# ARTICLE IN PRESS



Available online at www.sciencedirect.com



www.elsevier.com/locate/tourman

**TOURISM** 

MANAGEMENT

Tourism Management I (IIII) III-III

# Representations of tourism transport problems in a rural destination

Janet E. Dickinson\*, Derek Robbins

School of Services Management, Bournemouth University, Talbot Campus, Poole, Dorset BH12 5BB, UK

Received 4 June 2007; accepted 7 February 2008

#### Abstract

Within the tourism impacts literature, car travel is regularly cited as a main contributor in destination areas. This study questions the nature of the problem by analysing key stakeholders' representations of the tourism transport problem and tourists' travel behaviour at a rural tourism destination in the UK. Exploratory research involving in-depth interviews with residents identified a typical emphasis on local travel problems and identified tourist arrivals by car as a major contributor. Data compiled using travel diaries and a survey, however, revealed car-based visitors had fewer concerns. Problems were seen to be minor with little or no need to modify behaviour to cope in any way. Analysis suggests perceptions of problems are to a large extent context contingent and are socially constructed and reproduced with consequent implications for destination management.

© 2008 Elsevier Ltd. All rights reserved.

Keywords: Sustainable transport; Travel behaviour; Rural destinations; Car dependency

# 1. Introduction

The ability of visitors to travel around destination areas is crucial for tourism, yet this mobility brings many problems, particularly to sensitive rural destinations where the infrastructure is often ill-suited to the large scale influx of seasonal visitors. Almost all studies examining the impacts of tourism cite tourism related traffic as a problem, often causing one of the single biggest negative impacts (for example, Andereck & Vogt, 2000; Gursoy, Jurowski, & Uysal, 2002; Jurowski, Uysal, & Williams, 1997; King, Pizam, & Milman, 1993; Lindberg & Johnson, 1997; Perdue, Long, & Allen, 1990; Vaughan, Farr, & Slee, 2000). Typical local impacts are congestion, parking stress, visual intrusion, noise and air quality as a result of the dominance of car-based visitors. In the UK numerous initiatives have set out to affect a modal shift in rural destinations, especially in National Parks where car transport share is at its highest (see for example, Coleman, 1997; Cullinane, 1997; Cullinane & Cullinane, 1999; Eaton & Holding, 1996). To date, while many initiatives that

0261-5177/\$ - see front matter © 2008 Elsevier Ltd. All rights reserved. doi:10.1016/j.tourman.2008.02.003

promote alternatives to the car maintain a steady level of use, few have affected a significant modal shift and many have been very short-lived falling foul of limited funding and the need to meet economic and patronage targets (Dickinson & Dickinson, 2006).

Studies examining factors that influence pro-environmental behaviour are of interest here. Broadly speaking there have been two approaches in studies of environmental concern and behaviour: social structural (socioeconomic/demographic) and social psychological (attitudes, beliefs, values and worldviews) (Dietz, Stern, & Guagnano, 1998). Car use is a typical social dilemma (Tertoolen, van Kreveld, & Verstraten, 1998). While many car users are aware of their potential impact, the individual benefits result in continued use. In this type of situation rational decision making models typically fail and there is a clear gap between attitudes and behaviour (Anable, 2005). Studies have tended to focus on identifying key characteristics, be they demographic or attitudinal, which predict modal choice, while few studies attempt to unravel the social assumptions and discourses that underlie travel behaviour decisions. Studies in social psychology show that people's views are often much more contradictory, dilemmical and multifaceted (Billig, 1996; Billig et al., 1988). Views can vary according to the context or social

<sup>\*</sup>Corresponding author. Tel.: +441202965853; fax: +441202515707. *E-mail addresses:* jdickinson@bournemouth.ac.uk (J.E. Dickinson), drobbins@bournemouth.ac.uk (D. Robbins).

situation, can be modified to suit an individual's stance at any one time and are therefore far from stable (Clark, Darrall, Grove-White, Macnaghten, & Urry, 1994; Macnaghten, 1995). Recently, studies have started to address the ambivalence that exists between people's environmental attitudes and their behaviour (Becken, 2007; Kurz, Donaghue, & Rapley, 2005; Shaw & Thomas, 2006; Stoll-Kleemann, O'Riordan, & Jaeger, 2001) and it is this aspect which is developed here. This study applies Moscovici's (1981) framework of social representations to an analysis of tourism travel problems in order to examine how representations of travel problems support particular travel practices that are contingent on an individual's contextual position. The paper makes two contributions to knowledge. Firstly the paper adds to the understanding of how and why travel decisions are made. Secondly the paper adds to the data which contrasts attitudes with behaviour by exploring how attitudes and behaviour are context dependent and shaped by collective ideas that circulate in society.

A social representations framework suggests that people's views of transport modes and travel are, in part, socially derived. The authors developed a conceptual framework to explain the role of social representations in travel behaviour (Fig. 1). People develop views based on their own past experiences of travel but views are also developed through social interaction and the influence of mass media. Thus an individual's representation of a particular travel problem will be constructed from a combination of the individual's experience and the collective ideas that circulate in society about the problem. The social representations then moderate people's future behavioural choices. As transport is a contested topic, there are many recognised dilemmas and contradictions relating to travel and travel behaviour, some come to

dominate for certain groups and others remain subordinate. A social representations framework suggests people draw on these diverse arguments to justify their particular actions in a specific context, thus, the discourses are context contingent. This study started from the perspective that there was a travel problem to address in rural destination areas. As the study progressed it became clear that not everyone shared the perspective that there was a travel problem to address and this has important implications for initiatives aiming to affect modal shift and address tourism congestion problems. The paper takes a case study approach using data collected in Purbeck, Dorset, UK. Purbeck is a rural destination area on the southern coast of England close to the Bournemouth and Poole conurbation. The paper begins with a brief review of tourism transport problems in rural areas which sets out the broader relevance of the chosen study area and the potential wider application of the findings.

