How understanding tourists' perceptions of distance can help reduce the environmental impact of tourism mobility

Keywords: Distance; understandings of distance; travel; experience; tourism mobility

Introduction

The average distances travelled by tourists have been increasing, especially since flying has become a widely used mode of travel for vacations, and the availability of cheap air fares has brought many distant destinations within reach; inside acceptable time periods and cost constraints. The increasing speed of travel and provision of new routes have resulted in a higher proportion of the tourist population visiting distant and international destinations, with projections of even higher numbers travelling in the future, as well as increasing average distances. Unfortunately the further and the faster the travel, the greater the environmental impacts through fuel-use, greenhouse gas emissions and pollution. Although tourism is currently only responsible for en estimated 5% of global greenhouse emissions, both its absolute and relative contributions are growing as other industries reduce their emissions. Of tourism's CO_2 emissions, 75% is a result of the transportation of tourists to and from their holiday destinations (UNWTO-UNEP-WMO, 2008).

In order for tourism to reduce its environmental impact, the distances tourists travel must be reduced, especially the distance travelled across by air. Peeters (2007) argues that a reduction of the passenger-kilometres travelled by tourists has the potential to reduce tourism's greenhouse gas emissions, and in the report on climate change and tourism global challenges UNWTO-UNEP-WMO (2008) argue that because aviation is the main source of tourism mobility's environmental impact, a shift towards surface modes would reduce the emissions from tourism transport.

Distance, and how it is travelled over by tourists is thus an important element of the discussion of how the tourism sector can reduce its environmental impacts, but while the increasing distances being travelled have been measured and aggregate movements of tourists analysed (see for example Ankomah, Crompton and Baker (1996), McKercher and Lew (2003), Nicolau and Mas (2006), Lin and Morais (2008), McKercher, Chan and Lam (2008), Nicolau (2008)), there are no accounts of how tourists *themselves* view distance and the role this plays for their travel behaviour. The research presented in this paper used discourse analysis to identify the different ways in which distance was talked about in interviews with Danish tourists. It found that the respondents rarely referred to physical units of distance measurements (such as kilometres or miles), but used other

scales such as cost, time and cultural difference to express relative distances. They also viewed some distances as ‘zonal’, when they referred to places being away from home or being within a zone associated with ‘sun and sea’ or winter sports holidays. This paper proposes that understanding how tourists understand distance can provide important insights into how it is possible to encourage tourists to travel less distance.

The paper first presents more detailed evidence of the increase in tourist travel and the resulting environmental impacts. It next explores thinking about distance and how it is represented using literature from several disciplines including geography, tourism and mobility. After a brief description of the methodology, the findings are summarised before a discussion about how these results might inform efforts to reduce the environmental impact of tourism.

Environmental impacts of increasing tourism travel

It has been estimated that tourism in 2005 contributed between 3.9% and 6.0% of global CO_2 emissions (UNWTO-UNEP-WMO, 2008). 75% of these were from tourist travel and 40% (and 54-75% of radiative forcing) were from air travel. Compared to surface-based transport modes air travel has a high environmental impact (Gössling and Upham, 2009), and combined with the relatively large proportion of travel undertaken by air, this constitutes a problematical issue for tourism's effort to reduce its emissions (Scott and Becken, 2010; Dubois, Peeters, Ceron & Gössling, 2011). Further, Peeters, Szimba and Duijnisweld (2007) project that total passenger transport performance (measured in passenger-kilometres) will increase for European outbound tourism from 2021 billion kilometres in 2000 to 4480 billion kilometres in 2022, representing a rise of 122%, whereas the numbers of trips will 'only' increase by 57% (Peeters et al. 2007; Peeters 2007). This indicates that the average distances travelled by European tourists will increase, and Peeters et al. (2007) expect a considerable growth towards 2020 in the long haul market, journeys predominantly undertaken by air.

The trends of increasing numbers of people taking more frequent holidays in more distant destinations with an increasing proportion of travel by air will result in increasing emissions from tourism at a time when other industries, through technological change and economic downturns, seem to be moving towards their future emission reduction targets. Tourism, if emission reduction efforts are not efficient, could risk becoming a major greenhouse gas source (Scott, Peeters & Gössling, 2010), and most of this environmental impact will be a result of tourists travelling by air. Like almost all motorised transport, air travel uses fossil fuels faster than they are created, emits a number of pollutants and green house gases and causes other impacts such as noise for non-users. In addition, because the pollutants are deposited at high altitudes their impact on global climate change

is increased (Peeters, Williams & de Haan, 2009). Although fuel efficiency measures have the potential to reduce emissions, these will be outweighed by the predicted increases in flying unless they are accompanied by policy intervention (Kahn et al., 2007).

