

Mediation of a destination's environmental image: a consideration of a negative portrayal.

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Abstract | As understanding of the relation between negative plot and perceived destination image is still limited, this paper explores the question if a filmic experience of environmental degradation found in a popular tourism destination would also influence viewers' image formation of the destination. This paper argues that a negative plot impacts perceived destination image and can impinge upon how the audience participates in the construction of the image it consumes and reaffirms literature suggestions that tourist awareness of sustainability issues might lead to changes in tourist destinations choices.

Keywords | Destination image, film tourism, negative mediation, environmental sustainability

1. Introduction

Literature suggests that destination image is a fundamental factor in the decision making of the destination selection process of travelers (O'Leary & Deegan, 2003). Destination image is determined as 'a totality of impressions, beliefs, ideas, expectations and feelings accumulated towards a place over time' (Kim & Richardson, 2003). Thus, image is seen as a multidimensional concept that incorporates an individual's assessment of different aspects of a place (Gallarza, Gil & Calderón 2002).

This paper seeks to explore how a filmic experience of toxic pollution case found in a popular domestic tourism destination in Greece influences viewers' image formation of the destination. The

film used in the survey was *Erin Brockovich*, which depicts the toxic pollution case of Hinckley, California. A similar case is found in Oropos area, a popular Greek domestic tourism destination which urban water supply comes from the toxic polluted Asopos river. The Asopos river mobilization received extensive publicity and it has been widely covered by Greek and international media. The selected audience of *Erin Brockovich* watches also the Greek documentary *Erevna*, which correlates the toxic pollution cases of the two regions and an assessment is made of the impact of the filmic experience of the toxic pollution on the perceived image of Oropos area as a tourist destination. Ultimate scope of the research is to highlight the vital role of both negative mediation effects and tourist

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awareness of sustainability issues among the myriad variables that work singly and in combination to influence tourist behavior (Connell, 2012).

The survey was conducted in 2008 in a period when official tests revealed the toxic pollution of Asopos river and Asopos case gained major national and international media attention. The survey was also conducted during the 2008 global economic crisis and just a year before the 2009 economic crisis that erupted in Greece, when domestic tourism was still flourishing and not influenced by economic instability. In this context, this paper explores if an image change of a mature destination is possible in a time when this destination receives negative media exposure due to severe environmental degradation and also, offers a historical analysis of film-induced tourism in a stable socio-political and economic context for Greece, which is valuable for comparison on how might matters are different today when people in Greece do not have the same financial resources to travel, Greek cities present signs of poverty and immobility and current tourist imaginaries of Greece include dark and guilty landscapes of poverty (Tzanneli & Kors-tanje, 2016).

2. Mediation of destination image

Visuals play a vital role for the destination image formation and selection (Huang, Busby & Bosdou, 2009). Non-tourist directed visual media, such as films and television, tend to create higher credibility and market penetration in a short period of time (Butler, 1990; Crompton, 1979), which is a powerful impact that destination marketers cannot afford to do with the traditional tourist directed methods (Hahm & Wang, 2011). Film tourism, defined as "tourist visits to a destination or attraction as a result of the destination featured on the cinema screen, video or television" (Busby & Klug, 2001: 316) is a growing phenomenon worldwide

and in Greece, fuelled by both the growth of the entertainment industry and the increase in international travel (Hudson & Ritchie, 2006).

Formation of destination image through visual media is not a linear process. Today's media become meaningful because of coordinated human activity and, at the same time, people understand the world and their position in it through the media (Livingstone, 2009). This 'dialectic' implies a plurality of interplays, practices, processes and performances that exist in mediating the image of a destination, as those who receive the portrayal of imaginative touristscapes actively participate in the construction of the product they consume (Lester & Scales, 2013).