## 2. Tourism transport problems in rural destination areas

Many terms are used to describe rural tourism (Roberts & Hall, 2001). Lane (1994) and Keane (1992) both give simple definitions to the effect that rural tourism is tourism that takes place in the countryside or a rural area. However, it is not that straightforward as rural areas are difficult to define (Lane, 1994; Roberts & Hall, 2001; Sharpley & Sharpley, 1997) and what might be considered urban forms of tourism can be located in a rural area (Lane, 1994). Traditional approaches to defining rurality are becoming less meaningful in the UK with the restructuring of agriculture influencing employment and the nature of the resident population (Halfacree, 1993; Hall & Page, 2006). The use of rural space is changing and it is increasingly developing important functions for non-rural

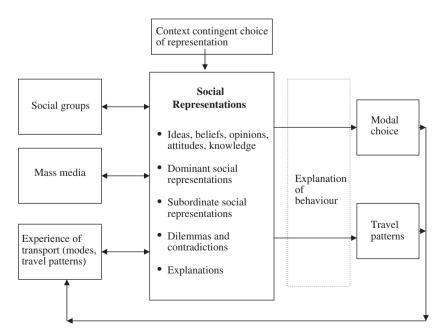


Fig. 1. A social representations conceptual framework for travel behaviour.

as well as rural residents (Cloke, 1993). Rural areas also have an increasingly mobile, car dependent population travelling to centres of employment and services outside the area, while the landscape is seen as a leisure space and draws in a visiting population. Purbeck is typical in these respects.

Purbeck is at a mature stage of tourism development with an industry which has been established for over 50 years. It has a range of natural attractions and a spectacular coastline, designated a UNESCO World Heritage Site, with excellent sandy beaches and rocky coves. It is a popular UK holiday destination for families and outdoor recreation enthusiasts. The area attracts an estimated 2,330,000 day and 490,000 staying visitors each year (Purbeck Heritage Committee, 2002), while the resident population numbers 44,000 (Buro Happold, 2004). Purbeck was selected as a study area due to its rural nature, dramatic natural setting, thriving tourism industry and acute seasonal travel problems. There is both congestion and parking stress, with a perception of poor alternatives to the car. In common with many other rural destination areas in the UK transport is one of the most contested tourism issues. Visitor traffic creates tensions among local people, conflicts with conservation objectives, and threatens the positive natural attributes that attract visitors in the first place. Within the last ten years the local authority and other organisations have commissioned a number of consultancy reports and funded a variety of transport initiatives yet seasonal travel problems remain and most schemes show limited success as is common elsewhere. While any study area has unique characteristics, Purbeck presented an opportunity to study an area that represents the situation of many UK rural destinations with high visitor numbers and transport problems.

Transport problems in rural destination areas occur at two broad levels: global environmental issues and local travel problems. At a global level, analysis of the environmental impact of tourism shows that transport is by far the largest contributor to the environmental impact (60-95%) (Gössling et al., 2005). While air travel is the most problematic component long domestic journeys by car are also very significant (Peeters, Szimba, & Duijnisveld, 2007). Becken (2004) found that around half of all tourists questioned a link between climate change and tourism and suggests tourists know little about their impacts. Several studies suggest the personal benefits of holidays override potential concerns about the environmental impact (Becken, 2004, 2007; Böhler, Grischkat, Haustein, & Hunecke, 2006; Gössling, 2002) and studies show that environmental knowledge is less important than attitudes in predicting pro-environmental behaviour (Nilsson & Küller, 2000).

On a global scale much of the environmental impact accrues through travel to, rather than within, destination areas (Robbins & Dickinson, 2007). However, while local travel is more minor, in relation to global dimensions such as climate change, it creates significant local problems

which should not be overlooked (Böhler et al., 2006). Tourism activities, especially in rural areas, tend to be very dependent on the car. Attractions are generally dispersed and isolated from public transport routes, modern leisure pursuits can require the transportation of bulky items, traffic is generated at varied times (Charlton, 1998), the journeys are not part of a daily routine (Dickinson, Calver, Watters, & Wilkes, 2004) and visitors are unfamiliar with the area and public transport infrastructure. The impacts of car-based visitors are extensively recorded in studies examining the residents' perspective of tourism, but visitors are also affected by traffic congestion and parking problems. Traffic congestion can reduce the time available for participation in tourism activities and visitors may even seek out alternative destinations (Dickinson & Dickinson, 2006; Lawson, 2001; Prideaux, 2000).

Transport and tourism has not received its fair share of interest from academics (Dickinson et al., 2004; Page, 2005; Schlich, Schonfelder, Hanson, & Axhausen, 2004). Transport to and within destinations appears marginalised in the tourism literature and there are inherent conflicts involved for tourism. The local tourism transport problem is the result of the combined effect of different groups' competing needs for travel: tourists' journey from home to destination on day of arrival and departure; day-visitors' journey from home to destination; journeys in the destination area undertaken by tourists and residents for leisure purposes; and utility journeys undertaken in the destination by visitors and residents such as food shopping. As Hall (1999, p. 183) suggests, there is the "problem of identifying tourism transport as a discrete functional entity for analytical and policy purposes". There are also issues with the policy agenda with less government interest in leisure travel in the UK compared to commuting and the school run which receives much more attention (Department of Environment, Transport and the Regions, 1998). There are also policy conflicts at a national level between tourism and transport (Robbins & Dickinson, 2007). Perhaps the solutions to the tourism transport problem seem largely intractable as journeys are more ad hoc than predictable commuting or school run habits, and while patterns can be identified at destinations the people involved vary from day to day. The existing studies are predominantly atheoretical and frequently focus on a specific initiative (see for example, Lumsdon, Downward, & Rhoden, 2006). Therefore academics have needed to be involved in local initiatives to research the problem and the findings from one initiative are not necessarily transferable elsewhere and thus a solid body of knowledge has yet to develop. Where theory is applied, it is drawn from attitude theory, despite the problem that attitudes are not especially good at predicting transport behaviour (Anable, 2005). Studies also arise from spatial geography and a logistics tradition which focuses on quantifying the trips and the travel characteristics which predict modal choice, but pays little attention to the social conceptions of transport and the social reality that shapes travel behaviour (Urry, 2002).

In many rural destinations transport is a contested issue—a key source of nuisance for local residents, the impact of which is likely to be seen in balance with other positive benefits of tourism. As such transport issues are a key element of a sustainable tourism strategy. Studies assume rational decision making behaviour, yet conflict is apparent and there is a need to understand the contradictions and dilemmas. There are many institutionalised assumptions about transport and there is a need to understand the societal agendas and rhetorical strategies which are employed by the public and practitioners. Thus, this study moves away from a focus on objective reality epitomised by attempts to categorise people, places, behaviour and transport initiatives, to a focus on how ideas about transport and destinations are constructed and reconstructed. There is also a need to focus on collective rather than the individual processes which underlie much transport behaviour research. In order to explore these aspects a more holistic study was undertaken in Purbeck to gain a more contextual understanding of travel as it takes place within a destination.