Mitigation of tourism's environmental impact through changes in the way tourism transport systems are managed, such as carbon off-setting schemes (Gössling et al., 2007), voluntary compensation (Boon, Schroten & Kampman, 2007) and the inclusion of aviation into EU's Emissions Trading System (European Commission, 2012), is one approach to this issue. If successful this will “change the transport landscape from cheap and fast (air transport) to slower and more expensive" (Peeters, 2007: 21). Scott et al. (2010) argue that the only scenario that would see tourism achieve an actual reduction in total emissions, rather than a relative one, is if high energy efficiency gains through technological developments are combined with considerable modal shifts and tourists choosing closer destinations and stay in these destinations for longer periods of time. Reduction of transport volumes is important in order to make the mitigation strategies of emissions successful, and

> means uncoupling the growth of tourism and the growth of passenger-kilometres by changing current mobility trends towards shorter and more frequent trips to longer and less frequent ones, and to shift destination choices away from long haul (Peeters, 2007: 23).

Distance plays an important role in this strategy, and the increase in distances travelled by tourists, and the expectation that the proportion of air travel will also rise, is problematical in terms of tourism's environmental impact as the transport to and from destinations is already tourism's main source of emissions. Therefore distances travelled by tourists is an area where a change in behaviour will have significant impacts on tourism's overall environmental impact. This would require reducing, rather than increasing, the total distance travelled.

Distance

Distance though, despite being an important element of tourism's environmental impact, has received little attention in tourism studies, and tourists' understanding of distance in relation to tourism mobility remains largely unexplored. Most people have an intuitive understanding of distance as the separation of places, measured in kilometres or miles. However, most people are also aware that not all kilometres or miles are the same as each other. For example, an uphill kilometre differs from a downhill one, especially on a bicycle. Such understandings of distance are sufficient in most everyday situations, but for research focussed on the effect of distance, a more

nuanced understanding of distance is needed.

Both geography and mobilities studies offer insights into 'what distance is', because also for these research fields is distance important. From these fields, distance emerges as a concept that has both a physical as well as numerous relative dimensions (Pirie, 2009), and as something that denotes a relationship between places (Gatrell, 1983). Distance can be as simple as close or faraway or express degrees of closeness or separation such as near by, further away or a long way away.

Distance's physical dimension is the distance that is measured in units derived from the physical world and its mappings, such as kilometres or miles (Pirie, 2009). These measurements of distance are designed to allow comparisons between distances in different areas and as such are decontextualized, but often form the reference baseline for discussions about distance. The relative dimensions of distance are the references made to distance using units that are not directly linked to the physical spatiality of the world (Chapman, 1983), but rather denote distance in terms of, for example, time, cost, accessibility, travel experience or familiarity (with routes and modes, or culture at destination) (Pirie, 2009). Relative distances become important because, in order to travel distance, a number of factors are relevant such as cost, time and effort of overcoming distance (Cooper & Hall, 2008; Gatrell, 1983), and this can change the relative distances between places. This involves a certain degree of subjectivity because of the different capability of and access to resources to cross the same distance, for example between a time and cash-rich pensioner, and a time-rich, but cash-poor unemployed, young person.

Beyond the differential access to resources, distance may also be perceived differently in the estimation of the physical distance (Ankomah et al., 1996), the resources needed to overcome it (Hall, 2005) or the inclination to traverse it (Pirie, 2009). There will also be different degrees of familiarity with the route, mode, journey, destination, various motivations to travel and attitudes towards all of these, alongside different affective and symbolic (Stradling, Hine & Wardman, 2001) meanings attributed to these and any alternatives to travelling. Therefore the distance between places may hold multiple significances for potential travellers.

Distance is often represented as a friction to be overcome (see McKercher and Lew, 2003). The gravity model is used to explain the connection between distance and the relative ‘pull’ (usually the size in terms of population) of different destinations. This representation embraces the observation that the further away a destination is the less likely people are to visit it, also called ‘distance decay’ (Eldridge & Jones, 1991). Improving transport infrastructure or vehicles by lowering the cost or increasing the speed of travel reduces the friction of the distance. A similar model, the intervening opportunities model (Stouffer, 1940; Hall, 2005), explains distance decay as a function of the number of destinations offering similar attractions between the traveller’s point of

origin and the studied destination. The intervening opportunity might be a destination which is quicker or cheaper to reach, either because it is closer or it is more accessible through the transport networks.

These different aspects, physical and relative, of distance exist simultaneously and are most appropriately understood as different layers of distance, rather than alternatives. The representations chosen to talk about distance may imply different consequences. For example, when travel to a holiday destination is referred to as a time or money cost or perhaps a constraint on the distance travelled, it implies that increases in the journey time or cost of travel would result in less distance being travelled. If greater distances are associated with cultural differences which bring increased tourist-satisfaction, the cost and travel time might appear less relevant. Engagement with the mode of travel, as with slow travel, may imply that greater satisfaction may be achieved through journeys of greater duration, but not necessarily greater length.