In this regard, research studies have explored the perceived image of a destination prior to and following the viewing of a film and evidence suggests that a favorable image positively influences the pre-travel and post-travel behaviors whereas a negative image has the opposite effect (Phillips & Jang, 2007; Tasci, 2009). In particular, negative imagery issues linked with film-induced tourism may have a harmful effect on the development of a destination (Beeton, 2001; Bordelon & Dimanche 2003). However, Shani, Wang, Hudson and Gil (2009) found no dramatic change from positive to negative perception of South America after viewing *The Motor Cycle Diaries*, a film with controversial content and overall perception remained the same after viewing as before. It has been suggested that destination image changed in relation to socio-cultural aspects in that the place seemed more distant, poorer and archaic (Connell, 2012) and especially in the case of distant and not well-known destinations, even negative exposure could be beneficial to the image of the destination (Croy & Walker, 2003). Similar Warnick, Bojanic & Siriangkul (2005) found that viewing *The Beach* did not increase the likelihood of visiting Thailand, as the film content did affect both negatively and positively image and perception of the destination. Thus, it is possible that when a film depicts images

of a destination that are considered negative represents lost promotional opportunities, possibly even having a negative effect on tourism development, but still there is limited understanding of films with a negative plot and how these impact tourist perception of a place (Connell, 2012). The expansion of dark tourism, the visitation of sites of death and disaster (Stone, 2011) and of toxic tourism, non-commercial trips intended to highlight people and locales polluted by poisonous chemicals (Peluzzo, 2009), indicates that perhaps places of filmic disaster events may not consist unattractive tourist destinations to audiences after all.

3. Research method and context

If we take the argument that negative plot may have a negative effect on a destination tourism development, then perhaps cinematic depiction of negative environmental images of a destination might lead to changes in perception of a destination, more possibly when the potential film tourists are aware of sustainability issues. Although research into the awareness of tourists about sustainability is limited and most of the literature focusing on tourists in relation to the environment deal with tourist perceptions of the environmental impacts (Manning, 1985; Marion & Lime, 1986; Hillary, Nancarrow, Griffin & Syme 2001), ecotourist profiles (Blamey & Braithwaite, 1997; Holden, 2000; Palacio & McCool, 1997) and with the preferences and evaluations of park visitors (Jurowski, Uysal, Williams & Noe, 1995), evidence shows that in the long-term tourist awareness of sustainability issues might lead to changes in tourist destinations choices (Kaae, 2001; Cottrell, van der Duim, Ankersmid & Kelder 2004).

Based on previous research on visually-based and emotionally-engaging environmental communications through films (Lowe, Brown, Dessai, De Franca Doria, Haynes & Vincent 2006; Reusswing,

Schwarzkopf & Pohlenz 2004; Balmford, Manica, Airey, Birkin, Oliver & Schleicher, 2004; Lowe, 2006; Leiserowitz, 2004, Bahk, 2011), it is predicted that watching an environmentally themed film would increase viewers environmental concern. Popular fiction environmental films have the power to foster positive environmental attitudes and willingness to act, due to their capacity to visually communicate knowledge, messages and emotions to lay public (Sakellari, 2015). But, as understanding of the relation between negative plot and perceived destination image is still limited, the question remains if the filmic experiences of environmental degradation found in a popular tourism destination would also influence viewers' image formation of the destination. When a film depicts the environmental degradation of a destination, how this impacts visitors' perception of the place? Is a non sustainable destination image still attractive to viewers?

3.1 The film *Erin Brockovich* and Oropos area toxic pollution case

In Greece, municipality of Oropos is a popular Greek domestic tourism destination. Beaches along with hotels, taverns and restaurants are found along the coastline of Skala Oropou, the marine area of the municipality. The town of Oropos depends mainly on tourist activities and except from permanent residents one comes across with seasonal residents and tourists, while nearby Oinofita is a town where the majority of the residents are employed at industrial activities at Oinofita Industrial Area, the largest in Greece. Both towns, along with 5 other small towns are located in Asopos river basin. Situated on the border between Attica and Viotia regions, the Asopos is an important natural watercourse, one of the closest to Athens. About 200,000 people live in the river basin, which covers a total surface area of 450km²

and is about 60km north of the capital.

