A CATREG model of destination choice for a mature Island destination

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ABSTRACT

This paper explores the factors that most strongly influence the attraction of tourists by mature island destinations during the stagnation phase of the resort lifecycle. Many such destinations have attempted to develop *ex nihilo* strategies, typically in the form of product differentiation. Others have adopted a strategy of consolidating their traditional tourism markets. It can be argued, however, that to undertake either strategy successfully requires a very clear understanding of the factors that determine tourists' destination choices. The purpose of this paper is to identify the factors that shape tourists' destination choices in the case of Madeira, a 'classic' destination in the Atlantic area that is in many ways typical of mature tourism destinations in their stagnation phase. The study presents the findings of a categorical regression (CATREG) based on a sample of 260 visitors. Insights are gained into how the destination can best be managed and marketed in order to facilitate the attraction and retention of tourists. The paper concludes that the most salient factors determining destination choice tend to be generic and cross-cutting, implying that destination management and marketing needs to be more focused on operational issues than it tends to be in many mature island destinations.

1. Introduction

Mature islands destinations in the stagnation phase of their lifecycle (Tooman, 1997) tend to face complex economic challenges, including dependence on a small number of markets, erratic growth rates and a gradual loss of market appeal (Andriotis, 2006; Bardolet & Sheldon, 2008; Butler, 2000; Christensen & Hampton, 2007; Weaver, 1993, 1998). Such destinations have often tried to address these problems by product diversification into niche forms of 'alternative' tourism, such as health tourism, sport tourism, adventure tourism and rural tourism. These have tended to be *ex nihilo* strategies, based on little more than following the example of other destinations in similar positions. This has even led to some destinations adopting a diversification strategy based almost entirely on 'artificial' attractions and 'invented' cultural practices (Terluin, 2003). The rationale for diversification into new forms of tourism tends to be that it can help convey an image of modernity to potential tourists, as well as to more effectively harness commitment on the part of the local authorities to support tourism development. Product diversification, in particular, tends to be seen as a better alternative to market diversification, which can leave the destination on a 'treadmill' of having to find ever more alternative markets for their existing product offerings. It is also argued that if destinations do not diversify their product offering they risk being trapped in a low-price, high-volume strategy. This would leave the destination with limited ability to re-invest in its infrastructure and the

quality of its traditional product offering.

The above discussion emphasises the fact that traditional sun-sea-sand tourism is still the mainstay in many island destinations. Butler (2000, p. 17), reflecting on the problems of island tourism, asserts that while tourism 'is extremely dynamic in nature, it also exhibits great inertia and stability', particularly in terms of tourists' motivations to visit but also destination image (Garrod & Kosowska, 2012). Island images can be particularly strong and Andriotis (2006) argues that only a few larger island destinations (such as Cyprus and Jamaica) possess the resources required to break free of stereotypical imagery. This suggests that diversification through the reproduction of 'ideal types' may not be as straightforward as it may seem. Moreover, as García-Falcón and Medina-Muñoz (1999) note, alternative forms of tourism are not always economically viable in the long run. Consequently, authors such as Sharpley (2003), Hospers (2003) and Parra-Lopez, Rodríguez and Yanes-Estévez (2008) have suggested that the most effective strategic approach may actually be the consolidation of the existing mass product, particularly by working to enhance the quality of existing offerings, rather than to develop new ones.

What is clear from this ongoing debate, however, is that either of these two strategies – diversification or consolidation – requires the relevant destination marketing organisation (DMO) to have a detailed knowledge of the tourist decision-making process. In the context of tourism, this is understood to be complex and multi-stage process. It typically begins with the prospective tourist's organic assessment of the

destination image and culminates in a destination choice that is heavily mediated by marketing efforts and the electronic media. Also involved are repeat-purchase decisions and recommendation to others, which are greatly influenced by the tourist's assessment of the quality of the tourism experience they received. Endowed with scarce resources, DMOs must focus on those destination attributes that are most salient in the tourist's decision-making. This study attempts to identify the destination attributes that are most salient in attracting tourists to the island of Madeira. These attributes may then be emphasised in the DMO's marketing efforts and suitable programmes put in place for maintaining the quality of these attributes.

The contributions of the paper are thus as follows. First, it discusses the current state of tourism development in Madeira, which is arguably still one of the least-studied mature tourism destination in Europe. Secondly, the paper attempts to identify the attributes of the destination that are the most salient in destination decision making on the part of tourists, the aim being to help guide the development an expedited marketing strategy by Madeira's DMO. Thirdly, the paper illustrates the use of categorical regression (CATREG) in order to accommodate both nominal and ordinal variables and thereby overcome some of the limitations of ordinary least squares (OLS) regression analysis in this respect.

The remainder of this paper is organised as follows. In Section 2, the recent evolution of tourism in Madeira will be described as an example of a mature destination that is passing through its stagnation phase. Section 3 will then present a review of the literature, focusing particularly on tourists' destination-choice behaviour. Section 4 discusses the methods used in the study, which applies categorical regression analysis to data collected in Madeira. Section 5 then presents the findings of the study, including the identification of those destination attributes that are most influential in tourists' decision making. Following some further discussion of the findings in Section 6, the limitations of the study are presented in Section 7. Meanwhile, Section 8 presents the conclusions of the study, as well as suggesting some future directions for research in this subject area.

