MA Tourism and Sustainability

Anja Dalton   November 2005

Welcome to the Cheap Seats:
Air Travel and Climate Change.
Acknowledgements

This study was completed for the MA in Tourism and Sustainability at the University of the West of England, Bristol. The work is my own. Where the work of others is used or drawn on it is attributed.

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Abstract

In the debate on tourism and sustainability, tourism mobility is often 'organised out' of the discourse, yet is often responsible for the majority of the negative environmental impacts associated with tourism. This research sought to address this gap in the literature by examining people's views about air travel and its contribution to climate change. The hypothesis was that those who were 'environmentalists' would not necessarily have more sustainable patterns of travel than 'non-environmentalists'. A comprehensive review of the literature surrounding sustainable tourisms, tourism and the environment, air travel, and climate change and tourism and the interactions between them was conducted, revealing that only a handful of studies have begun to address this conundrum.

Primary research was then conducted in the form of six focus groups with both 'green' and 'non-green' groups in the Bristol area, to ascertain their attitudes towards the topic and to examine how they would react to a range of potential solutions to this key sustainability problem. A purposive sampling strategy was employed to identify participants for the groups, who were then asked to debate a series of 15 questions on tourism and the environment and more specifically, climate change and air travel.

The hypothesis that members of green groups would not have more sustainable patterns of air travel was confirmed. However, certain individuals within both types of group who thought of themselves as greatly interested in environmental issues did appear to have a sustainable pattern of tourism travel. In addition, considerable interest in and concern for the issue was revealed and reactions to some possible solutions to unsustainable levels of air travel were favourably received. Whether this can be translated into practical action to reduce rates of aviation is a matter for future research.

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Chapter One: Introduction

With climate change gaining a higher profile than ever before; the two recent hurricanes affecting the United States, problems with polar ice, and even a blockbuster movie (The Day After Tomorrow) about global warming, attention is slowly turning to the impacts which tourism, as the world's biggest global industry accounting for 11.7% of world GDP (Urry 2001), has on this environmental problem. Whilst there has been a plethora of papers in the tourism literature concerning the local environmental impacts of tourism, resulting in the 'sustainable' and 'eco' tourism movements (c.f, Boo 1990, Buckley 1994, Bottrill & Pearce 1995, Ceballos-Lascurain 1996, Blamey 1997, Fennell 1999 and detractors such as Wall 1994 and Wheeler 1994) there has been scant attention given to the global impacts of tourism travel (Frändberg 2005).

According to Frändberg, the dominant discourse in sustainable tourism from the early to mid 1990's focussed on the mutually beneficial relationship between tourism and the destination environment, and excluded any critical examination of environmentally damaging effects of tourism as 'irrelevant' or 'undermining'. This hegemonic status exists to the extent that tourists have been exhorted to "visit the Maldives quickly before they are underwater due to global warming" (Hillman 2004 p37).

This dissertation investigates people's perceptions of the tourism industry and how it affects the environment. Following research by Becken (2004), who studied tourists' perceptions of the environment in New Zealand, focus group interviews with small samples of people were undertaken to examine how people view interactions between tourism and the environment, and more specifically, between air travel and climate change. Becken's is the only study so far which has looked at tourist's awareness of their travel impacts on the global climate, but also their willingness to mitigate such effects. The researcher intends to further expand these issues by means of focus group discussions.

Becken conducted two surveys of tourists in New Zealand and one survey of tourism experts in Australia, and revealed a range of responses which she categorised into five 'types'; Green tourists, Uninformed willing, Sceptics, Undecided, and Resisters. Many were both ill-informed and sceptical about the links between tourism travel and climate change. This present study will build on previous research by examining how people see links between the environment

and tourism and will explore whether there are any circumstances which would encourage respondents to change their behaviour. It focuses especially on how tourism travel, which is predominantly air travel, is impacting on climate change. The researcher was particularly interested to see if those who are already environmentalists - in the loose sense that they take actions to lessen their impact on the environment (i.e. recycling, composting, buying local organic produce, using their car less) - are likely to have a reduced tourism travel impact. It is contended that tourism travel forms a large and looming problem for environmentalists, but one which has not been considered in any systematic fashion.

The researcher hypothesises that those involved in the environmental field are not likely to have less of a tourism travel impact and therefore, their efforts to be 'green' in other spheres of life may be fairly insignificant, compared to the immense CO_2 impact of international flights. This presents a complex dilemma for the environmental movement; if even the small section of the population who are interested and motivated to make behavioural changes for the sake of the environment will not modify their travel behaviour, how will the largest environmental problem of them all – climate change – be tackled? The aim of this research then, is to find out whether this is indeed the case and to provide suggestions as to what might induce behavioural change in the area of tourism travel.

The aims are defined below:

1) To critically review the literature on tourism and the environment, sustainable tourisms, climate change and air travel.

2) To ascertain knowledge of and attitudes towards the environment by a sample of respondents identified as 'green' and 'non-green', and their awareness of the links between air travel and climate change in particular.

3) To invite respondents to self-define themselves according to their level of interest in environmental matters and to consider whether this has any bearing on whether they exhibit sustainable patterns of air travel or not.

1.1) Research questions

- What are people's perceptions of the links between tourism and the environment and between climate change and air travel in particular?
- Are tourists in denial over the environmental damage which they cause?
- Does it seem feasible that tourists would modify their behaviour to reduce their contributions towards global warming?
- Does the level of awareness of green issues have any impact on the amount of air travel that a person takes?
- If not, why not, and what can be done to persuade those who are environmentally minded (those who take actions to lessen their impact on the environment in other areas) to lessen their tourism travel impact?

This study is broken down into a number of sections as follows:

Chapter two will provide a comprehensive review of the available literature relevant to the study. These include studies on tourism, the reaction against mass tourism partially as a result of environmental thinking and the introduction of a plethora of 'new tourisms' which purport to be sustainable. Further, a summary of the relevant environmental impacts of tourism on the environment and the types of strategies which have been employed to try and deal with them. The latest research on climate change will be analysed, together with the impact that air travel has upon this global phenomenon. Literature describing the ways in which people think, feel and act with regard to climate change are assessed to determine relevant findings for the study at hand.

The third chapter will describe the process of research, why certain methods were chosen, how the study was conducted, limitations of the research and ethical and other considerations. In chapter four the results of the research are presented in tabular format, together with analysis of the material; this forms a combined results and discussion section which is most pertinent to the qualitative nature of the research. The conclusions of the study are presented in chapter five, which is followed by a bibliography of materials consulted and relevant appendices.

Chapter Two: Background to research and literature review

Whilst global tourism's environmental impact on host communities has received a great deal of attention in the literature (c.f. Carrying Capacity, Limits of Acceptable Change, Environmental Impact Assessment, New Tourisms such as 'green' 'eco' and 'responsible'), as Frändberg (2005) notes, there has been a marked silence about the impacts of tourism travel on the global environment. The fact that tourism travel, especially air travel, is a significant and growing contributor to climate change 'remains unexplored' (Gössling 2002a).

A handful of studies over the last few years have started to look at tourism travel critically (Høyer 2000, Gössling 2002a, 2002c, Becken 2004, Frändberg 2005) and following on from these, the researcher intends to make a small contribution to the body of knowledge in this area. Tourism is often perceived to be a 'clean' industry compared to many others, and although it is now known that tourism travel is especially damaging in terms of carbon dioxide (CO_2) emissions, many tourists may be unaware or unwilling to acknowledge this. As Holden reports, a survey conducted in Britain in 1995 by a leading market research agency into tourist's opinions on tourism, found that tourism was rated 14th out of 17 possible industries for damage caused to the environment (Martin 1997 cited in Holden 2005).

2.1) The environment and tourism

The academic research on the environmental impacts of tourism spans several decades and a wide range of disciplines - a brief synopsis is outlined here. When discussing environmental impacts, the environment has often been split into three components; natural, physical (built environment) and cultural (human social and cultural environments) (Hunter & Green 1995). For the present study, I am concerned with the natural environment which "includes such features as air, water, flora, fauna, soil, natural landscape and climate" (ibid p11). Some of the first awakenings of interest in looking at the interactions of tourism and the environment were responses to the perceived problems of mass tourism and its environmental and cultural impacts, such as Young (1973), Baud-Bovy (1977), Tangi (1977) and a whole host of studies in the 1980's including Krippendorf's seminal work 'The Holiday Makers' (1987). There were also a number of studies relating to the management of locally occurring environmental problems such as carrying capacity (CC) (O'Reilly 1986), limits of acceptable change (LAC) (Stankey et

al. cited in Baud-Bovy & Lawson 1998) and Environmental Impact Assessments (EIA) (Green & Hunter 1992).   All of these concepts sought to identify or manage areas where too many visitors were creating problems for a destination, but were mainly concerned with local or micro impacts.

Tourism, in common with many other human activities and industries has impacts on the environment.   These may be due to the development of tourism facilities and services, including hotels and other forms of tourist accommodation, shopping, leisure and sport facilities such as golf courses and swimming pools, transport infrastructure in the form of roads, railways and airports, or due to the activities of individual tourists such as sight-seeing, walking and climbing. (Hunter & Green 1995).   Due to the nature of tourism, which often shares the same spaces with local communities, it may often be difficult to determine whether or not it is actually tourism development which is responsible for negative environmental impacts (Briassoulis & Van der Straaten 1992).

There are also many indirect impacts of tourism which affect the environment in addition to the direct ones, but which may not be so easily quantifiable (ibid).   Clearly in such a discussion on tourism and the environment, it is worth remembering that whilst most studies have focussed on the negative impacts, tourism can also have positive impacts on the environment.   One example, as Shaw & Williams describe, is where the environment in some (often urban) areas is already damaged by other industry, and tourism development is therefore expected to enhance the environment (Shaw & Williams 1992).   Others, such as Mathieson & Wall discuss tourism and the environment as a 'symbiotic relationship' (Mathieson & Wall 1982 p96), and indeed such ideas have led in part to the creation of ecotourism.

Many academics have written useful summaries on the relationship between tourism and the environment (see Mathieson & Wall (1982), Briassoulis & van der Straaten (1992), Shaw & Williams (1992), Hunter & Green (1995), Baud-Bovey & Lawson (1998) and Holden (2005)).

Some of the main impacts are summarised in table one, below:

Table 1: Some of the impacts of tourism on the environment (from Hunter & Green 1995)

Impact aspect	Potential consequences
Floral and faunal species composition	Disruption of breeding habits Killing of animals through hunting Killing of animals to supply goods for the souvenir trade Inward or outward migration of animals Trampling and damage of vegetation by feet and vehicles Destruction of vegetation from wood or plant gathering Change in extent/nature of vegetation through clearance Creation of a wildlife reserve or habitat restoration
Pollution	Water pollution through discharges of sewage, oil/petrol Air pollution from vehicle emissions, fuels in heating & lighting Contribution towards climate change from CO_2 emissions Noise pollution from tourist transportation and activities
Erosion	Compaction of soils, causing increased run-off & erosion Change in risk of occurrence of land slips/slides Change in risk of avalanche occurrence Damage to geological features (e.g. tors, caves) Damage to river banks
Natural resources	Depletion of ground and surface water supplies Depletion of fossil fuels to generate energy for tourist activity Change in risk of occurrence of fire Depletion of mineral resources for building materials Over-exploitation of biological resources (e.g. over fishing) Change in hydrological patterns Change in land used for primary production
Visual impact	Facilities (e.g. buildings, chairlift, car park) Litter Sewage, algal blooms

As can be seen, tourism can have wide ranging impacts on the environment, which can be local, regional or global in scope. These impacts may last for various timescales, ranging from fleeting effects to those which may continue for hundreds of years. The current study is concerned particularly with climate change, which is both global and long-term in nature. Air pollution in the form of emissions (e.g. from air transport), releases pollutants into the global atmosphere and climatic system. The life of greenhouse gases can be extensive; sometimes lasting for hundreds of years (IPCC 2001). There are clearly long-term implications from the emission of greenhouse gases, therefore, since future generations will also be affected by the patterns of current lifestyles.

2.2) Sustainable tourisms

As a response to some of the identified problems of mass tourism and leisure, which started to become seen by many as creating too many environmental, socio-cultural and economic problems to be sustainable, 'new' forms of tourism were mooted from the 1980's onwards (Butler 1999). These were allied with the growth of the environmental movement and green consumerism in Western societies and influential ideas of sustainability from the Bruntland report (WCED cited in Shaw & Williams 2002). Many new forms of tourism were formed and promoted such as 'agro', 'alternative', 'appropriate', 'eco', 'ethnic', 'green', 'wildlife', 'responsible', 'sustainable', 'nature', 'soft', 'cultural', 'wilderness' and more recently 'fair-trade' (Mowforth & Munt 2003). Some of these new forms of tourism had a greater concern with cultural impacts and some with environmental impacts, but all were predicated on the assumption that small scale tourism development could offer a sustainable alternative to mass tourism. Detractors of these new approaches, such as Butler have argued that "it has yet to be proven that all examples of mass tourism are unsustainable" (Butler cited in Shaw & Williams 2002). Urry, from a sociological perspective, sees these forms of sustainable tourism as a natural part of a consumer reaction against being seen as part of a mass; a shift away from a Fordist to a post-Fordist mode of consumption (Urry 2002). Despite some objections, there has been a great deal of interest in sustainable tourism and in eco tourism in particular, with many environmental NGO's becoming involved in promoting it alongside tourism companies.

Eco-tourism has been variously defined in the tourism literature, but one of the most influential definitions is that of Ceballos-Lascurain; "travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas" (Ceballos-Lascurain 1996). As one of the most successful of the new tourisms, eco-tourism, was and still is the subject of a great deal of interest in the tourism literature (c. f. Boo 1990, Lindberg & Hawkins 1993, Buckley 1994, Cater & Lowman 1994, Wall 1994, Wheeler 1994, Bottrill & Pearce 1995, Ceballos-Lascurain 1996, Blamey 1997, Lindberg, Epler Wood & Engeldrum 1998, McLaren 1998, Fennell 1999, Honey 1999, Wearing & Neil 1999, Duffy 2000, Weaver 2001, Higham & Luck 2002, Nowaczek & Fennell 2002, Page & Dowling 2002, Crouch & McCabe 2003, Stamou & Paraskevopoulos 2003).

However, none of these studies looked at the environmental impact of eco-tourism in totality, because they neglected to account for the travel to the destination and its environmental impact. In a sense then, eco-tourism may have missed the point; in seeking to use tourism to prevent environmental damage it has ignored the environmental damage occurring before the tourist has even arrived at the destination. Given that many eco-tourism destinations are vulnerable island communities, it would appear that eco-tourism may be helping to hasten their destruction, as Gössling concluded in his study of eco-tourism in the Seychelles. His research, which calculated the ecological footprint of tourism in the Seychelles, found that 97.5% of the footprint was as a result of air travel, leading him to conclude that "environmental conservation based on funds derived from long-distance tourism remains problematic and can at best be seen only as a short-term solution to safeguard threatened ecosystems" (Gössling 2002a p209).

2.3) Climate Change

The rise of the environmental movement over the last 40 years has seen awareness and understanding take shape about the nature of global problems such as climate change. From the first international environmental conference in Stockholm in 1972, to the 1987 United Nations World Commission on Environment and Development (WCED), to the 1992 Rio Earth Summit and more recently the Kyoto Protocol, a number of global environmental challenges have been identified and some solutions proposed. The most pressing of these global environmental issues is arguably climate change, which David King, Chief Scientific Advisor to the UK government has described as "the most severe problem we are facing today, more serious even than the threat of terrorism" (Hall 2005). The Intergovernmental Panel on Climate Change (IPCC) has confirmed that global warming is "occurring, that it is largely man-made, has begun to accelerate sharply and will increase far faster than previously thought" (IPCC 2001). What then are the links between this severe environmental problem and tourism?

Climate change or global warming is a complex and still not fully understood phenomenon which is caused by human energy use. There are six main 'greenhouse gases' which contribute to climate change; carbon dioxide (CO_2), methane, nitrous oxide (NO_x), hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (Hillman 2004). Of these, carbon dioxide is the most important, accounting for two thirds of global warming, and it is released whenever we burn fossil fuels (coal, oil and gas). These gases, when released into the atmosphere, join a naturally occurring system called the greenhouse effect. This is a

naturally occurring layer of gases in the atmosphere, which keep heat from the sun trapped near the planet's surface, making it warmer than it would be. The increased emissions from anthropocentric energy use are adding to this, making Earth warmer than it naturally would be (ibid). The IPCC are a group of hundreds of scientists from countries around the world involved in trying to understand and mitigate the impacts of climate change. They outline the issue as "a problem with unique characteristics. It is global, long-term (up to several centuries), and involves complex interactions between climatic, environmental, economic, political, institutional, social and technological processes. Developing a response to climate change is characterised by decision-making under uncertainty and risk, including the possibility of non-linear and/or irreversible changes" (IPCC 2001). Whilst global warming is not universally accepted and there are those who refute these predictions, these are few and often allied to major corporate interests, such as oil companies who wish to maintain the status-quo (GM Watch 2005).

The consensus predictions for climate change are: "globally averaged surface air temperature is projected to warm 1.4C to 5.8C by 2100 relative to 1990, with the globally averaged sea level projected to rise 0.09 mm to 0.88mm by 2100" (IPCC 2001). There will be considerable variation in this picture however and one of the main concerns is for an increased incidence in the changeability of the climate with extreme weather events such as cyclones, droughts, floods, heatwaves and cold snaps becoming much more frequent (Hall 2005). Once emissions are released into the atmosphere, they stay there for up to several centuries, meaning that what we emit now will impact upon many generations to come. Global warming therefore raises issues of both 'intra' and 'inter' generational equalities.