Hexavalent chromium was found in urban water supply of Oropos town and nearby area, as Asopos River has accepted hazardous waste from industrial activities that were illegally dumped in the river. The contamination of the Asopos River started in 1969, when factories were first allowed to dump waste unrestricted into the river. Although authorities later put restrictions on what could be discharged, many factories built illegal underground pipelines straight into the water and continued to empty untreated waste. It took until 2007 for official tests to show drinking water was contaminated with high levels of carcinogen, hexavalent chromium. The revelation spread shock and anger in Oropos, Oinofyta, and beyond, even to US advocate Erin Brockovich, whose crusade against hexavalent chromium contamination of groundwater in Hinkley, California, was portrayed by Julia Roberts in the hit film *Erin Brockovich* (2000). In 2007, Brockovich responded to calls for help to raise public awareness by residents and environmental protesters and she was heavily involved in the Asopos case, demanding for pressure to be applied to the Greek government to provide a new water source for those living off the Asopos and to enforce laws. The surge of international and media attention which followed resulted to close linkage of Asopos case with the film. In this regard, an episode of the hit Greek TV show *Erevna* which was aired on 23 of October, 2007 presented the full story of Oropos toxic pollution issue, starting with a correlation between the two cases of hexavalent chromium pollution, Hinkley and Oropos, through an interview with the real Erin Brockovich.

The film *Erin Brockovich*, directed by Steven Soderbergh was based on the real-life story of Erin Brockovich who has discovered that Pacific Gas & Electric Company had dumped illegally a deadly toxic material, hexavalent chromium and contaminated underground water, poisoning the residents of Hinkley. The film was released on March 17, 2000 in 2,848 theaters in US, made a worldwide

total of \$256.3 million and ranked 10th at Top 20 of Global Box Office and 8th in admission of films in distribution in the European Union in the year 2000 (European Audiovisual Observatory 2001). The film also received numerous awards, including Academy Award for Best Actress, won by Julia Roberts, the actress who played Erin Brockovich in the film.

3.2 Methodology

In order to assess the impacts of cinematic depiction of toxic pollution of destination on audience image formation, a convenient sampling of graduate students watches first the film *Erin Brockovich* and then the Greek documentary *Erevna*, which correlates the toxic pollution cases of the two regions, Hinkley and Oropos. It was predicted that watching the film *Erin Brockovich* would increase concern about toxic pollution and willingness to act towards an antitoxic policy. With respect to initial concern for toxic pollution and willingness to act, the study measured the audience's intention to visit Oropos in the future. The study predicts that the awareness of the toxic pollution at Oropos area will lead to a negative destination image formation.

The survey was implemented in early 2008 just after Asopos case received significant attention from the media and was conducted in two parts. In the first part, structured interviews were conducted before and after watching the film *Erin Brockovich* to see if watching the movie had an appreciable effect on students' environmental knowledge, concern and behavioural intentions. Questions asked were based on The Theory of Planned Behavior (Ajzen, 1991) and Behavior Flow Chart (Hungerford & Volk, 1990). Both models are widely used for the analysis of the development of responsible environmental behavior. Aside to our beliefs about our competencies in successfully per-

forming a behaviour, in Ajzen's theory, communication might lead to behavioural change by influencing expectations about the positive or negative outcome of engaging in the target behavior. On the other hand, Behavior Flow Chart it is strongly associated with environmental literacy, that is having the knowledge, attitudes, skill, and behaviors to be competent and responsible (Disinger & Roth, 1992).

In the second part, the same group of university students watched the documentary *Erevna* and semi-structured interviews were conducted, in order to assess the impact of filmic experiences of toxic pollution on the destination's image formation. Semi-structured interviews, which is probably the most commonly used technique in qualitative research (Kitchin & Tate, 2000), allow the exploration of complicated relations and meanings, as well as the interpretation of slowly evolving events (Hoggart K, Lees, & Davies, 2002). Core questions of the semi-structured interviews related to the desire to visit destinations as a result of being featured in a movie, the role of awareness of sustainability issues in tourist destinations choices and perception of Oropos as a domestic tourism destination that merits visiting before and after watching the film *Erin Brockovich* and the documentary *Erevna*.

