Cooperation, competition, knowledge transfer and Innovations among visitor attractions and their spatial proximity and product similarity

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Dr Adi Weidenfeld, University of Exeter and Hanken School of Economics

Prof Allan Williams, University of Surrey

Prof Richard Butler, University of Strathclyde

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INTRODUCTION

The spatial and tourist-thematic determinants of co-operation, competition and knowledge transfer between tourism attractions are examined in the context of two competing arguments. The first is that distance and proximity between tourist attractions affect cooperation and competition between them. As has been done in previous studies in other industrial sectors, the study explores whether proximity between attractions increases or decreases external cooperation between attractions, including knowledge transfer and adoption of innovations. The second argument is whether the sources of such competition and collaboration lie in any product-thematic similarity between tourist attractions irrespective of their locations. The study also examines the consumption side by looking at how low and high levels of clustering influence the extent of which the same tourists visit neighboring attractions. The study in Cornwall, England is based on in-depth interviews with tourist attraction managers and key informants including tourism officers, local government councilors and representative of tourism associations as well as a survey among 400 tourists in tourism areas of high and low concentration of tourist attractions conducted throughout 2006. The findings throw light on the interactions between tourist attraction enterprises, which include cooperative competition and a set of complementary relationships. The latter are interrelated with other factors such as spatial proximity, product similarity as well as other similarities such as size, product quality and market segments. These findings should help operators of individual attractions and policy makers in decision-making on locations for new tourist attractions. As well, the study aids in measuring the impacts on existing attractions of the constant need to remain competitive, productive and innovative while avoiding land-waste and minimising the use of greenspaces. The findings improve our understanding of the benefits and disadvantages for tourism destinations of high and low levels of spatial clustering. The following sections provide a summary of the conclusions and recommendations of this study.

1.   Cooperation between visitor attractions

1.1   Levels of cooperation include:

1.1.1   High levels

a. Joint financial investments in development and tourism production

b. Cross-selling including vouchers and joined ticketing regardless, or in addition to, activities managed by existing marketing associations, e.g. two attractions which are not members of a marketing alliance, sell each others' vouchers and/or advertise or promote each other.

c. Attractions identified by visitor attraction managers as 'biggest co-operators'.

1.1.2   Low levels

Attractions identified by visitor attraction managers as ordinary' or 'other co-operators'. This category refers to attractions, identified by managers as attractions with whom 'I cooperate in general'. The areas of cooperation include sharing and exchanging information, marketing together as a part of a regional marketing alliance or another marketing scheme with other local attractions.

1.2   Density of visitor attractions encourages regional cooperation (regional groups of attractions) in areas such as buying groups, staff training, and services (e.g. NAT).

1.3   High density of attractions discourages cooperation in marketing among regional groups of attractions, compared to low levels of density where regional cooperation is lower (e.g. NAT as a regional group cooperates to a lesser extent than the Passport Scheme on the Lizard).

1.4   Spatial proximity encourages cooperation between individual neighbouring visitor attractions, including marketing of the tourism experience. However, cooperation, especially marketing, depends on various similarities and complementarities (Figure 1) between attractions, detailed below; the most influential one being product-thematic complementarities.

1.4.1   Complementary-thematic similarity in terms of the tourism product/experience: Most attractions see their dissimilar neighbours as complementary but if similar complementary attractions are neighbours they are likely to engage into close cooperation: cross selling, vouchers etc.

1.4.2   Market segment complementarity: neighbouring attractions are able to differentiate their tourism experience products to various tourist segments thereby increasing their collective appeal to visitors. Potential cooperation between neighbouring

complementary attractions in terms of diverse markets is enabled if spatial proximity exists.

1.4.3   Indoor/outdoor complementarity: Outdoor attractions referring (or cross-selling) visitors to an indoor attraction's product on a rainy day. Another case is about indoor attractions referring each other's visitors to other neighbouring indoor attractions on a rainy day. The greater the spatial proximity between attractions, the more visitors are expected to follow such a recommendation.

1.4.4   Visit time/duration: When two attractions sell a short visit or when similar neighbours open at different times, there is less competition and more potential for joint-selling.

1.4.5   Pricing complementary: attractions in spatial proximity are more likely to cooperate if they both offer their customers affordable admissions to those visiting both in the same holiday trip. This complementary relationship is more likely to be the outcome of other complementarities responsible for drawing similar market segments.

1.4.6   Other similarities in market segments, market size and product quality, binding restrictions and regulation due to membership in tourism associations, different patterns of ownerships (public/private) as well as personal relationships between managers all affect collaboration, but the most influential factors are different types of complementarities and thematic complementarity in particular.

1.5   Relationships between product similarity and neighbouring individual attractions in terms of their levels of cooperation (Figure 2).