The effects of these changes in climate are likely to impact most on vulnerable areas such as certain islands, coastal regions, low lying regions and areas which are already drought-prone becoming uninhabitable. It is also likely that the brunt of climate change will be felt by those in the developing world. A recent World Health Organisation report estimated that: "over 150,000 people in developing countries are now dying each year from the effects of global warming, ranging from malaria, malnutrition, extremes of heat and cold, to floods and that by 2020 this number will have almost doubled" (cited in Hillman 2004). From a tourism perspective, it is worth noting that the large majority of those affected by climate change will not be creators of it, and are highly unlikely to have engaged in tourist activity. We shall now look at some of the main activities which cause global climate change.

In the EU, 20% of total CO_2 emissions come from transport and it is the only sector which is generally increasing its emissions as opposed to the energy supply, industry, agriculture and waste management sectors which are reducing theirs (Hall 2005). Within the transport sector, the fastest growing form of transport is air travel, which in the UK accounts for 6% of total emissions currently, but with current government plans for airport expansion is anticipated to rise to 25% by 2030 (Friends of the Earth (FoE) Bristol 2004). Aeroplanes produce not only carbon dioxide but also nitrogen oxides that change to the greenhouse gas ozone in the troposphere (West 2005). This in effect means that air travel counts threefold for every tonne of carbon emitted (Hillman 2004). According to Holden: "air transport represents the fastest growing source of greenhouse emissions and is a major threat to the natural functioning of the atmosphere" (Holden 2005). The Organisation for Economic Co-operation and Development (OECD) predicts that "the contribution of air transport to global warming is likely to exceed that of car transport at some time between 2010 and 2040" (ibid.). All of these concerns make it imperative that tourism literature acknowledges the impacts that are occurring on the climate through the rapid rise in air travel and makes efforts to understand and ameliorate its effects.

The main international response to the threat of climate change, apart from the IPCC, is the Kyoto Protocol. This is an agreement which many countries around the world, including the UK, have signed, and which aims to limit their emissions of carbon dioxide, the main greenhouse gas. Whilst there are a number of issues around the Kyoto protocol, such as the refusal by countries such as the US (the largest producer of CO_2 in the world) and Australia to join, and the assertion by many climate scientists that the cuts in CO_2 are far too low to tackle the problem adequately, it is still an important and symbolic step for the international community to make. In the UK, the current government has committed itself to a reduction in carbon emissions as part of Kyoto. The target is to cut CO_2 emissions by 20% (over 1990 levels) by 2010 (FoE Bristol 2004), a target which was feasible to make, according to commentators (Hillman 2004). However, the government's transport policy is in direct contradiction to these stated aims: the government has embarked on a programme of expansion of road and airport capacity, whilst simultaneously reducing support to public transport (ibid 2004). Unsurprisingly, recent signs are that emissions have risen by 4.7% since a Labour government has been in power (Tayor pers. comm.). Clearly, even with reductions in emissions from other sectors, this will mean that the UK is highly unlikely to be able to meet its own target on reduction in greenhouse gases and is now suggesting buying in carbon credits from other less polluting nations.

2.4) Climate change and tourism

As the implications of climate change permeate the tourism field, some attention has been paid in the literature to the likely impacts of climate change on tourism. Ceron & Dubois in their 2005 study of the impacts of climate change on the French tourism industry, predict mixed fortunes, with possible increases in summer Mediterranean tourism as Spain & Greece become too hot, but a less favourable outlook for the winter skiing industry which is likely to lose substantial amounts of snow because of warmer, wetter winters. Other possible consequences for French tourism are increased health risks related to temperature and diseases, an increase in the popularity of artificial resorts and negative effects for the Atlantic Coast as winter rainfall increases (Ceron & Dubois 2005). Whilst the study mentions the contribution that tourism travel makes towards climate change, it does not seek to explore this in more detail and focuses mainly on how tourism can adapt to the changes that will be brought about by climate change.

A raft of other studies have looked at the impact of climate change on tourism; Viner & Agnew (1999), who noted the difficulties sea level rise would present for islands in the Pacific, König & Abegg (1997) and Elasser & Burki (2002), who investigated the threat to tourism in the Alps as a result of climate change, Giles & Perry (1998) who forecast that UK domestic tourism will receive a welcome boost due to rising temperatures. Maddison (2001) researched the wider impacts on the UK tourism industry whilst Harrison, Winterbottom & Sheppard (1999) did the same for the Scottish tourist industry. Other studies have focussed on specific types of tourism such as Scott, McBoyle & Mills (2003) who investigated the potential for adaptive technology in the Canadian skiing industry, Wall (1998) who concentrated on the effects of wetland areas and Holmes, Palmquist & Steiger (2000) with their study of the economic impact of changes to recreational fishing in the southern Appalachian mountains. All of these studies are clearly focussed on the potential advantages or disadvantages that climate change can bring to tourism, but were very little concerned with the part that tourism itself plays in bringing these changes about. Similarly, the industry response from the World Tourism Organisation, who convened in April 2003 for the 'First International Conference on Climate Change and Tourism' in Djerba, is reported by Ceron & Dubois as follows; "some major stakeholders (mainly among tour operators, hospitality industries and governments) are still reluctant to admit the most disturbing risks or issues linked to climate change and tend to call for delays before acting" (Ceron & Dubois 2005). Those in the tourism field then, are recognising that climate change

will have a range of impacts upon the industry, yet are slow to examine their own contribution to the situation.

2.5) Air travel and climate change

A significant and growing contributor to climate change is travel which constitutes 13% of global carbon dioxide emissions (Schafer & Victor 1999). Of the different forms of travel, aviation is "the fastest growing source of greenhouse emissions and is a major threat to the natural functioning of the atmosphere" (Holden 2005 p341). A World Tourism Organisation (WTO) survey of international arrivals in over 20 major tourism destination countries revealed that over 70% of tourists arrived by air (WTO 2000). The assertion by the industry that; "By almost any measure, aviation's impact on the environment is and will remain minor. It makes a minimal contribution to atmospheric pollution and to global warming" (IATA 1993 p23), certainly does not add up currently. Aircraft release a combination of gases into the atmosphere; CO_2, NO_X, sulphur trioxide (SO_3), and water vapour. Whilst the effects of CO_2 in the atmosphere are well documented, it is not yet known how much the other emissions from aircraft effect the atmosphere, although it is thought that SO_3 also contributes to the destruction of the ozone layer (Holden 2005 p341). The fact that the gases are released in the troposphere, however, does make an impact and therefore, emissions from aircraft count for approximately three times their actual emission load, to account for this fact as noted earlier (Olsthoorn 2001, Hillman 2004, Greenpeace, cited in Becken 2002). This means that over a given distance aviation is at least three times more environmentally damaging than any other mode of transport.

By the industry's own admission that "there is at present no viable alternative to jet fuel" (ibid p15), means that the only improvements in environmental performance available are through fuel efficiency. Whilst considerable efficiency measures have been achieved since the 1970's, further large efficiency increases are unlikely and the massive increase in the number of flights worldwide has meant that aviation is the fastest growing source of CO_2 emissions (Hillman 2004). As well as increasing numbers of flights, there is a growing demand for longer flights, with an extension of average passenger trip length by 43% in the last two decades (OECD, cited in Becken 2002).

The study of air travel by area reveals that the vast majority of flights are taken by the industrialised West; "North America represents more than one-third of global demand with 36% of total passenger services in 1998. Europe represents 27.8%, Asia Pacific 26.2%, Latin America/Caribbean 4.9%, Middle East 3.2% and Africa 1.8%" (WTO 2000 p39). It is only a small minority of the world's population who ever take a flight; only 6.5% participate in air travel (Becken 2002 p127). This raises questions of equity over those who cause global climate change and those who are affected by it, as noted earlier.

The recent rise of low-cost airlines have also added hugely to the amount of travelling which people are able and want to do. The characteristics of such airlines are:

- A fleet consisting of a single aircraft type leading to reduced maintenance and pilot training costs
- Intensive use of aircraft with flights scheduled over an extensive time period including night flights
- Limited onboard services and payment for services provided
- Direct marketing through telephone call centres, and, increasingly, by Internet
- Non-participation in global distribution systems
- Utilization of regional airports such as Stanstead in London, Beauvais in Paris or Carcassonne for Toulouse, so as to reduce airport charges and taxes (WTO 2000 p47). Despite recent worries over high fuel prices in the industry, increases in passenger numbers are ensuring continuing large profits for the low-cost airlines, as the 9% profit rise by Easyjet shows (Warren 2005).

There are also a number of factors which give the aviation industry competitive advantage over other forms of transport such as trains, ferries or buses, all of which have much lesser emissions of CO_2. As the WTO notes; "air travel is exempt from the burden of fuel taxes, despite the fact that at an altitude of 10,000 metres kerosene is 10 times more toxic for the environment than similar products on the ground. This means there is a market distortion between these types of transport" (WTO 2000 p20). This situation leads to exceptionally cheap air travel, comparative to other means of transport, and alongside rising incomes ensures that air travel increases rapidly. This is clearly the opposite of the pattern which would show a move towards sustainability and the mitigation of climate change impacts.

2.6) The social dimension

Next we shall examine how research has attempted to find out what people think about climate change and how they act in light of it. Climate change as well as being a scientific problem, is also a social construct, in that it is viewed in different ways by different groups of people. Thompson and Rayner identify three strands of argument in the climate change debate; 'profligacy', characterised by a concern for the moral imperative for the industrialised nations to reduce their CO_2 emissions in order to avert disastrous climate change, 'pricing and property rights', which views the problem dispassionately as a failure of economics which with simple market mechanisms can be solved and 'population', which sees the main culprit for climate change as being the number of people on the planet, and therefore more a problem of 'over-population' in the developing world (Thompson & Rayner 1998). These, however are all the perspectives of 'experts' in the field of climate change, and for global warming to be mitigated, a shift in resource consumption must be made by all, at least from the profligacy perspective. What then are 'lay' perspectives on climate change; what do people know about this environmental problem and what actions, if any, are they prepared to make to lessen its impacts?

Several studies have identified a number of issues surrounding lay perspectives on climate change;

- a widespread belief that climate change is caused by general pollution and a lack of understanding that it is actually a by-product specifically of the burning of fossil fuels and the consequent release of CO_2
- confusion around distinguishing between good general environmental practices and causes and actions specific to climate change (Morgan et al. 1992, Bostrom et al. 1992, 1994, cited in Thompson & Rayner 1998).

Such beliefs may lead to inappropriate or misplaced actions by lay people, whilst believing that they are indeed having a mitigating impact upon climate change. Researchers have however, been dismayed by the lack of credence given to such research by decision makers who draw up public policy in this area, according to Thompson & Rayner (ibid). Reasons suggested for such reluctance are related to the fact that policymakers, who are often believers in technological solutions to climate change, see the public's primary motivation as economic and are worried by suggestions of lifestyle changes (ibid). So whilst research identifies that there

may be confused or misplaced beliefs on the part of lay people, policymakers are not necessarily approaching methods to mitigate climate change in the way which would engage them.

Studies on how citizens behave with regard to climate change have had conflicting findings. Kasemir et al conducted many Integrated Analysis (IA) focus groups with people in four different European cities. They used pictorial methods to discover respondent's thoughts and feelings around two scenarios; a business-as-usual high energy future and a strong reduction in energy levels to prevent climate change. The latter scenario was found to be more attractive to all of the groups than the former, although there were variations on a country by country basis (Kasemir et al 2000). This would suggest that participants would be willing to change their lifestyles and behaviour in order to bring about the necessary strong reduction in energy levels. In contrast, a study by Stoll-Kleeman et al, using the same methods, found that whilst respondents were alarmed about climate change, they "erected a series of psychological barriers to justify why they should not act either individually or through collective institutions to mitigate climate change. From the viewpoint of changing their lifestyles of material comfort and high-energy dependence, they regarded the consequences of possible behavioural shift arising from the need to meet mitigation measures as more daunting" (Stoll-Kleeman et al. 2001).

McDaniels et al, in their study of risk perception and global change, concluded that laypeople "perceive technologies or actions that contribute to global change processes quite differently than the consequences of these processes" (McDaniels et al. 1996 p169). So for example, automobiles were rated on a much more positive basis than global warming, which they are a direct cause of. They surmise that "current lay perceptions may prove a substantial impediment to enacting meaningful responses to these complex and worrisome processes" (ibid p171). Such studies reveal that there may be substantial barriers to implementing policies to ameliorate climate change due to confusion and/or denial of the problems by lay people. It must be remembered, however, that some of these studies were conducted a few years ago and that perspectives on climate change may have evolved in the intervening years.

2.7) Future patterns

Some studies have attempted to analyse how we travel now and how travel might change in the future. Schafer and Victor developed a model to project patterns of travel in the future and

hypothesised that car travel would decline sharply in industrialised countries, with high speed train and air becoming the dominant mode of transport. Thus emissions would rise enormously by 2050. Their analysis rests however, on a fixed travel time budget (TTB), where they assume that greater distances must be covered in the same amount of time in the future; this assumes that current trends will continue with no mitigating effects towards climate change (Schafer & Victor 1999). Olsthoorn predicted that the share of CO_2 emissions produced by aviation would rise to 15% of all emissions by 2050 and his figures were for international aviation alone, which could mean that the total share could be considerably higher. He also considered the possibilities for introducing an international tax on kerosene (jet fuel) to control these emissions, but concluded that "the political barriers to the imposition of such a tax on an international level, yet without any precedent, are probably formidable" (Olsthoorn 2001 p92).

From the tourism field, Becken studied international tourist flows to New Zealand to discover the environmental impact of the aviation involved. She found that the tourism travel to the country would "increase national energy use by 6% if international air travel were included in national inventories and add CO_2 emissions of 1.9 million tonnes" (Becken 2002). She concludes that "any visit to New Zealand must be considered as unsustainable, given current technology" (ibid p123). Becken proposes a number of measures to lessen the impact of flights to New Zealand; increasing the average length of tourist stay, promoting domestic tourism and increased marketing in closer source markets such as Australia (ibid). Some of these measures could be utilised in other destination countries.

2.8) The new paradigm: sustainable mobility in tourism

Frändberg, in one of the handful of studies to buck this trend and examine the impact of tourism on the environment, explores the 'story lines' or dominant discourses associated with tourism and the environment. She studied 60 written texts on sustainable or environmental tourism from the late 1980's to the mid 1990's and identified four 'story lines' which she argues are the "dominant lines of argument organising the international policy discourse on sustainable tourism in the early to mid 1990's" (Frändberg 2005 p274). These were: 1) tourism as victim of environmental change, 2) tourism as generator of problems internal to the tourism economy, 3) tourism as generator of problems external to the tourism economy and 4) tourism as solution to the environment-development dilemma.

The first of these describes tourism as dependent on the quality of the environment and also as a victim of the environmental problems and degradation caused by other industries. The second story line also asserts that tourism is dependent on 'high quality' environments but that because of this fact, tourism itself is likely to remedy any environmental problems created since it has this inherent dependency. Thirdly, the story line on problems external to the tourism economy relates to texts that emphasise that tourism creates environmental, economic and social problems and that there may often be conflicts over resources between local populations and tourists. This strand believes that tourism does not necessarily have any incentive to deal with problems that arise, and so calls for local participation in the tourism decision-making process and argues that if the destination is managed properly these conflicts will be solved or minimised. The final storyline regards the environment and tourism as symbiotic, so that the environment needs tourists as much as tourists need the environment and is mostly connected with ecotourism.

None of these key story lines however, made much reference to the inherent problem of the environmental damage caused by tourism travel; although 3) the external problems story line has the potential to do so. Her findings are that "the tourism policy context has been dominated by a logic, which so far has organised out the issue of long-distance mobility from the agenda of sustainable tourism". The challenge is to find a way in which tourism travel can be put at the heart of sustainable tourism policy making, yet Frändberg notes: "for many actors it may however prove difficult to even indirectly question the extent and speed of personal mobility – in particular long distance leisure mobility – as this would challenge presently highly influential narratives concerning the benefits of globalisation on the one hand and sustainability through ecological modernisation on the other" (Frändberg 2005).

Høyer, in a study of tourism and leisure mobility in Norway, also argues that "sustainable tourism should be linked to a concept of sustainable mobility" (Høyer 2000 p147). He found that more than half of the total mobility undertaken was for leisure and tourism purposes, which led to large ecological impacts. He claims that "a sustainable mobility is thus without the auto and aeromobility familiar to the rich countries of the world today. The basis must lie in walking, bicycling and other land-based means of transport, such as the bus, train and tram" (ibid p156).

In light of these recent forays into recognising the impacts of mobility in the sustainable tourism debate, the present study aims to make a small addition towards furthering the knowledge in

this complex and controversial area. By using focus groups to examine what people believe about how tourism impacts on the environment and what issues air travel raises for climate change, the research will contribute a more in depth look at the issue of sustainable mobility. The examination of the views of environmentalists and non-green groups will further add to the debate an understanding of whether this factor alters travel behaviour due to beliefs.

Chapter Three: Methodology

For the topic under consideration, which is primarily concerned with people's attitudes and views about air travel and climate change, it was felt that a qualitative method of research would serve better than a quantitative one. The researcher was attempting to understand people's perceptions of climate change and how air travel contributes towards it and what the barriers are to more sustainable levels of flying. This involves, as described by Corbetta; "grasping the subject's perspective: understanding his mental categories, his interpretations, his perceptions and feelings, and the motives underlying his actions" (Corbetta 2003 p264.). To fully understand how people view the links between tourism and the environment, and in this specific case the links between air travel and climate change, it was necessary to discuss the topic in some depth with plenty of scope for respondents to choose their own responses and explain in detail what their motivations for travel were. Therefore a standardised quantitative instrument such as a survey would not have allowed for the degree of individual response required for this study.