Distance and travel

Travel is an essential element of tourism; tourists being defined as people “traveling to and staying in places outside their usual environment …” (UNWTO, 1995, p10). Travelling beyond one’s usual environment inevitably involves distance. Fridgen (1984) identified five phases of the tourism experience: planning and anticipation, travel to the destination, being at the destination, the return journey and recollection, and distance features in all five phases. In the planning of a holiday distance is an element of the destination choice, as distance has to be contemplated in relation to how much distance it is necessary or desired to travel across to reach the holiday destination. The journey to the destination and back again represent very tangible engagements with distance through travel, and most holidays also involve travel within the destination. Lastly, distance becomes an element in holiday recollection through being the spatial separator between the tourist's home and their holiday space.

Much literature has focussed on the importance travel has for tourism: Moscardo and Pearce (2004) identified five different roles of travel, ranging from the situation where travel is not undertaken even if it is desired, to the travel that dominates the experience, and is enjoyed and desired. Lumsdon and Page (2004) outline how tourism transport can be understood as a continuum from the position where tourism transport is viewed purely as utility, and has a low intrinsic value as a tourism experience, to the opposite position where the transport is viewed *as tourism*, and has high intrinsic values for the tourism experience. Specific modes of transport are linked to this continuum, with fast modes generally associated with the transport that yields low intrinsic experience values, and slow modes of transport associated with high intrinsic experience values.

Little is known, however, about how tourists understand and perceive distance in relation to their holiday travels. Previous studies have shown that physical distance can be both a positive and negative factor in influencing travel behaviour (Nicolau, 2008), and physical distance has been viewed by researchers as a proxy for other variables that impact on a tourist's holiday mobility (McKercher et al., 2008). Aggregate studies of tourism often utilise measured physical distance to explain quantitative relationships between origins and destinations (e.g. Duval, 2007; Mazanec, Vöber & Zins, 2007), but they do not attempt to understand the subjective perceptions of distance and how these might underpin tourists' travel behaviour.

Viewing travel as part of the tourist experience differs from the more traditional view of travel to and from the destination being a practical problem (Haldrup, 2004). It opens the potential of enhancing the experience, rather than crossing the distance as quickly and cheaply as possible, focussing on the values travel can have as a tourist experience (discussed by, for example, Larsen, 2001; Page, 2005; German Molz, 2009; Dickinson & Lumsdon, 2010). This shows that the journey to and from holiday destinations holds more importance than just being a practicality to be dealt with. It also shows that distance has the potential to be important for tourism mobility beyond it being a spatial separation to be transcended by tourists en route to their chosen destinations.

Methodology

Because of the lack of previous studies and theorisation about perceptions of distance by tourists, the research adopted an abductive (Reichertz, 2007) and qualitative approach to explore the subject. The aim was to identify different understandings of distance and to develop theory rather than seek representative samples of tourists and their views. 30 interviews were conducted; all focussing on experiences of the respondent's tourism mobility, and the data collection was in three stages, interspersed by analysis to inform the subsequent interviews. This permitted an inter-play between data and theory (Blaikie, 2007; Corbin & Strauss, 2008) and meant that specific types of respondents could be recruited to explore issues arising from the analysis. The semi-structured interviews allowed respondents to expand on the topics introduced by the researcher and introduce new topics of their own. The respondents were all Danish adults, aged between 26 and 67, with experience of travel. They were interviewed for between one and two hours each at a place that suited them (usually their own home).

Discourse analysis was used to analyse the transcribed interviews to identify and understand the language used to talk about distance. This focuses on discourses: sets of meanings, metaphors and representations which together produce a version of events (Burr, 1995) and ways of talking about the world (Hall, 1997). Using a discourse as the unit of analysis captures contradictory

attitudes and actions from the same respondent which form part of different ways of viewing the same entity. Using Atlas.ti software, open-coding was first used to label themes emerging from the data, which was followed by axial coding to analyse the properties of each theme and explore whether any could be grouped (Bryant & Charmaz, 2007).