2. Tourism development in Madeira

Madeira emerged as a popular tourism destination well before the era of mass seaside tourism and has duly progressed through all the classic destination-lifecycle stages (Butler, 2000; Tooman, 1997). Today it serves as a 'safe' travel destination: sometimes as a 'haven' to which tourists can turn in times of crisis in the Mediterranean area. A small island located on Europe's Atlantic periphery, and a semi-autonomous region of Portugal, Madeira offers a relatively 'exotic' experience and boasts extensive natural areas, including a spectacular rocky coastline, attractive marine wildlife and a relatively pristine, mountainous interior. Data available on visitors' satisfaction suggests that tourists highly value the scenery of the island, along with its natural attractions, high levels of safety and hospitality, and excellent gastronomy (CED, 2009; SRTM, 2006). Madeira also trades on a long-established reputation for service quality, and this tends to be a positive aspect of tourists' assessment of the destination.

Madeira's position as a 'classic' tourism destination is, however, becoming increasingly tenuous. A report commissioned by the DMO, which is known as the Madeira Regional Tourism Board (MRTB), places the island in closest competition with a number of well-established tourism destinations, including the Canary Islands, Malta, Cyprus, Tunisia, the south of Spain, Egypt, Greece, the Balearic Islands, Croatia and Morocco (GConsulting, 2005; Neoturis, 2005). Madeira has much in common with these destinations, not only in terms of the timing of their entry onto the international tourism market, their position at or nearly at the stagnation stage of the destination lifecycle, and their location at the periphery of the European continent, but also in terms of the key attributes they have to attract tourists, including an agreeable climate year-round, attractive

Table 1
Key indicators for the tourism industry in Madeira.

Indicators	1976	2000	2009	Annual growth rate (1976–2009)	Annual growth rate (2000–2009)
Arrivals	265,582	986,504	1,058,410	4.3%	.8%
Overnights	1,947,611	4,972,470	5,496,926	3.2%	1.1%
Receipts	3,680	200,586	255,852	13.7%	2.7%
Accommodation capacity	10,140	22,722	28,915	3.2%	2.7%
Number of hotels	91	162	291	3.6%	6.7%

coastal scenery and a well-developed tourism infrastructure. A recent report commissioned by the European Commission (Ismeri Europa, 2011) asserts that Madeira's tourism product is still traditional and has failed to keep up to date with market developments. *Indeed,* 'there is a wide perception that the growth factors that have supported the model of development over the last 30 years are not valid any more, due to significant internal and external changes' (Ismeri Europa, 2011, p. 137). The results are to be seen in the key indicators for tourism in Madeira (see Table 1), which include falling rates of growth in arrivals and receipts, and low accommodation occupation rates in spite of continued investment in accommodation capacity.

It is recognised, however, that the tourism sector still offers tremendous opportunities for growth in Madeira (Ismeri Europa, 2011). To this end, the island's government has been trying to reposition and redefine the image of the destination so that it is suitable for attracting new tourists to alternative niche forms of tourism. This is motivated in part by the recognition that the local tourism industry sometimes struggles to live up to the expectations established by its up-market image. The MRTB also recognises the high expectations of tourists have in terms of service quality; yet meeting these is becoming an increasingly difficult task due to the increasingly connected and turbulent nature of the world economy, as well as the growing levels of experience tourists have with the standards offered by competing destinations. With regard to turbulence in the external environment, Madeira has experienced a number of crises in recent times, including major flash flooding in February 2010 and an outbreak of dengue fever in 2012. While both were well-managed, they tend to be antagonistic to the island's image as a 'safe' destination.

3. Literature review

The literature suggests that destination image one of the most influential determinants of tourists' buying behaviour (e.g. Alegre & $2 Juaneda, 2006; Beerli & $2 Martin, 2004; Gallarza, García & $2 Saura, 2002; Lichrou, O'Malley, & $2 Patterson, 2008; Pike, 2003). Destination images are thought to be especially important for first-time tourists given their lack of first-hand experience (Kozak, 2001; Lehto, Morrison & $2 O'Leary, 2004). Indeed, it could be said that for first-time tourists, 'images are more important than tangible resources and perceptions rather than reality are what motivate consumers' (Guthrie & $2 Gale, 1991, p. 555).

Even so, the definition of the term 'destination image' remains highly contested. It is widely agreed that destination images can be based on the objectively verifiable attributes of the destination: these are important determining factors in the organic and often also the induced images of the destination, and they are instrumental in the modified-induced image that is formed in the course of an actual visit. Images are, however, always 'colored by individual's subjective interpretation of the objective reality' (Arguello, Campbell, Krider & $2 Morea, 2010, p. 786). This occurs as a result of a comparative analysis with similar destinations (Baloglu & $2 McClearly, 1999; Baloglu & $2

Pekcan, 2005; Hu & \$2 Ritchie, 1993; Otto & \$2 Ritchie, 1996). This inherent subjectivity frustrates the definition of destination image, and hence its measurement at the most basic level.