## 3. Methodology

The Purbeck study was conducted in three stages. The approach adopted, of a qualitative exploratory phase followed by a quantitative survey, is widely used despite what many consider to be a quantitative/qualitative divide (Bryman, 2001) and the epistemological arguments against multi-strategy research. The first stage was exploratory and aimed to define the important value concepts for the population in the study area relating to transport and tourism. The main source of information was 13 in-depth interviews with key informants during winter 2003–2004. A purposeful sample was used to select information rich cases for in-depth study. Key informants were initially identified from a contact based in Purbeck District Council and a snow-ball process used to identify additional informants across a range of different locations in Purbeck. The people interviewed met three criteria (Rubin & Rubin, 1995): they were knowledgeable about transport and/or tourism in the Purbeck area; they were willing to talk; and they represent the range of points of view including those who directly benefit from tourism and those who do not. The sample purposefully selected some public transport users and cyclists. A theoretical sampling strategy was employed as in 'grounded theory' (Giles, 2002) whereby participants were recruited with a range of different experiences and perspectives until the data reached saturation point and each additional interviewee added little to the data. Residents' experiences of transport and tourism in the Purbeck context were explored. Earlier papers have analysed this material to explore how social representations explain travel decisions (Dickinson, 2004a; Dickinson & Dickinson, 2006). It was argued that due to the dominance of the car in society people have little experience of alternatives to the car and thus draw on

social representations of the alternatives from social and media discourses. Analysis has also been undertaken on the social representation of rural tourism questioning whether it is rurality rather than tourism that lies at the heart of the problem (Dickinson, 2004b). Here analysis develops these aspects by focusing on travel problems and the residents' behavioural response and integrating these findings with those from stages two and three.

The second stage explored travel patterns and travel behaviour of visitors to the area through the use of 40 travel diaries completed during summer 2004. This produced largely quantitative information on: travel patterns, modal choice, trip chaining, purpose of journeys, attractions and places visited. In addition an open section allowed participants to give a personal description of their trips and they were encouraged, in particular, to explain problems encountered and how they dealt with them. Tourists were sampled at campsites which account for a large proportion of beds in Purbeck (approximately 50%, Purbeck Heritage Committee, 2002). The Purbeck area was divided according to ward boundaries and each ward stratified on the basis of population and transport characteristics. A sampling frame for caravan and camping sites was derived from tourist information material. Five campsites were then selected to represent different ward and campsite characteristics. Posters advertising and explaining the travel diaries were put up in prominent positions on each campsite and leaflets distributed to visitors. Visitors were recruited by walking around the site and asking at each tent in turn until a quota of 10 was achieved. The design of the travel diary was based on a German study (Axhausen, Zimmermann, Schonfelder, Rindsfuser, & Haupt, 2002) and the UK National Travel Survey (Stratford, Simmonds, Nicolaas, & Costigan, 2003). In an earlier paper (Dickinson & Robbins, 2007), analysis focused on whether visitors are constrained by the objective reality of travel opportunities or their social representation of transport and it was concluded that representations play a powerful role. Analysis here focuses on the problems encountered and responses to these problems.

Finally as the travel diary focused on visitors staying at campsites, a questionnaire survey was undertaken with visitors at various attractions in the area during summer 2005 (n = 776). Four sites were selected on the basis of high visitor numbers. All sites were openly accessible, free at the point of access and where the survey was feasible. Eighteen days were allocated to the survey. A quasi-random approach was adopted on site. A systematic traverse was employed on three sites which were traversed over a given time period and individuals sampled at regular intervals (Davidson, 1970). To maximise this approach, the sampling employed clustering, whereby six people were approached at each survey point. The systematic traverse was not applicable to one of the sites where visitors were generally on walks. At this site a strategic point was chosen on a popular route along the cliff top where there were

a number of benches where respondents could complete the survey. Every group passing this point was approached unless congestion precluded this.

The visitor attraction survey enabled data to be captured from residents on leisure trips and day visitors as well as staying visitors. Topic areas developed in the questionnaire arose directly from the findings of stages one and two. Among other things, data were compiled on people's explanations for travel behaviour, the problems encountered and responses to these problems by employing open questioning techniques. Open questions freely elicit views without prior categorisation thus respondents are not prompted to identify a problem such as 'congestion' by this being given in the question. The data generated were coded by content analysis according to the steps suggested by Weber (1990). Inter-coder reliability was assessed by Cohen's Kappa (travel behaviour, k = 0.85 (almost perfect agreement), problems, k = 0.77 (substantial agreement) and for coping mechanisms, k = 0.75 (substantial agreement)) (Stemler, 2001). Data were then entered into SPSS as binary data for each category, i.e. present/absent data. Cluster analysis was employed to identify groups of respondents based on their explanations for car travel.

## 4. Findings

## 4.1. Residents' perspective

A strong social representation to emerge from the interviews with residents was the conceptualisation of tourism as a balance between positive and negative impacts. There was a strong feeling among many, though not all, participants that the negatives outweigh the positive which contradicts typical tourism impact studies (Andereck & Vogt, 2000). Ap and Crompton (1993) indicate that residents who directly benefit from tourism are likely to embracement it. Yet here the sheer volume of people in a concentrated area and the resultant traffic congestion, pollution and even grid lock were held to be a major problem even by those with a direct stake in the tourism industry. In general the problem was seen to be caused by tourism and it was felt visitors should take some responsibility to solve it by using alternatives to the car, again, a strong social representation. However, the traffic congestion and overcrowding from tourism, while seen to be acute were viewed as concentrated and short-lived. They are something you could put up with for the privilege of living in the area.

It's a fact of life, basically, and it is intensely concentrated over the six weeks break during the summer holiday (I. 2).

Everybody will tell you the traffic problems in summer, that's due to the pressures of tourism, if you live here you learn to live with it, it's no good complaining, you've just got to live with it (I. 6).

Tourism as the cause of the problem formed the dominant discourse, but other issues became apparent as interviews unfolded. These might be seen as subordinate but no less important. For example, problems that could be attributed to local people were identified:

Local people to start with—you get the person who gets in the car just to go to town [Wareham, a small, rural market town]. They know where in the town they can park in one of the lanes and come back through the town to get home. If there was a different system of where they had to use the bypass to go out of the town rather than congesting it, a lot of people would find it quicker and easier to walk to town (I. 8).

Another example is the school run where blame is apportioned to a specific group of car users.

At 9.00 round the school times, it's a nightmare... when I worked I travelled west of here towards Dorchester and quite honestly it was a waste of time me bothering to go between 8.15 and 9.15 because I wouldn't get to work any earlier because you get stuck in the school traffic (I. 7).

The basic problem of rurality was also cited as a reason for high car usage:

I'm afraid we very much rely on cars for our transport as so many people do... young people living here have virtually got to have a car it's very unlikely that the train will take them conveniently just to where they work and it's a big problem... one of the major problems with the motor car and all this congestion is the very great distances that people travel to work and I just don't know what the answer is I mean this link with housing, people with a desire to live out in the country (I. 3).

