

MEASURING FACTORS THAT INFLUENCE A VISIT WITH A MOVIE MAP: An empirical analysis of a surrealist cult film

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ABSTRACT: Film tourism has been one of the fastest developing areas of tourism in recent years. In general, research has recognized the importance of films as tourist promotion tools, although academic studies dealing with the factors that induce tourists to select such film destinations are still insufficient. The principal aim of this research is therefore to propose a model that explains the decision made to visit the locations of a surrealist cult film. The results have allowed us to quantify the relative importance of the different factors affecting the selection and evaluation process on a specific movie map, and provide an explanation for the inadequacy of tourism fairs as communications tools. **Keywords:** film tourism, tourist behaviour, surrealist cult film, tourism fair, logistic regression.

RESUMEN: El turismo cinematográfico ha sido una de las áreas de mayor desarrollo en los últimos años. En general, los trabajos existentes han reconocido la importancia del cine como herramienta de promoción turística, aunque los estudios académicos sobre los factores que llevan al turista a seleccionar un destino cinematográfico continúan siendo insuficientes. Por tanto, el objetivo principal de esta investigación es proponer un modelo explicativo de los factores que determinan la decisión de visitar las localizaciones de una película de culto surrealista. Los resultados obtenidos permiten cuantificar la importancia relativa de los diferentes factores que afectan el proceso de selección y evaluación de una ruta cinematográfica específica, y revelan las limitaciones de las ferias turísticas como herramientas de comunicación. **Palabras clave:** turismo cinematográfico, comportamiento turístico, película de culto surrealista, feria turística, regresión logística.

RESUMO: O turismo cinematográfico tem sido uma das áreas de maior desenvolvimento nos últimos anos. Em geral, os trabalhos existentes reconhecem a importância do cinema como

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ferramenta de promoção turística, embora os estudos académicos sobre os fatores que levam o turista a escolher um destino cinematográfico, continuem a ser insuficientes. Assim sendo, esta investigação tem como principal objetivo propor um modelo explicativo dos fatores que determinam a decisão de visitar os locais de um filme de culto surrealista. Os resultados obtidos permitem quantificar a importância relativa dos diferentes fatores que afetam o processo de seleção e avaliação de uma rota cinematográfica específica, e revelam as limitações das feiras turísticas como ferramentas de comunicação. **Palavras-chave:** turismo cinematográfico, comportamento turístico, filme de culto surrealista, feira turística e regressão logística.

INTRODUCTION

The tourist sector is now a well-established business activity, and tourists evaluate their potential destinations in greater depth. Destination marketing organizations (DMOs) must therefore design increasingly more innovative and creative strategies in order to attract tourists.

There has thus been an increase in the interest in visiting destinations where films or TV series have been shot, with independence of the existence of a communication campaign designed to promote the destination. This new tourist tendency has been called film tourism and is spreading throughout the world as a result of both the growth in the entertainment industry and the increase in international travel. Film tourism may be defined as tourists travelling to a destination observed in a movie or TV series (Buchmann, Moore, & Fisher, 2010; Hudson & Ritchie, 2006) and their participation in particular tourist activities associated with film tourism, such as tours or visits to film sets (Beeton, 2005).

Film tourism has gradually become a popular field owing to the research studies that focus on its increasing economic impact (Tooke & Baker, 1996), marketing and product launching (Hudson & Ritchie, 2006), tourist motivation (Busby & Klug, 2001), tourist experience (Carl, Kindon, & Smith, 2007), destination image (Beeton, 2005; Kim & Richardson, 2003; Larsen & George, 2006; Schofield, 1996), nostalgia and identity (Bandyopadhyay, 2008; Sargent, 1998), set landscape meanings (Couldry, 1998; Torchin, 2002), or authenticity (Jones & Smith, 2005; Tzanelli, 2006).

Some researchers suggest that movies may affect tourists' preferences for specific destinations, working as a tool to introduce the attractive and characteristic features of the destination's image, and have an influence on tourists' decision making processes (Frost, 2010; Iwas-hita, 2006).

Tourism organisations and film companies are beginning to work together to influence film tourism (Cynthia & Beeton, 2009), and some DMOs have been particularly proactive. In this respect, one of the most effective communication strategies is to establish collaboration with the film industry in order to locate and shoot films in a given destination. The study carried out by Hudson and Tung (2010) identified some of the marketing strategies and promotion tools used by film executive

producers in order to locate movies in different destinations. DMOs can also create movie maps linked to movies or even develop Internet communication campaigns that may coincide with the film premiere in order to promote the destination where a film was located. Websites linking new films to destinations may be an effective promotional tool to encourage tourists to visit the place. However, O'Connor (2010) suggests that there is a significant research gap in the successful integration of the film induced tourism phenomenon and destination marketing campaigns.

According to Macionis and Sparks (2009) despite the increasing academic interest in film tourism, the activities and motivations of film-induced tourism require more attention. Hudson, Wang and Moreno (2011) proposed that empirical studies attempting to measure the impact of film perception and behavioural aspects of the viewers relating to a specific destination are scarce. These authors suggest different key issues that require more attention in empirical research: (1) the relationship between tourism film and destination imagery; (2) the specific aspects of the film that motivate tourists to visit the destination; and (3) the role of culture in viewers' response to the film.

Others research priorities has been indicated by Macionis and Sparks (2009). These authors conducted research to discover how film viewing might be related to tourism behaviour and whether motivations drive people to become specific film tourists, or whether visiting a film location is simply an incidental tourism experience. In this research, Macionis and Sparks (2009) developed a survey instrument that analysed different tourism motivations and provided empirical evidence that a film is a secondary motivator or contributing factor, not a primary motivator for visiting a film location.