The concept of the destination image nevertheless remains popular in the field of tourism management (Krider et al., 2010). This study adopts the broad definition advocated by Beerli and Martin (2004, p. 658), which states that a destination image is formed by the tourist's 'reasoned and emotional interpretation' of two closely interrelated components: their 'perceptive/cognitive evaluation' of the destination, which is based on their existing knowledge and beliefs, and an 'affective appraisal', which is based on their emotive feelings towards the destination (see also Butler, Correia & \$2 Oliveira, 2008; Gartner, 1993; McCabe, 2000). Various previous studies have adopted this approach (e.g. Crompton, 1997, Li, Cheng, Kim, & \$2 Petrick, 2007; Fesenmaier & \$2 MacKay, 1997; Crompton & \$2 Um, 1990) and there is considerable empirical evidence to support it (e.g. Bramwell & \$2 Rawding, 1996; Ryan & \$2 Trauer, 2005). Both the cognitive dimension and the affective appraisal are considered multidimensional because of the diversity of interests on the part of the tourist, media stereotyping and past experiences of the destination by repeat tourists. Accordingly, some studies have included a very large number of attributes to try to capture the range of cognitive and affective factors that are likely to play a part in attracting and retaining tourists (Kusumastuti et al., 2011; Dellaert, Hannes, Janssens, Kusumastuti & \$2 Wets, 2010). Beerli and Martin (2004), for example, identified nine dimensions of destination image, together containing dozens of attributes. Hui and Wan (2003), meanwhile, identified 37 attributes at work in attracting tourists to Singapore.

With this context come a number of methodological challenges, not least to the tourist who, faced with the daunting task of ranking dozens of attributes relative to each other, will have had to have expended a great deal of cognitive effort choosing their preferred destination. Recounting this complex decision-making process to a researcher, or recording it in a questionnaire, would presumably be an even harder task. Moreover, in studies that try to identify which destination attributes are most important in informing a destination image, participants' responses may be unduly shaped by psychological effects (Kusumastuti et al., 2011; Fodness & \$2 Murray, 1999), resulting in biased data and attendant implications for the validity of any findings generated by analysing them.

While the wide diversity of determinants of a destination image might seem to represent something of a challenge to the successful study of the role it plays in destination decision making, some commentators have suggested that in realty there may be a rather smaller number of variables at work (Alegre & \$2 Juaneda, 2006; Echtner & \$2 Ritchie, 2003). In fact, there may be reason to believe that the typical tourist may first choose a limited set of destinations, based on their various attributes, and then select one of them based onsimple heuristics and rules of thumb (Kleinsasser & \$2 Wagner, 2011). Moreover, tourists who have visited the destination before may be more 'driven by habit' than by conscious decision making (Kusumastuti et al., 2011, p. 998). Hsu, Tsai and Wu (2009) add that repeat tourists may rely 'less on pre-purchase external search' than novices, partly because experience and expertise 'leads to faster solutions' and partly because they can rely on their experience gained from previous visits. Such practices may allow tourists to make their choices based on a rather narrower range of variables (see also Axhausen & \$2 Schlich, 2003; Hannes, Janssens, & \$2 Wets, 2008; Pyo, 2005; Sjöberg, 2003; Stern & \$2 Richardson, 2005). Other commenters have suggested that tourists may use 'agile thinking' to operationalise their decision-making (Davis, Kastenholz & \$2 Paul, 1999). This involves the use of destination stereotypes, with each destination being assigned a notional market niche (in terms of its tourism offering) and price-quality ratio. In this way, tourists can try to avoid the cognitive burden imposed by the large number of factors involved in the decision-making process. With stereotypes standing in

for actual data, only a small number of actual destination attributes need be analysed (Abdul-Muhmin, 1999; Apostolakis & \$2 Jafrry, 2005; Cook & \$2 Fleming, 2008; Hensher, Stopher, & \$2 Louviere, 2001, Greene, Hensher & \$2 Rose, 2005; Dellaert, Lindberg, & \$2 Rassing, 1999).

It can be argued, therefore, that tourists often use only a sub-set of the available variables in order to relieve the cognitive burden involved in deciding which destination to visit (Breejen, 2007; Faullant, Matzler, & \$2 Mooradian, 2011; O'Leary and Deegan, 2005). First-time visitors may employ a broader range of variables than repeat tourists. Indeed, differences in the decision-making behaviour of repeat and first-time tourists are well acknowledged in the literature (Beerli & \$2 Martin, 2004; Correia et al., 2008; Fayeke & \$2 Crompton, 1991; Milman & \$2 Pizam, 1995). First-time tourists might be expected to take into consideration a larger number of contextual variables than repeat tourists, including budget constraints and a broad range of destination image attributes (Correia et al., 2008). Even so, Wong and Yeh (2009) argue that first-time tourists might be expected to give greater attention to a few basic destination attributes such as 'health, safety, time, prices and travel distance': factors that are likely to have a substantial impact on the overall quality of the tourism experience. As such, it can be argued that there are often only a small number of aspects taken into effective consideration in the destination choice-making process.