Access and egress to the area was raised as an issue for residents and tourists, there being few routes into the area. So at one level tourists are blamed for the problem but at another there is recognition that tourism is only part of the picture.

An aspect which emerged from the resident interviews was the 'coping mechanisms' employed to deal with tourism impacts and the rural area. Strategies were learnt in response to traffic congestion and overcrowding at key sites. This reflects the findings of other studies examining behavioural responses of residents to tourism (Ap & Crompton, 1993; Brown & Giles, 1995; Burns & Holden, 1995 cited in Brunt & Courtney, 1999). Brown and Giles suggest the response to tourism impacts could be a function of residents' ability to reorganise their activities largely due to a desire to avoid congestion and crowding. Brown and Giles found coping reduced spontaneity, two aspects of this were apparent in this study:

 Reorganisation of daily activities (changing times and locations of activities). In Purbeck residents avoid particular places, use different routes and go at different times, for example:

We try to avoid going to Poole to a cash and carry at 4pm in the afternoon as when you come home you know it will be jammed up with traffic (I. 7).

• Retreat from normal life (stopping/avoiding certain activities and planning ahead to avoid the need to go out). In Purbeck residents stay at home more at certain times for example:

You adjust your way of living to suit the conditions. For instance, we know on a Sunday, friends will ring up in Wimbourne and say it's lovely, we're having a barbeque. Sorry, we can't get there, because on a Sunday afternoon the traffic coming from Studland beach is chocker all the way through, so you never arrange anything, you stay at home on Sunday afternoon (I. 6).

Though the exploratory research with residents revealed an emphasis on local travel problems, that is typical of the tourism impacts literature (for example, Jurowski et al., 1997; King et al., 1993; Lindberg & Johnson, 1997), residents' views were mixed on this. The overriding problem cited by residents was traffic congestion. Some informants viewed tourism congestion as a short-term problem that could be lived through and was avoidable, while wider issues relating to rurality posed greater problems. Interviews suggest residents have developed a way of life adapted to cope with tourism. The need to develop coping strategies tends to reinforce the view that tourism causes a problem. This relates well to Ap and Crompton's (1993) adjustment strategy which they linked to residents disinterested in tourism. Given the longevity of tourism in Purbeck it becomes apparent that underlying tourism issues are wider problems faced by residents of rural areas. Thus the extent to which tourism is the major transport issue is debatable. Rurality stands out as a more over arching issue posing year round transport problems for residents that couple the mobility issue with problems of accessing jobs and facilities such as shops. This is perhaps where the real problems lie. The nature of rural areas and the rural population are changing. For instance, residents expressed a strong sense of a rural community, but one in which there was community breakdown (Dickinson, 2004b). As rural areas evolve, this creates significant issues for long-term residents over and above those of tourism. For residents there was arguably a continuum of coping between what Ireland and Ellis (2004) have termed 'communities of fate' and 'communities of choice'. This distinguishes between the ability to make choices rather than have them imposed and having the financial provision to do so. 'Communities of choice' was implied by the way residents framed problems encountered in terms of 'others' who were unable to cope (Dickinson, 2004b). A limitation of this study is the lack of contact with disadvantaged groups and the transport poor, to confirm the 'communities of fate' scenario.

# 4.2. Visitor travel

The travel diaries and visitor attraction survey revealed that car use by visitors is high in Purbeck (Table 1). This comes as no surprise and ties in with other studies in Purbeck (Purbeck Heritage Committee, 2002) and rural destinations elsewhere (Research International Ltd., 2006). On the other hand, walking and cycling are also high relative to national levels (Department for Transport, 2005). This reflects the recreational participation in these activities in Purbeck (Scott Wilson Resource Consultants Tourism Associates, 2000) and might be an opportunity the area can build on.

#### 4.3. Travel behaviour decisions

The visitor attraction survey contained data on the reasons for car use. For the purpose of analysing car travel behaviour decisions those categories used by less than 10% of the respondents in the survey were excluded as has been suggested elsewhere (Hammond, 1993). Typical reasons were given for car use with convenience and ease of use dominating the responses with a variety of pragmatic reasons also being apparent (carrying equipment, speed, presence of children) (Table 2). There were also responses which describe problems with the use of alternatives (problems with walking, cycling and pubic transport) despite not being asked about alternatives directly. Previous work suggests strong social representations of transport guide people's behavioural decisions. For instance, interviews and travel diaries revealed there is a discourse that public transport should be used and would be but for the fact that it is expensive relative to the car at point of use and difficult to use (Dickinson & Dickinson,

Table 1 Visitor travel mode

	Travel diaries, total trips (%)	Visitor attractions survey, all modes used that day <sup>a</sup> (%)	Visitor attractions survey, main mode (based on distance) (%)
Car	82	83	82
Walk	10	23	12
Bus	2	2	1
Cycle	4	1	1
Train	0	2	1
Steam train	1	2	1
Coach	0	2	0
Motorcycle	0	1	1

 $<sup>^{\</sup>rm a}\text{Adds}$  up to greater than 100% as respondents may use more than one mode.

Table 2 Reasons for car use (categories used by 10% or more of respondents)

	(%)
Convenience/ease of use	67
Carrying equipment	37
Speed or time	26
Problem with public transport	24
Presence of children	23
Independence and flexibility	18
No alternative	16
Cost	13
Number of people	11
Problem with cycling or walking	10
Distance traveled	10

2006; Dickinson & Robbins, 2007). Here respondents draw on a widely held representation that there are problems with these alternatives to the car and this is a useful mechanism to support their car use. It also suggests that some respondents feel a need to excuse their car use and rather than justify why they used the car by describing its positive features, they chose to explain why they could not use alternatives. Similarly Barr, Ford, and Gilg (2003) found people gave excuses for their non-participation in recycling, as it has become normative behaviour. While car use is clearly normative behaviour these findings suggest some people are questioning their use.

The categories were entered into a cluster analysis using a within group linkage method and pattern difference measure for binary data which produced tight clusters. The findings of this cluster analysis are not intended as a typology of motorists or travellers as per the work of Anable (2005) and Dallen (2007), but serve as heuristic for further discussion. Clusters were identified as follows:

Cluster 1 (n = 112) associated with:

- cycle or walking problem and
- public transport problem.

Labelled: alternative apologists

Cluster 2 (n = 399) associated with:

- convenience,
- independence,
- cost,
- speed,
- equipment,
- children.
- distance and
- number of people.

Labelled: satisfied car users

Cluster 3 (n = 96) associated with:

• no alternative.