1.5.1   Thematic product similar-complementary attractions show the highest levels of cooperation.

1.5.2   Different product similar attractions with complementarities show high levels of cooperation.

1.5.3   Similar product attractions are likely to cooperate to the lowest extent.
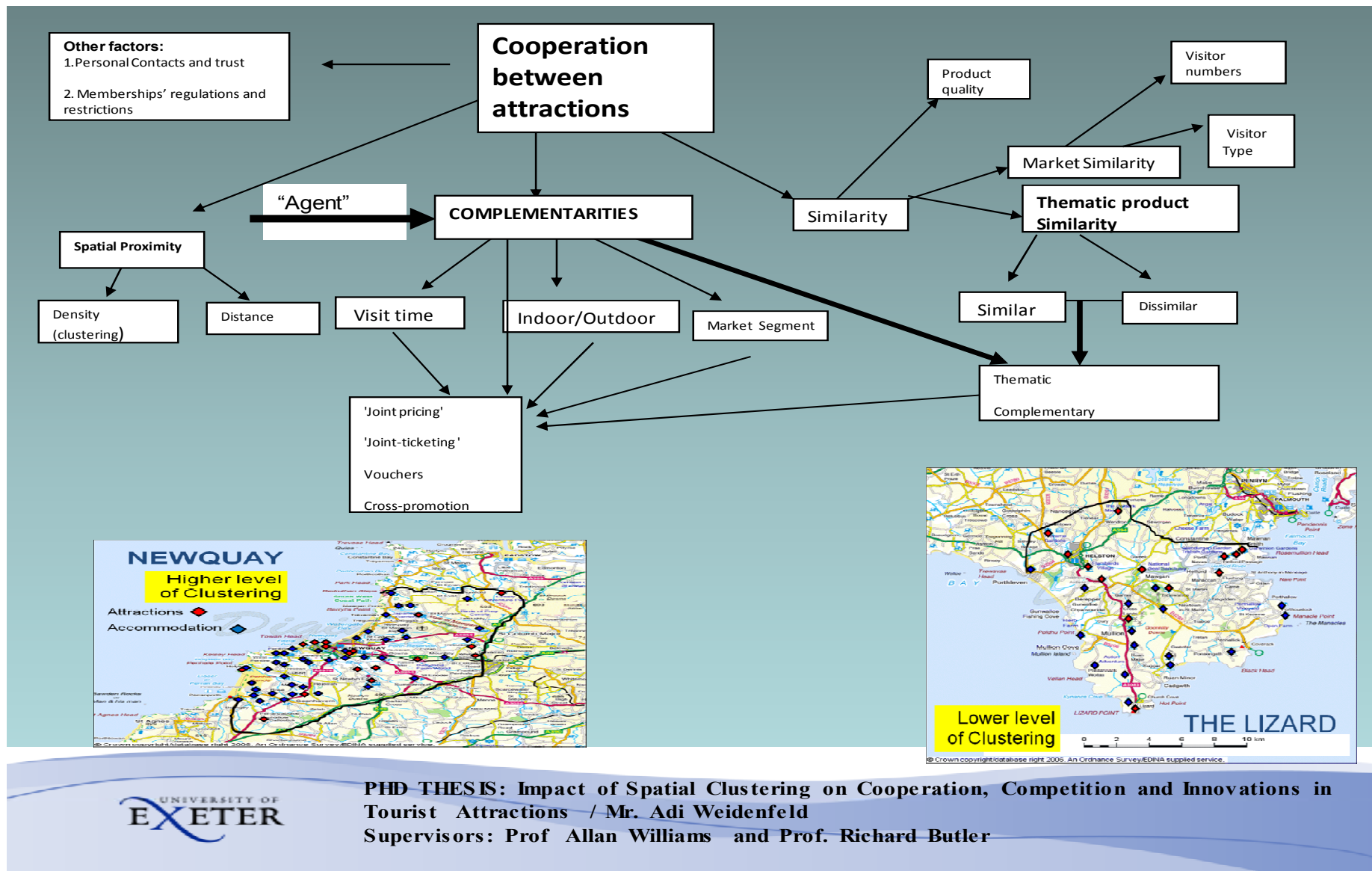
Figure 1. Cooperation between visitor attractions in Newquay and the Lizard