As noted above, empirical researchers have encountered difficulties in determining which of the many variables are operational and hence important to tourists' decision-making. Data-reduction techniques are often used to try to achieve this (Hsu et al., 2009), such as the exploratory factor analysis applied by Beerli and Martin (2004) and Kim (2014), and the fuzzy-set theory and multi-criteria decision analysis applied by Hsu et al. (2009). This paper explores an alternative method, known as categorical regression with optimal scaling (CATREG). This analytical technique offers the researcher the ability to 'narrow down' the number of variables taken into consideration by tourists in the decision-making process. These are the attributes that are the most influential or 'salient' in determining the attractiveness of a destination.

Using Madeira as an example, the paper presents findings based on the analysis of data drawn from a survey of tourists who were asked to identify the attributes they believe to have been most decisive (i.e. prominent in their minds) when choosing Madeira as their destination. This study hypothesises that attraction to the destination may be conditioned by a wide range of cognitive and affective factors. However, based on the foregoing discussion, it can be argued that some attributes are likely to be more 'salient' than others in the decision-making process. Knowledge of these factors and how they operate to assist the tourist to choose their destination will be helpful regardless of whether the DMO is pursuing a consolidation or diversification strategy; moreover, it may help the DMO to decide which of the two strategies it would be in their long-term interests to pursue.

4. Methods

This study uses an econometric procedure called CATREG, which is especially useful when handling dataset with a combination of nominal, ordinal and/or interval variables (Zhang, 2002). Variables used in social and behavioural studies are often categorical, ordinal and interval in nature, which presents a number of limitations when applying the standard linear regression (OLS) model (Gee & \$2 Walsemann, 2010; Carroll, Guth, Simpson, & \$2 Zhou, 1997; Burdine, Feng, & \$2 Xu, 2010). This is because OLS regression relies on strict assumptions of linearity, normality, homoscedasticity and independence of error terms. It also demands large samples, which are often not easy to obtain using social survey approaches (due to money and time budget constraints). CATREG, in contrast, can be used with relatively small sample sizes and is well-suited to the inclusion of

attitudinal data (Anastasios, Koutsourism, & \$2 Konstadinos, 2010; Anderson, Black, Hair & \$2 Tatham, 1998; Meulman & \$2 Kooij, 1997). The key argument justifying the use of CATREG analysis in this context, however, is that it enables the identification of the relative importance of the explanatory variables. It does this using an optimal scaling procedure to scale both the dependent and independent variables. This involves the minimisation of the following expression:

$$\|X^*b-z^*\|, \quad where\|X+b-Z^*\|=\sqrt{(X^*b-z^*)´(X+b-z^*)}$$

where b is the vector of standardised coefficients, X' is the coefficient matrix of the transformed variables, and Z* is the vector of the transformed observations of the dependent variable. CATREG maximises the correlation between θ(Z) and $\sum b\ j\ \varphi\ j\ (Xj)$ based on non-linear transformations. Different optimal solutions are available for dependent and independent variables, namely, nominal, spline nominal (in such cases the transformation is a smooth, non-monotonic, piecewise polynomial of the chosen degree), ordinal, and spline ordinal (in such cases the transformation is a smooth, monotonic, piecewise polynomial of the chosen degree) and numeric. Further details are provided in Meulman (1997) and SPSS (2005).

Accordingly, a deductive methodology was adopted, employing quantitative data obtained from a survey administered among tourists in Madeira from October 2010 to February 2011. A questionnaire of four pages in length was developed comprising entirely closed-ended questions relating to the respondent's cognitive and emotional reasons for choosing Madeira as their holiday destination. Various socio-demographic questions were also included, including the age group, income group, educational achievements and home country of the person completing the questionnaire. The questionnaire was pilot-tested with a small number of tourists staying in local hotels; it was found to take around 15–20 min to complete, which was considered reasonable. Feedback was then sought from a number of experts, including local hotel owners, the head of the local rural tourism association, local journalists and senior officials at the island's DMO. This resulted in some minor re-wording to the questions for the purpose of clarity.

In order to distribute the questionnaires, the owners/managers of a number of hotels were recruited by the researcher to participate in this study. Hotels were chosen as venues for conducting the survey as they allowed the questionnaire to be delivered to a large number of tourists within the limited resource envelope the researchers had at their disposal. A total of 10 agreed, all of whom were known personally to the researchers. The hotels included establishments from every quality-rating category from two-star to five-star, and from a range of different locations around the island. One questionnaire was distributed per party by the hotel reception staff on checking in and they were collected back when they had been completed, usually at the time of checking out. As such, the questionnaire tended to be completed by the lead guest of each party. A relatively slow response was expected due to the dependence on hoteliers' willingness to distribute the questionnaires and to collect them back. This was indeed the case – the survey taking 13 months to complete – but it was nevertheless possible to collect 280 usable questionnaires in this way. Out of this total, 20 questionnaires were not usable due to non-completion of one or more of the questions. This sample size is considered appropriate for CATREG analysis (Hair et al., 1998). Indeed, as noted above, an advantage of CATREG is that it can be run with relatively small sample sizes.