Labelled: single minded car users

The likely response of the three clusters to car usage reduction strategies is considered. The largest group (satisfied car users, n = 399) love the car and embrace positive features of car travel. This group is unlikely to respond positively to alternatives which cannot reproduce these features. The 'alternative apologists' (n = 112) and 'single minded car user' (n = 96) groups are of interest from a behavioural change perspective as their reason for car use includes consideration of alternatives, albeit from a negative perspective. However, these groups use the problems with alternatives as a powerful excuse for car use and are thus also unlikely to switch mode. In particular the 'single minded car user' group are not able to identify alternatives in the context of their present circumstances. Unfortunately, the survey was not constructed to reveal whether this is a pragmatic reality or a more subjective social construction. Nilsson and Küller (2000) discuss the concept of car affection and suggest for some groups this is so dominant that other means of transport are never considered. In a similar vein, a German study of holiday travel (Böhler et al., 2006) also questions the use of alternatives even where people express positive views. Böhler et al. (2006) found people were positive about better trains but had limited personal experience. Most had never travelled by train on holiday and mentioned at least one problem (commonly price, luggage and complications) which stopped them travelling by train. Ultimately it is unclear how the 'alternative apologists' and 'single minded car users' might respond to alternatives being made available. Would they embrace the options or would they be unwilling to engage? Given that alternatives are already available in many cases the latter seems likely. This does, however, raise a question as to whether there is ignorance over alternatives or it is merely an excuse.

## 4.4. Travel problems

Travel diary participants were invited to add additional comments about their trips especially in respect to any problems encountered and any unusual routes taken. Weather conditions were unusually poor during summer 2004, particularly during August which was very wet. This is likely to have reduced the number of visitors, particularly those making day trips, as Purbeck depends to a large extent on outdoor attractions. As a result, fewer participants than anticipated encountered problems travelling around the area and several commented that the road conditions for driving were surprisingly good.

The travel diaries revealed that congestion was encountered on only 42 out of 844 trips recorded. A few participants attempted alternative routes to avoid congestion though this was not always successful as they were not familiar with the area. Only 6% of visitors' trips categorised parking as difficult, though when this was the case it was commonly mentioned in additional open comments at the end of the questionnaire (general problems mentioned 29 times, cost mentioned 13 times).

Participants reported paying up to £9 which was for a day's parking in Weymouth. Most participants parked in car parks (77%) as opposed to on the road. On 56% of trips there was no parking charge. Some participants disliked paying for parking, particularly for short stays. In one case this resulted in the trip being aborted. It was common for people to spend time looking for free, on road, parking before resorting to paying a car park fee. One participant commented:

Went to park in municipal car-park but at £4.00 decided to park on road instead, although car-park completely empty—road parking quite difficult to find space [Swanage, Sunday 25/7/04, 7pm].

Bus users were inclined to comment on late buses and the cost.

The visitor attraction survey again revealed that car users experienced fewer problems than might have been expected (25% encountered problems). Here poor weather did not play a role as the survey was only conducted on good weather days and the number of problems seems thin when compared to other studies where a third or more of visitors experienced congestion (Dickinson et al., 2004). Cyclists and bus users identified most problems (41% encountered problems in both these groups) and walkers the least (11% encountered problems) (Table 3). This tends to suggest travel conditions are less favourable for bus users and cyclists. This is a concern as these are both important alternatives to the car and while they are poorly received they are less likely to encourage use. Problems with cycling and bus use also featured as reasons for car use and reinforce the representation of these modes as problematic.

In the visitor attraction survey the biggest problem identified by car users was congestion (Table 4). Several places are well known to suffer from seasonal congestion due to volume of traffic. However, many referred to

Table 3
Problems identified by bus users, cyclists and walkers

Bus user problems	Cycle problems	Walking problems	
<ul> <li>Congestion/volume of traffic</li> <li>Not enough public transport</li> <li>Buses late</li> <li>Buses slow</li> </ul>	<ul> <li>Congestion/volume of traffic</li> <li>Buses travelling dangerously</li> <li>Hills</li> <li>No cycle lanes</li> <li>Car parking hazards</li> <li>Speed of traffic</li> <li>Abuse from car drivers</li> <li>Walkers and dogs causing an obstruction</li> <li>Lack of access to Poole Harbour</li> <li>Poor car driving</li> <li>Ticketing problem at Sandbanks' ferry</li> </ul>	<ul> <li>Congestion/volume of traffic</li> <li>Volume of people</li> <li>Dog mess</li> <li>Hills</li> <li>Physical fitness</li> <li>Car parking hazards</li> <li>Rain</li> </ul>	

Table 4 Problems identified by car users (% is of those who identified a problem, n = 157)

	(%)	
Congestion/volume of traffic	50	
Parking costs high	12	
Shortage of parking/difficulty finding space	11	
Poor signage	15	
Road works	3	
Could not park where wanted	2	
Accident	2	
Queuing for ferry	1	
Volume of people	1	
Finding free parking	1	
Other	23	

Table 5 Coping mechanisms employed by car users

	(%)	
Accept it	41	
Alternative route finding	11	
Drove slowly	5	
Took time/looked for parking	4	
Parked on road	4	
Would not come again	1	
Other	35	

% Is of those who mentioned a coping mechanism n = 80.

congestion outside of the Purbeck area during the origin to destination journey rather than in Purbeck itself. Congestion was also highlighted by 18% of bus users. Parking was the second problem highlighted by car users. Here it was a combination of high parking costs and problems finding spaces. Car drivers typically accepted the problem, as part of the experience of visiting a tourism destination area in high season (Table 5). Comments at the end of the questionnaire suggest some visitors had expectations of problems particularly on good weather days and others had amended their travel plans, usually by setting off early, to avoid problems they might encounter.

While resident interviews show residents recognise local travel problems, the travel diaries and visitor attraction survey revealed that car-based visitors had fewer concerns. Relatively few visitors identified problems, the most common concern being congestion, including that outside the Purbeck area. After congestion, parking was a concern identified by both residents and visitors. The problems related to finding parking spaces and a dislike of paying for parking. In open comments visitors expressed some concern about high parking charges but these did little to deter car use. The survey demonstrated that car-based visitors, on the whole, accepted the problems they encountered, they were expected in a holiday destination and turned out to be less severe than expected.