After contemplating the range of available qualitative methods, the researcher concluded that focus groups would be the best method for bringing out, through group discussion, what respondents really felt about an issue. A key advantage of focus groups is that they can be extremely dynamic (Berg 2004 p124), stimulating what Sussman et al (Sussman et al 1991, cited in Berg 2004 p124) call the "synergistic group effect". This refers to the fact that participants in focus groups interact with each other as well as with the moderator and often results in brainstorming or linking themes together. In this way "a far larger number of ideas, issues, topics and even solutions to a problem can be generated through group discussion than through individual conversations" (Berg 2004 p124). Other distinctive advantages of the method are that it is flexible, permits observation of interactions, places participants on a more even footing with each other and the investigator and can produce quick results - which is important in a time limited study such as this one (ibid).

In this particular study perhaps the most important advantage of focus groups is that they allow groups of people to discuss a problem which affects everyone and which is arguably a product of culture and lifestyles. The solutions to such problems often lie in a cultural shift which is a group, rather than an individual process. Tonkiss argues that focus groups "capture the

inherently interactive and communicative nature of social action and social meanings, in ways that are inaccessible to research methods that take the individual as their basic unit of analysis" (Tonkiss 2004 p198). Tonkiss also claims that there has been increasing interest in focus group research amongst different academic disciplines, with environmental studies being one of the key ones (Tonkiss 2004 p194).

There are clearly a number of disadvantages or limitations to the method also, when compared with other qualitative research methods. The moderator has less control over the material produced, compared to other methods, such as one-to-one interviews or quantitative methods (Gibbs 1997). This is clearly the flip-side of the fact that participants feel on a more equal footing with the researcher. Focus groups may not offer the same depth of information as a long semi-structured interview (Berg 2004). Sussman et al also found that participants in focus groups had a tendency to take on a more extreme position than that adopted in survey questions (Sussman et al. 1991 cited in Berg 2004). Despite these limitations, the researcher felt that focus groups were the best method for this particular study, for the reasons outlined above. These respective strengths and limitations of the method used were borne in mind by the researcher throughout the study and care was taken not to generalise from the groups to a wider population.

3.1) Conducting the focus groups

As mentioned above, focus groups were selected as the most effective method relative to this particular study. After consulting the literature on focus groups (Krueger 1994, Gibbs 1997, Robson 2002, Corbetta 2003, Finch & Lewis 2003, Berg 2004, Tonkiss 2004) to determine the parameters for the method, the researcher decided to conduct four different focus groups. Due to the desire to capture the attitudes and behaviour of environmentalists specifically, the researcher chose to conduct two focus groups with 'green' groups and two with groups comprised of people with no particular environmental associations. This would provide the opportunity to compare the groups and see what differences, if any, level of environmental awareness and interest had on holiday taking and particularly on air travel. The ideal number of participants for a complex topic such as the one under discussion is no more than six to eight (Finch & Lewis 2003 p172.), so the researcher aimed for having six participants in the sessions. It was envisaged that each session would take approximately one hour, since this

seemed a reasonable amount of time that could be taken up in the course of a lunch hour without inconveniencing participants, most of whom were taking part during their work hours.

In many focus group studies participants are paid or otherwise incentivised due to the greater commitment of time and effort needed to participate in a focus group session compared to other methods of research (Krueger 1994 p91). Unfortunately this proved beyond the means of the researcher who was self-funded. Therefore existing social networks were used as the primary means of finding participants; a purposive sampling strategy (Robson 2002 p265). Other groups were contacted, but apart from one (The Schumacher Society) were uninterested or unable to take part in the study.

The researcher also felt it prudent to conduct a preliminary 'pilot' focus group with a group of friends to test out how the focus groups would work in practice. Berg suggests that '*novice interviewers must try out their performances in front of an audience of competent critics, who may include experienced interviewers or the kinds of people they may be interviewing for a given study*' (Berg 2004 p110.) This seemed especially appropriate since the researcher, whilst experienced in conducting both individual qualitative interviews and of quantitative survey methods from prior research, had no previous knowledge of conducting focus groups.

The group chosen for the pilot study were a group of four of the researcher's friends who fell into the 'environmentalist' category. A preliminary list of questions was prepared and then asked of the group. The session was both audio and video taped, the audio taping being vital to capture all of the responses generated from the focus group which it would clearly have been impossible to note down by hand, and the video taping, both as a back up in case of any audio tape problems, and as a way of watching the group dynamics of the session.

A number of measures were tested and refined at this initial stage. The group were asked for feedback on the questions and a number of questions were added or refined on the basis of this feedback. This pilot session also tested whether any questions were off-putting, confusing or difficult for participants. A confidentiality statement along lines developed by Berg (Berg 2004) was piloted and was used in all subsequent focus groups (see Appendix 1). The aim of this was to make participants feel more comfortable about speaking candidly in the group. The confidentiality statement attempted to ensure that group members would not repeat anything said in the group other than between themselves, or with the researcher, thereby giving

participants more confidence. This statement is clearly not binding in any real sense; it forms a social 'contract' between those taking part in the research and the researcher.

A mini-questionnaire (see Appendix 4) was also prepared to capture basic details such as participants name, age and gender. It also asked participants to rate themselves on a scale of environmental interest ranging from white (no interest in environmental issues) to dark green (a great deal of interest in environmental issues). This was based on the categories developed by Naess, the philosopher, who identified those involved in the environmental movement as 'shallow' or 'deep' greens and is credited with being one of the founders of the deep ecology movement (Naess 1973 cited in Jacobs 1991 p45). Finally, people were asked to circle a category of how many hours they had spent in air travel over the last year. The categories were 0-5 (the only category which could be considered sustainable, Hillman 2004), 6-10, 11-20, 21-30 and 31+. These were designed to establish how far away from a sustainable pattern of air travel respondents were. High, unsustainable levels of flying were expected, since multiple holidays and medium and long haul flights are common annual experiences for many people. To try and counter for any untypical holiday patterns such as a one-off visit to Australia for example, participants were asked if this was a typical amount of yearly air travel for them and if not to choose a more representative category for their usual year.

In the end six focus groups were conducted over a four week period (See Appendix 2 for the schedule of focus groups) 1 pilot session, 3 with environmental groups and 2 with groups with no particular environmental focus. The environmental groups were held with groups of staff from Sustrans (Bristol-based sustainable transport charity), UWE students studying on environmental courses and the Schumacher Society (environmental philosophy group based at the Create Centre in Bristol). The non environmental groups were a group of UWE staff (from the Information, Projects and Research Department) and a group of staff from heritage charity the National Trust (from their Wessex Regional Office based in Warminster, Wiltshire).

The majority of the sessions were conducted with myself as moderator, asking the questions and directing the session (See Appendix 3 for a copy of the Moderator's Guide), and with my partner, Stephen Dale, as a technical assistant to set up and check on the audio and video taping and to make brief notes on each session on notable points such as group dynamics, key quotes or other points of interest. One session where this was not possible was the National Trust focus group at Warminster and here the group was audio taped only. In total 22 people

took part in the study, making 3 groups of 4 people and 2 groups of 5 (with a further group of four as a pilot study).

In order to find participants to take part in the focus groups the researcher made use of existing social networks such as a former employer, current voluntary placement and links at UWE where the researcher is a student. Despite this it sometimes proved difficult to persuade people to take part in research which is of no obvious benefit to them and which they do not necessarily have a direct connection with (i.e. the research is not about their livelihood). Some groups pulled out and others had to be re-scheduled at short notice. Also in general numbers in the group were lower than anticipated with groups consisting of four or five people rather than six or seven. Partially this was because participants dropped out, but again was also due to the difficulties of persuading people to take part in the research process at short notice. This may in some respects have been a benefit for the research as there were quite a few topics to be discussed and the more people involved the less time to devote to each topic. Obviously given more resources and a longer timescale for the research project, more time could have been spent finding greater numbers of participants. In a fully funded research project, participants would have been paid a small amount to compensate them for their time, and this would obviously impact on the desire to participate to some extent.

Once they were involved in the focus groups, participants often seemed to enjoy the process a great deal and comments were made to the researcher about how unusual and welcome a chance it was to debate a topic in depth with friends or colleagues. In terms of group dynamics there were a couple of instances where the mix of the group was not ideal and could have been improved on for further research. With three groups there was a sole female participant with three or four males, in one case there was also a large gap in terms of age and experience, which may have led to a feeling of insecurity and more reluctance to participate to the full. There was also very little diversity across the groups in terms of ethnicity or class; the participants were all white and whilst no questions were put to them about what class they considered themselves to be, due to occupation most were likely to have been middle class.

As a deliberate strategy to maximise the chances of getting participants for the groups the researcher chose social networks of people who already knew each other. This had a number of advantages in terms of ease of contacting people and of finding a place to conduct the research. It also offered a group of people who were usually relatively familiar with and at ease

with each other, which can help facilitate group discussion and make focus group discussion flow. On the other hand there are a number of disadvantages to this strategy; since most of the participants were colleagues there are already power and status hierarchies at play which could affect how much individual participants responded and whether they felt free to fully air their views. People can feel more constrained airing unpopular views with those who they come into contact with every day rather than if the group participants had come together as strangers and would never see each other again. However, since the material under discussion was not of itself highly sensitive, then these factors will presumably have made less of an impact than if the study was about investigating criminal or sexual behaviour, for example.

3.2) Ethical considerations

Ethical considerations in this study mainly focussed around confidentiality. As mentioned earlier, the researcher devised a confidentiality statement, based on a format given by Berg (Berg 2004). The statement asked participants to sign their name stating that they would not talk about the subjects that came up in the focus groups, apart from to each other or the researcher. This document is not binding in any way and because of the group situation cannot be guaranteed, but forms more of a social agreement, so that respondents felt confident that they could express their views without them being repeated to other colleagues, friends or family outside of the sessions. Whilst the topic was not an extremely sensitive one, it was felt that this gave people some assurance that their contributions would remain confidential.

The audio and video tapes were only heard and seen by myself and the assistant moderator. This also ensured a further degree of confidentiality. Whilst direct quotes have been used from the transcriptions, all names have been changed, therefore responses are anonymous also. All of the confidentiality concerns and permission to use audio and video tape were all dealt with at the start of each focus group. The researcher did not encounter any particular concerns over confidentiality or the audio and videoing process, apart from one respondent who was initially reluctant to participate due to the videoing process, but subsequently changed their mind and appeared to accept the taping in the actual event.

3.3) Remarks on the focus group process

In terms of the practicalities of conducting the research, having two people involved in conducting the session was extremely useful, especially given the fact that the sessions were both audio and video taped. It relieved some of the pressure on the moderator and meant that there were fewer practical details for the researcher to worry about at a time when the priority is to talk to participants and make them feel at ease prior to the session. It also provided a neutral observer of the groups to notice and note down group interactions and quotes which the main moderator would be unlikely to, as their main attention is given to facilitating the session. Therefore, the reseacher would recommend the strategy of using two people to conduct the focus groups whenever practical and feasible, as described in Krueger (Krueger 1994 p103).

It was noticed that there was a difference in the character of the session depending on where it was conducted. All of the groups, apart from the pilot and the UWE students group, were held at the participants place of work, with the result that these sessions were perhaps treated by those involved in a slightly more focussed way than the home based sessions which had a more relaxed feel, but also a tendency to stray away from the topic under discussion more frequently. On a personal level, the discipline of remaining objective, apart from the subject matter and not offering any personal opinions in the group sessions was a difficult one for the researcher to master. It is particularly difficult when incorrect assumptions about the topic under discussion come up and remain unchallenged. It was also challenging to deal with dominant respondents in the sessions as Berg notes (Berg 2004 p137.) and to try and ensure that other group members gave their full opinions. The ability to intercept such exchanges without embarrassing or undermining the dominant person in a group situation is one that requires a great deal of practice.

In general, the researcher felt that the focus groups were an innovative way to approach the subject under discussion within the tourism field, were enjoyable and provided a wealth of interesting material. The material generated in the focus groups was approached in a thorough and systematic way. Firstly, all the group sessions were transcribed by the researcher from audio tape. Whilst this was a time-consuming process from the researcher's point of view, with each session generating in the region of 10,000 words or 20 pages of data, the transcribing helped the researcher to get to know the material well before analysis proper began. Secondly, all the video tapes were viewed, notes on group dynamics made and key quotes or points

made and these were added to the material gathered by the assistant moderator. Thirdly, the transcripts and other notes were read through and the data coded according to themes used in the questioning (See Appendix 3 for the list of questions used). Key quotations from participants were picked out to give a representative sample of the range of views on that particular topic. It was also noted how typical the different responses were. Key quotes on these themes are presented in the Results and Discussion section.

The mini-questionnaires (see Appendix 4) were used to give an approximate guide to how 'green' respondents rated themselves and how much air travel they undertook on an annual basis. The purpose of collecting this data was to see if the level of interest in environmental issues (how 'green' they felt themselves to be) correlated with a sustainable level of air travel. According to Hillman a sustainable level of air travel is a fairly minimal one, and would equate to the first category given on the mini-questionnaire; 0-5 hours of air travel annually (Hillman 2004). This was then compared with the different groupings, whether they were a member of a green or non green group. Due to the nature of the research and the small number of participants involved no generalisable claims can be made about these results, but they serve to give an indication of what patterns might be found in a wider and more quantitative study.

Finally, the researcher has attempted to draw out the key themes arising from the focus group sessions and discuss ways in which they can inform those developing policy and practice within the environmental and climate change fields. Limitations of the study are detailed and recommendations for future research directions given.

Chapter Four: Results and Discussion

The data collected from my focus groups is presented and interpreted in the following section. As a brief recap, three of the sessions were carried out with environmental groups (Sustrans, UWE Environmental students & Schumacher Society), two with control groups who had no particular environmental associations (UWE Staff & National Trust) and one pilot group. I have included some quotes from the pilot session as it generated some interesting comments, but it is not included in any of the other results.

In general, most participants showed interest in the topic, and were well motivated to discuss the issues surrounding air travel and climate change. The first stage of each focus group was to ask participants complete a confidentiality statement (Appendix 1) and a mini-questionnaire (Appendix 4). The mini-questionnaire ascertained how 'green' participants rated themselves to be and also found out how many hours of air travel they undertook in an average year. Most respondents rated themselves surprisingly highly on the scale of 'greenness' as the graph below shows:
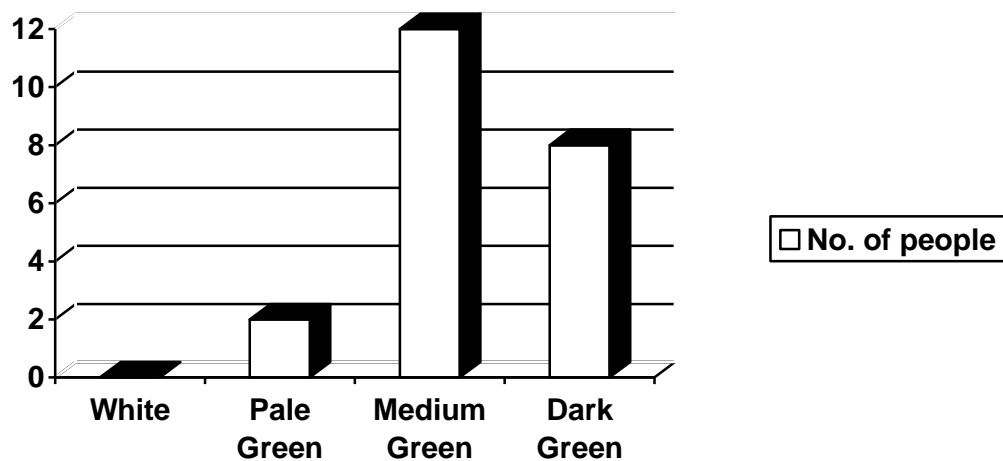
Graph 1: How 'green' focus groups respondents rated themselves to be.

Participants were asked to rate their level of interest in environmental issues as follows; White (no interest), Pale Green (a little interest), Medium Green (quite a lot of interest) and Dark Green (a great deal of interest). This scale was developed along the lines of Naess and his scales of 'shallow' and 'deep' ecology as stated earlier (Naess 1973 cited in Jacobs 1991). Usually only a small sample of the general population would fall into the Dark Green category.

Obviously, since this study involved three groups of people who were already identified as having an interest in environmental matters, higher than average ratings are to be expected. However, it is still surprising that even those from control groups mainly rated themselves as Medium Green with only 2 classifying themselves as Pale Green and none as White. In part this may be due to the 'interviewer effect', whereby participants know that the subject under discussion is 'environmental' and, therefore, to please the researcher they over-estimate their interest in environmental issues. This may have occurred more strongly in this piece of research as people may be aware of the fact that the researcher's own level of interest in environmental matters is high. On the other hand research has shown that people do tend to be greatly concerned about environmental issues, but less ready to act upon those concerns (Stoll-Kleeman et al 2001). Whatever the issues involved, the small scale of this sample does not enable generalisations to be made but the results do indicate that these particular participants were either strongly environmentally motivated or at least wanted to appear to be so.