In accordance with this background, the main objective of this empirical research is to propose and estimate a model that will explain the decision to visit the locations (three villages located in the interior of Spain) of a surrealist cult film (*Amanece, Que No Es Poco*, directed by José Luis Cuerda). Appendix 1 contains some information about the film. The model is oriented towards evaluating the relative importance of different factors affecting the intention to visit the film location.

The work carried out here is presented in three sections. Firstly, there is a review of the literature focusing on the factors that determine a visit to a film location and destination, carried out in order to define the main hypothesis of this research. Secondly, there is a detailed description of the method used to develop the model proposed and the empirical results obtained. Finally, the third section deals with the conclusions derived from this study, in addition to its main limitations, recommendations and possible lines of future research.

LITERATURE REVIEW

Many theorists have examined consumer behaviour in tourism and constructed models to assist in understanding the decision making process (Page & Connell, 2006; Pearce, 2005). These models recognise that in order to understand individual travel decisions, an insight into both psychological and social factors is necessary.

Social factors are forces outside the individual (environmental and social conditions), including the other people's influence. According to Moutinho, Ballantyne, and Rate (2011), social influences can be grouped into four major areas: (1) role and family influences; (2) reference groups; (3) social class; and (4) culture and subculture. The internal psychological factors that influence travel behaviour include: (1) personality and self-concept; (2) perception and cognition; (3) motivation; (4) learning; and (5) attitude and intentions (Moutinho *et al.*, 2011; Swarbrooke & Horner, 1999). Environmental and social conditions influence internal elements that are directly involved in consumer behaviour in tourism. This research focuses on internal factors, owing to their great explanatory power of film tourist behaviour (Moutinho *et al.*, 2011). However, as has been noted in previous research, we recognize that some differences in levels of knowledge, motivation or expectation can be attributed to cultural or social circumstances (Kim & O'Connor, 2011; Macionis & O'Connor, 2011). Another factor that influences tourist behaviour is destination marketing campaigns (O'Connor, 2010). We therefore analyze the effect of promotion activities on visits to film locations.

FILM TOURISM AND TOURIST MOTIVATION

Certain academic studies on film tourism have accordingly identified a wide range of motivational elements that induce tourists to visit one given destination. In this respect, Riley and Van Doren (1992) stress the importance of the natural environment in tourist visits. Other authors argue that both destination and tourist experience are more easily remembered in the spectator's memory when the movies include FX innovative technology, famous actors and attractive scenarios (Lee, Scott, & Kim, 2008; Tooke & Baker, 1996). In another study, Riley, Baker, and Van Doren (1998) state that movies with appealing scenes construct an icon that spectators may link to the location shown in the film. Frost (2010) analyses how movies may convey an image of the features of the destination, signifying that there is a promise of possible experiences for potential tourists in addition to a close relationship between film and tourism.

Other researchers have observed more personal connections between the plot of a film and tourism. In this respect, Kim and Rich-

ardson (2003) established a relationship between the level of empathy spectators feel for the characters in a movie and the perceptions of the places seen in the film. Beeton (2005) argues that spectators see films through themselves so that there is always some kind of personal meaning involved, and that they place themselves inside the story, landscape, sounds, and emotions of the film. The research work carried out by Jewell and McKinnon (2008) suggests that films increase identification with the place where they have been shot and create a new kind of connected cultural landscape. Carl *et al.* (2007) therefore observed a strong motivation for tourists to be in the places where the real scenes were filmed. An empirical study carried out by Macionis and Sparks (2009) proved that visits to the destinations where films had been shot tended to be unforeseen and that the main motivation was to see the scenery in real life.

Some research works on tourist consumer behaviour classify film tourism motivation according to two groups of factors, called pull (external attraction factors) and push elements (tourist inner motivation). The pull variables attract tourists to one specific destination and their value resides in the aim of the journey, while push factors can be defined as elements that stimulate travel and include psychological variables (Macionis, 2004; Riley & Van Doren, 1992).

Table 1. Motivations of the film tourism

Increase in the interest in the movie		
Accidental film tourist	General film tourist	Specific film tourist
Destination selected takes them to a place where a film was located	Film location does not determine destination selection but participation in film tourism activities	Active search for places that appear in films or where movies have been filmed
Motivations included: <ul style="list-style-type: none"> • Social interaction • Novelty 	Motivations considered: <ul style="list-style-type: none"> • Escape • Novelty • Education • Nostalgia 	Motivations considered: <ul style="list-style-type: none"> • Self-improvement • Self-updating • Pilgrimage • Self-identity • Direct Experience • Fantasy • Status/Prestige • Romance • Nostalgia
Increase in self-updating motivations		
Drop in the importance of authenticity		
Increase in the importance of push factors		

Source: Macionis (2004).

In this respect, Macionis (2004) used the push and pull factors in film tourism, and suggested that film tourism motivations have three kinds of pull factors: place (location, landscape, scene attributes), personality (cast, characters, famous stars) and performance (plot, theme, genre), while push factors should be included in inner motivation (ego enhancement, status/prestige, fantasy/escape, search for self-identity). Table 1 displays the results of Macionis's model, which underlines the differences in tourist motivations, from the accidental film tourist (whose selection of destination includes a movie filmed in that location), to the general film tourist (who is not attracted to the destination by the film but takes part in the film tourist activities), and the specific film tourist (who actively searches for places shown in movies).