Extent of
Cooperation

Dissimilar   **Similarity**

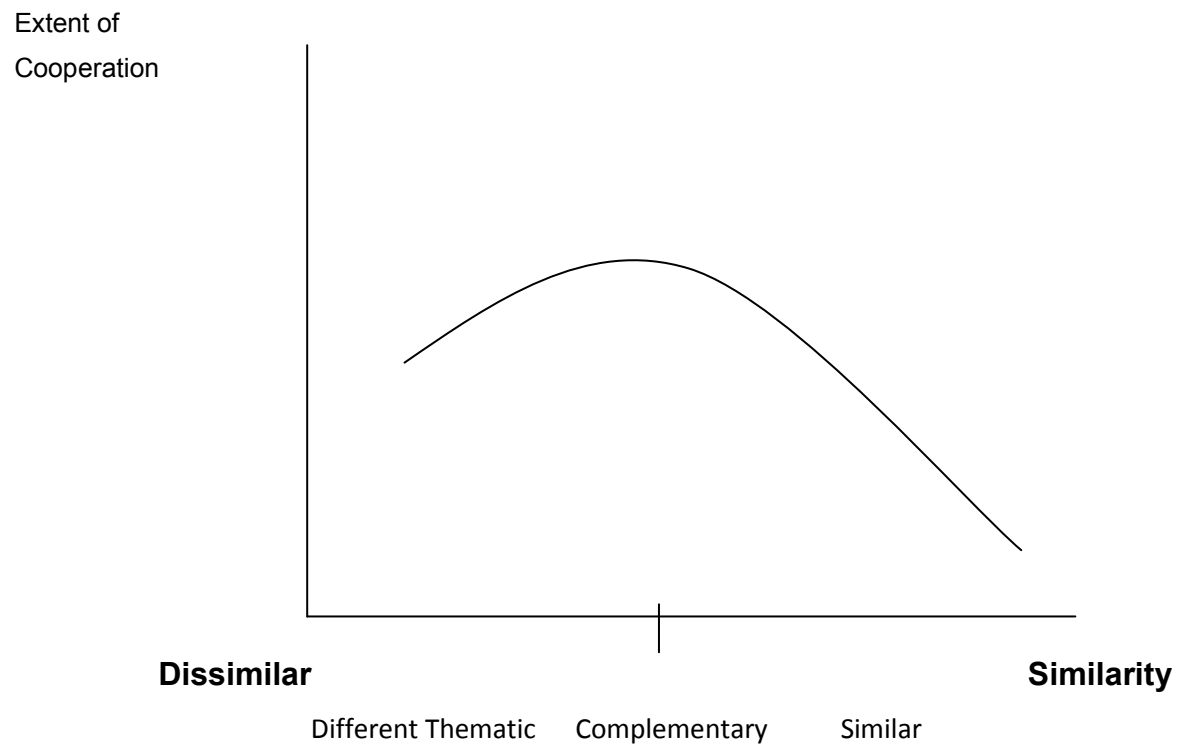Different Thematic   Complementary   Similar

Figure 2. Generalised relationships between extent of cooperation and product thematic complementary of tourist attractions

2. Competition between visitor attractions

2.1 Thematic product similarity and spatial proximity between neighbouring individual attractions are positively related to the level of competition between them. The more neighbouring attractions are proximate and product similar, the greater the competition between them.

2.2 Density of tourist attractions in destinations, such as Newquay and the Lizard is positively related to local competition between neighbouring attractions.

2.3 Density of tourist attractions is negatively related to regional competition with other destinations and other distant attractions (out of Newquay/the Lizard).

2.3.1 Newquay attractions as a group (e.g. NAT) compete with other destinations to a lesser extent than those in the Passport Scheme and the Lizard Peninsula do.

2.4 Other businesses such as retail outlets, pubs and restaurants compete with tourist attractions for visitors and labour.

3. Knowledge transfer and innovations between visitor attractions

3.1 Spatial proximity, product similarity and market similarity encourage knowledge transfers, imitations and adoption of innovations between neighbouring individual attractions and among attractions as a regional group.

3.2 Spatial proximity and product similarity are inseparable factors in affecting knowledge transfer and adoption of ideas/innovations among attractions.

3.3 Product similarity encourages knowledge transfer more than spatial proximity, particularly between distant attractions.

3.4 Private attractions have higher levels of knowledge transfer and innovation than public ones.

3.5 There is a positive relationship between the managers' length of employment in the tourism sector and in the attraction itself and the extent of innovation and knowledge transfer.

3.6 No relationship was identified between attractions' size (in terms of number of employees in the high season) and the level of knowledge transfer.

4. Visitor numbers and appeal to visitors

Studying appeal of visitor attractions focused on the preferences to visit certain types of attractions and their locations. Appeal was measured in terms of visitor numbers. The

relationships between tourism appeal to visitors and product similarity between neighbouring attractions was measured in terms of the number of visitors shared by the same attractions in relation to spatial proximity and product similarity between them. The findings are based on a tourist survey and brief interviews with tourists as detailed below.

4.1   Purpose of the survey

Identify differences between two destinations with lower and higher levels of density of visitor attractions and accommodation facilities: Newquay (higher levels) and the Lizard (lower levels) in terms of

4.1.1   Travel motivations for visiting attractions in Newquay and the Lizard; and

4.1.2   Thematic and locational preferences for visiting tourist attractions.

4.2   Methodology

4.2.1. A tourist questionnaire survey (Appendix 1) was conducted with 216 tourists visiting a tourist attraction on the Lizard and 219 tourists visiting an attraction in Newquay, both located in a central location within these areas. In order to identify attractions visited by tourists, they were asked about

4.2.2. Their general preference to visit certain types of attractions (Table 2. e.g. gardens, wildlife);

4.2.3. Actual preference for their choice to visit attractions on the *following day* ('Tomorrow, Table 3, Figure 7) and the day before the survey ('Yesterday', Figure 8) and their choice regarding

I. Their first, second and their most preferred visited attraction (Figures 4-6)

II. Statistical analysis (mainly χ^2 Test) was employed.

III. Brief interviews with 20 tourists in each attraction (overall 40 interviews), asking tourists about the reasons for choosing to visit a certain combination of attractions (Figure 9, Appendix 2)

4.3   Population sample

Families with children spending an average period of a 7 day holiday (6 +/- 2 nights) in the South West for the purpose of holiday or leisure, using a car as their main means of transport. Each respondent represented the rest of the tourists travelling in his or her group (in most cases they belonged to the same family) and most respondents came in groups of 3 people or more (80%) with almost half in groups of 4 people. The vast majority of the tourists surveyed came for leisure and holiday

purposes (93%), stayed for 7 nights or more in Cornwall (above 90%), and for 87% it was not their first visit to Cornwall. The most popular places of accommodation among respondents were Newquay, St Austell, Helston, Hayle Perranporth and Falmouth.