The other key piece of information collected from the mini-questionnaires, patterns of air travel by different groupings, revealed a complicated picture. Again, due to the small sample involved in this research, they give merely a snapshot of tourist aviation patterns. The researcher compared the amount of flying done by participants in two ways. Firstly, all respondents were either in a group termed 'green' (Sustrans, UWE Students & Schumacher) or in a 'non green' group (UWE Staff & National Trust). When the amount of annual air travel was added and averaged for these two groups there was very little difference between the green groups with an average of 11 hours and non-green groups with 10 hours. In fact, the green groups were travelling slightly more, confirming my original hypothesis that environmental awareness does not necessarily lead to people adopting more sustainable tourism travel habits.

When these figures were calculated on the basis of how participants had rated themselves however, those who classified themselves as 'Medium Green' did fly on average 3-4 more hours than the 'Dark Greens'. This would suggest that within the green groups and to a much lesser extent within the non-green groups, there are those who are more environmentally minded than the majority and who do have a more sustainable pattern of travel. According to Hillman, the maximum sustainable amount of air travel under a carbon rationing system is the equivalent of a return European flight; for example a round trip from London to Madrid which generates 1,170 tonnes of CO_2 (when multiplied by three to take into account the extra effects

of emissions being released higher up in the atmosphere) (Hillman 2004). He suggests that a fair individual ration of CO_2 emissions would be approximately 5 tonnes, which would need to reduce annually. Given that an individual's average car driving per year generates 1,050 tonnes of CO_2 and carbon emissions from other areas of life such as energy use in the home and food and general consumption also contribute substantially, the actual level of air travel which is sustainable also depends on lifestyle in other areas (ibid.).

It would seem natural that within both the 'green' and 'non green' groups there are different levels of awareness and interest. As Grob (1995) and Nilsson & Küller (2000) found in studies of environmental beliefs and behaviour and of travel behaviour in Sweden, respectively, people's environmental actions were often allied much more to attitudes and personal beliefs, rather than knowledge. This may be a pattern at work here, although it may be dangerous to suppose that all members of any given 'green' group have the same level of knowledge and awareness of environmental issues simply on the basis of membership. However, there do seem to be a minority who classify themselves as 'dark green' who actually do engage in more sustainable levels of air travel.

The next step in the focus group process was to explain the workings of the sessions to participants and for this purpose the researcher devised a moderator's guide (see Appendix 3) which outlined the introduction where the moderator explained the research to the group, highlighted ground rules such as allowing all participants to have a say, and obtained permission to audio and video tape the session. A quick warm-up question was asked to focus everyone's minds on the topic, followed by a series of 15 questions relating to tourism and the environment and more specifically air travel and climate change. The questions were semi-structured and so not all questions were asked of all groups, due to pursuing other lines of enquiry or running out of time, but the majority of questions were common to all groups. Some of the key quotes encapsulating how participants felt about the topics are highlighted in tables below with explanation and interpretation following.

Participant	Q1: What positive impacts do you think tourism has on the environment?
Peter	*I don't think tourism has any positive environmental effects at all. I think the trick is probably to aim towards having a neutral effect, to mitigate the impacts of your visit as much as possible.*
Cynthia	There are lots of areas where animals are being conserved and areas of wildlife are being conserved because tourists are coming.
Penny	*I suppose if people are exposed to different cultures and different parts of the world, then I suppose you might be more motivated to take action to preserve them or something.*
Morris	There's an economic impact for jobs. Tourism is the world's number one global industry or employer, so there's certainly an economic spin-off.
Sven	*You've got all these big nature reserves and places that are being protected, but the big push for them to be protected is ecotourism.*
Ivan	If that is handled well then it can improve the environment because you're trying to attract people to come and stay and look at it.

Generally, most people when asked this question mentioned conservation or natural areas or 'eco' types of tourism. There were also economic or social benefits from tourism cited, rather than environmental benefits, such as the money tourism brings to communities or ideas of a social or spiritual awareness derived from tourism. This could be because it is conceptually difficult for people to separate the effects of tourism into different, artificially constructed categories such as 'environment' and 'cultural'. Another possible explanation is that participants believe that there are only a few positive environmental effects from tourism, but place a high value on its economic and social impacts.

Environmental benefits when they were mentioned could be loosely described as referring to 'eco' or 'wildlife' tourism, where the impetus for habitat preservation was tourism spend, the 'symbiotic relationship' between tourism and the environment (Mathieson & Wall 1982). This was an area which many people mentioned, so it seems likely the ecotourism messages are pervading the mainstream consciousness. Some of the main proponents of eco-tourism have been environmental and conservation charities, such as the Worldwide Fund for Nature (WWF), and there may be a high degree of awareness among the respondents who are, or are likely to, be members of at least one of these charities (see Mowforth & Munt 2003 p144 for the rise in popularity of socio-environmental organisations).

A couple of people were of the opinion that there were no positive environmental benefits from tourism, due to the travel involved, but that people could aim towards minimising the effects of

this. This position was summed up in the phrase 'mitigate the impacts of your visit'. Propensity to take this viewpoint was not necessarily related to a sustainability commitment, in terms of less flying, however. Less frequently mentioned positive effects of tourism were; the host community improving the environment for the tourist, an increase in tourism facilities also meaning an increase in facilities for local people and that it may help to stem rural migration.

4.2 - Table 2: Negative Environmental Impacts

Participant	Q2: What negative impacts do you think tourism has on the environment?
Felicity	*It's just the getting there by the sounds of it.*
Jasper	Western culture is accommodated in places where that kind of lifestyle, that environment to be in wasn't there.
Julie	*The aspect of countries that have very little water and a lot of that water being sent to the hotels and not the fields.*
Michael	Huge amounts!
Phil	*I guess if someone finds a natural beauty spot which is unspoilt by tourism, if they are journalists or whatever they put it in their article and eventually loads of people go there. And eventually the reason that it was nice has gone, they've all built hotels on it or whatever.*
Matthew	There are also the disadvantages of certain kinds of tourism, the classic example is skiing and the Alps, the chairlifts and funiculars put up all over the Alps, and the erosion that it causes.

Participants were much more voluble about the negative environmental impacts of tourism and sometimes mentioned several factors. As before, some negative economic and social consequences of tourism were also offered, rather than economic ones. The most frequently mentioned impacts were; cultural or social change (usually equated to a Westernisation or globalisation of culture), transport congestion and pollution (both land-based and airborne), micro-environmental impacts such as litter, overcrowding, water shortages and damage to flora & fauna, money leaving the local economy, and commercialisation.

Less frequently mentioned impacts included the idea that Tourism might drive out other more sustainable development in an area, the loss of local democracy in mass tourism areas, and that it may in fact increase stereotypical views of other cultures due to the nature of the cultural displays given to tourists. Interestingly respondents did not often mention the global CO_2 emissions from tourism travel but this may well be because they thought, due to the nature of the study, that that was already a 'given' or that it was bound up with pollution generally. A tourism pattern was also mentioned several times which would coincide with Butler's life cycle analysis; more and more tourists visit an area and problems associated with greater numbers

escalate until the original attractiveness of the area is spoilt (Butler 1980, cited in Shaw and Williams 2002).

4.3 - Table 3: Consideration of Environmental Impacts of Holidays

Participant	Q3: Do you consider the environmental impacts of your travel when booking a holiday & if so do you do anything differently?
Peter	*Well I do, it's a thought that comes into my mind, but it doesn't necessarily make any difference to the final decision.*
Scarlet	Yes, I certainly think about it and on holiday this year I made the decision to not fly anywhere.
Katherine	*The lure of the visit always overrides your environmental aspirations or thinking on it.*
Brenda	I don't pay it any attention I'm afraid.
Amanda	*Yes I do think about it and I feel really guilty. But I still do it. And I really wish that they would put the prices up, something's got to be done. Because it's just too easy.*
Ray	Well I do very little air travel just because I don't have the opportunity to, so it doesn't really figure at the moment.

This question was attempting to probe how much participants thought about the way in which their travel behaviour would impact on the environment. The responses about the environmental impact of travel varied greatly from people who chose not to fly, or to fly very little due to the environmental impacts, to those who flew infrequently for other reasons such as fear of flying or economic or time factors in their lives and had not really considered it. There were also many interviewees who did substantial amounts of air travel but did not pay it much attention. Guilt over flying so frequently or so far was mentioned by a significant number of participants, which clearly indicates that they are aware of the scale of the environmental problem, but many feel unable to do anything to avoid the lure of cheap air travel at present.

Several people expressed a desire for flight prices to increase, thereby removing some of the temptation to travel more often. This is quite an interesting psychological point which occurred several times; many people expressed a desire to be rid of the burden of choice with regard to the amount they travelled; "I wish they would put the prices up, it's just too easy." We can surmise then that those who currently have a more sustainable pattern of air travel have many varied reasons for doing so; some are genuinely motivated by environmental concerns but others are simply choosing not to travel often or far for many other reasons such as cost, time, fear of flying or just wishing to take only one holiday per year. Further research to determine

more about these different groupings would be valuable to ascertain how best to promote more sustainable travel patterns to them.

4.4 - Table 4: Carbon Offsetting

Participant	Q4: What do you think about the idea of carbon offsetting?
Anna	*It's a nice idea but it doesn't sound like a particularly effective way of combating the problem*
Auberon	I've thought about it every single time. I haven't yet got around to doing it.
Scarlet	*I think that if you fly a lot then it's giving you an excuse to, it's justifying your flight. And people should be thinking about actually reducing their flights rather than justifying them by throwing money at something else.*
Julie	Yes I would definitely consider doing it. I think we have?
Michael	*Never heard of it.*
Phil	I think it's a good idea, sure.
Ivan	Well I'm very keen on them because I am running a scheme.

One of the solutions proposed by some to the problem of emissions which contribute towards climate change is 'carbon offsetting' (Becken 2004). This idea involves calculating the amount of CO_2 which has been emitted from an activity (in this case a flight) and then seeking to reduce the same amount of emissions from somewhere else so as to maintain a carbon neutral effect. This can be done via fuel efficiency initiatives (often in developing countries) or carbon sequestration in trees and is generally available to people online (Future Forests 2005, Climate Care 2005). Customers then give these organisations money so that they will 'offset' the impact of their flight by planting trees or via other initiatives.

Generally there was a surprising amount of scepticism about the idea of carbon offsetting. Whilst some accepted that it might be a useful measure, most believed that it was more likely to encourage people to keep flying at unsustainable levels or that it could not possibly hope to offset the damage done by flights. For example as one respondent described it: "My concern is that it's not a solution. We can't end up with a situation where the whole globe is covered in trees and we're still flying" (Penny). One participant raised the issue of the fact that most offsetting is done in the Southern hemisphere, whereas those with carbon intensive lifestyles were in the North, therefore using money generated to keep polluting lifestyles in rich countries to pay poor countries to be even more energy efficient seemed morally wrong.

However, it is a measure which the UK government favours; they are offsetting the CO_2 emissions arising from the G8 in 2005 and from air flights for Whitehall departments from April

2006 (DEFRA 2005). The Environment Minister, Elliot Morley also urged holidaymakers to "counter some of the environmental damage by subscribing to one of the offset schemes available" (ibid.) in a press release in July 2005. It will be interesting to see how much uptake there is on this scheme, given the high levels of scepticism expressed by people participating in the focus groups.

On a contrary note to the general picture, a small number of respondents were amenable to the idea of carbon offsetting; my impression is that cost was not an issue for these people and that they tended to use more air travel than the average. One participant was involved in running a carbon offsetting scheme of their own so clearly they were highly committed to the idea.

4.4 - Table 5: Change patterns of air travel

Participant	Q5: Is there anything which would persuade you to travel more or alternatively less by air?
Felicity	*If there was more promotion of other ways of getting places, within and between countries.*
Scarlet	And if the pricing structures were different, so if I could get the train for £30 up to Edinburgh and if the flight was £100 then I would get the train.
Erin	*Basically it all comes down to time and money and that's it.*
Adam	I find that cheapness means that I do fly more than I did, which means that if flights became more expensive again then that would have an impact.
Phil	*I don't travel at the moment very much anyway, but even though there are flights for a quid I still don't travel.*
Matthew	How do we change our culture so that speed and this pressure on time are not so important?

One key factor mentioned here was the cost of cheap flights, which several people remarked on as seeming unsustainable and that if prices were to go up then they were likely to fly less. However there is also some evidence that the advent of cheap flights has brought about a shift in people's perception of what they can do in a given time. With current flights so excessively cheap, long weekends, weekends or even day trips to places several hours flight away are now accessible to many. This produces a cultural shift as people's expectations rise in line with the availability and affordability of flights. In order to reduce flying to more sustainable levels, a similar cultural shift will need to take place to reverse this trend.

Another frequently mentioned factor was that people would be willing to use alternatives such as travelling short distances by train or ferry if they were not so expensive or if the quality were better. As mentioned earlier air travel has such a privileged place in the market as to make

alternatives seem expensive (WTO 2000 p20). Added to this is the fact that "much of public transport has been in decline for years" (Hillman 2004 p36). These two factors brought together mean that air travel currently has the advantages of being perceived as cheaper, quicker, more reliable and more attractive when compared with alternatives.

There were also several respondents who said that nothing they could think of would persuade them to travel less by air as they don't have the time or inclination to worry about any environmental consequences of their air travel. Time was a factor in choice of transport; if people felt they had very little time they were most likely to take a plane whereas if they had longer, as in the case of their main holiday, they were more likely to explore alternatives (obviously dependent upon destination). As Høyer questions, can travellers be persuaded that "time efficiency is not of prime importance?" (Høyer 2000).

4.6 - Table 6: Image of Holidays

Participant	Q6: How do you think the image of holidays affects you and do you think there is a link between distance travelled and trendiness?
Peter	*Oh, we've gone further! And while it's not the thing that makes your decision, it does still have an impact.*
Jasper	At pubs or dinner parties there are always two lots of couples who are like, 'oh yeah I've been there and I've been there' and you think well I'm going to have to do it just so I can have these conversations.
Katherine	*Getting away from the crowd is more important for us, going somewhere that other people aren't. Therefore the thought of going somewhere where most of the English population go on holiday wouldn't appeal.*
Sven	In a lot of it a physical distance equates to a cultural difference, and its cultural difference which a lot of people are looking for. And I think the more culturally different a place is, the cooler it seems to be, you know.
Ivan	*Personally, because it is so easy to go to India this year, Egypt next year etc. It becomes part of the normal way of peer pressure, in your circle of friends and that's what people do. And there's an element of competition going on so you do.*
Saul	But now I would take image pride in saying 'yeah I went to the Pyrenees but I took the train.' I feel really self-righteous about it!

The image of holidays is obviously a huge area in itself but even at this simple level of analysis, it produced some interesting results. People's responses throughout the focus groups stressed their disowning of mass market tourism and their desire to get away from 'Brits abroad'. This desire to get away from other tourists can lead to a system of 'one-upmanship' as people seek more distant and unusual destinations. A recent study, The UK and European Travel Report, highlighted this trend; "instead of heading for the beaches of Spain or Portugal, the 'chav-

allergic' tourist is more likely to explore countries such as Mozambique or Libya" (Hickman 2005). This desire by the middle-classes to avoid locations which are associated with mass-tourism, is part of what Urry conceptualises as 'service class tastes' (Urry 2002) or 'ego-tourists' (Mowforth & Munt 2003). In this reading of tourism trends, class distinctions are being fought, with tourism as the battleground. Bourdieu describes how the 'new petit bourgeoisie' distinguish themselves by their 'cultural capital' and by their position as 'taste-makers' and opinion-formers (ibid).

Respondents described the status appeal of a visit to an unusual destination; "and then you come back and everyone thinks you're really cool because you've been away. And you can get all the global artefacts out around your house and say well yeah, I was there in '92 before all these bloody students started going there" (Saul FG1). This obviously has implications for sustainability also, since the further the distance, the greater the emissions caused on the flight. Tourists are choosing more far-flung destinations, partly due to these social distinctions; "demand for travel to countries once considered unfeasible because of remoteness or strangeness has increased sharply in the past five years" (Hickman 2005).

Participants were more likely to believe that other people were motivated by image, than they themselves were, although a couple of people did readily admit this influence. Others claimed to be much more pragmatic in holiday choice, deciding on the basis of the type of holiday (i.e. walking, city break etc.), by weather (seeking sunshine) or stated that friends and family influenced their decisions.

4.7 - Table 7: Carbon rationing

Participant	Q7 What do you think about the idea of carbon rationing/trading?
Saul	*It's just not a priority; I mean the government wants to see more airports, more business and more globalisation. And it's so against everything the government does.*
Jasper	I think it's a good idea but I realise that it's partly because I like the idea that somebody other than me has to make that huge sacrifice of not getting that £30 flight to Prague.
Julie	*I'd be happy if they said to me, OK you can only go on long haul once every two years. I'd be much happier if there was a fair system for everyone, that we're all in that.*
Brenda	I think carbon trading; the business of it is just so preposterous to me.
Sven	*Somebody can hold in their hand how much damage they are doing to the planet through travel, through carbon emissions.*
Ivan	I think it would make a significant alteration to our lifestyles and attitudes on carbon emissions and energy use altogether. I think there are some huge hurdles to get over to actually implement it.

Interestingly, a surprising amount of support was revealed for the idea of carbon rationing with the majority thinking that it was a good idea. Carbon rationing, is based on the principal of contraction and convergence (C&C), first proposed by the Global Commons Institute (GCI) (Hillman 2004 p119). The two main principles of C&C are; "first that the global emissions of carbon dioxide must be progressively reduced; and second, that global governance must be based on justice and fairness" (ibid). This would basically mean a fair and equitable carbon 'ration' for everyone; each person would decide what share they gave to each of the main CO_2 emitting practices – everyday travel, tourism travel and heat and light in the home.