Three important caveats need to be considered in relation to the visitors' low identification of problems. Firstly, poor weather conditions during the later part of the travel diary implementation period may have reduced the incidence of problems encountered. It is also possible that sampling bias in the visitor attraction survey reduced the number of visitors experiencing problems. As visitors were surveyed at attractions those who had encountered problems may have gone elsewhere to less popular sites. However, it was felt that this was unlikely to have had a major impact on either sample. Secondly, an issue may be visitors' expectations and experience of problems. Many come from urban areas where they are acclimatised to more serious traffic problems on a frequent basis. Indeed, open comments revealed visitors had expectations of problems, particularly on good weather days, and expressed a willingness to put up with them. Thirdly, visitors are better placed to avoid problems as leisure trips are less dependent on specific time frames and the destination can even be modified.

#### 5. Conclusion

While transport is regularly cited as causing impacts at destination areas and while residents in this study reinforced this view, the analysis raises questions about the pervasiveness of transport problems in rural destinations. By examining visitor travel behaviour decisions, the coping mechanisms adopted by residents and visitors, and contrasting the travel problems encountered, this study has explored how ideas about transport and tourism are to a large extent context contingent and shaped by the collective ideas that circulate in society (the representations). The way ideas circulate and particular practices become accepted is significant for tourism, especially where such practices have negative implications for society or the environment. Practices become accepted and difficult to question especially where there is a collective need to maintain mobility due to the range of personal benefits. Stakeholder groups can also present ideas in a particular way. These issues are now reviewed and implications considered for destination management.

While the findings of this study are specific to Purbeck, much of what has been found can be transferred to other rural destinations in the UK such as National Parks although the local context should be taken into account. Transport planning has a long pedigree of decision-making based on models that draw on objective studies of people's behaviour. This study has focused on how ideas about transport and destinations are constructed and reproduced. It demonstrates the importance of examining the social reality, rhetoric and the social processes that underlie people's decision making in a more holistic way. People make their transport decisions in the light of the social reality in which they live and draw on representations that support their behaviour in particular contexts. Social representations theory is interested in why and how society

creates that social reality and the common sense outcomes that arise from this. It is this that influences behaviour rather than the objective reality of buses, cycling and walking that many people know little about.

There are several clear messages for destination management which arise from this study. First there are issues of responsibility. Residents readily identify with transport problems and tend to project responsibility onto visitors although even as they do so there is recognition that tourism is not solely to blame. Residents contribute significantly to problems of traffic congestion and parking issues. For many visitors the problems do not appear to be salient and visitors were much less inclined to view transport issues as a significant problem. This has important implications for where responsibility to take action lies. Residents would like visitors to take responsibility, yet the visitors do not recognise the problem, see little need to take action and feel persecuted by high parking costs. High parking charges are, at present, the main 'stick' implemented in the area and while visitors express concern about these costs they appear to do little to deter car use. Residents adopt a variety of coping mechanisms to avoid transport problems, however, visitors were more inclined to accept problems. Thus the situation is at a stalemate. Other researchers have observed similar forms of inertia where it is clear people recognise environmental problems but continue with behaviour which is counter-intuitive (Becken, 2004; Böhler et al., 2006; Gössling, 2002). In Purbeck visitors may not even recognise there is a problem although this may be a form of dissonance (Eiser & van der Pligt, 1988) whereby visitors are modifying their views to fit their chosen behaviour of car use. Destination managers need to recognise that different stakeholder groups can construct the problem in a particular way so as to protect their own interests. The issue of responsibility for transport problems is wider than the destination context and it is important that transport issues are set in this wider context, at a national or potentially international level (Robbins & Dickinson, 2007), so as to avoid the bipartisan perspective observed in Purbeck. Recent studies show tourists are less inclined to adopt environmentally responsible behaviour as a tourist than in their general life (Barr, 2007; Becken, 2007). This suggests policy measures should not target tourists (as the residents in Purbeck would like) but instead focus on travel behaviour in general. This removes the complexity and political difficulties of implementing restraint targeted at a destination level. Becken (2007) argues that air travel has become highly valued for the perceived freedom it brings and that only major societal changes would lead to reduced air travel and this is also the case with car-based travel to and around destination areas. Such changes need to be implemented nationally rather than locally.

A large proportion of visitors come from urban areas where congestion and parking problems are an almost permanent feature. From an urban centric perspective the problems in Purbeck are not significant. Furthermore, cycle and bus users identify more problems and two groups of car users were also identified (alternative apologists and single minded car users) with negative views of alternatives. Thus, through social transmission, negative experience and negative representations of alternatives potentially reenforces the embracing of car use. Representations while prescriptive can, however, be modified and this offers an opportunity to manage more sustainable mobility. Representations might be modified by direct experience of alternatives to the car. However, such experiences need to be positive otherwise negative perceptions will be reinforced and transmitted through social interaction. Clearly positive experiences for existing public transport users, cyclists and walkers are an important first step. The media and marketing communications can also play a role in modifying representations.

On a positive note, visitors are aware of the dilemma that they are visiting a natural area and using a mode of transport that detracts from the natural beauty. Yet, visitors are reluctant to pay the costs of their car use and resent paying, what they consider urban parking charges, even though many will be used to these at home. At several sites in the survey (most notably Lulworth Cove) an attempt has been made, using interpretation, to make the link between car park charges and the funding of conservation work. Anecdotal evidence collected during the survey and comments on parking costs suggest these messages are not reaching a large proportion of the visitors. This is an important area for further study as visitors are likely to be more receptive to charges if they have greater understanding of how their money will be spent. People who visit rural destinations do so to a large extent because of the natural environment. There is therefore much greater scope to make the link between the place and visitor travel behaviour through the use of interpretation. However, the ability of interpretation to modify behaviour is limited, especially at destinations where it is encountered after key transport decisions have been made, and can be only one strand in a strategy to affect changes to the representation of transport in destination areas.

A final point relates to the perceived inadequacies of alternatives to the car. The simplistic response of convenience and ease of use dominated reasons for car use. People also employed pragmatic reasons such as transport of equipment and children. Of more interest, is the excuses scenario given for not using alternative modes to the car, particularly public transport. This justifies car use on the basis of the inadequacy of alternatives. When asked about problems, bus and cycle users gave more examples of problems than car users suggesting these modes either experience more problems or are conceptualised as having more problems. Given that problems with alternatives was a common excuse for car use, the latter seems likely and this highlights the pervading representation that there are inadequacies with non-car alternatives. In fact nationally there is a discourse to that effect whereby 'carrots'

(improvements to alternatives) are required before the 'stick' (restrictions on, or charges for, car use). Thus, people are drawing on a widespread discourse that alternatives to the car are simply not adequate and therefore the car has to be used. This throws down a challenge to destination managers and transport providers to develop innovative and effective alternatives to the car which provide positive visitor experiences and even go a stage further to use transport to add value to the leisure experience (Schiefelbusch, Jain, Schäfer, & Müller, 2007). There is a long way to go before residents and visitors will be enticed from their cars, but as global and local travel problems increase people will be looking for alternatives and positive experiences of high quality alternatives to the car may alter how ideas about transport and tourism are constructed in a destination context.