It is necessary to point out the differences in the age ranges between the samples in Newquay and the Lizard, in order to explain the similarities and differences in tourist behaviour between the two. The breakdown of age ranges was different as respondents visiting Newquay travelled with more children (5 to 10 years old) than those on the Lizard, who travelled with more teenagers (11 to 15 years old). The age differences probably stem from the fact that the attraction in Newquay offers more facilities for younger children compared to the attraction on the Lizard, which is more appealing to teenagers. This may also apply when comparing other attractions in Newquay and the Lizard; Gardens and thematic technological attractions are probably more appealing to older children than fun parks and wildlife attractions in Newquay.

Favourite Attraction Type
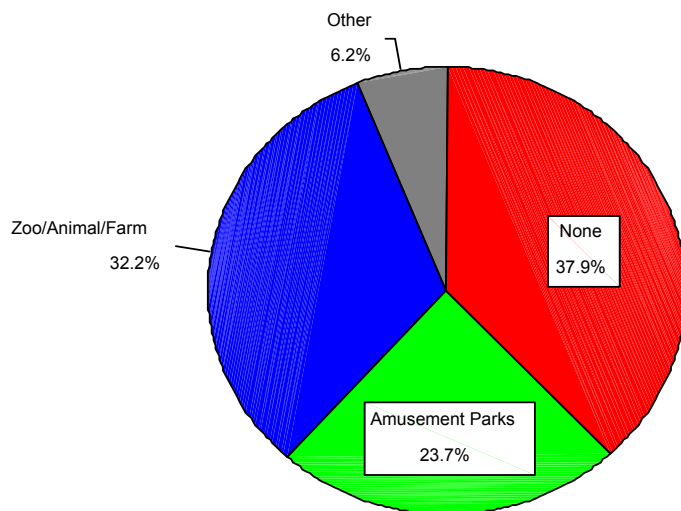
Figure 3. Distribution of surveyed tourists by type of most preferred types of visited attractions (Preferred 1)

2nd Favourite Attraction Type

Technological/Themat
5.5%

Gardens
1.6%

Museums
3.0%

Heritage
3.9%

Zoo/Animal/Farm
19.8%

Amusement Parks
13.1%

None
53.1%
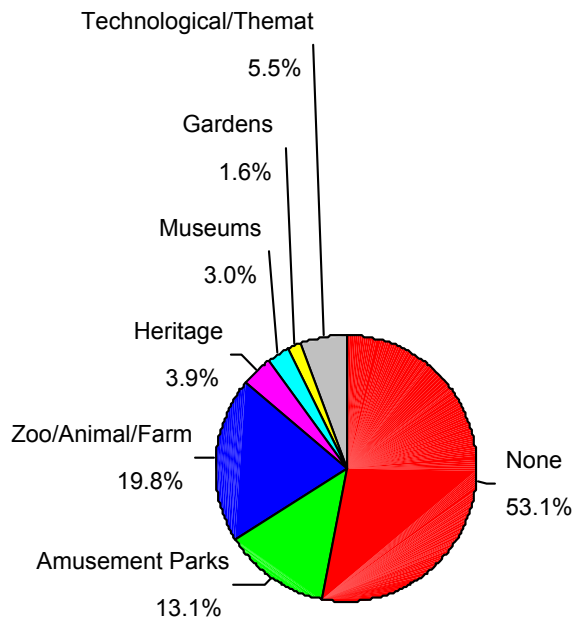
Figure 4. Distribution of surveyed tourists by type of the 2nd most preferred types of visited attractions (Preferred attractions 2)

Technological/Themat
2.1%

Gardens
2.1%

Museums
2.1%

Heritage
2.3%

Zoo/Animal/Farm
13.6%

Amusement Parks
10.1%

None
67.8%
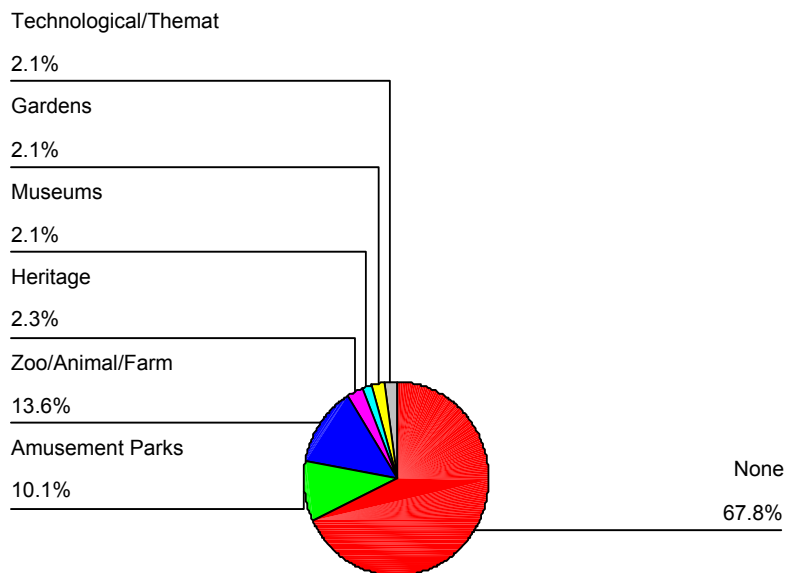
Figure 5. Distribution of surveyed tourists by type of 3rd most preferred types of visited attractions (Preferred attractions 3)