The majority of participants thought that carbon rationing was a good idea for a variety of reasons. One of the most common was that it would 'share the suffering'. People felt willing to reduce their amount of air travel, yet were reluctant because they felt that their individual action was meaningless because everyone else was still flying. Rationing would obviously mean that all would be limited to some extent, depending on how much carbon they allotted to holiday travel. The difficulty of implementing such a scheme, potential for corruption, or the thought that it was simply a bad idea were mentioned. Possibilities were raised for implementing it as a voluntary scheme and respondents mentioned that then people would be in direct control of how they used their carbon ration; "Somebody can hold in their hand how much damage they are doing to the planet through travel, through carbon emissions" (Sven FG5).

4.8 - Table 8: Aviation Fuel Tax

Participant	Q8 What do you think about aviation fuel being taxed and would it make any difference to how much you fly?
Katherine	*I think it's a really good idea, I think they ought to put 150% tax on fuel and it would stop me using the flights and I'd go to Bognor Regis on holiday with everybody else and we'd all be happy!*
Andrew	I think what's interesting for me is the correlation between air travel and road travel because there is so much speculation about what's going to happen to road travel, nothing seems to be happening with air. So the vehicle driver seems to be penalised more than the actual air traveller and that anomaly that they don't seem to be keeping pace with one another.
Amanda	*What! (Shocked) That is ridiculous. That's terrible.*
Sven	Maybe if the fuel was taxed and the money that was taken was put on for the fuel, if there was some specific use for it.
Matthew	*I think that if it was sold properly as a tax to benefit the environment and because of your personal use of, or generation of carbon dioxide by doing this, then a lot of people would support it I think.*

As noted earlier, one of the main concerns with the sustainability of flights is the artificially privileged position it enjoys due to a lack of tax on kerosene (WTO 2000). This question attempts to predict how people would react to this market distortion being corrected by tax being applied to aviation fuel in line with tax on fuel for all other forms of transport. More people were in favour of this measure than not, but concerns were raised over the fact that taxes generally are often thought to be regressive and therefore impact most upon the least well-off in society. Participants were greatly in favour of such a tax if it were ring-fenced for climate change amelioration or for other environmental measures such as improving alternative forms of transport.

Some objections to the idea in principle were voiced; that it was the responsibility of airlines not their customers to pay for the tax, that in order to work it would need to be global in scope, and that it would be disappointing not to be able to afford to go where you wanted to. Most people said that the extra cost would be likely to make them cut back on flights, whilst one respondent said it would make no difference to them.

4.9 - Table 9: Air Travel Curbs

Participant	Q9 Do you think air travel can and should be curbed?
Scarlet	*But I think in years to come we will look back on the way we fly now in the way that we think about smoking, so 'I can't believe you used to smoke in your office' like 'I can't believe you used to fly'.*
Katherine	It may all have the effect that if you reduce all this extra travel, it may also have a beneficial effect that people would be forced to communicate and interact and socialise with their local community as opposed to saying 'oh I have no connections with my local community, therefore I will go 500 miles away and spend a weekend.' I think you might find society knits together better perhaps?
Morris	*Yes you've got to manage it in some way. I don't think you can just let it grow exponentially until the market takes control because it will just keep going and going and you're just going to end up with environmental disaster.*
Phil	Well it can be I suppose, but if it should be I don't know. Environmentally I suppose it should but I don't think it's going to happen.
Christine	*I think it will be curbed as oil prices rise.*

The researcher was keen to ascertain whether people saw the rise in air travel as a problem which needed curbing or not. In line with many other responses, the vast majority thought that air travel both could and should be curbed, with a few saying they were not sure. Some believed that prevailing economic conditions in the future would automatically mean that the rise in aviation would be curbed, such as rises in oil prices or a drop in living standards in

Western countries. How much this desire to reduce aviation would translate into respondents' own air travel being curbed is a point to bear in mind, especially given research findings mentioned earlier which indicate a gap between environmental attitudes and behaviour (Grob 1995, Nilsson & Küller 2000).

An interesting issue raised by focus group participants, was that the reduction in travel due to curbing of aviation may have some positive side-effects, such as more social cohesion as people re-connect with their local community. One respondent was more concerned with the growth in car traffic rather than air, due to its greater tangibility (i.e. the negative aspects of car usage such as pollution and congestion are more visible). Another participant also mentioned that alternative means of transport would need to be made more viable and more attractive to compensate for the reduction in air travel.

4.10 - Table 10: Price as a factor

Participant	Q10 How much of a difference does price make to how much or how far you fly?
Felicity	*Normally getting any other form of transport is so much more expensive and you've got these cheap flights. I get horrible guilt pangs but what can you do?*
Scarlet	A huge factor. For me it's money and time.
Julie	*I don't think it does affect me but what it would do is make me choose between for example an independent holiday as opposed to a package holiday because they're always so much cheaper.*
Andrew	I do like going away to European cities, so the city is irrelevant; it's the cost of getting there.
Conrad	*There's always that push from other people to see more and do more and have more conversations about stuff. And you think 'God I should be doing that £20 flight to Prague.'*
Ray	*It wouldn't affect me; I don't think it would make much difference.*

There was an almost exact half and half split on this question between those who said that they would be unaffected by changes in the prices of flights and those who believed that cheap prices persuaded them to take more flights. More research in this area would be valuable to ascertain people's reasons for these decisions. Some of those who would be unaffected by price were those who would be able to still afford to go on holiday even if the price of flights increased substantially, whilst others did not travel a great deal due to other considerations of time, money or desire and so would not be affected by price either.

One of the themes which emerged in the discussions was social and peer pressure to go away more often, to keep up with others who were travelling frequently; "You always know someone who is jetting off everywhere, every weekend they are going and doing something really crazy, those 99p flights" (Conrad FG6). On the other hand, others clearly did not feel this pressure at all, and were unaffected by the price of flights. My impression is that this may be related to age of participant to some degree, those who are younger and have grown up with low-cost airlines perhaps feel this pressure more. More research is needed to uncover the differences in people's social susceptibility to increasing travel. Gössling has suggested that "within the industrialised countries, a small group of long-distance travellers seems to account for most of the energy used and travel surveys indicate a strong correlation between income, education and distances travelled" (Gössling 2002c). However, whilst this group may be frequent long-haul flyers, perhaps younger people with less income are still taking frequent short-haul trips which is also unsustainable.

4.11 - Table 11: Who Will Curb Air Travel?

Participant	Q11 Who do you think will or should take the lead in curbing the increase in air travel?
Peter	*I think the green lobby has pretty much won the argument in a, well there's no question that it's terrible for the environment, there's no question that it increases global warming, there's no question that flights will increase if no action is taken. So I think that's already been won, it just needs to be transferred into legislation as quickly as possible.*
Auberon	It will either be by the EU if enough green parties get elected into the EU, or it would be that oil runs out, and it's too late anyway, prices go up anyway.
Penny	*Government and different types of government like the EU, within the context of a broader policy on other things than air flights. Not in the sense of abdicating personal responsibility because I think we have to be ready to pick it up and run with it, but we can't do it as individuals.*
Amanda	So for me the changes have got to come in changes in the law and that's got to come from the government. And the government aren't going to do anything until there is more public demand. So I think it's got to come from the environmental charities that have got to try somehow to raise awareness and make people think about what they are doing.
Ivan	*Me. Seriously. I think its individuals at the local level take the lead.*

Most participants looked either to the national government or the European Union to take the lead here on reducing unsustainable levels of flying. Only a few recognised that it was also their own individual responsibility to take fewer or shorter trips. Several commented that they did not believe that the government would introduce any curbs on aviation without public

pressure, but clearly if most do not see reducing emissions from air travel as a personal responsibility they are unlikely to lobby government to introduce such changes.

McDaniels et al, in their study of perceived environmental risks of global change, found that lay people rated the causes and the consequences of environmental changes differently and that this had a bearing on political responses to the problems. For example, travel, one of the main causes, was rated as much less risky for humans and other species than climate change, the consequence. They argue that; "the less direct the perceived link is between the causes and the consequences, the weaker will be the political response. We also speculate that the greater the perceived benefits derived from the causes, the weaker will be the resolve of political processes to address the concern" (McDaniels et al. 1996 p171). In this study the perception or knowledge of the environmental impacts was either low, or other positive factors led people to override these environmental concerns. Therefore, the political will to address the situation is at present absent. In a recent *Independent* editorial on 10 ways to save the planet, curbing the growth in cheap flights was described as "a vote loser and a tough choice" (Independent

4.12 - Table 12: Media Responsibility

Participant	Q12 Do you think the media has any responsibility to encourage people to travel more sustainably?
Cynthia	*Free flights for Sun readers you mean!*
Penny	Finding interesting and funny and sexy ways to talk about the environment is going to make it turn up in the media.
Adam	*I mean the travel pages already have their bits on green travel and they already talk about some of these things. But of much greater importance are the special offers and the advertising and the fact that they get advertising from the airlines and the tour companies.*
Phil	Most of the travel articles talk about far flung places generally, so that involves taking a plane generally. So I guess on the whole they promote air travel.

A large amount of cynicism was displayed by participants in response to this question; many felt that the advertising revenue derived from airlines and travel companies and selling papers on the back of 'free flights' offers meant that the media was likely to continue to promote travel heavily. A couple of respondents, however, mentioned that they had noticed that 'free flights' offers seemed to not be as common recently as they had been and that there are now in some of the broadsheet newspapers columns on sustainable or green travel. This is a move towards bringing awareness of the impacts of travel but it is not present in the most widely read

newspapers. One participant mentioned that newspapers seemed to be better at addressing these concerns than broadcast media.

<p style="text-align:center">4.13 - Table 13: Environmental Groups</p>

Participant	Q13 Do you think that green and environmental groups do enough generally to highlight this issue?
Scarlet	*I think they do but it's just a question of how much they get through; it's a media question, of what's in the news at the moment and how fashionable it is. Until it becomes a bit more fashionable I don't think it will have any effect.*
Penny	Well presumably they are doing what they can so it seems a bit harsh to say that they're not doing enough.
Michael	*Nope, I've never seen anything.*
Andrew	I think this goes back to the fact that there's not this mass buy in, there wouldn't be any popular support at the moment if Greenpeace were to chain themselves to the runway at Heathrow. It would be 'bleeding beardy wierdy's stopping me going on holiday, run them over!'
Conrad	*I've never seen it in the news or anything, that kind of stuff. I don't know where Greenpeace are, you don't hear Greenpeace campaigning about it.*
Ray	I think we all feel a bit constrained because we all want to get on a plane ourselves.

This question is at the heart of my hypothesis about environmental groups; are they informing the public about the environmental problems associated with air travel? Most respondents felt that they had not seen or heard anything on the issue from any of the green or environmental groups, confirming one of my research questions that green groups are not campaigning strongly on air travel and climate change. Several people mentioned that there would be opposition to such a campaign; that it would be unpopular with the public. Others suggested that problems of limited resources meant that environmental groups were unable to focus on air travel and climate change, whilst a small minority thought they were doing a good job but were unable to disseminate these messages because of a lack of interest in the media. Two people also mentioned that green groups might feel as though they were being hypocritical if they took a stance on air travel.

Participant	Q14 Is having a holiday away from home a right?
Anna	*No you can't really argue that it is a right in a way. It's not an essential need. It is a luxury.*
Auberon	If the reason you don't take a plane is because of increased prices then people wouldn't consider it a right, they would just consider that they couldn't afford it.
Julie	*Yes I do consider that a right. I think in countries where people can't do that we consider it terrible that they can't leave the country, we consider that a wrong.*
Brenda	I think we have very few basic human rights and I don't think having a holiday is one of them.
Adam	*I think it is, just like it's a right to have enough food to eat every day, doesn't mean that everyone has it. But it ought to be there.*
Conrad	*I guess it's just a benefit that we in the first world have. It's not necessarily a right; it's just an advantage of living in the first world that we can actually go away. There are lots of places where you can't obviously go on holiday.*

This question stemmed from Hall, who suggests that: "many people now take mobility as a right – the freedom to travel from one place to another, the freedom to cross borders" (Hall 2005 p344). Focus group participants were mainly of the opinion that a holiday was a benefit or a luxury rather than a right, but a significant minority did feel it was a right. There was a split between the green and non-green groups here, with most of the people who thought it was a right being in the non-green groups. One participant mentioned specifically the right to 'escape' from your everyday circumstances. This question generated a great deal of debate within the groups, with people likely to disagree with each other over the issue.

The idea of travel as a luxury or benefit that was not universally available to all was raised by a few participants. How people feel about this issue is crucial to how willing they might be to reduce their travel to sustainable levels of mobility. As Hall argues: "the realisation may be dawning that such mobilities may come at an enormous cost at the global scale in terms of energy use, pollutions and greenhouse gases" (ibid). Some respondents seemed aware of this but others just considered that it was a form of civil liberty to be able to travel where they wanted.

Participant	Q15 How do you see the future for our use of air travel?
Felicity	*Particularly if you say, that lovely place that you've visited, if you and your mates carry on doing that it's not going to be there.*
Anna	I think people are more and more receptive to the idea and will self-police themselves in some way, thinking I'll treat myself to this but I won't do that and I'll be more environmentally friendly.
Jasper	*I think it will (continue to grow); my scenario is not yet, not until it's really pushing it, 70 years time or something. There will be more and more until the point that we just can't anymore. Until we have to and then it's too late.*
Katrina	Well, it can't really get much more; I mean there are planes everywhere.
Andrew	*I think it's going to change quite dramatically. I think people are going to get priced out of it, it's completely unsustainable these bucket prices. I can see it becoming a much more elitist thing.*
Adam	*I think particularly short haul is going to be like getting on a bus used to be really.*
Phil	*I think it's going to get more prolific. I think there are going to be more planes and more people flying.*

Most people thought there would be large increases in air travel over the coming years. Some foresaw some problems with the airline industry which might affect patterns of travel such as difficulties with security of planes or plane crashes or that there would be a large rise in oil prices or that fossil fuels would run out. One participant hypothesised that air travel would become more of an elite experience in future, with prices and quality going up so that less people could afford it. A couple of people thought that air travel simply couldn't get any bigger as there were already so many flights or that it could be curbed but that it would be difficult. So, here is a pessimistic picture, at least in environmental terms, of a continual growth in air travel leading to greater and greater problems of climate change.

Chapter Five: Conclusions

This research has attempted to examine a frequently overlooked or 'organised out' (Frändberg 2005) issue in the debate on sustainable tourism; climate change and air travel. The researcher examined what different groups of actors, namely 'environmentalists' and 'non-environmentalists' would think and feel about tourism travel and sustainability. The research also aimed to see whether those environmental beliefs would affect their actions in any way. My hypothesis was that environmentalists, despite their greater level of awareness and understanding about environmental problems such as global warming, would not actually behave differently. In this particular case the behaviour was air travel, which as a significant and growing emitter of carbon dioxide and other pollutants, is a major contributor to climate change.

Some of the limitations of this study relate to the nature and type of the focus group sessions: these had fewer participants than is often the case and as mentioned earlier there are both strengths and weaknesses of the purposive sampling strategy used. Longer sessions would have perhaps generated more in depth analysis of some of the issues, but time constraints in this study were such that this was not possible. Further research could concentrate on a number of key areas; the reasons why some people are relatively unaffected by cost as a factor in travel, how image and cultural difference in destinations encourage greater long-haul flights, whether and at what levels a tax on aviation fuel would reduce tourism mobility. Another crucial area to explore is that of carbon rationing; one proposed solution to the problem of climate change which received a surprising amount of approval by participants in this study. Whilst this study has concentrated on the impacts specifically of air travel, as substantially the worst culprit in terms of climate change emissions, other forms of tourism transport such as trains, buses, ferries and cruise ships do also contribute to air pollution.

From the evidence generated by a series of focus groups with 'green' and 'non-green' groups it appears that 'green' groups are not necessarily any more likely to have more sustainable patterns of tourism travel. This presents a difficulty, for if environmentalists are to be able to persuade people to adopt more sustainable travel habits, they must be able to act in such a way themselves. Without this commitment and buy-in from green groups, it will be difficult to

widen out the debate to the general public. As one of the focus group respondents neatly summed-up:

> "I think a lot of the people who are talking about climate change have some quite big contradictions in their lifestyle as well and that's something that needs to be picked up on. And that's the starting point in terms of the individual; we're talking about climate change but without making any real changes to our lifestyle. So if people who are aware aren't capable of it, then trying to inform people about the consequences of energy use, flights in this case, and get them to do something about it is quite a tough call. It's all about what people can do, rather than what they know" (Christine FG6).

This ties in with research by Stoll-Kleeman et al, who found in their study with focus groups in Switzerland, that whilst participants regarded low-energy futures as highly desirable "almost nobody was prepared to take the kinds of personal actions deemed necessary to achieve such a future, based on mitigated climate change" (Stoll-Kleeman 2001 p110). As Healy notes, tourism landscapes, including the atmosphere, are subject to the classic problems of 'the commons' (Healy 1994). In relation to air travel this means that those who do use aviation do not pay for the economic and social cost of their travel (in this case the consequences of climate change) and therefore have little incentive to alter their behaviour.