#### References

- Anable, J. (2005). 'Complacent car addicts' or 'aspiring environmentalists'? Identifying travel behaviour segments using attitude theory. *Transport Policy*, 12, 65–78.
- Andereck, K. L., & Vogt, C. (2000). The relationship between residents' attitudes toward tourism and tourism development options. *Journal of Travel Research*, 39, 27–36.
- Ap, J., & Crompton, J. L. (1993). Residents' strategies for responding to tourism impacts. *Journal of Travel Research*, 32, 47–50.
- Axhausen, K. W., Zimmermann, A., Schonfelder, S., Rindsfuser, G., & Haupt, T. (2002). Observing the rhythms of daily life: A six-week travel diary. *Transportation*, 29, 95–124.
- Barr, S. (2007). Environmentally responsible behaviour and attitudes towards low cost airlines: A UK perspective. Paper presented at the RGS annual conference 2007: Sustainability and quality of life, London, RGS, 29–31 August.
- Barr, S., Ford, N. J., & Gilg, A. W. (2003). Attitudes towards recycling household waste in Exeter, Devon: Quantitative and qualitative approaches. *Local Environment*, 8(4), 407–421.
- Becken, S. (2004). How tourists and tourism experts perceive climate change and carbon-offsetting schemes. *Journal of Sustainable Tourism*, 12(4), 332–344.
- Becken, S. (2007). Tourists' perception of international air travel's impact on the global climate and potential climate change policies. *Journal of Sustainable Tourism*, 15(4), 351–368.
- Billig, M. (1996). Arguing and thinking: A rhetorical approach to social psychology. Cambridge: Cambridge University Press.
- Billig, M., Condor, S., Edwards, D., Gane, M., Middleton, D., & Radley, A. (1988). *Ideological dilemmas: A social psychology of everyday thinking*. London: Sage.
- Böhler, S., Grischkat, S., Haustein, S., & Hunecke, M. (2006). Encouraging environmentally sustainable holiday travel. *Transportation Research Part A*, 40, 652–670.
- Brown, G., & Giles, R. (1995). Coping with tourism: An examination of resident responses to the social impact of tourism. In A. V. Seaton (Ed.), *Tourism, The State of the Art* (pp. 755–764). Chichester: Wiley.
- Brunt, P., & Courtney, P. (1999). Host perceptions of sociocultural impacts. *Annals of Tourism Research*, 26(3), 493–515.
- Bryman, A. (2001). Social research methods. Oxford: Oxford University

  Press
- Buro Happold (2004). *Purbeck transportation study: Dorset county council.*On-line document available at: <www.dorsetcc.gov.uk/index.jsp? articleid=31302> (accessed 31st January 2005).
- Charlton, C. (1998). Public transport and sustainable tourism: The case of the Devon and Cornwall Rail partnership. In C. M. Hall, & A. A. Lew

- (Eds.), Sustainable tourism (pp. 132–145). Harlow: Addison Wesley Longman.
- Clark, G., Darrall, J., Grove-White, R., Macnaghten, P., & Urry, J. (1994). Leisure landscapes: Leisure, culture and the English countryside: Challenges and conflicts, background papers. London: Council for the Preservation of Rural England.
- Cloke, P. (1993). The countryside as commodity: New rural spaces for leisure. In S. Glyptis (Ed.), Leisure and the environment: Essays in honour of Professor J.A. Patmore (pp. 53–67). London: Belhaven Press.
- Coleman, C. (1997). Tourist traffic in English National Parks—an innovative approach to management. *The Journal of Tourism Studies*, 8(1), 2–15.
- Cullinane, S. (1997). Traffic management in Britain's national parks. Transport Reviews, 17(3), 267–279.
- Cullinane, S., & Cullinane, K. (1999). Attitudes towards traffic problems and public transport in the Dartmoor and Lake District National Parks. *Journal of Transport Geography*, 7, 79–87.
- Dallen, J. (2007). The challenges of diverse visitor perceptions: Rail policy and sustainable transport at the resort destination. *Journal of Transport Geography*, 15, 104–115.
- Davidson, J. (1970). Outdoor recreation surveys: The design and use of questionnaires for site surveys. London: Countryside Commission.
- Department for Transport. (2005). Focus on personal travel—2005 edition. London: The Stationary Office.
- Department of Environment, Transport and the Regions. (1998). A new deal for transport: Better for everyone (Cmnd 3950). London: The Stationary Office.
- Dickinson, J.E. (2004a). Social constructions of tourism and local travel: implications for mobility in a rural tourism context. In *Tourism state of the art II conference*, 28–30 June, University of Strathclyde, UK.
- Dickinson, J.E. (2004b). Social representations of rural tourism: coping with tourism in a sensitive rural setting. In *Tourism, politics and democracy conference*, 9–10 September, University of Brighton, UK.
- Dickinson, J. E., Calver, S., Watters, K., & Wilkes, K. (2004). Journeys to heritage attractions in the UK: A case study of National Trust property visitors in the south west. *Journal of Transport Geography*, 12(2), 103–113.
- Dickinson, J. E., & Dickinson, J. (2006). Local transport and social representations: Challenging the assumptions for sustainable tourism. *Journal of Sustainable Tourism*, 14, 192–208.
- Dickinson, J. E., & Robbins, D. (2007). Using the car in a fragile rural tourist destination: A social representations perspective. *Journal of Transport Geography*, 15, 116-126.
- Dietz, T., Stern, P. C., & Guagnano, G. A. (1998). Social structural and social psychological bases of environmental concern. *Environment and Behavior*, 30(4), 450–471.
- Eaton, B., & Holding, D. (1996). The evaluation of public transport alternatives to the car in British National Parks. *Journal of Transport Geography*, 4(1), 55–65.
- Eiser, J. R., & van der Pligt, J. (1988). Attitudes and decisions. London: Routledge.
- Giles, D. C. (2002). Advanced research methods in psychology. Hove: Routledge.
- Gössling, S. (2002). Human-environmental relations with tourism. *Annals of Tourism Research*, 29(2), 539–556.
- Gössling, S., Peeters, P., Ceron, J. P., Dubois, G., Patterson, T., et al. (2005). The eco-efficiency of tourism. *Ecological Economics*, 54, 417–434.
- Gursoy, D., Jurowski, C., & Uysal, M. (2002). Resident attitudes: A structural modeling approach. Annals of Tourism Research, 29(1), 79–105
- Halfacree, K. H. (1993). Locality and social representation: Space, discourse and alternative definitions of the rural. *Journal of Rural Studies*, 9(1), 23–37.
- Hall, C. M., & Page, S. J. (2006). The geography of tourism and recreation: Environment, place and space. London: Routledge.
- Hall, D. R. (1999). Conceptualising tourism transport: Inequality and externality issues. *Journal of Transport Geography*, 7, 181–188.