Tomorrow attractions

Zoo/Animal/Farm
7.8%

Amusement Parks
5.7%

Other
8.7%
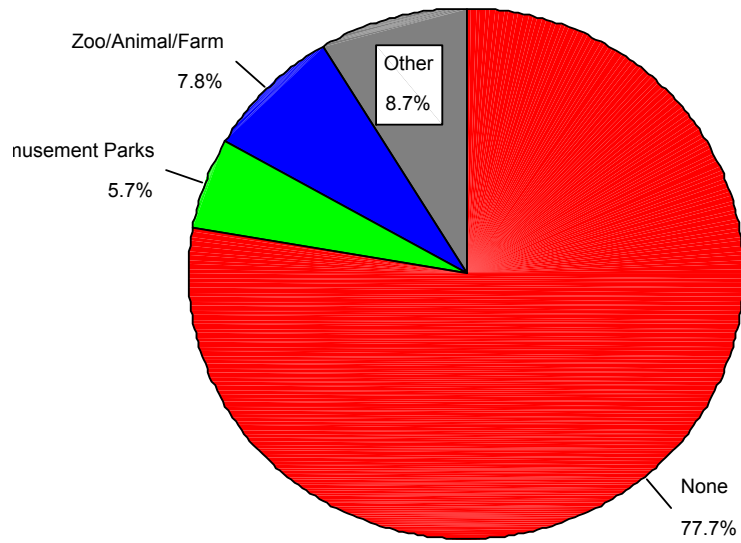
None
77.7%

Figure 6. Distribution of attractions, planned to be visited on the following day ('tomorrow')

Legend:
- None
- Amusement Parks
- Zoo/Animal/Farm
- Heritage
- Museums
- Gardens
- Technological/Thematic

10.80%

5.06%

2.30%

3.68%

2.07%

74.94%
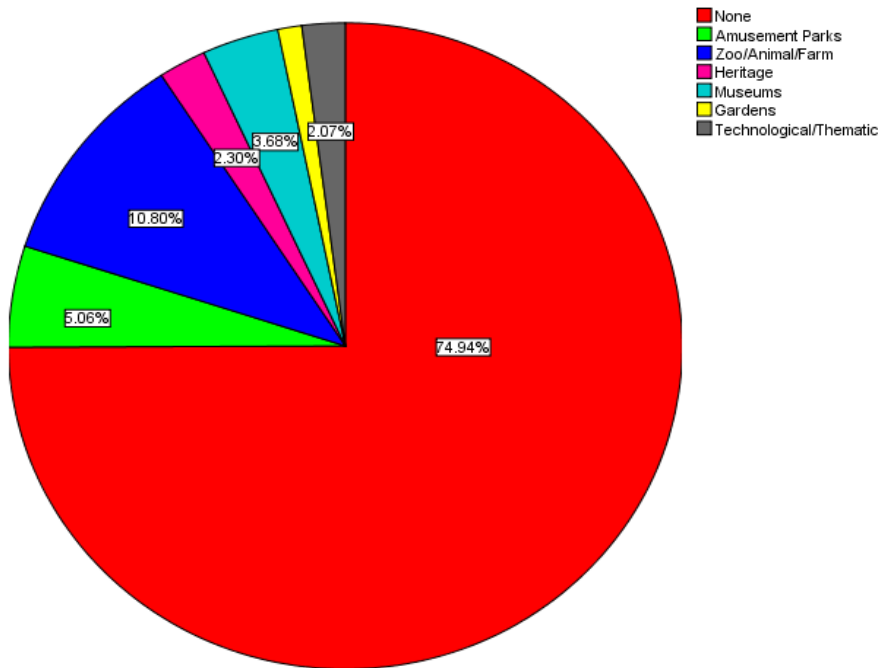
*'None' also includes all places/facilities, which do not match the criteria of attractions (e.g. beach)

Figure 7. Distribution of attractions, visited the day before the survey ('Yesterday')

Table 1. Differences between Newquay and the Lizard in the general popularity to visit types of attractions

*

Type***	Newquay (%)*	Lizard (%)*	Population Sample (%)**
Museums	16.4	29.6	21.1
Gardens	25.6	94.9	27.6
Beaches	94.5	13.9	94.7
Nature Reserves	16.4	15.7	15.2
Golf, water parks	19.2	86.1	17.5
Adventure parks	65.8	38.9	75.9
Heritage sites	25.1	50.5	32.0
Wildlife attractions	73.1	5.6	61.8
Other	5.9	0.0	5.7
	n=219	n=216	n=435

% of respondents in Newquay or on the Lizard

** % of respondents in the whole population sample

***Types of attractions classified by the respondents themselves

Table 2. Differences between Newquay and the Lizard in the main reasons for the actual preference to visit certain types of attractions

Reason	Newquay (%)*	Lizard (%)**	χ^2	df	PP
Mix of activities	40.4	59.6	30.614	1	0.000
Weather	54.1	45.9	1.990	1	0.094
Children	60.4	39.6	24.885	1	0.000
Low cost	50.8	49.2	0.000	1	0.523
Reason to visit Cornwall	33.3	66.7	6.240	1	0.009
Other	50	50	0.000	1	0.616