This is not a large-scale qualitative research. The small scale sample allowed better monitoring and quality control, through ensuring all are able to participate in the three interviews: structured interviews before and after watching the film *Erin Brockovich* and a semi-structured interview after watching the documentary *Erevna*. Although not unknown in qualitative research, pilot studies are more common in large scale quantitative studies, so a pilot study has not been undertaken.

4. Results and discussion

Participants for both studies I and II were 15

post graduate students of the Postgraduate Program "Agriculture and Environment" of the University of the Aegean in Mytilene and 18 post graduate students of the Postgraduate Program "Environmental Education" of the University of the Aegean in Rhodes, 10 men and 23 women, with an average age between 25 to 30 years old, who present intense environmental concern, but most of them (72%) are not members of any non-governmental environmental organization. Also, participants possess a variety of educational and professional background. Also, all participants were frequent moviegoers; more than half of the respondents watch movies on DVD or at the cinema more than 5 times per month (54,5%) and another 15.2% reported that they watch movies two to five times per month. Most of respondents travel for vacation once or two times per year, mainly during summer time, while half of them own a summer house. Only 11 of the participants were married and 6 of them had children.

4.1. Part I

The students were asked to answer closed-ended questions before and after watching the film *Erin Brockovich* to see if watching the movie had an appreciable effect on their knowledge, concern and behavioural intentions on toxic pollution issue.

4.1.1. Knowledge

Before the movie, participants already knew that groundwater toxic pollution by industrial waste cannot be limited in a specific area and contamination can be spread in a broader region, are aware of the toxicity of hexavalent chromium and knowledgeable about health effects of toxic pollution due to industrial waste and differences between answers in these particular questions, before and after the movie, were not significant.

4.1.2. Concern

Before and after seeing the film, almost all of the students declare that are worried about the quality of the drinking water in their area. However, before and after perspectives on the likelihood of toxic pollution of city's drinking water varies in a mixed way. Before the movie, 25% of the participants believe as *very probable* and 54% of the participants as *rather probable* the likelihood of toxic pollution of the drinking water in their area but these judgments varies after seeing the movie. The film seems to have reduced the degree of probability, as many of the participants moved from *very* to a more moderate *rather probable*. After the movie, only 6% of the participants believe

as *very probable* and 67% of the participants as *rather probable* the likelihood of toxic pollution of the drinking water in their area. Similarly, differences exist for the answering category *rather improbable*, as before the movie 21% of the participants believe as *rather improbable* the likelihood of toxic pollution of the drinking water in their area and after the movie they rise to 27% of the participants (Table 1). The above described erosion of perceived probability of toxic pollution of city's drinking water may be due to a general feeling that the kinds of severe impacts portrayed in the film were more unlikely to happen in their area, as indicated from similar findings of confused and mixed reactions to the film *The Day After Tomorrow* (Lowe et al. 2006; Reusswig, et al. 2004).

Table 1 | Perceived likelihood of toxic pollution of city's drinking water

	Very Probable	Rather probable	Rather improbable
Before seeing Erin Brockovich	25%	54%	21%
After seeing Erin Brockovich	6%	67%	27%

4.1.3. Intention to act

Before and after the movie, almost all the participants believe that toxic pollution cases can be successfully addressed and protection measures must be taken. Before and after the movie, in order to know from the participants whether or not, in a general way, they would personally be willing to do something about toxic pollution, participants were asked if they intend to become members of a non-governmental environmental organization (ENGO). While before the movie 42% of the participants' state that they *intend to become a member of an ENGO*, the film seems to reinforce the idea of an ENGO membership, as after the movie 48% participants state that they intend to become members of an ENGO. Based on the

notion of representation and stereotyping in popular culture (Dimnik & Felton, 2006; Grant, 1986) it was assumed that if a liked character exhibits attitudes and behavior favour to the environment in a narrative film, viewers identifying with the character would also likely be influenced in such desirable ways. Indeed, after the movie most of the participants, 82% of students, declare that Erin Brockovich serves as a role model for other professional or citizens that are involved in similar cases.

4.2. Part II

In the second part, evidence is provided by the qualitative data obtained through the semi-structured interviews and informal discussions.