Findings

The analysis focussed on how the interviewees spoke about distance in the context of their holiday mobility. Five categories emerged which are relevant to attempts to reduce tourist travel:

- distance as a use of resources
- distance as an experience
- distance as an attraction to travel
- distance as an ordinal scale of separation
- distance as being in different zones

When talking about distance, the interviewees rarely speak about physical measurements of distance, e.g. kilometres. Distance is predominantly understood and spoken about in relative dimensions, which seem to be more important for the interviewees in terms of signifying distance. This does not mean that physical distance is not relevant, and most interviewees reflect that their relative understandings of distance are supplemented by their knowledge of the physical distance to a given place. However, the analysis showed that, generally, the interviewees' knowledge of physical distance measured in kilometres to various countries and continents is sketchy. Most interviewees were unable to say in kilometres how far it is from Denmark to some of the favourite Mediterranean holiday destinations, and some appear to not be aware of the relative location of different countries, as exemplified by one interviewee:

> Actually I don't know if it [Egypt] is far away in terms of kilometres in comparison to some of the other places I have mentioned [USA, Asia] (female, 26).

The analysis showed that distance is a factor for the interviewees in relation to their holiday mobility, both in relation to the choice of holiday destination and travel mode, and when they reflect on the holiday experiences, but more often than not it is the relative dimensions of distance that are relevant, and not physical distance.

Distance as a use of resources

The distance travelled by the interviewees is predominantly determined by the availability of time and money: how long a time period do they have for travelling in, and how much a journey will cost them. Limited or designated budgets of both resources can form the constraints within which a holiday is planned and which limit the distance travelled:

> It [that, which determines how far to travel] is how long I can get off from my work and how much money I have decided to spend. So it is time and economy (male, 30).

> It [that, which determines how far to travel] is a combination of the cost and then how much time I have at my disposal (male, 37).

Distance that way becomes measured in time or money. The temporal measurement of distance relate to two issues: the time spent on a specific holiday in relation to the total annual leave, and the holiday journey time in relation to the total time spent on a specific holiday. Especially the latter understanding of distance is used to compare the relative distances to different destinations, or explain why certain holiday destinations were chosen. Time-distance emerged in the interviews as the single most used way of measuring distance.

The cost was also mentioned as an important factor of distance because cost distance has a strong determining influence on the destination choice, and the transport mode. The price of a holiday is important for most people as they have a budget to work within, and the interviewees correlated price with distance. However, it appears that the total price of the holiday is important, not just the price of the journey:

> We had discussed, because usually every other year we travel a bit further, so this year we were to stay just in Europe, that would be better. But then we found out that there were cheap tickets to Singapore. So we decided to go down there, and it is cheaper to stay in the East, so that was why [they travelled to Asia instead of Europe, as previously planned] (female, 29).

Where time is viewed as a strong signifier of distance, cost distance is less rigid because all the holiday costs are included, and not only the journey or ticket costs, but from the interviews it is clear that cost is perceived as the factor which most constrains the distances travelled on holidays.

Several respondents also pointed out that accessibility rather than physical distance influenced their choice of destination, because inaccessible destinations require more time or money to reach them and often have a hassle factor, when the journey is not straightforward:

> Distance is one thing, and accessibility another. Because the distance is still the same. But it is obviously easier to get to Phuket in Thailand than to Nuuk (in Greenland) (male, 30).

> You can travel far by plane, and there are some places that have very good flight connections, I mentioned Stavanger before, that is not an easy place to get to, but it is closer than for example Tenerife would be...but I think it would be easier to get to Tenerife […] It does something for the accessibility [a direct flight route] (female, 26).

This understanding of distance in the form of the resources it is necessary to use in order to overcome it is also reported in literature (e.g. Hall, 2005), and is a distance representation that is intuitive and relevant in everyday life, and will be recognised by many in relation to both their normal lives and their holiday mobility.

Distance as experience

After distance understood as resources, the way in which the interviewees most often refer to distance is in the form of distance as experience, i.e. the experiences that are associated with travelling across distance. Distance as experience mostly relate to the journey itself, when the journey assumes intrinsic qualities over the instrumental aim of just reaching a destination. The experience value may be derived from the mode, the areas travelled through or the travel companions:

> To move on a bicycle, that is very enjoyable. It is not fast, but the journey becomes part of the holiday […] You are closer to the surroundings, and nothing just flies past you, you see more of the scenery and experience the area in a different way (male, 29).

> I often enjoy the journey very much, even when it is by car, and you have ten hours driving with other people to a ski resort or somewhere, I find that part of the journey quite fun. It is often very nice, you are in the car telling stories, listening to music, drinking coffee. It becomes part of it, it is part of the concept. And I like the feeling of moving. (female, 32).

There is also an element of savouring the arrival and enjoying the transition from home to holiday, especially when it involves changes in climate, landscape or culture:

> It is nice [travelling from Denmark to Austria by train]. You arrive in a foreign country peacefully and quietly. And then you sleep on the way, that is you travel at night and that is actually a good way, you start in the late afternoon from Denmark and arrive the next morning, and the night is spent sleeping and travelling. When it goes to plan you wake up when you have come to Southern Germany and continue into Austria and see more and more mountains, hopefully with snow on them, and that is really a very good way of

arriving (male, 63).