*% of respondents visiting Newquay

** % of respondents visiting the Lizard

Table 3. Differences in the main reasons for visiting attractions on the following day ('tomorrow') between tourists in Newquay and the Lizard

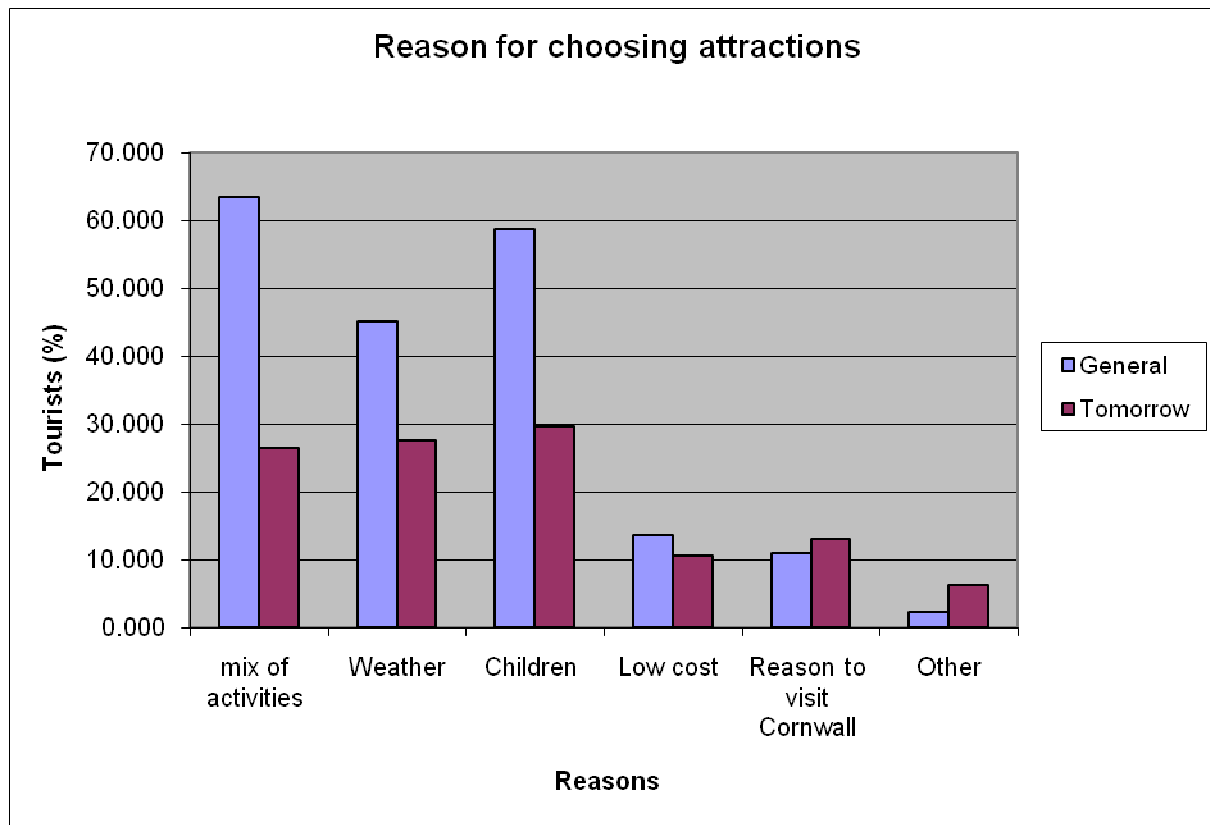|	Newquay (%)	Lizard (%)	χ²	df	P
Mix of activities	53	47	0.455	1	0.286
Weather	53.3	46.7	0.592	1	0.254
Children	63.6	36.4	12.822	1	0.000
Low cost	50	50	0.002	1	0.542
Reason to visit Cornwall	43.9	56.1	1.04	1	0.182
Other	48.1	51.9	0.056	1	0.485

Source: Author's Survey

Figure 8. Reasons for the preferences of visiting attractions based on brief short interviews (n=40)

4.4   Summary and conclusions

4.4.1   Differences in the general preferences to visit different types of attractions (Table 1):

a. Museums, gardens and heritage sites are more popular among tourists on the Lizard than among tourists in Newquay.

b. Beaches, adventure parks and wildlife attractions are more popular in Newquay

4.4.2   Differences in the reasons for the <u>actual</u> preference to visit attractions:

1. Mix of activities, and the main reason to visit Cornwall were mentioned more by tourists visiting the Lizard.

2. The 'weather' and 'Children' were mentioned more by tourists visiting Newquay.

4.4.3   Differences in the reasons for visiting certain types of attractions in the following day:

1. More tourists in Newquay mentioned 'children and babies' as the main reason, compared to less than 40% of tourists on the Lizard.

