HOW FAR IS A LONG WAY? CONTRASTING TWO CULTURES' PERSPECTIVES OF TRAVEL DISTANCE

Tracey Harrison-Hill, School of Marketing and Management and CTHMR, Griffith University.

Abstract

An examination of the tourism literature shows little cross-cultural research, particularly in the context of tourist behaviour. This is disconcerting as more tourism bodies are seen to be developing global or multi-country promotional campaigns. This paper will compare and contrast the perceptions of travel distance held by tourists from Australia and the United States, two cultures that are often clustered together by researchers and marketers and regarded as similar. The study investigated the relationship of cognitive distance, actual distance and prior travel experience. Data was collected using survey methodology from 224 US respondents and 230 Australian respondents. Findings report that US respondents have significantly more unrealistic perceptions of long-haul travel distances than do Australian respondents. Combined with a higher importance placed on travel time by US respondents, the implications for destination marketers are that localized strategies may be preferable.

Introduction

Within the tourism literature there has been a recent interest in the perception of distance and its relationship to destination decisions by individual tourists (Ankomah and Crompton 1992; Walmsley and Jenkins 1992; Ankomah, Crompton and Baker 1996). These authors have suggested that subjective or cognitive distance may be a better indicator than actual distance when investigating decision making processes by tourists. In addition to being an important evaluation criterion used by tourists, cognitive distance is important to destination marketers as its impact may be able to be influenced.

Cognitive distance is a mental representation of actual distance moulded by an individual's social, cultural and general life experiences.

A substantial number of researchers have reported findings indicating that cognitive distance estimates significantly differ from actual distance measures (Bratfisch 1969; Brown and Broadway 1981; Cadwallader 1981; Cook and McCleary 1983; Downs and Stea 1977; McNamara 1986).

Ε

rror in cognitive distance estimates by tourists will result in false perceptions being used in their decision making process. Overestimation of distance by tourists can lead to a perception of inflated costs, extended travel time and increased risk, all of which decrease the likelihood of travel. Underestimation of distance by tourists will initially increase the attractiveness of the destination, and increase the likelihood of travel. However, underestimation can be problematic if this leads to unrealistic expectations of a destination. When the tourist's experience does not equate with those expectations, dissatisfaction may result (Ankomah and Crompton 1992). Indeed when distance and travel time are regarded as important factors within the choice of a destination, this dissatisfaction may be amplified and the likelihood of negative word of mouth being passed on to other potential travellers is increased.

Determining the cause of consumers' distortion of distance has been the subject of a significant body of research. However, most of this research has concentrated on the urban environment (Briggs 1973; Brown and Broadway 1981; Cadwallader 1981; Canter and Tagg 1975; Golledge and Spector 1978; Lloyd and Heivly 1987).

Ankomah and Crompton (1992) provide a comprehensive list of propositions on the transference of findings from these urban studies to the tourism setting. Yet, transferring findings from these reported studies must be done with caution for two reasons. Firstly, the distance relationships being measured are relatively short when compared to the distances within a tourism setting. Secondly, the purpose and frequency of travel within the urban setting can be quite different to that of tourism.

Within the tourism literature the research has been less extensive and noticeably focused upon domestic destinations. One exception was a study conducted by Mayo, Jarvis and Xander (1988) which examined the relationship between cognitive distance, physical distance and attractiveness. Otherwise, there has been a lack of research into the influence of cognitive distance upon

destination decisions for overseas vacations. Moreover, there are very few studies referring to decision making for long haul travel.

This apparent lack of empirical research into the factors influencing long haul destination choice is curious given the increase in long haul travel that has accompanied the growth of mass tourism on a global scale, and that distance is a much talked about problem for destinations in attracting long haul tourists (Hall 1991; Smith 1989; Burkhart and Medlik 1981; Mayo and Jarvis 1981).

Long haul overseas travel presents the tourist with a somewhat different set of issues than that of short haul travel. "The most obvious of these differences are the increased cost and increased time of travel raising the monetary and psychological barriers to travel" (Crouch 1994, 3).