> For example when I travelled to Spain after high school I deliberately chose the coach, which was 54 hours. I could have taken the plane which would have been two hours, but it was important that I experienced the journey, to be able to adjust to something new (female, 32).

Another aspect of the experience of distance relates not to the journey, but to an appreciation of the differences in cultures encountered by travelling further. For some of the respondents experiencing foreign places and cultures is a driver for their holidays, and often they make a strong correlation between physical distance and the possibility of meeting that which is different. When distance is spoken about by the interviewed tourists as experience, their behaviour and reflections that can often be interpreted as a 'desire for distance', and it is clear that distance in itself sometimes becomes an attraction for tourists and a driver for tourism mobility, through the desire to encounter somewhere culturally different. For the interviewed tourists, distance signifies these attributes that are sometimes, though not always, desired in a holiday, and through this association, distance itself becomes desired and an attraction. The attraction of physical distance to tourists has been suggested elsewhere (by for example Nicolau, 2008; Peeters & Eijgelaar, 2012), but the findings of this research indicate that also distance in relative dimensions can be an attraction to tourists, and can motivate travel. The manifestation of a distance desire into actual travel behaviour is through the level of engagement with distance as part of the journey, which, sometimes, becomes the entire holiday, and through the deliberate choice of travelling to destinations that are culturally different from the usual context of the tourist. Thus, a desire for distance can be identified in two different forms of travel behaviour: distance can be desired when a tourist wants to travel distance in order to achieve difference, and associates physical distance and cultural difference. Distance can also be desired when the aim of a holiday is the actual journey from one place to another (or a circular trip), where it is the movement that is the holiday experience. This knowledge that relative distances are desired by some tourists gives an insight into potential reasons why people travel, and especially what roles distance has the potential to play in the motivation of holiday travel. Where previously travelling across distance has often been viewed as mostly an instrumental part of tourism mobility, the knowledge about distance desires gives weight to the arguments that the journey can be the most important element of a holiday, and shows how engagement with distances (in various relative dimensions) must also be viewed as an intrinsic factor of travelling.

Ordinal and zonal distance

The analysis of the interviews also showed that tourists understand distance as either zonal or ordinal. Ordinal distance was labelled as such by Tobler (2004) in order to capture the understandings of distance expressed through something or somewhere being near, close or closer, or far, further or furthest away, but without specifically measuring the involved distance in any physical or relative dimensions. That such an understanding of distance is present in the tourist interviews was not unexpected, as this is an obvious component of a tourist destination choice, theorised by Stouffer (1940) and Hall (2005) in the intervening opportunities model. This model projects that of two destinations offering the same to the tourist, the closest will be chosen. However, the analysis showed that ordinal distance, and the destination choice model described by Stouffer and by Hall, does not necessarily result in the choice of the destination that is closest in terms of physical distance. Often the destination choice is based on an effort of reducing distance in one of its relative dimensions, such as time or cost, so ordinal distance can, just as any other distance, be measured in relative dimensions. The respondents' judgement of which places they perceive to be close or far away then rests on an assessment of the relative distance rather than the physical distance, as it is the relative distance that is more relevant and has more influence on how their holiday mobility is manifested.

The zonal distance widely expressed by the interviewees is when distance is understood as a zone, where it signifies an unspecified location such as 'here' or 'there', or 'not here' or 'not there'. Distance becomes relevant just as the spatial separation it signifies, and not in terms of any quantitative measure of that distance. In the interviews it is typically seen when the tourists talk about wanting to just get away from home, and distance comes to signify somewhere (often: anywhere) else but home. In particular holidays to sun or ski destinations appear to include a zonal understanding of distance:

> I go away every year on a summer holiday, a week or fourteen days to some almost unimportant place, just to get some sun and summer […] In essence it is just to get away for a while and as long as it is warm, that is the important criterion (female, 29).

From the analysis it is clear that tourists can have both ordinal and zonal understandings of distance, but that in relation to some holidays an ordinal understanding of distance is predominant, while other holidays are influenced more strongly by a zonal understanding of distance.

Discussion

The insights gained from the research may be applied to the challenge of how it is possible to reduce tourism travel, and encourage a behavioural change towards shorter distances, by more

environmentally friendly transport modes, while at the same time satisfying tourists' desire for distance. That distance can be something that is deliberately made an element of holidays and a direct source of valued holiday experiences could be problematic in the context of the discussion of travel being tourism's major contributor of emissions. Any acceptable reduction in emissions from tourism is likely to be a result of a combination (Scott et al., 2010) of technological and infrastructural improvements (although the prospect of significant technological improvement in aviation is limited (Peeters et al., 2009)), regulatory and marked-based policies (Daley & Preston, 2009) and changes in travel behaviours. Peeters (2007) argues that emissions could be reduced if the number of passenger-kilometres is reduced, i.e. if tourists choose closer destinations, and UNWTO-UNEP-WMO (2008) highlight the necessity of a modal shift, where the proportion of tourism travel undertaken by rail and coach is increased, and aviation decreased.

