

Understanding the Relationship Between Tourism Destination Imagery and Tourist Photography

Brian Garrod
Aberystwyth University

Photography and tourism are widely considered to be intrinsically linked. Photographs play a crucial role in the promotion of tourism destinations, working through a range of media including brochures, television commercials, and picture postcards. Meanwhile the practice of photography is often held to be intimately related to the condition of being a tourist. Urry (1990) links these two phenomena, suggesting that they may constitute a self-reinforcing “closed circle of representation” in which tourist photographs both reflect and inform destination images. Using an innovative research approach combining visitor-employed photography with content analysis and quantitative statistical techniques, this article presents an empirical test of Urry’s theory. Mixed evidence is found, suggesting that while in many respects the circle of representation may indeed be at work, in certain other respects it may not be. This suggests that a more fine-grained and nuanced understanding of the circle of representation is required.

Keywords: *imagery; photographs; postcards; representation*

The nature of the relationship between tourism and photography has long interested academics (e.g., Albers and James 1988; Chalfen 1979; Cohen, Nir, and Almogor 1992; Crang 1997; Feighey 2003; Garlick 2002; Haldrup and Larsen 2003; Jenkins 2003; Markwell 1997; Teymur 1993). There is widespread recognition that this relationship is very close in many respects. Thus Markwell (1997, p. 131) argues that the “stereotypic image of a tourist weighted down by cameras, lenses, tripods and other photographic paraphernalia, although a cliché, nevertheless highlights the strong, almost inseparable connection between modern recreational travel and photography.” Haldrup and Larsen (2003, pp. 23-24), meanwhile, note that “taking photographs is an emblematic tourist practice . . . it is almost unthinkable to travel for pleasure without bringing the lightweight camera along and returning home without snapshot memories.”

The primacy of the visual representation of places in the construction of tourism destination images has often been noted (MacKay and Fesenmaier 1997; Markwell 1997; Scarles 2004; Tasci and Gartner 2007). Writers tend to agree that to market places as tourism destinations they must first be constructed as such, and to do so requires that the essential qualities of that place (be they real or imagined) be taken and shaped into imagery that will be attractive to tourists (Jenkins 1999; Morgan and Pritchard 1998; Tasci and Gartner 2007; Tasci, Gartner, and Tamer Cavusgil

2007). In the long term, the destination image must correspond reasonably closely to the actual characteristics of the place: otherwise tourists will not be satisfied (Britton 1979; Fakaye and Crompton 1991), will not recommend the destination to others, and will not return themselves at a later date (MacKay and Fesenmaier 1997; Milman and Pizam 1995; Tuohino and Pitkänen 2004). Even so, tourism marketers have long realized that the correspondence need not be exact. Indeed, tourism marketing tends to be most effective when the essential tangible qualities of the destination are fused with images of exoticism, paradise, and dream fulfillment (Buck 1993; Krippendorf 1984; Tuohino and Pitkänen 2004).

This article sets out to investigate the extent to which the processes noted above may be mutually interrelated. The following section develops the theoretical background to the article, which is based on the work of Urry (1990) and Haldrup and Larsen (2003), among others. Additionally, it discusses the work of Jenkins (2003), who also attempts to explore the relationship empirically. The present study attempts to build on this work to provide a more robust and detailed analysis than has hitherto been achieved.

Author’s Note: The author wishes to acknowledge the assistance of Nika Balomenou, Marcin Zięba, and Jodie Grainger, as well as the financial support of the Aberystwyth University Research Fund (No. 2004-05/39).

Theoretical Background

The Role of Photography in Tourism

In what has undoubtedly become the classic theorization of tourism in contemporary society, *The Tourist Gaze*, Urry (1990) examines the intimate relationship between tourism as a production system and photography as a tourist practice. At the beginning of this book, Urry develops the paradigm of the tourist gaze as a means of understanding how tourism is produced and reproduced as a socially constructed phenomenon. The tourist gaze is elaborated as a particular “way of seeing” the world that is enforced on tourists and essentially conditioned by the imagery created for tourism destinations by the tourism industry. The fundamental motivation of tourists traveling to such destinations, then, is to gaze on the panoramas, landscapes, buildings, people, and other manifestations of place they have been led to expect to find there through exposure to visual representations carried in tourism advertisements, television broadcasts, movies, brochures, travel books, and, significantly in respect of this article, picture postcards. Often, the things that are represented take on iconic status: the Houses of Parliament and the red telephone box in the UK; Uluru and the red kangaroo in Australia; the Statue of Liberty and the cowboy in the United States. It is the continual reproduction and recirculation of such photographic images—both the iconic and the everyday—that perpetuates the tourist gaze in society. For Urry, therefore, “tourism is essentially about ‘consuming places’ visually” (Haldrup and Larsen 2003, p. 24).