Yet within the literature, a contrasting factor has also reported. Several authors (Crouch 1994; Mayo, Jarvis and Xander 1988; Baxter 1979) have suggested that distance also acts to facilitate long haul travel. Despite the general belief that distance acts as an impediment to travel, the attractiveness of destinations has been found to increase with distance (Mayo, Jarvis and Xander 1988).

We are therefore confronted with a conundrum. On the one hand, the literature suggests

that the attractiveness of a destination increases with distance. However, on the other hand, the factors that contribute to the "friction of distance" (Mayo, Jarvis and Xander 1988), which operate to deter the act of travelling, have been suggested as also increasing with this distance. The relationship between the distance to the destination and desire to travel to that destination is further distorted by the notion that, as pointed out by Ankomah and Crompton (1992, p.324), "subjective distance rather than actual distance may best depict what goes on in individuals' minds when they are making travel decisions".

Cognitive Distance Literature Review

The literature identifies numerous factors that contribute to the discrepancy between cognitive and actual distances. These will be discussed in two sections: (1) Processing of Information about the Environment; and (2) Source and Method of Information Acquisition.

(1)

Processing of Information about the Environment

Two alternative theoretical perspectives of information processing have been proposed for explaining the distortion of cognitive distance estimates: Hierarchical theory and non-hierarchical theory.

Hierarchical theory postulates that different "regions" of the environment are stored as different branches within memory's network of knowledge (McNamara 1986). "Regions" are mostly defined by political boundaries, including state and country borders (Gould and White 1974), or physical boundaries such as rivers or mountains (Canter and Tagg 1975). Regions are stored on more dominant branches within memory that are called superordinate units. These branches then have smaller sub-branches

that store information about the environment within the region, including cities and attractions. These sub-branches are called subordinate units.

Accordingly, the underlying rationale of the hierarchical theory is that spatial information is processed (encoded) and stored in memory within these strict hierarchies of branches and sub-branches. Hierarchical theorists believe that cognitive distance errors arise when trying to determine the relationship between two points that were not encoded and stored within the same branch (McNamara 1986).

In contrast, non-hierarchical theory claims that spatial relations among objects within the environment are stored as a simplified cognitive image of that environment (Brown and Broadway 1981). These representational images have no hierarchical structure; everything is represented on the same level or branch. The image may ordinarily consist of the landmarks on the route and turns to be taken (Byrne in McNamara 1986). This process has also been referred to as cognitive or mental mapping (Gould and White 1974).

Non-hierarchical theorists argue that cognitive distance errors occur not in the encoding of information (which is a mirror-image of the environment) but in retrieval of the information. For instance, when an individual retrieves information, the more turns and landmarks remembered on a route, the longer they perceive the route to be (Byrne in McNamara 1986).

These two information processing theories have traditionally within the literature been presented as opposing theories, each with their own advocates. However, as each theory has elements that are intuitively important factors in explaining distortion in distance estimations, it would seem advantageous if the two theories were considered jointly. McNamara (1986) called for the two theories to be assimilated, and demonstrated the efficacy of doing so through the use of a partial hierarchical theory. This view was supported by Ankomah, Crompton and Baker (1995) who believe that testing hierarchical theory independently of non-hierarchical theory leads to an incomplete picture of respondents' processing of spatial information.

(2)

Source and Method of Information Acquisition

One of the implications of the partial and non-hierarchical conceptualisations is that the source of the information about the environment, and the method of learning that information will influence the accuracy of retrieval. Individuals learn about their environment over a period of time through both indirect and direct methods.

Indirect methods include education, interaction with others, travel brochures, street maps, mass media and advertising within those media (Cook and McCleary 1983; Downs and Stea 1977). The information from these sources may be distorted from the outset causing cognitive distance discrepancies. To illustrate, information processed from conversations with other people will depend on the perceptions of that other individual which may be biased or incorrect. These sources of information also tend to involve fewer sensory experiences and as such are not as critical as direct experience is to environmental learning.