One of the major behavioural challenges for a reduction in emissions from the transport of tourists is thus reversing the trend of ever longer holiday distances, transcended with increasing frequency by air (Bows, Anderson & Peeters, 2009). However, as it has been reported in literature (see for example McKercher, Prideaux, Cheung & Law, 2010; Gössling and Upham, 2009), and concluded from the workshop 'Psychological and behavioural approaches to understanding and governing sustainable tourism mobility', held in Freiburg, July 2012, voluntary change alone in tourists' travel behaviour on grounds of environmental concerns has not yet and is unlikely to achieve the necessary reduction in emissions. The question of who can and should instigate such behavioural changes is therefore a major challenge for the effort of the reduction of emissions from tourism travel, and tourists' understandings of distance can provide useful insights to this discussion.

Time and cost distance

That the tourists in the interviews first and foremost understand distance in relation to the temporal and financial resources they have to spend on travelling is not unexpected, as such an understanding of distance is also reported in the literature, both from within and outside tourism studies (e.g. Hall, 2005; Pirie, 2009). This way of representing distance poses significant challenges in relation to reducing the average distances travelled by tourists, as well as the need for the proportion of tourism travel by air to decrease. The choice of a holiday destination is, according to the interviewed tourists, highly influenced by how long it takes to get there, and how much the journey will cost. For most holidays, the time and money spent on the journey is minimised. This leaves air travel the most preferred mode of holiday transport (although not the favourite one), as the tourists in the interviews choose flying based on the assessment that it is the cheaper and faster way to reach

a destination, and therefore they choose flying as a default holiday transport mode (a finding which echoes with those of Hares, Dickinson & Wilkes, 2010).

The accessibility of a holiday destination was also a factor that influenced the tourists' understanding of distance. This also represents a challenge to a reduction in distance travelled and, in particular, a modal shift away from aeroplanes. Flying is viewed as an easy way of travelling and flight routes makes distant places much more accessible than they are using land based travel, even destinations on the European continent. Therefore flying is also chosen out of convenience, and thus represents the fastest, cheapest and easiest way to get to a destination. With distance mainly being measured as time, cost and accessibility, and most holiday journeys being viewed as a something that needs to be undertaken with the least spend of these resources, it becomes obvious why flying is the most preferred mode.

The constraints of time and money seem to be dominant factors in the choice of tourist mode with relatively little response to pleas to voluntarily reduce flying. This suggests that changes will be needed to the temporal and financial contexts to effect change. Changing the time-budget for tourists is a potential approach, where design of annual leave budgets could favour more sustainable travel patterns, by for example giving more time off work to people who then spend that extra time travelling a more sustainable way that by air. Scott and Becken (2010) have advocated that people travelling long distances should go less frequently and stay longer, currently very difficult with annual leave allowances. More flexible arrangements allowing leave to be accumulated over a few years might allow this. Employers wishing to improve their carbon ratings might give more annual leave to employees using slower modes, but currently holiday carbon spending is not viewed as of any relevance to employers and differential leave allowances might prove contentious. This is also a top-down regulation that could prove very difficult to achieve, as it would involve significant changes in labour-regulations, and introduce differentiation between workers according to choices regarding their leisure time. Schemes that tries to influence people's travel behaviour have, however, been used in relation to work related mobility, such as the cycle to work schemes in the UK and Denmark, and these could possibly provide some inspiration for how it is possible to change holiday mobility.

Another approach to encouraging a change in travel behaviour away from aviation is an increase in airfares, in order to make the tourists pay for the environmental externalities of their air travel. This would probably reduce aeromobility, because part of the reason tourists choose to fly is the availability of cheap tickets. However, Hares et al. (2010) found considerable loyalty to low cost airline because of the way they had opened up travel and far destinations "to the masses" (p470), which may make such price rises politically difficult to implement. It would necessitate negotiations

with and regulation of the air industry, and most attempts at regulating air travel so far has been met with the argument of reduced competitiveness in a global market, and would probably be resisted by both airlines and their customers.

Distance as experience and attraction

Distance as experience was expressed in two ways in the interviews: the experience of travelling from one place to another, and the experiences of meeting different cultures. Further, the analysis showed that when distance becomes an attraction to tourists, it is in the form of distance as experience. The desire for distance in the form of meeting different cultures and the association between longer physical distance and more unfamiliar cultures has the potential to lead to unsustainable travel behaviour, while the other type of desire for distance, which is the engagement with distance through slower travel modes, has the potential to lead to more sustainable tourism mobility through the rejection of air travel.