2. More tourists on the Lizard mentioned the 'main reason to visit Cornwall' compared to less tourists in Newquay.

4.4.4   Reasons for the preferences of visiting attractions based on the short interviews show that

a. 'mix of activities', 'children and babies' and 'weather' were the 3 main general reasons for preferring a certain combination of attractions on their holiday trip to Cornwall.

b. On the following day ('tomorrow'), it appears that a much lower percentage of tourists regarded these as the main reasons (Figure 9). It is possible that the difference stems from a tendency of respondents to think of more reasons for those they selected in previous answers. Further, it may be that, regarding visiting additional attractions to those visited, other desires and needs were considered, that reflect different influences on their preferences.

4.4.5   Spatial proximity and spatial density are positively related to the number of visitors shared by the same attractions and to their overall appeal.

4.4.6   Similar complementary neighbouring attractions have the largest positive impact on each other's appeal to visitors, given that they tend to share visitors more than dissimilar and similar attractions do.

4.4.7   Dissimilar product attractions with complementarities also share visitors but to a lower extent,

4.4.8   Dissimilar attractions (with <u>no</u> complementarities) were also found to be sharing visitors with each other but to even lesser extent;

13

4.4.9 Similar product attractions (except gardens) appear to have no impact or negative impact on each other's appeal, given that most do not share the same visitors, and it is possible that one attracts visitors at the expense of the other.

The above conclusions are illustrated in the hierarchy of appeal below (Figure 3).
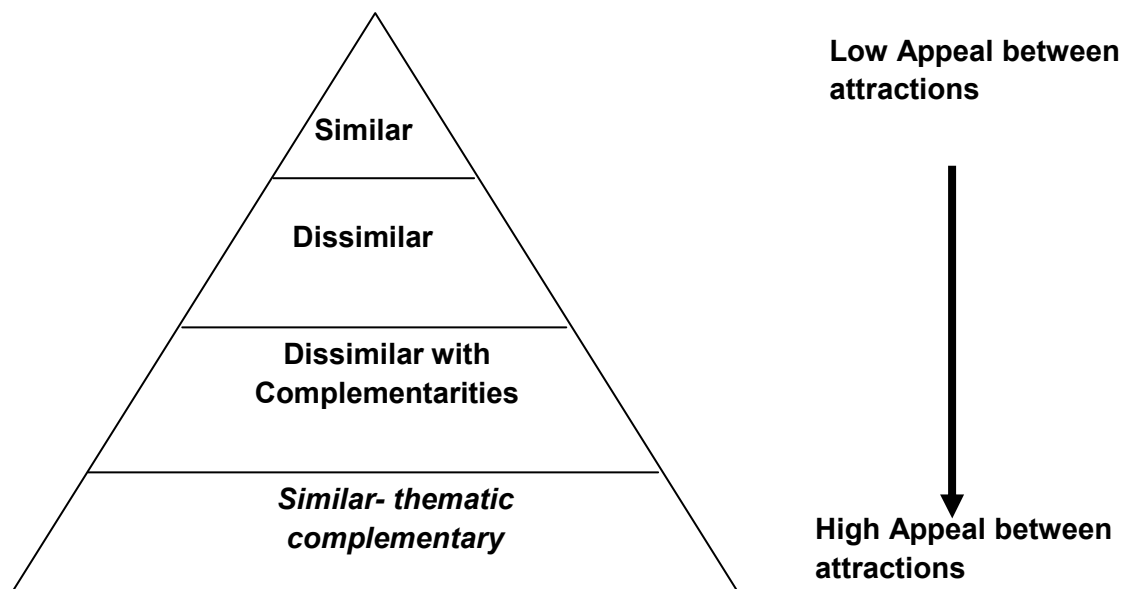
Figure 9. Relationships between tourism appeal to visitors and product similarity between attractions

5. Planning Policies

The study examined whether tourism-planning policies address tourism production including cooperation, competition, and knowledge transfer between attractions, and whether the cluster concept has a role in shaping these policies and influencing the operation of tourist attractions. In a review of the development and planning policies of Cornwall and the South West (SWT 2002,2005, Cornwall County Council 2003,2004,2005), and those of local governments, to which the territories of Newquay and the Lizard belong (Restormel Borough Council 2001,2004; Kerrier District Council 2002,2005,2005a, Wright 2000,2003), very few relevant policies were identified. Notwithstanding the lack of such policies, the comments of key informants including tourism officers, representatives of tourism associations, councillors and policy makers provided data on their perceptions of the impact of these aspects on the decision making process for the location of new tourist attractions. Based on these findings, the study provides the following: :

5.1 The decision-making process for the location of new tourist attractions implies 'unwritten' or informal policy guidelines rather than formal ones.

5.1.1 Development policies ignore the unique features of the tourism industry and in relation to visitor attractions and other tourism development projects, there is inconsistency between guidelines and the actual considerations that underpin planning applications.

5.2 The overwhelming focus is on environmental and sustainability issues; the relevance of the locations of other businesses and attractions to sustainable development in terms of landuse is not grounded in policy guidelines and regulations.

5.3 There are very few policies addressing cooperation, competition, knowledge transfer and diffusion of innovations. It is evident that notwithstanding the disregard of policy, competition and appeal to visitors do play a major role in many planning applications and decisions.

5.4 Regional/local competition between tourism businesses, including attractions, is acknowledged by key informants, but cooperation, knowledge transfer and innovations are neither considered nor acknowledged.