5. Results

Descriptive analysis of the data indicated that Madeira tends to attract middle-aged tourists: 59.1% of visitors were over 40 years of age and only 2.4% of the sample was under 24 years old. In terms of income, 58.5% of the tourists earned between €1000 and €3000 per month, but only 8.6% earned more than €3000 per month. The

Table 2
Socio-demographic details.

Variable	Total
Age	
Less than 29	8%
**30s	27%
40s	13%
50s	23%
60s and more	28%
Marital status	
Single	26%
Married and other	71%
Income	
Up to €1000	18%
€1000 to €4000	66%
More than €4000	16%
More than €5000	9%
Length of Stay	9.03
One week/Two weeks	71%
Education	
High school or less	53%
Undergraduate degree	47%
Daily expenditure (€s)	68.13
Professional	
Executive manager	11%
Self-employed	6%
Professional	22%
Retired	22%
Housekeeper	2%
Student	3%
Public servant	8%
Employee services	12%
Employee industry	7%
Unemployed	2%
Other	5%
Anticipation of booking	
One week	15%
One month	36%
Several months	42%
One year	7%
First visit	63%
Nationality	
British	20%
Portuguese	21%
German	28%
Other	32%
Attractiveness (Likert scale from 1 (unattractive) to 5 (very attractive))	4.27

disposable income of tourists to Madeira is thus seen to be relatively modest; in sharp contrast with the affluent and aristocratic visitors who typically travelled to the island when it was in the earlier stages of its destination lifecycle. Data regarding academic qualifications suggested a rather well-educated tourist, with 80% having at least a high-school diploma. Most respondents were frequent tourists, taking on average two holidays per year, while more than 28% of the respondents were repeat tourists to Madeira. The respondents were typically travelling as a family, but some without their children (8.6%). About 50% of respondents belonged to Madeira's three most well-established origin markets: Germany (24.9%), Portugal (15%) and the UK (10.4%). Table 2 illustrates this data. Other than there being a slight excess of German respondents compared to the general population of tourists, the sample was representative of previous studies commissioned by the DMO (e.g. SRTM, 2006, 2013), with the typical visitor being relatively older, middle class and well-educated.

Using 22 cognitive and affective destination attributes, coded as ordinal data, as independent variables, a CATREG was run with the variable 'destination attractiveness' as the dependent variable. Table 3 presents the means and standard deviations for all the variables used in this study. The standard procedure of exclusion of irrelevant (i.e. highly correlated) variables resulted in a final model with eight predictors (see Correia et al., 2008, for further details on the application of the procedure). The R^2 of .896, which implies that almost 90% of the

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Table 3
Variables used in the CATREG analysis.

Attributes	Mean	Std. Dev.
Scenic beauty	4.50	.826
Natural parks, nature, gardens and wilderness to enjoy	4.39	.808
New and exotic atmosphere	3.46	1.211
Traditional gastronomy	3.25	1.229
Cultural attractions (e.g. museums) and history	3.02	1.155
Transport cost to Madeira are low	2.98	1.387
Good infra-structure of hotels and apartments	4.03	.970
Good price (Madeira with overall cost advantages)	3.45	1.169
A safe place to visit	4.23	.972
Pleasant weather	4.54	.767
Relaxed pace of life	4.06	.992
Practising outdoor activities (ex. hiking, fishing)	3.12	1.381
To escape daily routine	4.33	.957
Feeling disconnected, like in a really different and refreshing place	4.03	1.086
Looking for change and novelty	3.36	1.743
To seek adventure and pleasure	2.79	1.275
To seek recreation and entertainment	3.19	1.239
Intellectually enriching	3.10	1.250
Have a good time with family/friends	3.18	1.461
Escaping to a rural environment to recharge my batteries	3.28	1.260
Relationships with local residents	2.87	1.36
Opportunities for children	2.28	1.403

variance is explained by the optimally scaled and transformed attributes, the F-statistic value of 53.8 (α=.000) and the p-value of .000, together indicate adequate performance of the model.

CATREG also reports Pratt's measures of relative importance, which is useful to make a further exploration of the relative importance of the independent variables (Pratt, 1987). The variable 'relationships with local residents' accounted for 15.7% of the total variance, followed by 'to seek adventure and pleasure', which accounted for another 15.1%. Other influential factors were 'traditional gastronomy', 'good infra-structure of hotels and apartments', 'discover new things', 'a safe place to visit' and 'to alleviate tension and stress'. A cautionary note on the interpretation of the coefficients is needed at this point because CATREG coefficients cannot be interpreted in the same way as with the standard OLS regression model. Nevertheless, the transformations plots of the attributes (see Fig. 1) suggest that the variables are well-defined and well-behaved: an increase in each of the image attributes can be expected to lead to an increase in the overall attractiveness of the destination.