As Hillman identified there are a number of difficulties, barriers and excuses to adopting a more sustainable pattern of travel, many of which emerged during the focus group sessions (Hillman 2004). A key problem was the artificial cheapness of flights, due to what is an effective subsidy by the tax payer to the airline industry through lack of tax on fuel and other benefits amounting to over £7 billion a year (FoE 2005). Cheap flights were in many cases a lure too hard to resist for many, even though they felt guilty about the environmental effects caused. Clearly putting a tax on airline fuel in line with all other forms of transport, if there were political will for this, would be likely to have an instant effect in reducing the number of flights taken, especially in the 'bucket price' sector.

There is some doubt over whether this is politically likely however, especially given the current government policy for substantial expansion in air travel. Given the fairly low levels of awareness of the environmental impacts of air travel, and therefore the lack of pressure on the government to alleviate it, political responses to the problem may be tokenistic. As McDaniels argues: "the result may be a tendency for 'symbolic' action that gives governments the appearance of responsiveness without having much impact" (McDaniels et al. 1996 p171).

This may perhaps be seen in the UK context with the aforementioned government commitment to carbon offsetting (DEFRA 2005), which does not commit to a reduction in travelling by the government, but to a measure which "can make only a small and possibly unreliable contribution" (Hillman 2004 p115).

The artificial cheapness of flights has also meant that overland travel has been largely replaced by domestic flights in the UK, which also increases people's expectations of how far they can get in a set period of time. This was mentioned by several of the focus group respondents. Patterns of holiday taking have changed with many 'upping the ante' with many more visits to friends and family being possible due to the cheapness of flights. One respondent mentioned that it was as cheap to fly between the UK and Spain as it was to travel from Bristol to York by coach. The excessively low price encouraged that person to make 6 trips between Spain and the UK in a year, which were unlikely to have been undertaken if prices were higher. Many trips are now promoted as a 'just for the day' journey to such destinations as Iceland, a round trip of 6 hours. This leads to a culture in which air travel is: "no different to hopping on a bus" (Adam FG4). The underlying motivations as to why we are travelling more and at what environmental and social cost are left unexamined by society.

On the other hand a significant group of people felt they were unaffected by the price of flights, either because they were wealthy enough that they would pay anyway, were unwilling flyers, could not afford any more travel or they simply had a pattern of having a major holiday per year and were not persuaded by cheap flight promotions to take any more. Further research in this area would be beneficial to outline the characteristics of this sector and see why cheaper travel does not appeal and whether any conclusions can be made which might assist in persuading those who do fly more to reduce their air travel.

Most participants in the focus groups rated themselves surprisingly highly on the scale of environmental interest, on the mini-questionnaire. Nobody categorised themselves as white, only 2 'pale green', 12 as 'medium green' and 8 as 'dark green'. As mentioned earlier there may be a number of reasons why this is the case. As other researchers have found, an interest or awareness in environmental issues, does not necessarily translate into behaviours which minimise impact on the environment (Stoll-Kleeman et al. 2001, McDaniels et al. 1996). It seems likely that there may be a similar contradiction between a person's view of air travel and climate change as there is between car travel, with its consequent problems of congestion

and pollution, and the enjoyment of natural environments. Shaw & Williams describe this process in a study of tourism in Cornwall: "There is, then, a classic contradiction between a high value placed on the environment and an equally high value being placed on personal mobility by car which causes many of the problems of congestion and possible environmental degradation. Tourists to Cornwall therefore represent a double-edged weapon in the conflict between development and the environment" (Shaw & Williams 1992 p56).

However, there were some individuals within the focus groups who categorised themselves as 'dark green' or strongly environmentally motivated and they exhibited a much stronger propensity towards a sustainable level of air travel. There was a substantial difference in the amount of flying undertaken by these people compared to those who rated themselves as 'medium green' or 'pale green'. Further research could look in more depth and breadth as to how people categorise themselves in terms of their level of environmental interest and how this relates to sustainable or unsustainable patterns of travel behaviour. The extensive interest shown by participants in the study and the high degree of guilt felt over flying, shows that people may be receptive to messages aimed at encouraging them to adopt more sustainable travel habits. How deeply felt this environmental value may be, will surely be increasingly questioned as the impacts of climate change become more evident. As Holden states: "The extent to which people will be willing to forego the lure of exotic locations because of the effects of flying upon the atmosphere will be a thorough test of the depth of a society's environmental ethic" (Holden 2005).

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List of appendices

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Appendix 1: Group Agreement for Maintaining Confidentiality
(adapted from Berg 2004)

Group Agreement for Maintaining Confidentiality

This form is intended to further ensure confidentiality of data obtained during the course of the following research into tourism travel and the environment. All parties involved in this research, including all focus group members, will be asked to read the following statement and sign their names indicating that they agree to comply:

I hereby affirm that I will not communicate or in any manner disclose publicly information discussed during the course of this focus group interview. I agree not to talk about material relating to this study with anyone outside of my fellow focus group members and the researcher.

Name: _____

Signature: _____

Date: _____

Appendix 2: Schedule of focus groups

Focus group 1 (Friends) Pilot   19th October 2005

Felicity
Peter
Anna
Saul

Focus group 2 (Sustrans)   24th October 2005

Jasper
Cynthia
Auberon
Scarlet

Focus Group 3 (UWE Staff)   25th October 2005

Penny
Julie
Erin
Katrina
Katherine

Focus Group 3 (National Trust Staff)   7th November 2005

Michael
Andrew
Adam
Brenda
Morris

Focus Group 5 (UWE Students)   7th November 2005

Phil
Sven
Amanda
Conrad

Focus Group 6 (Schumacher Society)   9th November 2005

Christine
Ray
Ivan
Matthew

Appendix 3: Moderator's Guide for Focus Groups

Checklist

Confidentiality statements & Mini questionnaires
Tea & Cake
Video camera & tapes (battery)
Mini-disk player & tapes (battery)
Meeting room booked
Pens
Water
Drinks afterward

Watch out for:

Dominators/Quiet members
Stages: forming, storming, norming, performing, adjourning
Note people's non-verbal responses
Allow/encourage short silences
Draw links/probe further
Steer back from tangents
Watch out for contradictions – probe
Devil's advocate

1) Introduction:	Thank yous Who am I? What is my research about?
2) Paperwork:	Confidentiality forms Mini-questionnaires Permission to audio and video tape the session
3) Rules of the session:	No right answers Say what you feel Don't need to agree or disagree with group Please let everyone have a say, don't talk over each other Explain mine & Steve's roles
4) Discussion:	I will ask questions but will not be joining in or offering my opinion. Please ask if you don't understand a question or would like some background info.
5) Opener:	Which do you think produces more CO_2 globally? Cars or planes?

Questions

6)   What positive impacts do you think tourism can have on the environment?

7)   What negative impacts do you think tourism can have on the environment?

8)   Do you ever consider the environmental impacts of your travel when booking a holiday? Do you do anything differently?

9)   What do you think about carbon offsetting? i.e. giving a donation to plant trees or other measures to lessen the CO2 impact of your flight? Has anyone done/thought about doing this?

10)   Is there anything which would persuade you to travel less or alternatively more by air?

11) How important is the image of holidays that you take to you? Are there some places which you would not consider going because of image? Do you think there is a relationship between the distance travelled and the more trendy the holiday?

12) How would you react if carbon rationing were introduced? (i.e. everyone would have a personal ration of CO_2).

13) What about if aviation fuel were taxed? Currently there is no tax on air fuel – how would you feel if it were introduced?

14) Do you think that the increase in air travel can/should be curbed?

15) How much does price affect how many flights you take?

16) Who do you think should/will take the lead on trying to reduce the amount of flying which is done and is it necessary?

17) Do the media have any responsibility to encourage people to travel less? How much do they influence people? (i.e. holiday programmes, guide books, travel writers etc.)

18) Do green/environmental groups do enough to highlight the impact of air travel on climate change?

19) Is it a right to be able to take a holiday?

20) How do you see the future for our use of air travel?

Thank you all for your time – is there anything else you would like to add?

Appendix 4: Mini-questionnaire

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Tourism Travel and the Environment Focus Groups

Name:

Age:

Gender: **Male:**   **Female:**

How would you describe you level of interest in environmental issues (please circle):

White   **Pale Green**   **Medium Green**   **Dark Green**
(no interest)   (a little interest)   (quite a lot of interest)   (great deal of interest)

How many hours have you spent in air travel this year (jan – dec 2005) (approx.)?

        0-5   **6-10**   **11-20**   **21-30**   **31+**

Is this typical?   **Yes**   **No**

If not, please estimate how many hours of air travel per year is typical for you:

        0-5   **6-10**   **11-20**   **21-30**   **31+**

Appendix 5: Example Transcript

Focus Group Four: 7th November 2005   **National Trust**

Anja: *I'm Anja Dalton in case anybody here doesn't know me, and I'm volunteering here with Michael. I'm also currently studying for my Masters in Tourism and Sustainability. The research for that is a series of focus groups, looking at climate change and air travel and this is my fourth one. So, basically, I've brought everyone together today to talk about those issues, not in a National Trust capacity, but as individuals. We'll kick off with these; the first one is a confidentiality statement just to say that outside of the group you won't talk about it. I don't think it's a very sensitive topic, but just in case anybody feels they wouldn't like what they say passed on. Thank you. There's another one coming around now, which is a very small mini-questionnaire and that's just to rate your level of interest in environmental issues and the amount of air travel that you do.*
Explained rules of session.

Anja: *So just to get us started off, a little opener, which do you think produces more CO2 emissions globally, cars or planes?*

Michael: I think its aircraft.

Adam: I think it was cars, but I think I've heard in the media that it's now aircraft.

Brenda: I think its cars.

Morris: I think its cars but aircraft do it at a higher level.

Andrew: I'm a car man.

Anja: *It is actually cars at the moment, but they are predicting that within the next 5 to 20 years that aircraft emissions will overtake that of cars. And as you mentioned, the impact is greater, it's up to three times greater because of the level at which the pollutants are emitted. At the moment it is still cars though.*

Anja: *First of all, what positive impacts do you think tourism can have on the environment?*

Morris: There's an economic impact for jobs. Tourism is the world's number one global industry or employer, so there's certainly an economic spin-off.

Andrew: Yeah if it's directed properly and the other thing is from an environmental standpoint it can bring people into contact with environments and cultures that they wouldn't normally have any contact with. Thereby generating a sort of commitment to preserving or enhancing that culture. So it's not just oh something happens in Zimbabwe, who cares type of thing.

Michael: I think there's an issue of when people are on holiday, they're of a different mindset, and they are more open to learn. And we've experienced this with projects in this country, where people are more environmentally aware when they're overseas but then when they've come back it's generated an interest.

Brenda: I think it can bring resources and facilities in a place which are then available for local people as well. So if the standard of living, access, cultural resources etc improves for visitors then it should be there for local people.

Morris: And infrastructure for tourists can serve local people as well, but again it's got to be done properly, planned properly.

Michael: I think it plays on people's consciousness and then you can have a direct impact. Mainly in a fundraising aspect where people may feel inclined to donate or offer support. They might not have been aware of an issue and might only become aware of it because of their tourist's activities.

Adam: I think it works the other way as well, locally. I think people are aware of tourism providers in their own locality. Developing, just as the National Trust would do, developing services in their locality, ways of managing the way that they conduct tourism and people get to hear about that through the media. I think sometimes when you go away on a foreign holiday, because of your particular mindset, you might be less open to all of that, rather than whatever drove you to take that holiday. Whereas if you see developments at a local level, being aimed at the wider tourist audience, that increases awareness.

Anja: *What about negative impacts, what negative impacts do you think tourism can have on the environment?*

Michael: Huge amounts.

Morris: Huge.

Brenda: It can really crush local individual cultures, because of trying to give tourists what they are comfortable with on every aspect of their holiday.

Andrew: I agree, I think local distinctiveness is the first thing to go with mass markets, with mass market tourism. It does suppress that.

Morris: I think often as well with mass market tourism, the money doesn't get back to the local people at all; it's all been siphoned off to Thompson's or whoever the big holiday company is.

Adam: In an extreme case, it can drive the local populous out of the local area that they've been living in, in terms of property prices, in particular second homes, weekend tourism in this country. That's right at the extreme end of that really.

Brenda: It can heighten problems that may already exist in an area, so if they are short of water, for example, developments are made for tourists, which really don't take enough account of that. So problems for the local people just go on getting worse, with nobody putting it right.

Morris: And you can imagine that if you've got a place and you bring in loads of tourists, you can destroy what you've come there to see. I went to Machu Piccu and everyone went fantastic, but if you're there, if you're there anytime between 10.00 and 4.00 you could be in Piccadilly Circus, it's just absolutely chocker with people. And you can't appreciate what it is that you are seeing as much as you otherwise might be able to.

Andrew: I think indigenous populations are affected by tourism as well, because they do take a lot out, as much as they are levering in. If you take the experience of people who live there 12 months in the year.

Adam: Spain is a fantastic example, of real positive economic benefits for the country, but the negative impact on some of those communities on Costa Blanca, which might be 100,000 strong, 90% ex-pat, non-Spaniard who have introduced their own languages into the culture, have introduced their own supporting infrastructure from shops and restaurants and things like that. And now actually local democracy, are run by German speakers or English speakers or French speakers and where the Spaniards are marginalised through their own democratic process in their own country. I think that's a fascinating example of where unplanned tourism has led one particular country. And obviously it's had huge benefits; it's the biggest industry in the country as well, brought a lot of wealth as well and changed the face of the Spanish economy.

Brenda: I think it does a lot to cement stereotypes as well because visitors are presented with dancing or examples of local culture, smashing plates or whatever they happen to be watching. It gives a very minimal view of a people, so the stereotypes you go with are just re-inforced which is a dreadful thing to happen.

Anja: *Does anybody think about the environmental impacts of a holiday when you are booking a holiday? And if so, do you do anything differently. Is it something you consider at all?*

Morris: Yeah it's one of those things that I consider, so you think I'm flying to Europe, and you think, Crikey, that's bad that's probably as much CO_2 I'll be generating from driving my car in a year. But then you see £5 for a flight or I could drive and it would be £150. I'll fly. There is the economic incentive for you to swallow whatever worries you have about the environment, that does blunt them. And I think you do do that.

Andrew: I think it comes back to what you were saying about money being siphoned off to the tour operators or whatever. There was a think in the paper about flights into Cornwall, them introducing a levy on flights to Newquay airport, £5 per passenger. If you knew that £5 was going to offset the environmental impacts of that vehicle then I think most holiday makers would be prepared to pay it, it's just knowing what's happened to your money. The amount that comes out of your holiday cost is going to be re-invested within the particular resort, or took account of local environmental impact, then I think it would be welcomed; it's just the not knowing.

Brenda: I don't pay it any attention I'm afraid.

Michael: And me too, I'm the same.

Brenda: I tend to think, I mean my hours in the air on that form you gave us came to six in a year, so I'm afraid I think well I hardly register in world terms. So therefore I don't need to bother about it, not me, not now, that's just it really, I don't need to bother about it.

Adam: I agree with you, I have to say that I wouldn't be put off travelling to somewhere I wanted to go to. When I read the travel pages of the papers at the weekend, if there's a new environmentally friendly resort somewhere then I do notice that, and then I suddenly realise

that I can't afford to go anyway and that's the end of it. But there's some positive stories about environmental or sustainable tourism obviously attract me. But economically….

Brenda: I think I'm quite cynical about those anyway. Ecotourism and agri-tourism and that sort of thing – I think they are just a gimmick.

Andrew: And I think there's a premium attached to them price wise as well.

Brenda: Mmmm.

Morris: But you are paying for not just the environmental benefits or lack of drawbacks in some of these eco-lodges but what you're actually getting as well is what you want to go there in the first place for anyway, which is isolation.

Adam: Yes.

Morris: Tranquillity.

Adam: Contact with local people, if you're staying in their homes.

Morris: You're not being mobbed into a big hotel….

Adam: Yes that's true.

Michael: Club Brit.

Morris: So you're getting the environmental benefit, but you're also perhaps getting some of the tourist benefit that you wanted in the first place.

Adam: I agree, I think the agri-tourismo thing in Italy has been a really positive thing, because it's meant that huge farm buildings in Italy, and I'm sure other countries do similar things, where they might build a big hotel to house all those tourist, they are more disparately spread in existing buildings that have been renovated and given another life, through the benefits of tourism. And yes you do get everything that you want, in terms of meeting the local farmer and eating the local produce and some of those other things that you might want to go on holiday for.

Andrew: I think the interesting thing is that elsewhere in the consumer market places, there has been a move towards having a more environmental conscience, so all the supermarkets and all the shelves have got a free from or free range or free range and organic and that share is getting bigger and bigger. But in the holiday market place the big operators, the Thompson's, the Airtours etc, I don't know if it's because of demand, but they are not offering that as an alternative. They are just offering the bog standard package holiday. So the question over whether we're influenced or if that's a factor in our decision making, I think its still so niche. I don't think it pricks the conscience enough because there's nothing out there.

Morris: I think the reason why its niche, is because it's more expensive in general. For those package tour companies that you're talking about they make their money from….

Andrew: Volume.

Morris: Yeah, from the people who don't have a great deal of cash, they can get away and get their two weeks in the sun. So if you say, we'll charge you £2-300 extra, you're pricing out your own market. You'll end up with middle class tourism, if you're middle class or upper class you can go away and if you're not you can't.

Anja: *What do you think of the idea of carbon offsetting? I don't know if you've heard of this, but the idea is, that it's a voluntary donation which you give to a charity, and the idea is that you offset the carbon emissions generated by your flight. So they will do things like planting trees which will over their lifetime offset the damage that you are doing. Has anybody heard of that, or done that or what do you think of that as an idea?*

Michael: Never heard of it.