Films may induce potential tourists to visit a destination for a variety of reasons: (1) physical attractions (landscape, environment, nature, and heritage); (2) stories or events associated with it; and (3) characters, who affect tourists' perceptions, evaluation and attitudes towards the destination. Locations, scenes and characters may act as image and attraction generating attributes. In their work, Kim and Richardson (2003) affirm that tourists experiencing a destination in a movie acquire a more favourable image of that destination than those who have not seen the film. Moreover, O'Connor and Bolan (2008) discovered the existence of a relationship between film tourism and destination brand image in a movie. It is therefore logical to conclude that tourists tend to visit specific places motivated by the images, stories or emotional attributes perceived in films (Hahm & Wang, 2011; Kim, Agrusa, Lee, & Chon, 2007; Liou, 2010).

Following the classification carried out by Macionis (2004), movies are push factors placed in tourist destinations. According to Riley and Van Doren (1992), films may be considered as more credible and effective information sources than the conventional promotion tools. Tourist destination advertising in the conventional mass media may be less effective owing to advertising saturation and its clear selling intention. Contrarily, when the tourist/consumer sees a movie located in one specific destination, she or he may obtain more detailed and attractive information even if she or he is unaware of its commercial value. Better still, this information acquisition process costs nothing and the consumer feels a high degree of implication with the knowledge about the destination. Movies with wide audiences allow tourist destinations to reach a great number of potential tourists with an investment that is lower than that required for conventional promotion. In relation to this, Hudson and Ritchie (2006) propose a global model to explain consumer behaviour in film tourism, and classify motivation in four categories: (1) the specific characteristics of a film; (2) the marketing actions (communication and promotion) of destinations; (3) the des-

mination attributes; and (4) film tourist profile (degree of implication). Some authors have also perceived a significant difference in the interest in visiting the destination shown by tourists who have previously seen the film and that displayed by those who did not previously know the film, signifying that the first group is comprised of individuals who are more motivated (Kim & Richardson, 2003). The movie analysed in this research faithfully portrays the characteristics of the natural environment, landscape and cultural features of the region in which it was filmed. Furthermore, owing to its genre (surrealist cinema), it is a “cult movie” that attracts a very specific group of fans. Bearing these characteristics in mind, this research proposes following hypotheses:

Hypothesis 1: The probability that a tourist will visit film locations will be higher for tourists who have seen the film before visiting the destination than for those who have not seen the movie.

Hypothesis 2: The probability that a tourist will visit film locations will be higher for tourists who claim to be: (a) fans of Jose Luis Cuerda’s film or (b) big movie buffs, in contrast with those tourists who do not consider themselves to be movie buffs.

Film tourism and travel planning

Planning can be defined as a procedure for achieving a goal: a set of directions, specifying what to do and when to do it (Bettman, Luce, & Payne, 1998; Morris & Ward, 2004). In the context of tourism, a route plan is an integrated and logically-consistent framework of decisions which will guide and predict a tourist’s route behaviour (March & Woodside, 2005; Stewart & Vogt, 1999). Tourists vary in the extent to which they plan their journey prior to the commencement of the route. The route plan can be conceived of as that subset of pre-route decisions, made by the tourists, which is most likely to be acted upon. Travel planning could therefore lead to a visit to the destination.

The link between route plans and actual route behaviours has been examined in a number of studies (Becken & Wilson, 2006; Hyde & Lawson, 2003; Johns & Gyimóthy, 2002). The results of these studies affirm that the category of planned and realized route behaviours is substantial.

The antecedent factors which might lead to more or less extensive route plans include specific characteristics of the route and specific characteristics of the tourist (Hyde, 2008). In the context of film tourism, tourists with a higher motivation to visit a movie map will seek more information about the destination prior to the visit.

A large proportion of these tourists are film fans attracted by the film. These fans have seen the film many times, and therefore have more information, planning elements and knowledge about the desti-

nation at which the movie was shot before they visit that destination. In this respect, the study proposes the following hypothesis:

Hypothesis 3: The probability that a tourist will visit film locations will be higher for tourists who have planned the journey before visiting the destination than for those who have not planned the journey.

Film tourism and interest in movie maps

Global interest in visiting a destination could be measured through the favourable or unfavourable attitude towards the destination. Tourist attitude describes the psychological tendencies expressed by the positive or negative evaluations of tourists when engaged in certain behaviours (Ajzen, 1991; Schiffman & Kanuk, 1994). Tourist attitudes comprise cognitive, affective and behavioural components (Unger & Wandermann, 1985; Vincent & Thompson, 2002). The cognitive response is the evaluation made in forming an attitude, the affective response is a psychological response expressing the preference of a tourist for a destination, and the behavioural component is a verbal indication of a tourist's intention to visit the destination. Attitudes predispose a person to act or perform in a certain manner, as shown in studies of tourism behaviour (Hrubes, Ajzen, & Daigle, 2001; Lee, 2007; Sparks, 2007).

Within the context of film tourism, it is critical to obtain a better understanding of how tourists might value the myriad experiences available within movie maps. Similarly, as the consumers form beliefs about sceneries in the film and what they mean to them, they will develop attitudinal judgement toward the destination. In general terms, tourists are likely to develop an attitude toward particular behaviour based upon their individual belief-value(s) about behaviour.

According to the theory of planned behaviour (Ajzen, 1985), behavioural intention is affected by attitudes toward behaviour. Attitude will thus influence the intention to engage in such behaviour, it being an effective predictor of tourist participation (Ragheb & Tate, 1993). There is evidence from previous studies that the act of tourists' stating their intention to visit a place has a considerable influence on actual visiting behaviours (Becken & Wilson, 2006; Hyde & Lawson, 2003; Johns & Gyimóthy, 2002; March & Woodside, 2005; Stewart & Vogt, 1999). Individuals who have a global interest in visiting the locations (where the film has been shot) will therefore have favourable intentions to visit them. In this respect, the authors state the hypothesis:

Hypothesis 4: The probability that a tourist will visit film locations will be higher for tourists that express a high global interest in the movie map than for those who express a low interest.