An individual's understanding of the environment results primarily from their spatial interaction or direct experience with the environment (Brown and Broadway 1981). Factors such as length of residence in an area (Golledge and Spector 1978) and mode of transportation (Downs and Stea 1977) are related to an individual's environmental learning.

Generally, the longer an individual is exposed to distance information, the greater the accuracy of cognitive distance estimates. Length of residence in an area is typical of this pattern. Empirical evidence has been reported confirming the relationship of length of residence to cognitive distance accuracy (Ankomah, Crompton and Baker 1995). Similarly, Golledge and Spector (1978) found length of residence to be inversely related to the amount of error in mental maps of individual's urban surroundings due to more frequent interaction within that environment.

The type of travel experience affects the degree of environmental learning. Active travel experiences, including walking or

driving a vehicle, require more attention to the environment than do passive experiences such as being a passenger in a vehicle or aircraft. As such, active travel lends itself more readily to a learning of the environment, which in turn increases the accuracy of perceptions of distance (Downs and Stea 1977; Ankomah et al 1995). Additionally, perceptions about distance arising from a travel experience can be distorted due to other factors including stress, boredom, motivation to travel, and speed and duration of a trip (Cook and McCleary 1983).

With the knowledge that cognitive estimates decrease in accuracy as distance increases, the judgment of distance for long haul destinations is expected to be distorted. Very little research has considered the factors that influence cognitive distance estimates over the large distances involved in long haul travel. The general pattern within the literature to date is that as actual distance increases, corresponding cognitive distance increases, but less than proportionately (Ankomah, Crompton and Baker 1995; Canter and Tagg 1975; Ekman and Bratfisch 1965; Mayo and Jarvis 1986; Mayo, Jarvis and Xander 1988).

When applying hierarchical theory, a long haul destination, when parted from the individual by the physical boundary of an ocean or country border, is likely to be stored in a different superordinate unit to the individual's origin market. As such correct estimation of distance between the origin and a long haul destination is unlikely with hierarchical information processing. In addition the same distance between two countries may be estimated differently by individuals from each country due to different perspectives of their surrounding environment. Similarly, with partial hierarchical and non-hierarchical theories the speed of travel and the inactivity in-flight are likely to cause problems with the encoding and decoding of information, leading to a likely distortion of the distance being travelled.

Further, the factor of length of residence in the origin market would not seem to be as important a factor in international tourism as it is in urban studies in influencing the accuracy of cognitive distance estimates. However, the frequency of travel would increase an individual's spatial interaction between the origin and destination and as such, should increase the accuracy of estimations, even though the nature of that travel is inactive.

Even so, in many instances the individual may not have travelled to the destination previously, and will be relying upon indirect methods of gathering distance information. This has been shown to distort distance estimates.

The Case of the Australian and US Markets

In 1993 Australia ranked number one among all single countries as the most preferred travel destination by the US market (ATC 1993). Yet the US market at this time was stagnant. Australia's market share was below the pro-rata level and this situation was being exacerbated by a lower than average growth (Faulkner 1996). Australia's failure to convert its position as the most desirable destination into actual visits and become one of the major shareholders of the US outbound market reflects the conundrum within the literature regarding distant destinations. It demonstrates that there is confusion with respect to tourists' perceptions of long-haul travel that requires research attention.

Exploratory interviews were conducted. In these interviews of both the American and Australian markets it became obvious that Australian perceptions of long haul travel were somewhat different to American perceptions, although similar factors, including the importance of travel distance and time, were cited as being influential within the destination decision making. This brought about the need for a cross-cultural comparison of perceptions of distance and the influence of those perceptions upon tourist decision making.

Research Hypotheses

The first set of hypotheses seeks to confirm that distance to a destination is indeed an important factor within tourists' decision making for international holidays across both cultures.

H1: More individuals will rate travel distance as important than those who rate it as unimportant.