Contrary to the findings in part one, fewer participants think that their involvement in environmental activism can eliminate the danger of toxic pollution in the future. While, before and after watching *Erin Brockovich* almost all respondents think that their involvement in environmental activism can eliminate the danger of toxic pollution in the future, during the semi-structured interviews that followed, only 23 of them reaffirm their previous statement. The following quote is illustrative: *"I don't believe that I can do much to prevent incidents like this one to happen in the future, but people in Oropos should keep fighting"*. Based on the notion of positive environmental cinematic stereotypes (Dimnik & Felton, 2006; Grant, 1986), this difference in the before and after conditions can be attributed to the implications and the unoptimistic representation of the Oropos case in *Erevna* documentary, contrary to the happy ending of the film *Erin Brockovich*.

4.2.1. Desire to visit destinations as a result of being featured in a movie

Narrative films induce the majority of the participants to travel to the locations that have been associated with filming, as most of the participants declare that they want to travel to places they have seen in movies. More specifically, in regard to the desire to visit destinations as a result of being featured in a movie, only 6 of the respondents had already travelled to a particular destination because of its film exposure, however more than two thirds of the respondents, that is 24 of the participants in the survey, overwhelmingly agree on the existence of this desire.

A participant in the survey declared that *"I want to travel to Japan, because of the relevant scenes I have seen in movies"*. Similarly other participants said that they want to travel to places in China or in USA as a result of being featured in the movies.

As a participant put it *"... while up until now I haven't make any plans to travel to a particular destination being featured in a movie I have seen, there is a strong possibility to do so in the future."*

It should be noted that there was not a significant difference between males and females. Similar findings with regard to gender are also reported by Soliman (2011) and contradict with the conclusions of Warnick et al. (2005) that females are more likely to travel to filmed locations than males.

4.2.2. Sustainability in tourist destinations choices and perception of Oropos as a domestic tourism destination

Although only four of the participants had been to Oropos area before, the respondents' perception of Oropos as a domestic tourism destination that merits visiting before watching the film was positive but, 29 of the respondents declare that after watching the film *Erin Brockovich* and the documentary *Erevna* they have no intention to visit neither Hinckley, neither Oropos area in the future and some of them intend to discourage friends and family from visiting. The following quotes are typical: *"I would only travel to Hinckley for scientific purposes, to witness by myself the impacts of toxic pollution"*, *"I will never buy a summer house in the area"*, *"After watching Erevna, I have no intention to visit this area"* or *"I will visit Oropos only if I have to"*. Also, the following quotes are typical in that it highlights the desire to stop loved ones from visiting the particular polluted destination: *"I will ask my parents, who own a summer house in the area, to sell it"* or as another participant stated *"I told my relatives not to visit the area ever again"*. Twenty-three of the participants said that they would cancel their vacation plans if they find out that the destination that they have chosen to spend their holidays faces severe environmental degradation, such as sea pollution or water contamination. The rest of the partici-

pants, even though they would visit a destination despite the severity of a local environmental problem, appear to be having some second thoughts about the implementation and/or the duration of their trip. The following quotes are illustrative: *"If I find out that a destination faces a severe environmental problem like toxic pollution, I would not cancel my trip, but I would only visit the place for two or three days"* and *"I would visit the area only if a friend or a relative lives there"* or in a case of polluted swimming areas *"I would visit the area, but I wouldn't swim"*, *"I would try to find other swimming beaches in nearby areas"* and *"I would visit the area in the winter"*. The majority of the participants, that is 29 of the respondents, declare that environmental protection is among their key criteria for a destination choice. As one participant stated, environmental sustainability *"... does not affect my choice, but only for those trips that last for two or three days"*. Asked if they feel that the film *Erin Brockovich* affected in any way their criteria for a destination choice, 22 of the participants declare the film made them realize that impacts of pollution are not always apparent and in this regard the film lead them to pay more attention to sustainability of a destination. As a participant put it: *"things are not always as they seem, from now on I will think about my holidays more carefully"*.