Film tourism and destination marketing campaigns

Tourism destination planners, marketers and managers have various opportunities to capitalise on the benefits of film-induced tour-

ism which can offer the destination the opportunity to generate both an increased profile and higher tourist visitation and economic benefits. These benefits are possible if destination marketing campaigns are centred around the film cycle from pre- to post-production, including: proactive efforts to encourage film producers to use their regional locations in the first instance; media publicity about the film and its location; marketing activities that promote the film after production; and other peripheral marketing activities to leverage film tourism potential (Beeton, 2005; Hudson & Ritchie, 2006).

DMOs may employ several strategies to use cinema as a communication tool (Hudson & Tung, 2010). Regarding the marketing activities performed by institutions promoting destinations, Croy and Walker (2003) argue that there are a wide variety of marketing activities that can be implemented before and after the movie premiere in order to attract tourists. Promotion associated with a film may be one of the most successful advertising tools to make the film and its destination known to potential tourists and to construct an attractive business image of the destination (Belch & Belch, 2001). Moreover, Hudson and Ritchie (2006) designed a model that gives details of the different marketing activities that destination promoters may carry out before and after the movie premiere. The period immediately after the premiere may be used by promoters to propose marketing activities related to film tourists. In this state, the challenge for promoters is to transform the audience's interest into a commitment to visit the destination in the future (Hudson & Ritchie, 2006).

Some of these marketing activities are: public relations, events, guided tours around the movie settings with press representatives, and advertising campaigns in travel magazines (Croy & Walker, 2003). DMOs should also include a variety of marketing activities. Specific marketing campaigns have been linked to the release of each film and to significant film events (Carl *et al.*, 2007). In the case analysed here, various events designed to commemorate the 20th anniversary of the film (*Amanece, Que No Es Poco*) took place in 2009, and the Spanish Regional Government of Castilla-La Mancha carried out a promotion campaign to present the movie map in FITUR 2009 (International Tourism Trade Fair). Bearing in mind the communication actions designed to promote the movie map, this research proposes the following hypothesis:

Hypothesis 5: The probability that tourists will visit film locations will be higher after the presentation of the movie map in FITUR 2009.

RESEARCH METHOD AND RESULTS

General model

This research uses a binary logistic regression model to verify the hypotheses proposed to analyze the influence of the factors discussed

above on the tourists' decision to visit the film locations and the movie maps. The reason for choosing this type of model is its high explanatory and interpretative capability.

The dependent variable used in the model is the visit to the film locations, which is understood as a dichotomic variable (visit/no visit). The independent variables or predictors are based on the hypotheses proposed. There are three dichotomous variables: previous viewing of the film (yes/no), travel plans (yes/no), and the impact of the FITUR 2009 promotion on the movie map's visibility (after FITUR/before FITUR). The model includes a categorical variable (interest in cinema) with three levels (I love Jose Luis Cuerda's films/I'm a big movie buff/I'm not a movie buff). This variable is recoded in two dichotomous variables (cin_1 & cin_2 ; k levels-1), as shown in Equation 1. A further continuous explanatory variable has also been included which describes the degree of interest in the movie map shown by tourists, measured through a 10-point Likert scale that oscillates from "not at all interesting" to "very interesting".

According to these specifications, the model is as follows:

$$P(\text{visit}) = \frac{e^{\beta_0 + \beta_1 \text{film} + \beta_2 \text{cin}_1 + \beta_3 \text{cin}_2 + \beta_4 \text{plan} + \beta_5 \text{int} + \beta_6 \text{fitur}}}{1 + e^{\beta_0 + \beta_1 \text{film} + \beta_2 \text{cin}_1 + \beta_3 \text{cin}_2 + \beta_4 \text{plan} + \beta_5 \text{int} + \beta_6 \text{fitur}}} \quad (1)$$

where:

$p(\text{visit})$: probability that tourists visit the film locations (coding: 1 = visit);

film : previous viewing of the film (coding: 1 = yes);

cin_1 : interest in cinema: (coding: 1 = I love Jose Luis Cuerda's films);

cin_2 : interest in cinema: (coding: 1 = I'm a big movie buff);

plan : travel plans (coding: 1 = yes);

int : degree of interest in the movie map (continuous);

fitur : impact of the FITUR 2009 promotion on the movie map's visibility (coding: 1 = after FITUR).

SAMPLE SELECTION AND INFORMATION COLLECTION

In order to collect the necessary information, this research conducted a personal survey of tourists visiting the villages included in the movie map in two consecutive periods. The first sample group answered the survey questions one month before the presentation of the movie map in FITUR 2009, while the second group filled in the survey questionnaire two months after the FITUR presentation. The aim was to evaluate the short term impact of the different communication campaigns used to promote the movie map. Table 2 shows the technical specifications of this survey.

Both surveys were carried out at the tourist destination, where the movie map and settings were located. The questionnaire, which was answered by individual tourists, included questions that revealed the

characteristics of the journey (duration, services hired, tourist group), travel planification (information search, reservation procedure, sources used), the degree of previous knowledge of the film and the movie map, the actual visit (or non-visit) to the film locations incorporated into the movie map, and the degree of satisfaction after visiting the film locations.