The second hypothesis seeks to confirm propositions from within the hierarchical theory of cognitive distance that suggest that cultural background and the surrounding environment will influence distance estimation. In addition the same distance between two countries may be estimated differently by individuals from each country due to different perspectives of their surrounding environment. It has also been identified as an issue within the exploratory interviews.

H2: The estimation of the length of time it takes to travel from Los Angeles to Sydney will be estimated differently by individuals from Australia as compared to individuals from the United States.

The third set of hypotheses seek to confirm propositions from within the partial hierarchical theory of cognitive distance that suggests frequency of travel will influence the accuracy of distance estimation.

- H3a: Individuals from the United States who have travelled to Australia previously will estimate the travel time more accurately than individuals who have not travelled to the destination before.
- H3b: Individuals from Australia who have travelled to the United States previously will estimate the travel time more accurately than individuals who have not travelled to the destination before.

The final hypotheses seek to confirm the proposition within literature review conducted by Ankomah and Crompton (1992) which indicated that in past studies cognitive distance estimates have been found to be less than actual distance.

- H4a: Estimates of the travel time from Los Angeles to Sydney by individuals from the United States will be, on average, less than the actual travel time.
- H4b: Estimates of the travel time from Sydney to Los Angeles by individuals from Australia will be, on average, less than the actual travel time.

Methodology

Cognitive distance has been measured in a number of ways. Within tourism the most widely used method has been to ask respondents for distance estimates in kilometres or miles between their origin and the destination (Ankomah, Crompton and Baker 1995; Walmsley and Jenkins 1992; Ankomah, Crompton and Baker 1996). This method is specifically suited to driving vacations.

The other most widely used method is cognitive mapping (Downs and Stea 1973; Brown and Broadway 1981) which customarily is used within urban studies. It asks respondents to draw a map from memory of a given area. This method has also been used to estimate cognitive distance between international destinations (Mayo, Jarvis and Xander 1988). This method though is very time consuming when compared to asking for a distance estimate. It also requires face to face contact with the respondents. The advantage though is it gives a spatial map showing where destinations are perceived to be in relation to other destinations. This advantage though can be duplicated using distance estimates if estimates are gathered for all pairs of destinations and origins, thus allowing for multi-dimensional scaling.

The disadvantage with metric distance estimates for this study is the difficulty of estimating the large distances between overseas origins and destinations. In the tourism studies to this point the actual distance measures have been road distances. For

international destinations air distances would be an equivalent. An alternative is to ask respondents to estimate the travel time by air.

Within the cognitive interviews, task complexity was tested for both alternative measures. Respondents were asked to give an estimate of distance and an estimate of travel time between two international cities, then asked to rate the difficulty of the two tasks, to determine which estimate they felt more confident about and to describe how they calculated their responses. It was found that travel time estimates were regarded with more confidence and were less difficult to estimate. Those who felt reasonably comfortable with estimating by distance reported calculating the measure through the air miles received within frequent flier programs. However these respondents still felt more confident in estimating the travel time. As such cognitive distance has been operationalised in this study by asking: *Please estimate the number of hours you think it takes to fly from Sydney, Australia to Los Angeles in the United States.* Importance of distance has been operationalised by asking to rate on a seven point scale from not at all important to very important: *When choosing a destination for an international holiday how important is... the time it takes to travel to destination.*

The actual travel time is the official flight time as recorded by the national airline between the cities. For example Qantas is providing the official flight times from Sydney to Los Angeles and the return leg. This has been compared to the official flight times from Los Angeles to Sydney provided by United Airlines, and reported differences in either direction are less than one hour. The actual travel time to be used is fourteen hours.

Data Collection

A phone survey was employed to collect data on the perceptions of long haul destinations by individuals who have travelled internationally. The questionnaire was pre-tested on a convenience sample. Consequently, the questionnaire was modified in wording and scale composition to increase readability and clarity of items. Content validity was established according to the guidelines set forth by Nunnally (1978). Pilot testing was then conducted (Harrison-Hill 1997).

