel were clearly unpalatable to our interview participants. Many expressed deep concern caused by contradictions between individual ideals (ethics) and behaviours (practices), and the abandonment of environmental concerns that the (unmodified) consumption of holiday air travel increasingly necessitates. The guilt associated with such abandon, while reconciled by some, is felt acutely by others. In some cases the transfer of accountability and guilt from capitalist society to individual consumers is resented (Young et al., 2014). Despite the widely expressed environmental dilemmas that are now associated with flying, these are quiet readily rationalised in the context of air travel, in order to overcome anxiety, personal accountability or responsibility. These findings render voluntary consumer behaviour change in the context of discretionary air travel as an improbable pathway to significant air travel emissions reduction (Higham et al., 2014).

It is evident that environmental decision-making is contingent on context (Barr et al., 2010). It is also clear that any expectation that consumer climate concern in daily life practices will transfer seamlessly to tourist decision-making is deeply flawed (Cohen et al., 2011; Hibbert et al., 2013). There clearly exists a common tendency to either consider existing alternatives to holidays involving air travel unpalatable, or to consider the tourist consumer context exempt from personal carbon accountability. These results build upon earlier studies that highlight public unwillingness to voluntarily change holiday travel practices on account of environmental unsustainability (Barr et al., 2010; Hares et al. 2010; Miller et al. 2010; Cohen et al. 2011; Higham et al., 2014). This points to an emerging consensus that behaviour change in isolation of meaningful industry measures and strong policy interventions will be insufficient to achieve climatically sustainable tourism (Randles & Mander, 2009; Barr et al., 2010; Miller et al., 2010; McKercher et al., 2010). Australia's modest carbon tax on domestic aviation (2012-2014), while short-lived, was ineffective in reducing demand for domestic air travel. Given the growing evidence that consumer accountability alone will fail to achieve meaningful reductions in aviation emissions, it is clear that further and more far-reaching policy interventions relating to structural provision (Hall, 2013), in combination with aviation supply measures (Duval, 2012) and tourism destination initiatives (Turton et al., 2009), are required to achieve the urgent climate imperative.

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