Table 2. Technical specification of the survey

Population	Visitors found in the three villages included in the movie map (finite population)
Sample size	226 personal interviews
Sampling error	Under supposition of probability sampling, $\pm 6.3\%$ ($p=q=0.5$)
Confidence level	95.5% ($K=2$ sigma)
Sampling process	Convenience sampling
Date	First period (one month before the movie map presentation in FITUR 2009): 82 surveys Second period (two months after the presentation in FITUR 2009): 114 surveys

RESULTS

As explained above, this research has used a logistic regression in order to predict the actual visit to the film locations integrated into the movie map. The dependent variable of this model allows for two excluding possibilities only: visit/no visit.

The analysis carried out here indicates that the explanatory variables used have significant impacts and may be considered predictors of the dependent variable (visit/no visit) (Table 3). The variable labelled as *cin₂* does not contribute towards predicting the visit to the film locations ($p = 0.131$), although the global effect of interest in cinema (*cin₁* & *cin₂*) is significant ($p = 0.010$). All the coefficients are positive, with the exception of the parameters associated with the constant and the variable impact of FITUR 2009, which have negative values. We can therefore conclude that hypotheses 1, 3, and 4 are not rejected, hypothesis 2 is partially supported, while hypothesis 5 is rejected, since results show that the FITUR presentation did not have a positive effect on the probability that tourists would visit the film locations.

After analysing the odds ratios [$\exp(B)$], it will be noted that the variables with a greater predicting capacity are *plan* (travel plan), *cin₁* (I love Jose Luis Cuerda's films) and *film* (previous knowledge of the film). Upon considering the data obtained it is possible to infer that, if all the other variables are constant, the visit to the film locations is 9.058 times more probable for individuals who have planned the journey before visiting the destination, in contrast with those tourists who have not

planned the journey. Similarly, the occurrence of the visit is 5.905 times more likely among those who claim to be fans of Jose Luis Cuerda’s film than among those who said “I’m not a movie buff”. Thirdly, the visit to the film locations is 5.076 times more likely to occur among those who have seen the film in comparison to those who have not.

The variable interest in the movie map is continuous and has to be interpreted differently. In this case, the exp(B) is 1.733, signifying that a one-point increase in interest in the movie map will increase the probability of visiting the film locations included in the movie map by 1.733 times. Finally, the impact of FITUR is significant, but negative. The odds ratio indicates that the visit is 0.359 times less probable after the FITUR 2009 promotion campaign.

Table 3. Summary of logistic regression and model fit

Independent variable	B	SE B	Wald	df	Sig.	Exp(B)
Constant	-4.947	0.941	27.645	1	0.000	0.007
film (viewing of the film)	1.624	0.549	8.748	1	0.003	5.076
cin (interest in cinema)			9.172	2	0.010	
cin1 (I love Jose Luis Cuerda’s films)	1.776	0.636	7.788	1	0.005	5.905
cin2 (I’m a big movie buff)	0.813	0.538	2.285	1	0.131	2.254
plan (travel plan)	2.204	1.078	4.177	1	0.041	9.058
int (interest in the movie map)	0.550	0.127	18.857	1	0.000	1.733
fitur (impact of FITUR 2009)	-1.024	0.390	6.891	1	0.009	0.359
Cox and Snell pseudo R-squared: 0.408; Nagelkerke pseudo R-squared: 0.544; Hosmer and Lemeshow Test: $\chi^2(7) = 11.513, p = 0.118$						

The model’s evaluation has been carried out using the value obtained in the pseudo R-squared. To be more precise, the Cox and Snell, and Nagelkerke coefficients have been used, since they play a similar role to the coefficient of determination in linear regression. These coefficients indicate that the percentage of variation identified by the independent variables oscillates between 40.8% and 54.4%, respectively. The Hosmer and Lemeshow statistic is not significant ($p = 0.118$), suggesting that the model adapts to the data in a reasonable manner (Table 3).

Another way in which to evaluate the model’s goodness of fit is to compare its predictions with the sample data. The procedure most often used for this is the classification table (Luque, 2000). The classification table is a double entry table in which the sample’s individual cases are classified according to the scores observed and to the scores predicted in the model (Table 4). By establishing a discriminating value (normally 0.5), all cases whose probability is the same or higher than this value will be classified in the group that is characterized by the pres-

ence of the dependent variable (visit to the film locations), while the cases scoring a probability lower than 0.5 will be included in the group that indicates the absence of that characteristic (in this case, no visit to the film locations). The model allows correct estimation in 81.9% of cases. The data displayed in Table 4 makes it possible to calculate the measures that lead us to conclude that the model has a high predicting efficiency: (1) error rate: 18.1%; (2) negative incorrect answers rate: 20.5%; and (3) positive incorrect answers rate: 15.6%.

Table 4. Result classification

Observed	Predicted	
	No visit	Visit
No visit	93	17
Visit	24	92

The Huberty Test is used in order to test the statistical significance of the global rate of correct answers. In our model, for a level of significance $\alpha = 0.05$, the score of statistic Z^* ($9.57 > 1.96$) leads us to reject the null hypothesis stating that the number of cases correctly classified by the model is no different to a random classification. The rate of correct answers is therefore significantly higher than the rate obtained at random.

CONCLUSIONS

The main objective of this research has been to construct a model to predict the influence of a series of factors on tourists' selection processes as regards a destination associated with a movie map. The main contribution of this paper is to show the relevance of certain factors (viewing of the film, interest in cinema, travel plan, interest in the movie map and tourism fair) on visiting the film locations, owing to the lack of empirical studies in this topic area (Macionis & Sparks, 2009).