The CATREG analysis (see Table 4) also allows the initial number of independent variables to be narrowed down, resulting in an eight-variable solution comprising two cognitive factors ('hotel infrastructure' and 'gastronomy') and six affective factors ('safety', 'alleviation of stress and tension', 'discovery', 'adventure', 'having a good time with friends', 'relationships with locals'). This does not mean that the 14 attributes that were excluded are irrelevant or unimportant; merely that the remaining variables are the most salient in tourist decision making. The eight-variable solution suggested here might therefore be considered a good starting point to analyse the Madeira's strengths and weakness with regard to the destinations with which it most closely competes.

Further findings follow from these initial ones. Given that six of the eight destination attributes are affective in character, it is evident that tourists tend to place a high value on the emotional dimension of the destination. This finding is consistent with Madeira being a mature destination in its stagnation phase. Echtner and Ritchie (2003), for example, suggest that tourists who are more familiar with the destination tend to place greater relative value on its emotional (holistic, psychological and unique) attributes. Beerli and Martin (2004) also link previous experience with an emphasis on the emotional aspects of the tourism product. Correia et al. (2008), meanwhile, found that repeat visitors travelling to Cape Verde were more sensitive to the

emotional aspects of the destination image.

The results are also consistent with the proposition that tourists attempt to ease the cognitive burden of selecting their destination by narrowing the decision-making calculus down to a smaller number of salient attributes. Of the 22 variables included in the initial analysis, only eight were needed to explain tourists' destination-selection behaviour well. This suggests that an effective strategy for the Madeira tourism industry would be focus on maintaining and enhancing the quality of these eight destination attributes, rather than trying to spread its efforts and resources among them all. These attributes can be considered to be the most salient in influencing destination choice; attending to any of the others is likely only to have a marginal effect on tourism arrivals and expenditure.

If only a subset of the range of possible destination attributes is effectively used by tourists when choosing Madeira as a tourism destination, it follows that the tourism industry would do well to focus their efforts in maintaining and enhancing the quality of their current offer. This applies whether the overall destination strategy is primarily one of diversification or consolidation. For example, offering tourists the benefit of 'alleviating stress and tension', which is consistent with the marketed image of the destination (Baum, 1997; Deloughrey, 2004), tends to thrive on a product offer that emphasises passivity, reflection and close contact with nature. This fits well with a consolidation strategy of maintaining and developing the resources upon which the present market depends. However, as island tourists are mainly motivated by such destination attributes (Alegre & $2 Juaneda, 2006), this benefit could also be emphasised when trying to develop alternative tourism focused on the themes of wellbeing and health, for example through the of de-stress and relaxation therapies.

Tourists also positively value the unique human landscape of Maderia, including opportunities to socialise alongside local residents and to visit picturesque villages where they expect to see the traditional Madeiran way of life. These benefits can be highlighted either by promoting existing activities (such as day trips to the traditional villages) or alternatively by promoting education tourism, for example holidays based on learning about the history and culture of the island. Past studies on Madeira, suggest that local foods and beverages are not a key driver of the final selection, but can serve well as a supplementary attractor (DRTM, 2004; ECAM, 2005). Encouraging existing tourists to take a more active interest in the local cuisine might therefore be an effective strategy for helping to add value to the tourism experience and encourage more spending in the destination's hospitality sector (Apostolakis & $2 Jaffry, 2005; Correia et al., 2008; Hui & $2 Wan, 2003; Sheldon & $2 Fox, 1988; Smith & $2 Xiao, 2008).

6. Discussion

This paper has suggested that DMOs of mature destinations in the stagnation phase of the destination lifecycle typically find themselves on the horns of a dilemma. With limited resources at their disposal they need to decide whether to adopt a consolidation strategy based on the continued promotion of their existing and often long-established tourism products, or to adopt instead a diversification strategy based either promoting existing product offerings in new markets (market diversification) or developing new market offerings (product diversification). The rejuvenation phase that follows is notoriously complex and imprecise by its very nature, and the time frame available tends to be rather short. During this time, tourism operators will be under constant pressure to keep their costs down, to meet short-term revenue goals and achieve room-occupancy targets. Over-reaction may be just as damaging as a doing nothing at all, so efforts need to be prioritised on the basis of sound market considerations.