Data for this study was collected from two samples; the west coast of the United States; and the east coast of Australia. The sample for the US was drawn from a database of 5000 names of west coast residents who were self-reported frequent fliers. To obtain the 224 completed questionnaires from this sampling frame, 257 contacts were made. Of those willing to complete the task, 225 were eligible respondents. The sample for Australia was drawn from the "Australian White Pages on Disk", as a database similar to that used for the US sample was not commercially available. To obtain the 230 completed questionnaires from this sampling frame, 412 contacts were made. Of those willing, 231 were eligible to complete the questionnaire.

Results and Discussion

The first hypothesis concerns the importance of distance as a consideration when selecting an international destination. Distance was operationalised as the travel time to the destination. Indeed, in both cultures more respondents rated distance and travel time as an important factor, than those who rated it as unimportant (Table 1). 70% of respondents from the United States rated it as important as compared to 18% who rated distance as an unimportant factor. 51% of Australian respondents rated distance as an important factor when considering a destination. As such hypothesis 1 is confirmed. It is worth noting though, that 30% of Australian respondents considered distance neither important nor unimportant as compared to 12% of Americans. This inconsistency highlights to some degree cultural differences in the importance of time and how different cultures may place different values on time (Feldman and Hornik 1981). Indeed this difference was also reflected on the question *When choosing a destination for an international holiday how important is... the enjoyment of the time spent on the flights to and from the destination*, where a higher importance rating from US respondents was elicited than from Australians.

TABLE 1
Importance of Travel Distance

	<u> </u>			
	Australian	American		
	Respondents	Respondents		
1.0 Not at all important	11 (4.8%)	8 (3.6%)		

2.0	14 (6.1%)	10 (4.5%)
3.0	17 (7.4%)	22 (9.8%)
4.0 Neither	70 (30.4%)	27 (12.1%)
5.0	88 (38.3%)	103 (46.0%)
6.0	17 (7.4%)	39 (17.4%)
7.0 Very Important	13 (5.7%)	15 (6.7%)
TOTAL	230	224

The second hypothesis concerns the effect of country of origin on cognitive distance. It was hypothesised that individuals from the United States would estimate the length of time it takes to travel from Los Angeles to Sydney differently as compared to individuals from Australia. An independent samples test comparing the sample means was conducted (Table 2a) and the sample means were found to be significantly different (Table 2b). This supports both the literature and the exploratory interviews that suggested that differences would exist, and overturns the findings in the pilot study where the small sample increased the likelihood of typeII errors (Harrison-Hill 1997).

TABLE 2a
Average Travel Time Estimates for the Australian and United States Samples

Sample	N	Mean	S.D.	S.E.M
Aust.	230	15.265	2.971	0.196
U.S.	224	15.880	3.557	0.238

TABLE 2b
Testing for Equality of means between the Australian and United States Samples.

Т	df	Sig. (2 tail)	Mean Diff.	SED
-1.999*	452	0.046	-0.614	0.307

^{*} Equal variances assumed.

The third set of hypotheses referred to the affects of previous travel to a destination on the accuracy of estimations of travel time to that destination. The mean cognitive distance estimates were compared for those who had not visited the destination, and those who had (Table 3a). For both countries of origin those who had travelled before estimated distance more accurately and with less deviance (Table 3b). For this study, hypotheses 3a and 3b were accepted.

TABLE 3a

Average Error between estimated and actual travel time for those who have visited versus those who have not visited.

Sample	Visits	N	Mean	S.D.	S.E.M
Aust.	1 or more	70	14.58	2.872	0.343
	no visits	160	15.56	2.973	0.235
U.S.	1 or more	49	14.65	2.11	0.302
	no visits	175	16.22	3.80	0.287

TABLE 3b
Testing for Equality of means between those who have visited versus those who have not visited.