The analysis has led to results that allow us to offer a series of relevant conclusions and recommendations for the design of communication strategies for DMOs promoting film tourism destinations (Figure 1).

Firstly, those tourists that have planned the visit previously have a high probability of visiting the movie map. This evidence is consistent with previous research (Becken & Wilson, 2006). According to this result, DMOs must increase the information provided to tourists as regards the components and attributes of the movie map, prior to their visit to the destination. In order to achieve this objective, a more effective management of the different tourism information sources used by tourists to plan the journey (Internet, tourist guides, travel magazines,

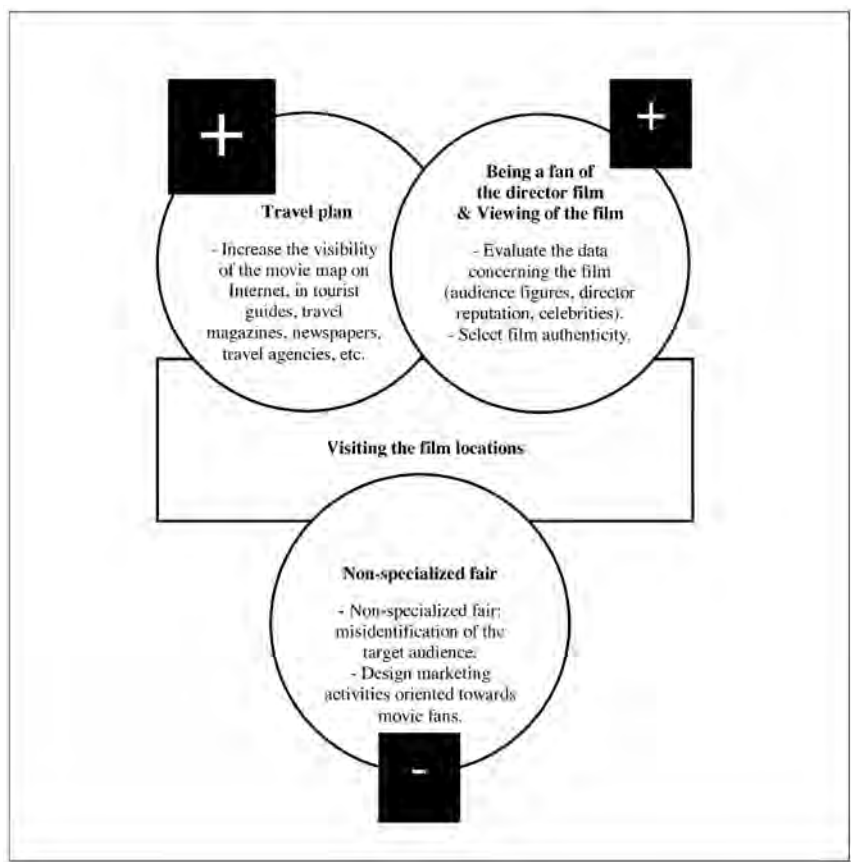


Figure 1. Conclusions and practical implications for DMOs

newspapers or travel agencies) would be necessary.

Secondly, the results obtained indicate that the variables labeled ‘viewing of the film’ and ‘being a fan of the film’s director’ determine a high probability of visiting the film locations. However, being a movie buff does not have an impact on the propensity to visit the movie map. Bearing in mind that this research deals with a film that does not have a mass audience but possesses a group of highly motivated fans, it is reasonable to assume that the group of potential tourists who have seen the film are much more likely and highly motivated to visit the movie’s settings, in contrast to spectators who do not know of or have not seen the film. This has important implications for DMOs. Furthermore, they should contemplate the viability of film tourism when planning and developing sustainable tourism (Heitmann, 2010). DMOs should therefore consider a rigorous selection of the film used for developing the movie map. O’Connor, Flanagan and Gilbert (2010)

consider this strategic question, and state that certain films are likely to have more of a pull for tourists than others. The selection of the film could be focused on audience figures and profiles, visibility and authenticity of film, director reputation and movie genre.

Thirdly, one important element in the success of a movie map, already identified in the research literature, is the set of marketing activities planned by DMOs. Nevertheless, the results obtained here indicate that tourist promotion campaigns have not achieved their aims, because they have only marginally increased the number of visits to the destination. This may mean that a non-specialized fair like FITUR is not the most effective communication tool for this kind of movie maps, and that it would be advisable to use other more effective communication tools in order to reach the potential film tourist audience.

Several studies have observed that one factor stands out as the most effective method by which to increase the number of visitors to a film tourism destination. This factor is the correct identification and description of the target audience for each different film. One possible explanation for the inadequacy of fairs as communication tools may be this misidentification of the target audience. The movie considered here attracts a very specific kind of visitor: those interested in surrealist cinema. This could lead to a lack of interest on the part of other potential conventional tourists who do not identify with the film's main themes. In order to overcome this inefficiency, DMOs should correctly identify the group of tourists attracted by specific films, and design marketing activities that are particularly oriented towards them. In this respect, it is significant to mention that the regional tourism agency dedicated a part of its main tourist information website to this film, and presented it in online social networks.

This research presents some limitations that may have conditioned the results obtained. From a theoretical point of view, although the model fit is quite good and the research is focused on some internal factors and the effectiveness of tourism fairs, other influential factors of tourist destination selection behaviour could have been incorporated into the model (Moutinho *et al.*, 2011). Previous studies maintain that film tourism is a very complex and dynamic concept (Macionis & O'Connor, 2011). The actual visit to a specific destination therefore depends on a wide variety of factors which lie outside the control of DMOs. Future research could therefore consider other complementary variables such as the film's visibility, the tourist's identification with the movie's image and characters, the level of satisfaction with the film, the originality and appeal of the setting itself, and the offer of other tourism services in or around the movie map. Another possible limitation of this study is the use of just one genre of film. Future research could also include a wider variety of movies.