It is evident that many destinations attempt to follow both strategies at the same time: both consolidation and diversification. Indeed, this is the approach recommended for Madeira in the Ismeri Europa (2011) report. Often, however, the latter is developed on an *ex*
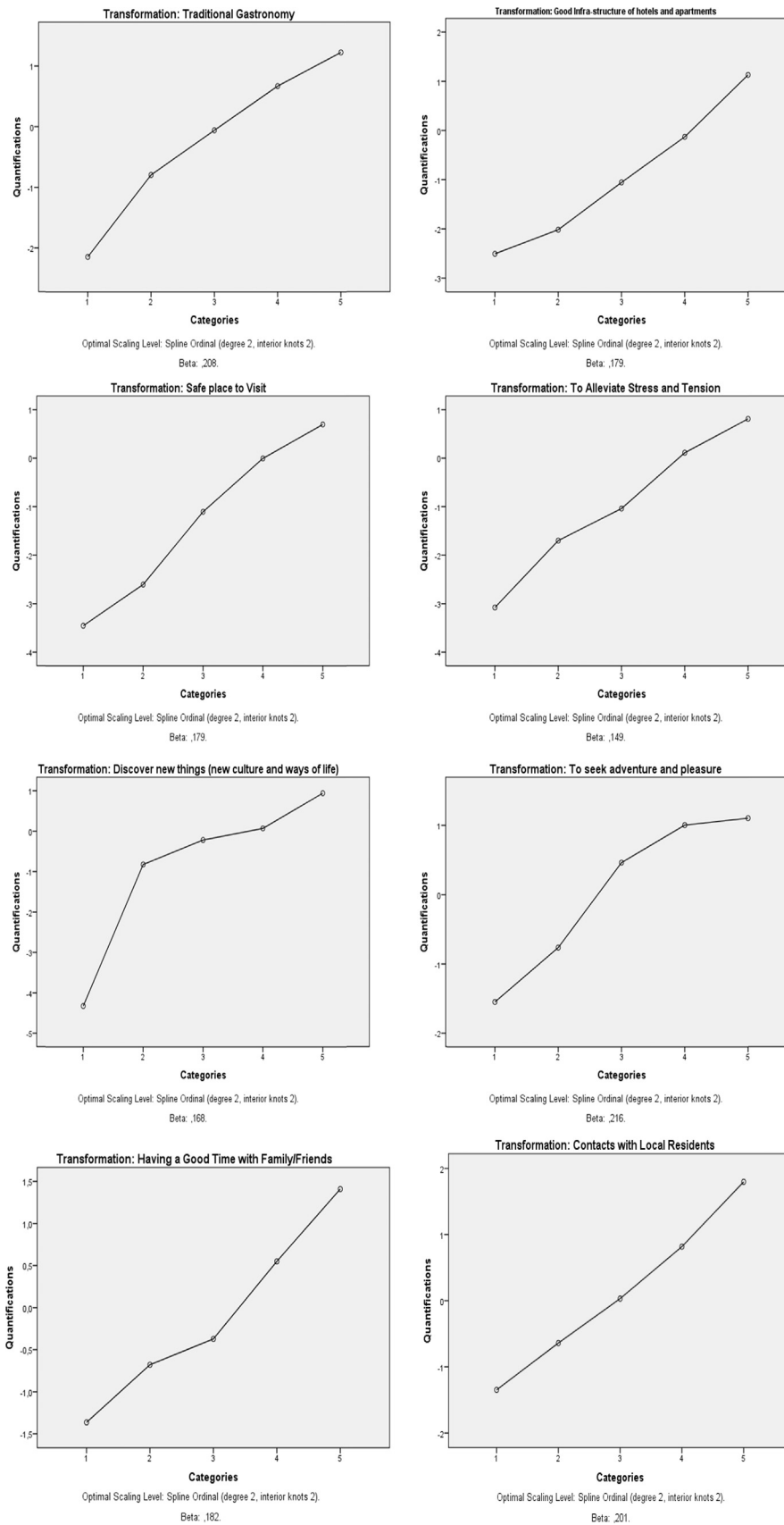
Fig. 1. Optimal scaling spinal plots.

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Table 4
CATREG output.

Variables	Stand. Coef.		F-value	Sig.	Imp.
	Beta	Std. Error		P value	
Traditional gastronomy	.208	.039	28.647	.000	.148
Good infra-structure of hotels and apartments	.179	.042	17.917	.000	.121
A safe place to visit	.179	.039	20.700	.000	.097
To alleviate stress and tension	.149	.038	15.502	.000	.091
Discover new things (new cultures and ways of life)	.168	.069	5.888	.000	.108
To seek adventure and pleasure	.216	.035	38.703	.000	.151
Have a good time with family/ friends	.182	.034	28.728	.000	.128
Relationships with local residents	.201	.044	21.202	.000	.157

R^2 =.896; Adjusted R^2 =.879

nihilo basis, rather than being informed by detailed and reliable market research. This paper provides some assistance to both strategic approaches by identifying the salient attributes of the destination that can either be maintained and enhanced as part of a consolidation strategy or used to develop more grounded development plans as part of a diversification strategy. Indeed, this study has shown that there may in fact be a relatively small subset of destination attributes upon which tourists tend to base their destination choice. This, along with the use of heuristics and rules of thumb, enables them to narrow down their choice set and thereby avoid cognitive overload. Tourism managers, marketers and policy makers would surely welcome knowledge of the composition of this subset. Faced with an often overwhelming agenda of daily operational issues, decision-makers often lack the time and energy to spend on developing complex, confusing, and time-hungry strategies that try to take in the broad sweep of considerations. The more parsimonious approach used here allows for the destination strategy – whether it be based on consolidation, diversification (or even both) – to be narrowed down and simplified at an early stage.