In summary, the results of the two studies suggest that watching the film *Erin Brockovich* increased knowledge, concern about toxic pollution and willingness to act towards an antitoxic policy. A similar effect is associated with other environmental films. In particular, literature suggests that after having seen popular, narrative, environmental films people become more concerned and more motivated towards the solution of environmental problems (Bahk, 2011; Lowe et al. 2006; Reuswig, et al. 2004) and changes in attitudes and behaviours may be long-term for the most engaged and concerned viewers (Howell, 2012). Moreover, research findings display that viewers' awareness of the toxic pollution at Oropos area lead to a ne-

gative destination image formation. As predicted, negative plot defines resultant destination image formation, as most of the participants don't like to visit destinations, facing serious environmental problems and will not choose Oropos area as a tourism destination in the future.

According to Riley & Van Doren, (1992), the ideal formula to entice people to a film location includes amazing landscape qualities, a unique social and cultural outlook, an icon, and/or an image that tourists can relate to and wish to explore. This paper argues that a negative exposure has an opposite effect and can impinge upon how the audience participates in the construction of the image it consumes.

5. Conclusion

Exposure to the emotional, environmental storyline of the film *Erin Brockovich* provided new information and plausible cinematic events to survey participants and in this way positively affected their anti-toxic attitudes, an effect associated with other environmental films. Results suggest that popular narrative films have a positive effect on environmental knowledge, concern and intention to act. Then, concerned viewers of *Erin Brockovich* are exposed to the Greek documentary *Erevna*, which correlates the toxic pollution cases of the two regions, Hinckley and Oropos. As a result, audience's perception of Oropos is influenced, as environmental sustainability becomes a factor that influences viewers' decision to visit that particular area in their future traveling. However, this survey has several limitations. Intention to act served as a proxy for actual behaviour, therefore future research is necessary to study the impact of popular narrative environmental films as metaphor for the immersive and naturalistic experience of actual tourists. The participants were higher degree students with specialism in the environment and not

randomly selected, so the generalizability of the results would be strengthened by having a sample of people of different education, age, political affiliation and income. Moreover, this study did not examine the longevity of the effects.

Overall, this paper supports the argument that negative visual depiction of a destination environmental image may have a negative effect on the perception of a destination, more possibly when the potential film tourists are aware of sustainability issues and reaffirms literature suggestions that tourist awareness of sustainability issues might lead to changes in tourist destinations choices. This paper highlights that both a negative plot and environmental sustainability have a vital role in the destination image formation. In particular, for environmentally concerned viewers an unsustainable filmic depiction of a destination is not an image they relate to and wish to explore. These findings are particularly important because of the limited knowledge of negative film plot effects on destination image and marketing. Moreover, the results of this study suggest that the profile of those that engage in tourism activities enabled by toxic tours and disaster events perhaps should receive greater research attention. Finally, most of the research participants declare that they want to travel to filmed locations and they intend to do so in the future. Further research is needed to explore if the current economic crisis in Greece has affected intention to visit destinations as a result of being featured in the movies.

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References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.
- Bahk, C.M. (2011). Environmental Education Through Narrative Films: Impact of Medicine Man on Attitudes Toward Forest Preservation. *Journal of Environmental Education*, 42(1), 1-13.
- Balmford, A., Manica, A., Airey, L., Birkin, L., Oliver, A. & Schleicher, J. (2004). Hollywood, Climate Change and the Public. *Science*, 1713.
- Beeton, S. (2001). Smiling for the camera: the influence of film audiences on a budget tourism destination. *Tourism, culture & communication*, 3(1), 15-25.
- Blamey, R. & Braithwaite, V. (1997). A social values segmentation of the potential ecotourism market, *Journal of Sustainable Tourism*, 5(1), 29-45
- Bordelon, B. & Dimanche, F. (2003). *Images of New Orleans: the relationship between motion pictures and tourists' expectations of a travel destination*. Proceedings of the 34th Annual Travel and Tourism Research Association Conference. Boise, Idaho, USA
- Busby, G. & Klug, J. (2001). Movie-induced tourism: The challenge of measurement and other issues, *Journal of Vacation Marketing*, 7(4), 316-332
- Butler, R. (1990). The influence of the media in shaping international tourist patterns. *Tourism Recreation Research*, 15(2), 46-53.
- Connell, J. (2012). Film tourism – Evolution, progress and prospects, *Tourism Management*, 33(5), 1007-1029.
- Cottrell, S., van der Duim, R., Ankersmid, P. & L. Kelder, L. (2004). Measuring the Sustainability of Tourism in Manuel Antonio and Texel: A Tourist Perspective. *Journal of Sustainable Tourism*, 12(5), 409 – 431.
- Crompton, J. L. (1979). An assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image. *Journal of Travel Research*, 17(1), 18-23.
- Croy, W. G., & Walker, R. D. (2003). Rural tourism in film—Issues for strategic regional development. In D. Hall, L. Roberts, & M. Mitchell (Eds.), *New directions in rural tourism* (pp. 115-133). Aldershot, UK: Ashgate Publishing Ltd.