Finally, the use of a qualitative approach (one that provides information about the individual’s experience) linked to a quantitative approach (one that analyzes the efficiency of the theoretical conceptualization) may lead to a better understanding of the behavioural model considered.

APPENDIX 1. THE FILM

Amanece, Que No es Poco

Year	1989
Director/Writer	José Luis Cuerda
Genre	Surrealism/Anarchic comedy
Ratings	7.6/10 (Film Affinity) & 7.2/10 (The Internet Movie Database) (Retrieved date: 10/10/2011)
A sample scene (English subtitles)	http://www.youtube.com/watch?v=X_fulhr6ZFk .
Some film frames	



A field with men who are growing like plants.



A rather strange teacher who does not wish to give his pupils exams.



A mother is younger than her daughter (the daughter is shown in the picture).



The mayor organizes the local elections in which the townspeople are going to elect a new nun, priest, teacher and, of course, adulterers.

REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckmann (Eds.), *Action-Control: From Cognition to Behavior* (pp. 11-39). Heidelberg: Springer.
- Ajzen, I. (1991). The theory of planned behavior. *Organization Behavior and Human Decision Processes*, 50 (2), 179-211.
- Bandyopadhyay, R. (2008). Nostalgia, identity and tourism: Bollywood in the Indian diaspora. *Journal of Tourism and Cultural Change*, 6 (2), 79-100.
- Becken, S., & Wilson, J. (2006). Trip planning and decision making for self-drive tourists. A quasi-experimental approach. *Journal of Travel and Tourism Marketing*, 20 (3-4), 47-62.
- Beeton, S. (2005). *Film-Induced Tourism*. Clevedon: Channel View Publication.
- Belch, G., & Belch, M. (2001). *Advertising and Promotion: An Integrated Marketing Communications Perspective*. New York: McGraw-Hill.
- Bettman, J.R., Luce, M.F., & Payne, J.W. (1998). Constructive consumer choice processes. *Journal of Consumer Research*, 25 (3), 187-217.
- Buchmann, A., Moore, K., & Fisher, D. (2010). Experiencing film tourism. *Annals of Tourism Research*, 37 (1), 229-248.
- Busby, G., & Klug, J. (2001). Movie-induced tourism: The challenge of measurement and other issues. *Journal of Vacation Marketing*, 7 (4), 316-332.
- Carl, D., Kindon, S., & Smith, K. (2007). Tourist's experiences of film locations. *Tourism Geographies*, 9(1), 49-63.
- Couldry, N. (1998). The view from inside the "simulacrum": Visitors' tales from the set of Coronation Street. *Leisure Studies*, 17 (2), 94-107.
- Croy, W. G., & Walker, R. (2003). Rural tourism and film: Issues for strategic regional development. In D. Hall, L. Roberts, & M. Mitchell (Eds.), *New Directions in Rural Tourism* (pp. 115-133). Aldershot: Ashgate Publishing Limited.
- Cynthia, D., & Beeton, S. (2009). Supporting independent film production through tourism collaboration. *Tourism Review International*, 13 (2), 113-119.
- Frost, W. (2010). Life changing experiences. Film and tourists in the Australian outback. *Annals of Tourism Research*, 37 (3), 707-726.
- Hahm, J., & Wang, Y. (2011). Film-induced tourism as a vehicle for destination marketing is it worth the efforts?. *Journal of Travel & Tourism*, 28 (2), 165-179.

Heitmann, S. (2010). Film tourism planning and development—Questioning the role of stakeholders and sustainability. *Tourism and Hospitality, Planning and Development*, 7 (1), 31-46.

Hrubes, D., Ajzen, I., & Daigle, J. (2001). Predicting hunting intentions and behavior: An application of the theory of planned behavior. *Leisure Sciences*, 23 (3), 165-178.

Hudson, S., & Ritchie, J.R. (2006). Promoting destination via film tourism: An empirical identification of supporting marketing initiatives. *Journal of Travel Research*, 44 (4), 387-396.

Hudson, S., & Tung, V. (2010). “Lights, camera, action...!” Marketing films locations to Hollywood. *Marketing Intelligence & Planning*, 28 (2), 188-205.

Hudson, S., Wang, Y., & Moreno, S. (2011). The influence of a film on destination image and the desire to travel: A cross-cultural comparison. *International Journal of Tourism Research*, 13 (2), 177-190.

Hyde, K.F. (2008). Information processing and touring planning theory. *Annals of Tourism Research*, 35 (3), 712-731.

Hyde, K.F., & Lawson, R. (2003). The nature of independent travel. *Journal of Travel Research*, 42 (1), 13-23.

Iwashita, C. (2006). Roles of films and television dramas in international tourism: The impact of movies and television on tourism. In K. Chon (Ed.), *The International Conference on Impact of Movies and Television on Tourism* (pp. 182-196). Hong Kong: Hong Kong Polytechnic University.

Jewell, B., & McKinnon, S. (2008). Movie tourism—A new form of cultural landscape?. *Journal of Travel & Tourism Marketing*, 24 (2-3), 153-162.

Johns, N., & Gyimóthy, S. (2002). Market segmentation and the prediction of tourist behavior: the case of Bornholm, Denmark. *Journal of Travel Research*, 40 (3), 316-327.