7. Limitations

CATREG is one means by which the most salient subset of destination attributes can be identified but this study shows that it can be both serviceable and insightful. With respect to Madeira, this study highlights two cognitive factors and six affective factors that constitute such a set. This set of attributes is in many ways typical of mature island destinations, in that the destination is attempting to offer both familiarity and novelty. Tourists value the former in terms of comfort, reliability and safety, but also would appreciate a taste of the latter in the form of novelty, excitement and new experiences.

The study is not, of course, without its limitations, and it is important to recognise these before proceeding to draw conclusions from the analysis presented above.

First, as noted in the methods section of the paper, the data used in this analysis based on a convenience sample of tourists staying at 10 specific hotels on the island. These hotels were nevertheless located in different parts of the island and had a range of quality grading, helping to ensure that the sample represented a wide spectrum of visitors. A fully randomised sampling procedure would naturally have been preferable. However the researchers lacked the resources of money and time required for this.

A second limitation of the study is that the sample size is relatively small. While this sample size is large enough to enable CATREG to be run, increasing the sample size would have allowed more confidence to be had in the findings. Indeed, with a margin of error of 6% (for a 95% confidence level), care must be employed in attempting to generalise the results of the analysis. Further research, based on larger samples,

may therefore be advisable before any results are considered to be conclusive or definitive. This having been said, the study did produce findings that are clearly in line with *a priori* expectations, and is consistent with previous studies in terms of variable rankings and socio-demographic attributes.

A third limitation relates to the administration of the questionnaires by hotel staff in their work environment. At busy times of the day, staff may not have the time to distribute the questionnaires properly or may forget to do so. Similarly, by giving the questionnaires to guests to take away, rather than to fill in straight away, it must be acknowledged that there is a risk of selection bias: those who have something to say may be more likely to complete the questionnaire and return it than those who do not. This method also requires respondents to fill in the questionnaires unsupervised. It also makes the assumption that the lead guest will be the one complete the questionnaire, thus recording their socio-demographic details, and that this is the person who made the decision to visit Madeira. These assumptions may not hold in practice.

Finally, a limitation of the data-collection method is that it is not possible to determine the rejection rate or to identify reasons why guests may have chosen not to complete the questionnaire. This may have introduced an (unknown) element of bias into the data.

8. Conclusions

The main conclusions of this paper are as follows. First, tourists typically seek a blend of familiarity and novelty in choosing Madeira as their tourism destination. Perhaps fortunately for the tourism sector in Madeira, the attributes that are highlighted in the study as being the most salient to tourists' destination choice go beyond the stereotypical image of the island destination. This presents the sector with a prime opportunity to develop a unique selling proposition based not simply on the traditional attributes of Madeira, which tend to dominate the image of the island that is presently projected both by the DMO and the industry itself, but to go beyond these to provide new, adventurous experiences for tourists in which the culture and people of the island also play a central part.

Secondly, it can be argued that any destination must deliver a high-quality experience that meets and ultimately exceeds expectations if it is to generate repeat visits. Such expectations are often heavily derived from the destination image that is promoted both by the DMO and the industry itself. Care must therefore be taken to ensure that the offer promised by the image and associated marketing activity match the delivery of the experience in quality terms. A complete redefinition of the image is probably not necessary, but the sector needs to redirect the focus marketing away from the traditional use of imagery based on landscapes, nature, tranquillity and relaxation to consider all that Madeira has to offer, including adventure, social interaction with the host population and gastronomy. While this might seem like diversification it is actually an important part of a consolidation strategy; maximising repeat tourism requires an active strategy of ensuring that the full range of the tourists' needs and aspirations is met.

Thirdly, the study nevertheless recommends that Madeira takes a step-by-step journey through the reinvention phase of the destination lifecycle in which it prioritises its strategic marketing actions, rather than taking the 'scatter-gun' approach of trying to do everything at once. Some destination attributes do appear to be more salient than others and these should be the ones that are focused upon first. Some attributes cannot easily be influenced (e.g. climate) but there are others that the sector as a whole can agree together to focus upon.

Fourthly, and in some ways serendipitously for Madeira, the way forward that is suggested here is not very far distanced from the current technological and learning abilities of the sector. While this strategy has arguably always been available, the contribution of this study is to identify a more parsimonious approach that will allow industry managers and policy makers to focus on just a subset of

destination attributes, rather than attempting to cover the full gamut. In so doing, the paper is not trying to suggest that these other attributes are not influential, simply that their influence is relatively minor in comparison to the more salient ones. This affords the sector the opportunity to focus its resources and energies on what might work best for Madeira.

This study also has relevance to destinations other than Madeira. While Madeira is clearly a special case in terms of its insular nature, position on the periphery of the European region, long history of tourism and well-developed destination image, many of the findings of this paper apply well to other mature tourism destinations. In particular, this study demonstrates that it is possible to identify a subset of salient destination attributes on which the industry and the DMO can focus their efforts. The destinations that are the most successful in this are likely to be those that have carefully selected the best subset of attributes and this paper recommends the use of CATREG for this purpose. The most successful destinations will also doubtless be those that get all stakeholders and scarce resources 'rowing in the same direction' when it comes to putting the identified programmes into action.

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