By travelling to and from the holiday destination using a mode of transport that facilitates a closer engagement with the distance travelled over, the analysis of the interviews show that tourists' experience of distance increases. The slower the tourist travels, the more they engage with the distance, so slower travel modes have the potential to not only make holiday travel more environmentally friendly, but also to satisfy the tourist's desire for distance. Hence it could be possible to accommodate the environmental aim of fewer passenger-kilometres without tourists necessarily experiencing less distance through a change in the transport mode. Lumsdon and McGrath (2011) argue that slow travel is emerging as a new form of tourism mobility, where the emphasis is on travelling using slow transport modes (i.e. avoiding planes, private cars and possibly high speed trains), that allows for a deeper engagement with the space and places the tourist travels through and to. Slow travellers incorporate their travel time into the holiday experience (Dickinson & Lumsdon, 2010), so there is potential for a tourist's engagement with distance to be enhanced through deliberately choosing slower surface modes of travel, as opposed to longer distances travelled by air. If tourists could be encouraged to travel by modes that in themselves offer experience and thereby add to the overall holiday experiences, it is likely, from the interview analysis, that they would travel shorter physical distances. So not only would they not fly, but use more environmentally sustainable modes, which in itself would be beneficial, but they would also not travel as far.

The desire for distance can be a result of the link tourists make between physical distance and cultural dissimilarity, i.e. the further away one travels, the more likely an encounter with a different culture. Tourists search for novelty (Urry, 2002), and when novel cultures becomes

associated with physical distance, distance appears attractive to tourists. Analysis of the interviews show that the holidays where a desired experience is the meeting of different cultures generally are to destinations that are physically further away than, for example, the yearly sun-holiday. This insight suggests, that if tourists' desire for experiencing unfamiliar cultural contexts can be dis-associated with physical distance, it would be possible to facilitate a reduction in the distance the tourists travel. Supporting this argument are comments made in the interviews about how little is actually known by the tourists about relatively close destinations, with one interviewee commenting that Ukraine is close compared to some of the other destinations he discussed, but seems very different. Others reflected that many destinations that are close in physical distance actually 'feel' far away because of the experience of cultural dissimilarity. If this 'feeling' of far away could be harnessed in order to satisfy a distance desire, physical travel distance could be reduced.

Holiday travel has often been framed as just a practical problem, with few intrinsic or positive emotional values (Haldrup, 2004), but this view of travel as a disutility, a cost of reaching the destination, has been challenged (see for example Baxter, 1980; Jain & Lyons, 2008; Moscardo & Pearce, 2004; Cao, Mokhtarian & Handy, 2008). Travelling across distance does (sometimes) hold intrinsic values for the traveller, and the analysis of the interviews in this paper showed that the journey element of a holiday is often embraced as both a physical and mental transition from one place to another. Instead of forcing tourists to travel on slower modes through regulation of time and financial resources available for the tourists, policies that encourage a modal shift could be introduced, perhaps in the form of incentives for travelling using surface modes, which could satisfy distance desires.

This, however, leads to the question of who should be responsible for providing such incentives. If tourists were made more aware of the cultural differences on offer closer to home, they could possibly be encouraged to choose destinations that are not as far away, and thereby reducing the distances travelled in order to encounter difference. Closer countries trying to develop their tourism market might be encouraged to market their ‘exotic’ tourism offering to nearby tourism origin countries, to promote a 'feeling' of distance. An example is the promotion of cycle tourism in former Iron Curtain countries, offering accommodation in rural areas. Meeting the desire for distance as experience in the form of encountering culturally different places will have to be based on the knowledge the tourist has about various destinations when the next holiday is to be chosen, and therefore it would have to rely on the destinations as well as tour operators to provide such information. The challenge they would face is the abundance of information and places where this information is communicated (online, through various media, word of mouth etc.), and how it is possible to find and target the tourists for whom this information would be relevant, and to market

such destinations effectively in the face of so much competition.

Also relating to the understanding tourists have of distance as experience is how it is possible to encourage more tourists to travel by modes that increase their experience of the journey, thereby avoiding air travel as well as potentially reducing the distances they travel. This could be done through making air travel less attractive, as discussed above, but it could also be done through promoting slower modes of travel, something which is already being done. The analysis of the interviews showed that if people have once travelled using slow travel modes and experienced the higher engagement with distance and the places they travel through, they are very positive towards this way of travelling (to the extent that all the interviewed tourists, without exception, who had done this mentioned slow travel modes as the most essential part of their dream holiday). So the challenge is how to encourage more tourists to try slow travelling, as those who have already done it are likely to continue to do it.