- Dimnik, T. & Felton, S. (2006) Accountant stereotypes in movies distributed in North America in the twentieth century, *Accounting, Organizations and Society*, 31(2), 129-155
- Disinger, J.F. & Roth, C.E. (1992). *Environmental literacy*. Columbus, OH: Education Resources Information Center/Center for Science, Mathematics and Environmental Education
- European Audiovisual Observatory (2001) Focus 2001, World Film Market Trends, Tendances du marché mondial du film, Cannes Market
- Gallarza, M., Gil, G., & Calderón, H. (2002). Destination image: Towards a conceptual framework. *Annals of Tourism Research*, 29(1), 56-78
- Grant, B. K. (1986) *Experience and Meaning in Genre Films. Film Genre Reader*. Austin: University of Texas Press.
- Hahm, J. & Wang, Y. (2011) Film-Induced Tourism as a Vehicle For Destination Marketing: Is it Worth the Efforts?, *Journal of Travel & Tourism Marketing*, 28(2), 165 – 179
- Holden, A. (2000) Winter tourism and the environment in conflict: the case of Cairngorm, Scotland, *International Journal of Tourism Research*, 2(4), 247-260
- Hillary, M., Nancarrow, B., Griffin, G., & G. Syme (2001) Tourist Perception of Environmental Impact, *Annals of Tourism Research*, 28(4), 853-867.
- Hoggart K, Lees L & Davies A. (2002) *Researching human geography* Arnold, London
- Howell, R.A. (2012). Investigating the Long-Term Impacts of Climate Change Communications on Individuals' Attitudes and Behavior. *Environment and Behavior*. DOI: 10.1177/0013916512452428
- Huang, R., Busby, G. & Bosdou, C. (2009) The first Plymouth: pictorial element and destination image, *International Journal of Tourism Policy*, 2 (4), 246-261.
- Hudson, S. & Ritchie, J.R.B. (2006). Promoting Destinations via Film Tourism: An Empirical Identification of Supporting Marketing Initiatives. *Journal of Travel Research*, 44, 387-396.
- Hungerford, H. & Volk, T. (1990). Changing Learner Behavior through Environmental Education, *Journal of Environmental Education*, 21(3), 8-21.
- Jurowski, C., M. Uysal, D.R. Williams & Noe, F. P. (1995). An examination of preferences and evaluations of park visitors based on environmental attitudes. *Journal of Sustainable Tourism*. 3(2), 73-87.
- Kaae, B.C. (2001). The perceptions of tourists and residents of sustainable tourism principles and environmental initiatives. In: S.F. McCool and R.N. Moisey (Eds) *Tourism, Recreation, and Sustainability: Linking Culture and the Environment*, (pp. 289-313). Oxon: CABI.
- Kim, H., & Richardson, S. L. (2003). Motion picture impacts on destination images. *Annals of Tourism Research*, 30(1), 216-237.
- Kitchin, R., Tate, N.J., (2000). *Conducting Research into Human Geography*. Prentice-Hall, Englewood Cliffs, NJ
- Leiserowitz, A. (2004). Before and after The Day After Tomorrow: a U.S. study of climate change risk perception. *Environment*. 46(9), 22-37.
- Lester, J.A. & Scales, C. (2013), Mediating the tourist experience: From Brochures to Virtual encounters in J.A. Lester & C. Scales (eds), *Mediating the tourist experience: From brochures to virtual encounters*, (pp. 1-12). Ashgate Publishing, Surrey, UK.
- Livingstone, S. (2009). On the mediation of everything: ICA presidential address 2008. *Journal of communication*, 59 (1). 1-18.
- Lowe, T. (2006). *Is this climate porn? How does climate change communication affect our perceptions and behaviour?* Working Paper 98, Tyndall Centre for Climate Change Research
- Lowe, T., Brown, K., Dessai, S., De Franca Doria, M., Haynes K. & Vincent, K. (2006). Does tomorrow ever come? Disaster narrative and public perceptions of climate change. *Public Understanding of Science*, 15(4), 435-457.
- Manning, R.E. (1985). Descriptive Aspects of Outdoor Recreation: Attitudes, Preferences, Perceptions. In R.E. Manning (Ed) *Studies in Outdoor Recreation: Search and Research for Satisfaction*, (pp. 27 – 41). Corvallis OR: Oregon State University Press.
- Marion, J.L. & Lime, D.W. (1986). Recreational Resource Impacts: Visitor Perceptions and Management Responses. In: D. L. Kulhavy and R. N. Conner (Eds) *Wilderness and Natural Areas in the Eastern United States: A Management Challenge*, (pp. 229-235). Austin TX: Austin State University Center for Applied Studies.