- Hammond, S. (1993). The descriptive analyses of shared representations. In G. M. Breakwell, & D. V. Canter (Eds.), *Empirical approaches to social representations* (pp. 205–222). Oxford: Clarendon Press
- Ireland, M., & Ellis, L. (2004). Holiday homes—the unspoken crisis. In Tourism state of the art II conference, 28–30 June, University of Strathclyde, UK.
- Jurowski, C., Uysal, M., & Williams, D. R. (1997). A theoretical analysis of host community resident reactions to tourism. *Journal of Travel Research*, 36(2), 3–11.
- Keane, M. (1992). Rural tourism and rural development. In H. Briassoulis, & J. van der Straaten (Eds.), Tourism and the environment: Regional, economic and policy issues (pp. 43–55). London: Kluwer Academic Publishers.
- King, B., Pizam, A., & Milman, A. (1993). Social impacts of tourism: Host perceptions. Annals of Tourism Research, 20, 650–665.
- Kurz, T., Donaghue, M., & Rapley, M. (2005). The ways that people talk about natural resources: Discursive strategies as barriers to environmentally sustainable practices. *British Journal of Social Psychology*, 44, 603–620.
- Lane, B. (1994). What is rural tourism? In B. Bramwell, & B. Lane (Eds.), Rural tourism and sustainable rural development (pp. 7–21). Exeter: Short Run Press.
- Lawson, C. T. (2001). Leisure travel/activity decisions: Time and location differences. *Transportation Quarterly*, 55(3), 51–61.
- Lindberg, K., & Johnson, R. L. (1997). Modeling resident attitudes towards tourism. Annals of Tourism Research, 24(2), 402–424.
- Lumsdon, L., Downward, P., & Rhoden, S. (2006). Transport for tourism: Can public transport encourage a modal shift in the day visitor market? *Journal of Sustainable Tourism*, 14(2), 139–156.
- Macnaghten, P. (1995). Public attitudes to countryside leisure: A case study on ambivalence. *Journal of Rural Studies*, 11(2), 135–147.
- Moscovici, S. (1981). On social representations. In J. Forgas (Ed.), Social cognition (pp. 181–209). London: Academic Press.
- Nilsson, M., & Küller, R. (2000). Travel behaviour and environmental concern. *Transportation Research Part D*, 5, 211–234.
- Page, S. J. (2005). Transport and tourism: Global perspectives. Harlow: Pearson Education Limited.
- Peeters, P., Szimba, E., & Duijnisveld, M. (2007). Major environmental impacts of European tourist transport. *Journal of Transport Geogra*phy, 15, 83–93.
- Perdue, R. R., Long, P. T., & Allen, L. (1990). Resident support for tourism development. Annals of Tourism Research, 17, 586–599.
- Prideaux, B. (2000). The role of the transport system in destination development. *Tourism Management*, 21, 53–63.
- Purbeck Heritage Committee. (2002). Making Purbeck more special: A strategy for the Purbeck Heritage Area 2002–2007. Wareham: Purbeck Heritage Committee.
- Research International Ltd. (2006). *England leisure visits: Report of the 2005 survey*. Wetherby: Natural England Publications.
- Robbins, D. K., & Dickinson, J. E. (2007). Achieving domestic tourism growth and simultaneously reducing car dependency: The illusive prize. In P. Peeters (Ed.), *Tourism and climate change and mitigation:* Methods, greenhouse gas reductions and policies (pp. 169–187). Breda: NHTV.
- Roberts, L., & Hall, D. (2001). Rural tourism and recreation: Principles to practice. Wallingford: CABI Publishing.
- Rubin, H. J., & Rubin, I. S. (1995). Qualitative interviewing: The art of hearing data. London: Sage.
- Schiefelbusch, M., Jain, A., Schäfer, T., & Müller, D. (2007). Transport and tourism: Roadmap to integrated planning developing and assessing integrated travel chains. *Journal of Transport Geography*, 15, 94–103.
- Schlich, R., Schonfelder, S., Hanson, S., & Axhausen, K. W. (2004). Structures of leisure travel: Temporal and spatial variability. *Transport Reviews*, 24(2), 219–237.
- Scott Wilson Resource Consultants Tourism Associates. (2000). *Purbeck countryside recreation study: Final report*. Abingdon: Scott Wilson.

## J.E. Dickinson, D. Robbins / Tourism Management ■ (■■■) ■■■■■■

- Sharpley, R., & Sharpley, J. (1997). *Rural tourism: An introduction*. London: International Thomson Business Press.
- Shaw, S., & Thomas, C. (2006). Social and cultural dimensions of air travel demand: Hyper-mobility in the UK? *Journal of Sustainable Tourism*, 14(2), 209–215.
- Stemler, S. (2001). An overview of content analysis. *Practical assessment*, research & evaluation, 7(17). On-line document available at <a href="http://PAREonline.net/getvn.asp?v=7&n=17">http://PAREonline.net/getvn.asp?v=7&n=17</a> (accessed 7th July 2005).
- Stoll-Kleemann, S., O'Riordan, T., & Jaeger, C. C. (2001). The psychology of denial concerning climate mitigation measures: Evidence from Swiss focus groups. *Global Environmental Change*, 11, 107–117.
- Stratford, N., Simmonds, N., Nicolaas, G., Costigan, P. (2003). *National travel survey*. On-line document available at: <a href="http://www.dft.gov.uk/stellent/groups/dft\_transstats/documents/page/dft\_transstats\_610055">http://www.dft.gov.uk/stellent/groups/dft\_transstats/documents/page/dft\_transstats\_610055</a>. pdf > (accessed May 2004).
- Tertoolen, G., van Kreveld, D., & Verstraten, B. (1998). Psychological resistance against attempts to reduce private car use. *Transportation Research Part A: Policy and Practice*, 32(3), 171–181.
- Urry, J. (2002). Mobility and proximity. Sociology, 36(2), 255-274.
- Vaughan, D. R., Farr, H., & Slee, R. W. (2000). Estimating and interpreting the local economic benefits of visitor spending: An explanation. *Leisure Studies*, 19, 95–118.
- Weber, R. P. (1990). Basic content analysis. London: Sage Publications.