Zonal and ordinal distance

The perception of distance as either ordinal or zonal provides useful insights into how it is possible to reduce distances travelled by tourists. As Scott et al. (2010, p9) point out "many tourists do not seek a holiday at a specific destination but seek a specific holiday experience that can be had at several destinations that may be at a range of distances". This corroborates the research findings that many interviewees wanted a certain type of holiday, either 'sun and sea' or winter sports, rather than a specific destination. If distance only matters to the tourist as a signification of absolute separation, in the form of here or there, home or away, the choice of closer destinations would not devaluate the holiday experience, as long as the destination fulfils the holiday expectations. This opens the way to suggesting nearer destinations within the desired zone, which might entail short haul rather than long haul flights, which make a significant difference in total emissions (Scott et al., 2010, p9). Closer destinations within a desired zone may even meet the threshold at which surface travel offers a viable alternative to air travel. As well as being much less damaging than air travel, surface modes offer more potential for efficiency in fuel use, use of renewable fuels and for quality enhancements (Lumsdon, 2011).

However, closer destinations within the desired zone will only be attractive if they are closer in 'ordinal' terms of money and travel time than further destinations. Although the intervening opportunities model (Hall, 2005) suggests that closer destinations will be favoured, the interviewees use of 'close' to mean cheaper or quicker suggests that physical distance is less important than relative distance, in this case money and time.

Conclusion

The main argument of this paper is that understanding how tourists understand distance provides insights into how it is possible to reduce the distances tourists travel over and encourage a modal shift away from aviation. The research presented in this paper found that tourists understand distance as both physical and relative, measured in kilometres and non-spatial entities such as time, cost and cultural difference. Further the analysis showed that tourists' understanding of distance is either ordinal or zonal, where the spatial separation distance signifies is viewed as either scalar or absolute. Tourists' understanding of distance in relation to their holiday mobility is far from only spatial, and distance to tourists is more often than not represented in dimensions that are not direct attributes of the physical world, but rather a result of how the tourists are capable and manage to engage with distance.

Further, distance was identified as being an attraction for tourists, especially in the context of holidays that are perceived as free of temporal and financial constraints, where travelling over long distances is embraced as a positive and desired element of a holiday. This seems a logical extension of the predicted holiday trends, where both numbers of trips, and distances travelled by tourists is set to increase over the next decades (Peeters et al., 2007). However, this is contrary to the trend of reduced tourist travel required to make tourism more sustainable and meets its emissions targets (Peeters, 2007).

One of the important findings from this paper to the discussion of how it is possible to reduce the distances travelled by tourists, and decease the proportion of tourism mobility undertaken by air is, that before understanding distance as a physical entity measured in kilometres, tourists understand distance as time, cost and accessibility. It has previously been established that the scope for significant voluntary changes in travel behaviour towards shorter (in distance) holidays is minimal, and an explanation for this can be found in the way tourists' understand distance. Most tourists seek to minimise the time and cost of their holidays, and flying currently offers the best way of doing so. Coupled with the knowledge from the analysis that many tourists desire distance in the form of experience and meeting that which is different, which they associate with long physical distances, this strongly suggests that voluntary travel behaviour change is unlikely.

However, the research also showed that the tourists' desire for distance can be satisfied through destination choices and travel modes that can facilitate tourism mobility to become more environmentally sustainable than it currently is. If tourism is to reduce its emissions it is necessary that tourists choose closer destinations, and that they fly less, which can seem problematic in the light of the finding that distance is an attraction to tourists. But distance desires can, the analysis

showed, be satisfied through the choice of destinations that are culturally different, but not necessarily far away. Here the tourists' understanding of distance as zonal becomes important, because what matters is not so much the physical distance between home and away, but being in a zone that is culturally different from home. This also opens the possibility that culturally different destinations can be visited using land-based transport modes. Indeed, using land-based transportation to reach a holiday destination is another way the analysis showed that distance desires can be met, as the engagement with distance increases significantly. The physical distances might be shorter, but the experiences of distance are better, and thus decreases the 'need' for distance in order to satisfy the distance desire.

The major challenge of encouraging tourists to satisfy their desire for distance is who should instigate this change. As the change towards more sustainable tourism mobility is unlikely to happen as a result of tourists becoming more aware of the damage caused by their current travel behaviour, a change could be encouraged if tourists were made more aware of the potential for good and valued holiday experiences that lie in choices of closer destinations and more sustainable transportation choices, combined with changes in policy that will mitigate the constraints the tourists feel from their time and financial budgets. Unless changes are made to how these two factors influence the potential for holiday mobility, significant changes in tourism mobility are difficult to envisage, as time and money are the factors that determinate of how far tourists travel.

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