Morris: BA are offering it at the moment aren't they?

Anja: *Some air companies are, yes*

Morris: But it's not been taken up very well I gather.

Anja*: I don't know about that.*

Andrew: So is it when you book your flight, that you are offered that?

Morris: Yes, they offer it, pay an extra £20 or so and they will do some kind of programme with carbon. The problem with those kinds of things is that people say oh well plant a tree, but you plant a tree in the wrong place and it can be just as damaging as anything else in environmental terms. That's the problem with these things; I would want to have confidence that they weren't giving money to any old person to stick a tree any old place. You've got to think about where you're planting it, what you're planting, why you're planting it.

Andrew: I could see it would be absolutely appropriate if it were for a half empty flight across the Atlantic in first class or business class or whatever but one of the advantages I think about the low-cost airlines is at least they are going out full, there are no empty seats. And I can totally see that you should surcharge somebody on a half empty flight across the Atlantic on a 747 paying premium price, but I do think the low cost airlines are at least filling up the planes.

Adam: But if they are filling them up then the more successful and the more successful you are the greater you increase your supply, the more flights there are. Whereas if you have half empty flights, they can't afford to run them, you might actually cease running them.

Brenda: I don't think that's the answer. I don't see why I should pay for a hugely profitable company do be doing something that they ought to be doing themselves.

Michael: And be visible.

Brenda: And be seen to do it. I think carbon trading; the business of carbon trading is just so preposterous to me. The idea then that we as individuals can and should do anything by way of giving to charity is just ridiculous. It's tackling the problem in the wrong way. If you want

companies to reduce carbon emissions you ought to force them to do it. So you force them to do it and then my responsibility is something different.

Morris: I mean the opposite side to that and why governments don't do that is they say well if you want to establish a petro-chemical company in this country we will make you do things that will cost you hundreds of millions pounds more than they would do in Portugal, then hey these are big multi-nationals and they will go to Portugal. These are the issues that governments are faced with.

Brenda: Yes I know that, but I still think it's not the answer.

Michael: It doesn't have to mean, we know of the FTSE index, there's the top 100 companies to work for isn't there, on Corporate Social Responsibility, where very many of them talk about environmental impact and they might do projects if you like that are quite low level in order to generate publicity for that. To back up that policy, so maybe it's at that level that the lobbying takes place, and if the lobbying is sufficient enough to make the decision internally, maybe because of public pressure, I don't know. But there's not enough public awareness, I mean I've learned a lot today, there's not enough public awareness.

Adam: I doubt whether it would be very successful, carbon trading, in the sense that when you go on holiday, you're choosing to go to a destination, and if you're paying a tax that isn't in any way related to where you are going to, the region you're going to then I wonder if people would voluntarily choose to do that. It maybe would be more successful if it was linked in some way to your destination. In that, if a tree was going to be planted, then it was planted in your destination. I know we're talking about a global problem not related to the destination, but I wonder if people perhaps in their mindsets, you might find it easier to relate it to where you are going to. So you can picture in your mind what you are contributing. But I think it's quite a hard one really.

Morris: They're quite contentious aren't they? I remember one of the Balearic Islands had an entry tax, an entry tax on tourists, ostensibly for environmental reasons. And a lot of the tourist providers and hoteliers they were up in arms about it.

Adam: Going back to Andrew's example, Ryanair are refusing to fly to Newquay, they cut 50% of their flights on the spot because they said that the reason we fly to Newquay is because it is low cost. If you start adding £5 each way, you're affecting the demand for our service, we can't do it. I heard, what's his name, Michael O'Leary on the radio a few months ago taking about it.
Michael: Who pays that's the question? The point is I would get on a plane, not thinking, not giving it a second thought and you need to get it into public consciousness.

Adam: But you were asking us about voluntary donations.

Anja: *Yeah, I'm not suggesting, there's obviously lots of different ways in which this could be tackled. One suggestion is that people make a voluntary contribution to offset that. The government is doing that next year for all government related air travel and they issued a press release in July saying that 'we think that it would be good for customers to do this'. But I think there is a very low level awareness about it.*

Andrew: I think it's a shame, I think it's very tokenistic that approach. I think it shies away from tackling Corporate Social Responsibility and puts the onus back on the consumer.

Adam: Although we, at all airports we pay a series of taxes and I'm sure anyone knows what those taxes are, where do they go? I mean you buy your 99p flight with Easyjet online and it says 99p each way and then the total cost of the flight is £56 and you don't know what these are. I wonder if perhaps we could just throw another one into there because nobody knows what they do. But even if we do collect all of this money will it be of any benefit really? In a sense, will it be of any benefit or should we be doing the opposite and just travelling less? I don't know, paying money into a scheme doesn't seem the way of solving problems almost.

Morris: And in a way…

Adam: It's assuaging conscience.

Morris: And what we're saying is we're not going to manage growth in air travel at all. We'll deal with it by not trying to manage it and just by letting it grow as it wants to grow and we'll just tax a few people who happen to use it.

Brenda: Yes.

Morris: It's not a proactive or well thought out policy in that sense is it?

Adam: Getting a bit fatuous, I am encouraged by global warming means that the South Coast has the same temperature as the Mediterranean, we'll no longer need to fly to the Mediterranean because it will be Sahara like and nobody will want to go.

Brenda: Head in the mud!

Anja: Is there anything which would persuade you to travel more or alternatively less by air?

Morris: It's difficult with all these things to do with the environment, you know you shouldn't have a big car, but hey I love my two litre sports car. You know you should be careful about flying and how often you fly and only fly when it's necessary but hey I need to get up to Scotland now and it's only going to cost me a fiver, I'll fly. And everyone is beset by double standards, aren't you all the time, you're beset by it. It's difficult to think of anything which would tip your mind towards the environmental side, rather than the convenience side.

Brenda: If air travel became pleasanter then I would be tempted to fly more, but it's so horrible that I don't want to fly any more than I have to.

Adam: I find cheapness means that I do fly more than I did, which means that if flights became more expensive again then that would have an impact.

Brenda: It's a question of the time that you have available, there's that said. I also like rail travel, but that's so expensive. I mean I would go by train a lot more if it wasn't that much dearer.

Andrew: It's these low prices. I think Scotland is a good example, there used to be a time when National Express was the cheapest option and you just had to grin and bear it and realise that you were going to be on a coach for 12 hours. But now flights are the cheapest option for those kind of internal routes. That's a very attractive proposition.

Morris: And you're not paying the full environmental cost of course, you're not paying the full economic costs for flights. In that if you take the bus for example then the fuel is taxed, there's road tax, there's all sorts of taxes. Fuel isn't taxed, aviation fuel isn't taxed. So there's a whole raft of things that you could maybe look at and say hmm maybe they should be. Why should aviation fuel not be taxed when every other fuel that anyone uses for anything is?

Andrew: I think the thing for me in the last few years with air travel is that it's become a spontaneous thing. You can decide you want to fly from any range of provincial airports, Bournemouth, Southampton, Bristol, wherever, pick a destination and kind of do it on the cheap. And that's completely new, that's a new phenomenon and it's become a spontaneous thing a weekend away.

Adam: Going back to what we were saying about the benefits of tourism and understanding other cultures and strengthening links and that sort of thing, with globalisation and the internet and freer movement of people, people working in other countries, that huge amount of information that comes with all of this stuff. That allows you to think 'actually I'd like to go to Siena because I've heard of Siena now and I've met people from Siena and I've read about Siena on the internet. All of this interchange and exchange just makes travelling all the more inevitable that people will want to do more and more. And you can't hold back the information exchange and the way that that works, so I don't know how we're going to be able to decrease travel, the only thing we can do is to find better ways of doing it. I mean I've never heard of; do the people who make airline fuel make green alternatives? Does unleaded exist for airplanes, does electric exist for airplanes?

Anja: *At the moment it looks unlikely that there are any alternatives to conventional fuel for airlines. There are a number of alternatives for cars which are being researched at the moment such as hydrogen cells and bio-diesel, which doesn't emit any CO2. But they are very small scale and they are not fully operational. But apparently it doesn't look as though there are any alternatives, at least in a reasonable timescale for aircraft.*

Adam: Catapults!

Michael: The problem, what Adam said just then, more people want to travel, the predictions are saying the exhaust emissions will be bigger than cars in one year's time and it will be three times the impact because of the high levels of exhaust if you like. We know it's getting bigger, more people want to travel, the cost is coming down, the internet is making people more aware, and it is going to get much bigger than cars. So how can someone making a voluntary contribution to carbon tax make any difference? How can you feel that you are making any difference?

Morris: No.

Michael: I think it's got to be Big Brother, it's got to be.

Brenda: Yes I do.

Andrew: And generically you asked the question what would persuade us to travel more, well there's always been a certain British reserve amongst certain areas of the population about being a bit scared about going abroad. And in a sense the Euro has simplified all that; nobody has to worry about the money because it's all in Euros and these fish and chips in Spain. And

in a sense it's become, there are other things which have made it much much easier to go abroad. I'm absolutely staggered by the websites and as Michael said, places like lastminute.com make it so easy and attractive to go away.

Brenda: I'd be more inclined to fly more if I thought the companies had more of a conscience about what they were doing, rather than just out for profit in a very cut-throat kind of way, then I'd view them better. But at the moment I will give them as little of my money as I can. And that's my annual holidays you know, and that's that.

Morris: The other thing of course is that we can manage our, I say we as Western Europe and the United States, with the political will, we can manage our travel perhaps downwards. But isn't it in India air travel is increasing 120% a year. Just because of the massive distances involved in crossing that country and the greater level of wealth.

Michael: If you go really really into it, if we think it's to everyone's benefit that we're more of a global society because we respect each others cultures because we're exposed to it. It's only when you get limited exposure to culture that you don't understand it, so more travel could even break down nationalistic issues, false prejudices. So I think you should be encouraged, more travel is good. How you do it, is the issue. I think it has to be government; it has to be Big Brother. I can't see profit making companies doing it. And we all know how ruthless it is in the airline industry. A bit of bad media for anything and the walls come tumbling down.

Andrew: But I think it's interesting that both terrorism and DVT (Deep Vein Thrombosis), there's this potential scare to the airline industry, particularly on DVT, its amazing how the airlines really pounce on that straight away and try to snuff it out. The medical evidence on DVT, they are very ruthless, very highly protective industry. And like Adam said to threaten to boycott Newquay airport.

Michael: And the other thing that, because they are so ruthless, that's why we're tackling the problem now, they are ruthless profit-making monsters. Aeroplanes don't rest, the only time an aeroplane is making money is when it's up in the air, and so it's burning more fuel, more parts, they need to make it work. Airlines keep their airplanes operational as much as possible.

Adam: Because that keeps our seats cheap! That's the whole argument.

Michael: I agree.

Andrew: What would make me travel less is if somebody re-commissioned another series of that airline programme. Because I think 'God, somebody must have thought all publicity is good publicity' but there's nothing good about the airline in this programme. They just do everything wrong, they've got appalling customer services but yet still we use them.

Adam: Going back to what we were saying about fuel, I can't see any other way of trying to tackle this project. If you put money here there and everywhere in trees, in assuaging our guilt, I'm not sure that has much impact, people are going to travel more. The crux seems to be the fuel that's burning and its impact. When all cars were on 4 star and it was the early stages of developing unleaded, fairly quickly government said by X year, every car will be an unleaded unless you won't be able to drive on the roads. And all these Fords of the world, Volkswagen, all these huge companies, similar to airlines, powerful, very politically savvy organisations managed to turn around and in quite a short period of time and create much greener cars. And

I hear that, admittedly it is the car lobby, but people on the radio saying, our cars are green, even with unleaded petrol, our individual cars create very little pollution compared to when they were running on leaded. And I don't know whether to believe that or not really, obviously they are developing it to take it further so it can't be great yet, but if motor transport can do that, I don't understand why aircraft can't.

Brenda: Well they're not trying because they are making too much money; it's about profits on one side and about persuading people on the other end. But you can't do everything you want to do.

Michael: And some of them are going bust as well.

Brenda: It's about getting it into people's heads that the earth is not theirs for as long as they want to do whatever they want. So there comes a point where it becomes not travelling by air, whatever you might want to do as an individual you might not be able to do it because it might be harmful.

Michael: Theoretically it should be easier, I mean there are many more car manufacturers than there are aircraft manufacturers, many more. And the few colossal giants that build aircraft.

Adam: There's Airbus and Boeing basically.

Morris: But to be fair to both of those companies, they realise that if they make a jet that goes the same distance but with 20% less fuel, they know that all the airlines will snap them up. It makes economic sense for them because fuel is their biggest cost so they are working on they still use the same fuel, they still have whopping great engines, but they are lighter, more aerodynamic. So they are working really hard getting the damn things more efficient, carbon fibre instead of aluminium or whatever, but there's only so far they can go.
Brenda: Yes but it's not ethics that's driving that, its money.

Morris: No, it's definitely money.

Adam: But that drives everything, that drove cars and whatever. If we rely on ethics…..

Brenda: But this problem of sustainability is about that.

Adam: But I don't think it is going to be solved ethically. I think the only thing that will solve it is money, sadly.

Brenda: Hmmm.

Anja: *We better move on as I've got a few more questions folks, don't want to run over too much. On a money issue, what if aviation fuel was taxed. Would that have any impact on how much you travelled? Do you think that's a good idea or not?*

Andrew: I don't know about anyone else, but I think it's very attractive that you can fly around the world for less that £1,000, you can go to Australia for £600 and those figures have come right right down. I remember when I aspired to go to Australia and at first it was much more than that.

Adam: Brazil for £189 in the Independent at the weekend, return.

Andrew: It's kind of going back to that situation of, even Freddy Laker, but then Richard Branson muscling in and he could provide the cheapest flight across the Atlantic. Just so amazing, and you can shop for a bargain. I think if fuel were taxed it would change and it would have positive environmental impacts because it would be less people going.

Brenda: But couldn't you tax fuel without passing it on to the passengers though?

Morris: No

Anja: *No you couldn't no.*

Morris: I think that in some way the companies would always…

Brenda: But the answer for me is to not necessarily pass it on to the passengers. It's not my responsibility.

Michael: But you've got a couple of things haven't you? You've got it's a global issue, is everybody doing it at the same time. And you've got is it killing people's desire to travel by air, or managing people's desire to travel by air. Personally it's been over two years since I've flown and I don't like flying, but that's just me. So there are lots of people out of that market. But when you've got state sponsored airlines, of which many countries still have, there's a vested interest by the state in keeping that cheap. Why would they tax themselves? British Airways has been supported by the government very many times and bought them out of issues.

Andrew: But that wouldn't happen ad infinitum. There's not that many state owned airlines now.

Michael: But they still exist.

Andrew: But they're not being bolstered by the state, is that what you're saying?

Michael: Well some of them are. What I'm saying is that one country, or even Europe putting a tax on aviation fuel, if it's not global.

Morris: There are a number of practical issues as well; you'll get fuelling stops of convenience as well if you don't get fuel tax of the same amount applied across the board. If you land in Britain and you get a 10% surcharge and if you went to Paris and you didn't, then Paris would be filled up with aircraft coming in and filling up. And 10% of 10,000 gallons is a huge amount. So I think economically you could really influence where planes went if the whole taxing thing wasn't applied across the board. And also how do you reflect distance travelled because my feeling is that the airline will pass it on in ticket prices, any rise in fuel prices. But if you're going from London to Paris you'll pay an amount with a tax but if you're going from London to Los Angeles, 20 times as far, you wouldn't pay 20 times as much tax on that ticket, even though you'd be using 20 times as much fuel, so I'm not sure how that would work out.

Anja: *In the same way that car fuel is taxed…*

Michael: But you're not buying the fuel are you?

Morris: That's the thing, if you are buying it like in a car, you know how much the tax is. You know how far you are going and how much you are going to use, whereas if you have a plane with 300 people on and you're flying to Australia, it'll stop at Singapore. Now what's to say that the people flying to Singapore would be paying less, they wouldn't, it would just be shoved onto their ticket. So people travelling different distances would pay the same amount of tax. Potentially.

Michael: It all goes back to the fact that it's government's responsibility. So would we have demonstrable confidence in the government to put that tax in policies to reduce carbon emissions? You might get some of that. I think it boils down to do we travel more or do we travel less and making it more or less attractive.

Andrew: I think what's interesting for me is the correlation between air travel and road travel because there is so much speculation about what's going to happen to road travel. Where we're all going to have these wonderful things fitted to our cars which measure how much distance we've travelled and toll roads like the French auto routes and taxed according to how many miles we do. All of that seems to be happening and all going ahead at the same time as nothing seems to be happening with air travel. So the vehicle driver seems to be penalised more that the actual air traveller and that anomaly that they don't seem to be keeping pace with one another.

Morris: And the other problem is a flat rate tax passed on to the consumer will mean that if you are travelling first class across the Atlantic, you pay an extra £50 then so what. But if this is your one holiday in a year and it costs you £20 and they say it's going to cost an extra £50 you don't go. So basically its saying if you're poor you can't travel by air but if you're rich you can.
Adam: That's a good point. I'm still not clear what the purpose of the tax is really. Is it as a disincentive and the government does what it likes with it or is it that well we're going to fly and the economic impact of what we do is irrelevant, it's what we do with the money that's important. Whether we plant huge swathes of trees or whether we put lots of wind farms for example in the Bristol Channel, I'm not sure.

Morris: I'd feel much more confident about paying for it if it was definitely partitioned into we will use this tax to offset environmental harm rather than to buy a new Polaris submarine or whatever.