Sample	t		- 5	Mean Diff.	SED
Aust.	-2.34*	135.92	0.020	-0.977	0.42
U.S.	-2.77**	222	0.006	-1.569	0.42

^{*} Equal variances not assumed. ** Equal variances assumed

The final set of hypotheses referred to the findings of previous studies that had found cognitive distance to be underestimated in most circumstances. In this study, the means for both samples were higher than the actual travel time (Table 4a) and significantly different from the actual travel time of 14 hours (Table 4b). It can be concluded that for both the Australian and United States samples the cognitive distance was, on average, overestimated for long haul destinations. This result is contrary to other findings that have suggested as distance increases the cognitive distance increases less than proportionately. This distinction may be due to the nature of the distance being inter-regional and long haul. However Mayo, Jarvis and Xander (1988) also explored inter-regional cognitive distances and found that they were on average underestimated, although their method of estimation differed as it utilised cognitive mapping.

TABLE 4a
Descriptive Statistics of Cognitive Distance Estimates

			1		
Sample	N	Min	Max	Mean	S.D.
Aust.	230	7hours	24 hours	15.265	2.971
U.S.	224	8hours	28 hours	15.879	3.557

TABLE 4b
One Sample Tests to determine whether sample means are significantly different from actual travel time of 14 hours.

Sample	t	Df	Sig. (2 tail)	Mean Diff.
Aust.	6.459	229	0.000	1.265
U.S.	7.908	223	0.000	1.879

Conclusions and Future Research

This study has investigated the accuracy of travel time estimates between origins and long haul destinations and compared the results across two cultures. It was established from the literature that cognitive distance serves as an important tool in assessing destinations, yet very little research has investigated how it influences long haul destinations. Findings suggest that cultural and individual treatments of time may also be important in considering the impact of cognitive distance on destination choice. Feldman and Hornik (1981) propose a model of the uses of time that may assist in the formulation of future research. From the perspective of Australia's marketing to the US, these findings would suggest that perception of distance is an issue that needs to be directly addressed. The cultural variations in the importance of travel time indicate that differentiated strategies should be produced for the US market.

Results also suggest that first time or prospective visitors may benefit from marketing materials aimed at educating them with respect to distance and travel time expectations. The problem with many materials is that the consumer will not attend to the information unless they have situational involvement, and that may mostly occur during destination decision making. As such future research may benefit from considering the mental choice set placement of the destination and whether that influences accuracy of estimates.

In conclusion, the finding that cognitive distance is overestimated between the US and Australia, which is contradictory to previous research, warrants further research with respect to whether this distance estimate may influence the estimation of other factors such as perception of costs and perceived attractiveness.

References

Research. Vol.19, pp.323-342.

Ankomah, P.K., Crompton, J.L. and Baker, D., (1995). "A Study of Pleasure Traveler's' Cognitive Distance Assessments," Journal of Travel Research. Fall, pp.12-18.

Ankomah, P.K., Crompton, J.L. and Baker, D., (1996). "Influence of Cognitive Distance in Vacation Choice," <u>Annals of Tourism</u> <u>Research</u>. Vol.23, No.1, pp.138-150.

Archer, B.H., (1989). "Trends in International Tourism," in <u>Tourism Marketing and Management Handbook</u>, Witt, S.F. and Moutinho, L., (eds.) pp.593-598. Prentice-Hall: Hemel Hempstead.

Australian Tourist Commission, (1993). Market Segmentation Studies: Executive Summary for Asia, Europe, Japan.

Baxter, M.J., (1979). "The Interpretation of the Distance and Attractiveness Components in Models of Recreational Trips," <u>Geographical Analysis</u>. Vol.11, No.3, July, pp.311-315.

Burkhart, A.J. and Medlik, S., (1981). Tourism Past, Present and Future. Heinemann: London.

Bratfisch, O., (1969). "A Further Study of the Relation Between Subjective Distance and Emotional Involvement," <u>Acta Psychologica</u>. Vol.29, pp.244-255.