5.5 Although innovations, knowledge transfer and cooperation are crucial aspects, they are ignored by both policy guidelines and hardly acknowledged by policy-makers.

6. General conclusions

6.1 If attractions are thematic complementary, but do not recognise and encourage complementarities between their neighbours, they are unlikely to share many visitors and cooperate strongly with their neighbouring attractions.

6.2 A key element is how attractions perceive their cooperative and competitive relationships with other attractions and businesses and most important whether and how they act on this.

6.3 There is a need to build new heritage attractions and develop existing ones. The Cornish heritage theme was identified as underdeveloped with potential for the future.

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Acknowledgments

SCHOOL OF GEOGRAPHY,
ARCHAEOLOGY AND EARTH
RESOURCES

DEPARTMENT OF GEOGRAPHY

Amory Building

Rennes Drive

Exeter UK EX4 4RJ

Tel

Email

Web www.exeter.ac.uk

Dear Visitor,

We are conducting a survey among a sample of tourists. This survey is designed to provide data on your tourism experience in Cornwall. I wonder if you could spare a few minutes to answer some simple questions? All the responses will be kept completely anonymous and confidential. Please circle your choice, or write your answer in the space provided.

Firstly, are you a resident of Cornwall or just visiting?   Resident / Visitor **(Please circle)**

1. Why is the main reason for your visit to Cornwall? (One Response only)

a. Leisure/holiday visit   d. shopping trip

b. visiting friends/relatives   e. Other: (Please specify)_____

   c. a specific visitor attraction - Which **one?**…………………………………………

2. Is this your first visit to Cornwall?   a. Yes   2. No

3. Which of the following types of visitor attractions have you visited or intend to visit whilst on this visit to Cornwall and/or the South West?

   (Please tick the most appropriate type or types of attractions):

   a. museums.   e. golf, water parks

   b. gardens   f. adventure parks

   c. beaches   g. heritage sites

d. Nature Reserves   h. Animal sanctuaries/zoos

i. Other (Please specify):_____

4. What is the name of the nearest town to where are you staying in Cornwall?

Nearest town ..……………..…………..………..……..……… (show map if necessary)

5. How many nights are you spending in total in Cornwall during this visit?

    ___ ___ **Nights**

6. How many people are in your group (family/friends only)? ___ ___ (not whole

   coach party)

7. What age groups are the people in your visit party? **(Tick all that apply)**

Children aged: O 0 - 4 years   O 5 - 10 years   O 11 - 15 years

Adults aged: O 16 -34 years   O 35 - 54 years   O Adults 55+

8. What is your main means of transport while travelling in Cornwall? (Tick one)

Car/motorbike   O Train   O Bus/coach   O Bicycle

Other – **write in** ………..……………..……..……

9. Please name the 3 visitor attractions (others than beach and the countryside) you have most enjoyed while visiting Cornwall on this holiday/stay?

    (a= most enjoyable attraction

a._____

b._____
c._____

10. Please list those visitor attractions

       a.   You are visiting **Today**: _____
       b.   you visited **Yesterday**:_____

10a. Please indicate why you chose to visit these particular visitor attractions over the 2 days? **(Tick all that apply)**

    a. a good mix of activities for all age groups

    b. because of the weather

    c. we have children and babies

d. free entrance or low cost

e. We came to Cornwall especially to visit these kinds of attractions

f. anything else (please specify)_____

11. Please list those <u>visitor attractions</u> you intend to visit <u>tomorrow</u> (List up to 2)

a._____ and/or b. _____

11a. Please indicate briefly why you chose to visit these particular visitor

 attractions tomorrow? Please choose the options from <u>question 10a</u> (above):

    a   b   c   d   e   f

g. anything else (please specify)_____

12. While visiting a visitor attraction (entrance fee charging) on this holiday/stay, were you encouraged/recommended to visit another <u>entrance fee</u> charging attraction?

 a. Yes   **b. No**   If **YES**, were you encourage by (tick all that apply)

a. a member of staff

b. adverts for other attractions

c. vouchers for other attractions

d. anything else (please specify)_____

13. If you answered Yes to question 12,

a. Could you provide some more details about which visitor attraction recommended you to go to which other attraction(s)? For example, which attraction (A) gave you a voucher to visit another one(B) etc.

Attraction A :_____   Attraction B:_____

Details: _____

_____

b. Have you or will you visit this attraction(s) because of the recommendation?

  a. Yes   b. Yes, but I was already planning to do so.   b. No

  THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!

Date: _____   Day of Week:_____

Appendix 2: Brief interview with surveyed tourists

UNIVERSITY OF EXETER

SCHOOL OF GEOGRAPHY, ARCHAEOLOGY AND EARTH RESOURCES

DEPARTMENT OF GEOGRAPHY

Amory Building

Rennes Drive

Exeter

UK EX4 4RJ

+44 (0)1392 263342

Email   A.weidenfeld@ex.ac.uk

Web

Tourist Survey Interview.

Who decided on which attractions to visit?

1.Mother/female partner   2.Father/male partner   3. Children

4. Grandfather/Grandmother   5.Other _____

 Please indicate why you chose to visit these particular visitor attractions over the 2 days? **(Tick all that apply)**

_____

_____

_____

Please indicate briefly why you chose to visit these particular visitor attractions tomorrow?

_____

_____