Jones, D., & Smith, K. (2005). Middle-Earth meets New Zealand: Authenticity and location in the making of *The Lord of the Rings*. *Journal of Management Studies*, 42 (5), 923-945.

Kim, H., & Richardson, S. (2003). Motion pictures impacts on destination images. *Annals of Tourism Research*, 30 (1), 216-237.

Kim, S., & O'Connor, N. (2011). A cross-cultural study of screen-tourists' profiles. *Worldwide Hospitality and Tourism Themes*, 3 (2), 141-158.

Kim, S., Agrusa, J., Lee, H., & Chon, K. (2007). Effects of Korean television dramas on the flow of Japanese tourists. *Tourism Management*, 28 (5), 1340-1353.

Larsen, G., & George, V. (2006). The social construction of destination image: A New Zealand film example. In L. Kahle, & C. Kim (Eds.), *Creating Images and the Psychology of Marketing Communication*. London: Routledge.

Lee, S., Scott, D., & Kim, H. (2008). Celebrity fan involvement and destination perceptions. *Annals of Tourism Research*, 35 (3), 809-832.

Lee, T.H. (2007). Ecotourism behavioral model of national forest recreation areas in Taiwan. *International Forestry Review*, 9 (3), 771-785.

Liou, D-Y. (2010). Beyond Tokyo rainbow bridge: Destination images portrayed in Japanese drama effect Taiwanese Tourists' perception. *Journal of Vacation Marketing*, 16 (1), 5-15.

Luque, T. (2000). *Técnicas de Análisis de Datos en Investigación de Mercados*. Madrid: Pirámide.

Macionis, N. (2004). Understanding the film-induced tourist. In W. Frost, W. C. Croy, & S. Beeton (Eds.), *Proceedings of the International Tourism and Media Conference* (pp. 86-97). Melbourne: Monash University.

Macionis, N., & O'Connor, N. (2011). How can the film-induced tourism phenomenon be sustainably managed?. *Worldwide Hospitality and Tourism Themes*, 3 (2), 173-178.

Macionis, N., & Sparks, B. (2009). Film-induced tourism: An incidental experience. *Tourism Review International*, 13 (2), 93-102.

March, R., & Woodside, A.G. (2005). Testing theory of planned versus realized tourism behavior. *Annals of Tourism Research*, 32(4), 905-924.

Morris, R., & Ward, G. (2004). *The Cognitive Psychology of Planning*. Andover: Taylor & Francis.

Moutinho, L., Ballantyne, R., & Rate, S. (2011). Consumer Behaviour in Tourism. In L. Moutinho (Ed.), *Strategic Management in Tourism* (pp. 83-126). Wallingford: CAB International.

O'Connor, N. (2010). *A Film Marketing Action Plan (FMAP) for Film Induced Tourism Destinations*. Doctoral Thesis, Dublin Institute of Technology, Dublin.

O'Connor, N., & Bolan, P. (2008). Creating a sustainable brand for Northern Ireland through film-induced tourism. *Tourism Culture and Communication*, 8 (3), 147-158.

O'Connor, N., Flanagan, S., & Gilbert, D. (2010). The use of film in re-imagining a tourism destination: A case study of Yorkshire, UK. *Journal of Vacation Marketing*, 16 (1), 67-74.

Page, S., & Connell, J. (2006). *Tourism: A Modern Synthesis*. London: Thomson Learning.

Pearce, P. (2005). *Tourist Behaviour: Themes on Conceptual Schemes*. Clevedon: Channel View Publications.

Ragheb, M.G., & Tate, R.L. (1993). A behavior model of leisure participation, based on leisure attitude, motivation and satisfaction. *Leisure Studies*, 12 (1), 61-67.

Riley, R., & Van Doren, C. S. (1992). Movies as tourism promotion: A "pull" factor in a "push" location. *Tourism Management*, 13 (3), 267-274.

Riley, R., Baker, D., & Van Doren, C. S. (1998). Movie induced tourism. *Annals of Tourism Research*, 25 (4), 919-935.

Sargent, A. (1998). The Darcy effect: Regional tourism and costume drama. *International Journal of Heritage Studies*, 4 (3), 177-186.

Schiffman, L.G., & Kanuk, L.L. (1994). *Consumer Behavior*. Englewood: Prentice Hall.

Schofield, P. (1996). Cinematographic images of a city. *Tourism Management*, 17(5), 333-340.

Sparks, B. (2007). Planning a wine tourism vacation: factors that help to predict tourist behavioral intentions. *Tourism Management*, 28 (5), 1180-1192.

Stewart, S.I., & Vogt, C.A. (1999). A case-based approach to understanding vacation planning. *Leisure Sciences*, 21 (2), 79-95.

Swarbrooke, J., & Horner, S. (1999). *Consumer Behaviour in Tourism*. Oxford: Butterworth-Heinemann.

Tooke, N., & Baker, M. (1996). Seeing is believing: The effect of film on visitor numbers to screened locations. *Tourism Management*, 17 (2), 87-94.

Torchin, L. (2002). Location, location, location. The destination of the Manhattan TV tour. *Tourist Studies*, 2 (3), 247-266.

Tzanelli, R. (2006). Reel western fantasies: Portrait of a tourist imagination in The Beach (2000). *Mobilities*, 1 (1), 121-142.

Unger, D.C., & Wandersman, A. (1985). The importance of neighbors: The social, cognitive and affective components of neighboring. *American Journal of Community Psychology*, 13 (2), 139-169.

Vincent, V.C., & Thompson, W. (2002). Assessing community support and sustainability for ecotourism development. *Journal of Travel Research*, 41 (2), 153-160.

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