Briggs, R. (1973). "Urban Cognitive Distance," in Downs, R.M. and Stea, D. (eds.), <u>Image and Environment: Cognitive Mapping and Spatial Behaviour</u>. Chicago: Aldine, pp.361-388.

Brown, M.A. and Broadway, M.J., (1981). "The Cognitive Maps of Adolescents: Confusion about Inter-town Distances," Professional Geographer. Vol.33, No.3, pp.315-325.

Cadwallader, M., (1981). "Towards a Cognitive Gravity Model: The Case of Consumer Spatial Behaviour," <u>Regional Studies</u>. Vol.15, No.4, pp.275-284.

Canter, D. and Tagg, S., (1975). "Distance Estimation in Cities," Environment and Behavior. Vol.7, pp.59-80.

Cook, R.L. and McCleary, K.W., (1983). "Redefining Vacation Distances in Consumer Minds," <u>Journal of Travel Research</u>. Fall, pp.31-34.

Crouch, G.I., (1994). "Demand Elasticities for Short-Haul versus Long-Haul Tourism," <u>Journal of Travel Research</u>. Vol.32, (Fall), pp.2-7.

Downs, R.M. and Stea, D., (1973). "Cognitive Maps and Spatial Behavior: process and products," in Downs, R.M. and Stea, D. (eds.) <u>Image and Environment</u>. Edward Arnold: Chicago.

Ekman, G. and Bratfisch, O., (1965). "Subjective Distance and Emotional Involvement: A Psychological Mechanism," Acta Psychologica. Vol.24, pp.446-453.

Faulkner, W., (1997). "A Model for the Evaluation of National Tourism Destination Marketing Programs," <u>Journal of Travel</u> <u>Research</u>. Vol.35, No.3, pp.23-32.

Feldman, L.P. and Hornik, J., (1981). "The Use of Time: An integrated Conceptual Model," <u>Journal of Consumer Research</u>. Vol.7, March, pp.407-419.

Golledge, R.G. and Spector, A.N., (1978). "Comprehending the Urban Environment: Theory and Practice," <u>Geographical</u> Analysis. Vol.10, pp.403-426.

Gould, P. and White, R., (1974). Mental Maps. Penguin: Middlesex.

Hall, C.M., (1991). Introduction to Tourism in Australia: Impacts on Planning and Development, Longman Cheshire: Melbourne.

Harrison-Hill, T., (1997). "The Tyranny of distance: A Cross-Cultural Comparison of Tourists' Perceptions," in Sixth Symposium on Cross-Cultural Consumer and Business Studies. pp.371-376.

Lloyd, R. and Heivly, C., (1987). "Systematic Distortions in Urban Cognitive Maps," <u>Annals of the Association of American Geographers</u>. Vol.77, pp.191-207.

Mayo, E.J. and Jarvis, L.P., (1981). <u>The Psychology of Leisure Travel, Effective Marketing and Selling of Travel Services</u>. CBI Publishing: Boston.

Mayo, E.J., Jarvis, L.P. and Xander, J.A., (1988). "Beyond the Gravity Model," <u>Journal of the Academy of Marketing Science</u>. Vol.16, Fall, pp.23-29.

McNamara, T.P., (1986). "Mental Representations of Spatial Relations," Cognitive Psychology. Vol.18, pp.87-121.

Mowen, J.C., (1995). Consumer Behaviour, Englewood Cliffs, N.J.: Prentice-Hall.

Nunally, J.C., (1978). Psychometric Theory, New York: McGraw-Hill.

Smith, S.L.J., (1989). Tourism Analysis: A Handbook. Longman Scientific & Technical: London.

Walmsley, D.J. and Jenkins, J.M., (1992). "Cognitive Distance: A Neglected Issue in Travel Behavior," <u>Journal of Travel Research</u>. Vol.31, No.1, Summer, pp.24-29.

Long haul travel for the purposes of this paper is defined as inter-regional travel of at least six hours in duration (Archer 1989; Australian Tourist Commission 1993)