Andrew: It's the public consciousness though; I think public consciousness is more around airline security and the safety implications and (pardon the pun) that's hijacked the environmental side of it. It's thrown a curved ball over the last 5 or 10 years and people will say oh we'll pay to have a security guard in the cockpit or whatever.

Adam: Greenpeace need to change their tactics, Greenpeace need to hijack some aeroplanes, then it will become less safe to travel and then the environment will improve.

Michael: I absolutely agree with that – you've got to agree with that because we all know what happened after 9/11, with the big providers, no one would fly.

Adam: Briefly, but it picks up so quickly again.

Anja: *Do you think generally that the increase in air travel can or should be curbed?*

Morris: Yes you've got to manage it in some way. I don't think you can just let it grow exponentially until the market takes control because people, I think there may be a point in Western Europe where you get saturation point, but if you just leave the market on a world basis, which you would have to with air travel, to just continue growing and growing and growing. You may come to a saturation point in Western Europe and the States but China, India all those places, it's just going to keep going and you're just going to end up with environmental disaster.

Brenda: I think it can be and it should be but the answers are just very difficult to come by really. But the answer to your question is yes.

Adam: Well we've had Kyoto and although it's been seen as a failure in many ways, lots of countries have signed up to the start of the process, even though they know they might be disadvantaging themselves compared to competitors. And particularly the States which seems to be the one resister, interestingly lots of individual states within the States, again through the media, have introduced their own energy policies. And in bits of the States they've started to build their own momentum that might eventually force the Federal Government to respond. So even though there are problems about doing it globally because of fuel tax and all the things that you've mentioned its worth starting with one country and it will disadvantage that country, but at least it gets the momentum going.

Morris: I'm just thinking one of the ways to manage air travel is not to build any more airports because only so many planes can use any one airport at any one time. So you stop building airports.
Michael: Well but there's an argument that….

Morris: And just say you can't expand anymore.

Michael: Well I agree with that but the other issue is that they will take the airport to its limit, which we hear about and that does cause problems. And then you get local, I don't know those stacks outside Heathrow are something like 12 miles high, so you've got 12 miles of aeroplanes circling around burning fuel. Bet the ozone's got a bigger hole in that bit, I don't know!

Adam: And if you think about how many car miles are driven to get to Heathrow and all of that travel to reach the airport. If Bristol airport is a bit bigger then you lose all those car miles from Bristolians who have to drive to Heathrow.

Morris: Stop complicating things Adam!

Anja: *How much does price affect how many flights you take?*

Adam: Hugely.

Morris: Hugely.

Brenda: Very little.

Michael: And me, I'd say very little because I don't often go.

Brenda: If I want to go somewhere I'll go.

Andrew: I'm a city break person….

Brenda: I've only got a certain time when I can go, so…

Morris: I think if every flight cost me £500 I'd fly far less frequently.

Andrew: I'm going to get shouted down by saying this but actually I'm, I do, like Adam, I'm a linguist so I do like going away to European cities, so the city is irrelevant, it's the cost of getting there. So I'll take a hunch on somewhere I've never been before on the basis that the flights are really cheap. Sienna does exactly the same, she gets email alerts about new routes and how cheap and she's never considered going to XX destination but because they're discounting it so heavily, it becomes secondary to the price of the fare.

Michael: I think mine would be based on hours in the aeroplane to keep the kids quiet, but that's another issue.

Morris: I'm getting that way now with mine actually!

Andrew: But I think the reverse is true. I've got friends who really have scrimped and saved because they want to go long haul with a specific airline, Emirates, which have very expensive fares but making the flight part of the experience. And so they are prepared to pay through the nose for a long haul flight, knowing that it's going to be fantastic.

Adam: I think in Europe the huge development of the second home syndrome abroad, and the airlines developing routes to fit in with that, and having weekly flights into Spain, or France or Italy, wherever people have their second homes. That must add a huge amount to really regular short hop travel. And you hear every time an airline is going to close a route and you hear of all these people with second homes that will never be able to reach them because they would have to drive 24 hours to get there, so. I think we are just too wealthy as a society really.

Morris: We expect too much, having a second home is the norm and I damn well expect to be able to reach it in four years if I have bought it, whereas 10 years ago you wouldn't have had that expectation would you?

Michael: And the counter argument to your queuing at airports in cars then must be that if people live in cities and they are travelling to their second homes, then maybe they are driving less. I don't fly very much but I do drive a lot. I'm not saying I prefer it but it's just my lifestyle at the minute.

Anja: *Who do you think should or will take the lead on any reduction in our flying and do you think it is necessary?*

Brenda: It's an equal responsibility between individual people and companies. Who will take the lead, both should.

Michael: I think it's got to be the …

Morris: Government.

Michael: Yeah the policy makers, it's the governments. It won't be the oil producing people because they want to sell more.

Brenda: But if you do that you are just forcing people to do things. Ideally people understand what damage is happening to their own environment don't they? You realise that the climate is changing because your town floods more than it used to, suddenly it affects you.

Michael: But I don't think that penny's dropped yet.

Brenda: But that's what I'm saying, that's got to happen with individuals, with people at the same time as organisations and governments. Otherwise, you're not really solving the problem.

Morris: And governments will only do it when they know there are votes in it, to be quite honest. At the moment what government, I mean you don't get the government coming out at election time and saying this is my airline policy. And different airline policies with different parties. They are all just saying just do as you have been doing.

Michael: I'm disagreeing with both of those, because we've seen the proof of this in small towns where they've introduced recycling schemes. They've drastically underestimated people's action related to introducing a scheme. But you need to lead the horse to water. If nobody had put out the green bins then nobody would have used them.

Brenda: What do you mean, people do it or they won't do it?

Michael: Well they will do it or they won't do it. But it takes the lead, someone to take the lead to do that.

Brenda: But how have they been surprised?

Morris: But its national government setting targets.

Michael: They have been surprised by the reaction of the people using the services. If there was a policy that said hey we're only allowing 250 flights a year out of Bristol, book on those 200 or whatever. And this is why.

Andrew: I think it's difficult to do a one size fits all though, I mean we're not Australia but we are an island and we are very close to our neighbours, but for islands…

Brenda: Yes I was thinking that.

Andrew: We're not part of a big land mass.

Brenda: It is tricky from Britain because whatever you do you've got to cross water.

Adam: I like Michael's example and I think you are right, people don't do things unless you give them the opportunity to do it, but in the environment we think that we can buy something and we can keep buying and keep buying and as long as we recycle something we're OK.

Whereas I don't see how we can do it with aeroplanes.   You can keep purchasing more and more flights as long as you recycle the…

Brenda: But it's a great combination…

Adam: Or plant trees or whatever.

Brenda: The companies and governments actually buying into proper environmental schemes which people believe in. So people think OK well I'll pay that tax as long as I know my money is going to something worthwhile, as we've mentioned already. If I believed that then I would play my part. So the recycling scheme is supporting what I'm saying, it's a sort of web. It's a way of making individuals act at the same time as governments and organisations working with them.

Michael: But this is the problem, it needs to be global as well and we know it doesn't work when we've been to Kyoto. And I think it's taken us, I think hundreds of years in this country, to realise that actually we don't need to live in a nanny state. The government can pay agencies to deliver public services. I know there's an organisation called the Carbon Trust. Why don't they say your tax goes directly to the Carbon Trust who are a not-for-profit organisation? They are doing that now on health services in this country. But we are light years behind people like Holland and even the United States in healthcare provision. We are light years in front of developing countries in terms of the government sponsored agencies to deliver services.

Andrew: But isn't the use of all these different examples indicative of the fact that the airline industry isn't under the spotlight in terms of damage to the environment and greenhouse gases? Its other things, that's the point I think. Somebody needs to lead in terms of highlighting the problem.

Brenda: That's what Anja's doing! That's your job.

Anja: *Yes, mine alone! I'll have to set up my own charity.*

Morris could conceive of a scheme where, I mean it will never happen, but the tax you pay on your ticket went to for example the United Nations World Food Programme. That way the more you fly and the more you fuck around with the climate, the more climatic disasters that happen then your money is going directly to relieve the suffering that you have in one way caused.

Adam: But then you are incentivising people to travel!

Morris: No, because it's responding to a disaster.

Brenda: Not necessarily.

Morris: If there were a tsunami or whatever disaster it would happen to be, then you could at least say, that £5 is going to relieve suffering.

Andrew: Job done, I needn't worry about the United Nations or poverty or anything in the future; I've paid my £5.

Morris: Yes I'll never contribute to charity ever again; yes I can see how that might happen.

Adam: It's interesting what's happened in the States with the hurricanes there and I think it's started to tip the balance of environmental consciousness there, but they are starting to see the actual physical results rather than theoretical debates between scientists who do or don't believe.

Morris: Well who was it who said that nobody will do anything about acid rain until it's so acid that your car paint and your skin peels off! And people then say, why didn't you do something.

Andrew: Can I just add another thing into the mix? In terms of, in fact I think it's somebody from the Disasters Emergency Committee who said this after the Tsunami, this growing problem of climate change which is causing awful natural disasters, people are being encouraged to go to Malaysia, to go to Thailand, to say its business as usual. Because they are reliant on the tourist dollar, please come back, please don't stay away. So there's another thing to throw into the mix about. There's a consciousness that you do have to travel there, not stay away, because you're supporting it.

Michael: But it's true, I work for a green organisation and I don't give it a second thought, it's just not on my radar, about carbon emissions from aircraft, it just isn't.

Anja: *We are just on 50 minutes now, are you OK for a few more minutes?*

Morris: How many questions have you got?

Anja: *About three or four.*

Michael: We'll have to be quicker.

Anja: *Do you think the media have any responsibility to change the way they report these issues and can they influence us in any way?*

Michael: They sell a lot of papers on free flights, that's for sure.

Andrew: I was going to say!

Adam: I mean the travel pages already have their bits on green travel; the Guardian has its green transport column once a month and the travel editor's columns and they already talk about some of these things. But you're right, of much greater importance are the special offers and the advertising and the fact that they get advertising from the airlines and the tour companies and everyone else.

Andrew: And even buying on credit card, we're accruing air miles to do…

Morris: I do think it would make a difference if they said, this week we are visiting Bangkok, but rather this week we are visiting Bangkok and are releasing 48,000 tonnes of carbon dioxide into the environment. Do you think that would make people go, blimey?

Brenda: Actually yes, I think that's a very good thought because I think on the whole the written media are getting a lot better about pumping the messages, but the, some parts of television

are, but that's a good thought. Every time you talk about tourism or holidays assume the angle of an environmentally friendly person as well.

Michael: How about your health warning like on your cigarettes saying this ticket you're about to buy.

Morris: Has it stopped you smoking?

Michael: But it makes you think every time you see it.

Brenda: It makes a lot of people think. It works.

Adam: Do you think it works.

Brenda: Well it's just one of a lot of things isn't it?

Anja: *Do you think environmental groups do enough to highlight the impact of flights?*
Michael: Nope, I've never seen anything.

Adam: It's quite recently in my awareness, not until quite recently have I seen anything.

Morris: I mean it would be unusual for you to see Greenpeace chaining themselves to the runway at Heathrow, or something, which I imagine is because of the high security, you bolt a chain there and they would shoot you, but.

Michael: But why not? I used to have an Esso station at the bottom of my street and I'd quite often see somebody dressed in a Tiger suit, complaining about something, I never quite knew what the message was.

Andrew: I think this goes back to the fact that there's not this mass buy in, there wouldn't be popular support at the moment if Greenpeace were to chain themselves to the runway at Heathrow. I don't think people would be saying, good on you that's fantastic, as they were on some other Greenpeace campaigns, I just don't think there's that appetite out there. It would be bleeding beardy wierdy's stopping me going on holiday, run them over.

Adam: I mean what success have we had in persuading people to use their cars less?

Michael: There's been 2+ lanes and….

Adam: We're an environmental charity and we drive everywhere all the time, and the employer doesn't even encourage the employee not to travel to work, or to travel in other ways or incentivise us through our wage packets by travelling to work by public transport you'll be paid a bonus, there's none of that, so.

Michael: But it's more visible, look at car share schemes, 2 in a car lanes, you see them a lot more now.

Adam: I signed up for the Wiltshire car scheme a year and a half ago now online and said I travel this route, and nobody has ever, ever, ever contacted me in a year and a half.

Michael: But it's there, so it's more visible.

Adam: The critical mass, we're light years away from that.

Andrew: I'm totally with Adam. Totally.

Michael: I agree but…

Andrew: I used to live in Holland and it's a completely different mindset there, a very different mindset.

Michael: But they all went and used bikes didn't they? They live in a city.

Andrew: They do live in a city.
Adam: Bikes with wings.

Michael: I'm agreeing with what you're saying but the point I'm making is that I drive and I see the signs saying you should be sharing your car and it's quicker if you do. And the only reason I don't travel by air is because at the moment I'm not going on holiday because I can't afford it. But I don't give a toss about, no ones told me about the environmental impact, no ones told me anything about it. Nothing at all.

Andrew: Exactly.

Brenda: So the media, who could get to Michael aren't doing it.

Andrew: And governments have the power through TV advertising campaigns. I remember the fireworks ones and the HIV ones in the 80's.

Adam: 6g of salt (recent government health initiative) has been very effective.

Morris: Again there's nothing in the populist media out there telling you that there is a problem.

Michael: I was really proud when Newcastle got its own airport. We're on the global stage.

Morris: But everyone has got to lead from somewhere.

Michael: You've obviously not been to Newcastle.

Anja: *Do you think it's a right to take a holiday?*

Morris: Yes.

Michael: Yes.

Anja: *Well that's my quickest answer so far!*

Michael: Doesn't mean you have to fly.

Andrew: I'm just trying to unpack that. What do you mean by a right?

Anja: *I don't mean having time off from your work, I mean the right to travel somewhere else in order to take a holiday.*

Andrew: Well that's somewhat different, because you don't have to travel to have a holiday anyway; you could have a holiday at home.

Brenda: So no it's not a right in those terms.

Michael: I think it is part of my human rights that I go and visit other cultures.

Morris: It's a right as far as I would be cross if somebody physically prevented me from doing it. But I am savvy enough that you've got to have the economic wherewithal to do it.

Andrew: Exactly, it's very biased towards an affluent Western kind of. Does that right extend globally, are we saying...

Brenda: I think we have very few basic human rights and I don't think having a holiday is one of them at all.

Michael: I think it is.

Andrew: But how do you apply that to the rest of the world's population and say that is a basic human right.

Michael: I didn't say it was a basic human right, I said it was a human right. We all have our own privileges. I can give you a, no I won't.

Adam: I think it is, just like it's a right to have enough food to eat every day, doesn't mean that everyone has it. But it ought to be there.

Morris: To be able to travel freely in the sense of not having someone tell you where you can and can't go is a human right. But no-one is under the mis-apprehension that everyone should be able to go where they want, whenever they want.

Adam: If we're European and not British.

Andrew: I feel very uncomfortable with this, especially the analogy about having enough to eat and drink. Now that is absolutely a human right and to put going on holiday on a par with, I'm uncomfortable with that. I think that….

Brenda: You think it's different.

Andrew: I do, if I didn't have to go on holidays, shows you what my holidays are like. If I didn't go on holiday for the rest of my life it would be a hardship, but it wouldn't be the same hardship as not having enough to eat.

Michael: But it depends how you define holiday. Why does the travelling community thrive?

Andrew: Because they are itinerant and they get to see new things.

Michael: That could be my definition of a holiday.

Andrew: Some people see new things in a walk down the street that other people would have to go round the world to find.

Michael: Yeah, it's how you define it. I think it is anyway.

Anja: *OK last one, folks. How do you see the future for our use of air travel?*

Morris: Big, I think that it's going to go and go and go.

Michael: Crashes.

Morris: There might be fewer airlines as they consolidate and so on, so there might be less choice in that sense. But I think the actual amount of miles travelled per person in this country will increase.

Andrew: I think it's going to change quite dramatically. I think it's going to become much more price, I think people are going to get priced out of it. I think it's completely unsustainable, these bucket prices. I can see it becoming a much more elitist thing. So a new Concorde coming along and smaller planes with much more premium destinations and premium passengers. I don't think it's going to be…

Morris: So you're chance to elevate yourselves above the plebs?

Andrew: Yeah, I just don't think we can sustain this ridiculous pricing structure for very much longer, I think it is going to change.

Adam: If oil prices don't go up and they stick where they are and there isn't any government legislation to make things more expensive. I think particularly short haul is going to be like getting on a bus used to be, really. More and more short trips that's how it would be used.

Brenda: I wonder if we are going to run out of airport space though, because the ability to keep expanding every single airport, which is what would be called for, I can see then local people and environmental groups objecting to that and being successful.

Morris: Well it's a big thing at the moment isn't it?

Andrew: Did anyone see earlier in the year, the very first Chinese tourist plane, the very first package tour from Beijing. Of that's going to be mammoth when that kicks in full scale and everyone's going to be vying tourist wise to get some of that economy.

Morris: We think of air travel as us going places but of course equally its people coming to us, isn't it? And I think with India and China particularly that will increase.

Michael: What about security, it's still a big issue?

Morris: I think the thing that's going to kibosh it in the end is in 60 years time when we've pumped our last barrel of oil. We're stuffed then aren't we, not much you can do about it then. That will be the thing that puts the kibosh on it eventually but how far ahead that is?

Andrew: I think with security, I think Adam is right, some people have very short memories. I mean all those atrocities in Egypt and three weeks later they were all back on.

Anja: *Right, thank you all very much. Sorry we over-ran a little bit, but hope you found it interesting.*

(Appendix 4: 10,466 words)