- O'Leary, S. & Deegan, J. (2003). People, pace, place: Qualitative and quantitative images of Ireland as a tourism destination in France. *Journal of Vacation Marketing*, 9(3), 213–226.
- Palacio, V. & McCool, S.F. (1997). Identifying ecotourists in Belize through benefit segmentation: A preliminary analysis. *Journal of Sustainable Tourism*. 5(3), 234–244.
- Peluzzo, P.C. (2009). *Toxic Tourism, Rhetorics of Pollution, Travel, and Environmental Justice*, The University of Alabama Press
- Phillips, W. & Jang, S. (2007). Destination image and visit intention: Examining the moderating role of motivation. *Tourism Analysis*, 12(4), 319–326.
- Reusswig F., Schwarzkopf J. & Pohlenz, P. (2004). *RIK Report No. 92, Double Impact, The Climate BlockBuster 'The Day After Tomorrow' and Its Impact on the German Cinema Public*, Potsdam Institute for Climate Impact Research (PIK)
- Riley, R. & van Doren, C.S. (1992). Movies as Tourism Promotion: A Pull Factor in a Push Location. *Tourism Management*. 13(3), 267–274.
- Sakellari, M. (2015). Cinematic climate change: A promising perspective of climate change communication, *Public Understanding of Science*, 24(7), 827–841.
- Shani, A., Wang, Y., Hudson, S. & Gil, S. M. (2009). Impacts of a historical film on the destination image of South America. *Journal of Vacation Marketing*, 15(3), 229–242.
- Soliman, D.M. (2011). Exploring the role of film in promoting domestic tourism: A case study of Al Fayoum, Egypt, *Journal of Vacation Marketing*, 17(3), 225–235
- Stone, P. (2011). Dark Tourism: towards a new post-disciplinary research agenda, *International Journal of Tourism Anthropology*, 1(3/4), 318–332
- Tzanneli R., & Korstanje, M. (2016). Tourism in the European economic crisis: Mediatized worldmaking and new tourist imaginaries in Greece, *Tourist Studies*, DOI: 10.1177/1468797616648542
- Tasci, A. D. A. (2009). Social distance: The missing link in the loop of movies, destination image, and tourist behavior? *Journal of Travel Research*, 47(4), 494–507.
- Warnick, R.B., Bojanic, D.C., & Siriangukul A. (2005) Movie effects on the image of Thailand among college student travelers, In J.G. Peden, R. Schuster (Eds.), *Proceedings of the 2005 northeastern recreation research symposium*, April 10–12, U.S. Forest Service, Bolton Landing, N.Y