Later in his book, Urry goes on to elaborate the relationship between tourism and photography. While writers such as Garlick (2002) have argued that Urry discusses photography merely as an example of the all-pervasive influence of the tourist gaze, others argue that the practices of tourist photography are absolutely fundamental to the notion of the tourist gaze. Cornelissen (2005), for example, stresses the importance of tourism marketing organizations as agents in the collation and presentation of the signifiers of place on which the tourist gaze is directed. The tourism industry presents these signs by means of the imagery and particularly the photography it employs in its brochures and other marketing materials. Jenkins (2003), meanwhile, argues not only that these photographic representations inspire the tourist’s visit to a destination but also that taking photographs constitutes a major focus of activity for the tourist. Personal photographs also provide proof that the tourist has indeed visited the destination (and perhaps done certain things while they are there) when vacation

stories are later recounted. In this way, tourists’ photographs reinforce the tourist gaze that has been created by the tourism industry and, in doing so, help perpetuate an attractive image for the destination.

Such ideas can indeed be seen in Urry’s discussion in *The Tourist Gaze*, suggesting that the position of photography in reproducing the tourist gaze is actually a more prominent element in his theory than some writers would have us believe. Indeed, Urry (1990, p. 140) writes that:

Photography is . . . intimately bound up with the tourist gaze. Photographic images organize our anticipation or daydreaming about the places we might gaze on. When we are away we record images of what we have gazed on. And we partly choose where to go to capture places on film. The obtaining of photographic images in part organizes our experiences as tourists. And our memories of places are largely structured through photographic images and the mainly verbal text we weave around images when they are on show to others. The tourist gaze thus irreducibly involves the rapid circulation of photographic images.

This suggests that Urry holds the practices of photography and tourism to be both conceptually and practically inseparable. Urry then goes on to elaborate this relationship, resting his arguments on eight related propositions: (i) that to photograph something is in some way to acquire and possess it; (ii) that photography is (or at least seems to be) a means of transcribing reality; (iii) that photography involves the selection, structuring, and shaping of what is to be acquired, enabling an idealized image of the object of the gaze to be captured; (iv) that the power of the photograph is in its ability to pass itself off as a genuine miniature version of the real thing; (v) that photographs enable the photographer to interpret the image captured thereon and to tell stories about it; (vi) that photography is a ubiquitous phenomenon in society and a democratized practice; (vii) that photography gives shape to travel, in major part determining which destinations we visit as well as what we do while we are there, implying that travel is a strategy for acquiring photographs; and (viii) that photography may thus be seen as part of a “hermeneutic circle” of tourism (re)production, in which tourists seek to acquire photographic images of the place they are visiting so that they can prove to others that they have been there. Thus, Urry (1990, p. 140) argues, tourism culminates with travelers to a destination “demonstrating that they have really been there by showing their version of the images that they had seen originally before they set off.”

Urry's theorization of modern tourism thus implicates photography fundamentally: photography is a central dynamic force in the cyclical reproduction of the tourism gaze, outside of which modern tourism as we know it could not exist. Some writers have criticized Urry's depiction of tourist photography as being framed entirely within his "hermeneutic circle" of representation. Haldrup and Larsen (2003, p. 24), for example, argue that tourist photography is more than simply a "pre-programmed shooting of image-driven attractions." Drawing on earlier work by Crang (1997), Haldrup and Larsen suggest a different motivational basis to tourist photography, which focuses more on social activities than the desire to consume places. According to this view, the tourism destination is the setting for the "family gaze," which uses tourism merely as a stage for framing personal stories revolving around social relations, particularly among the photographer's accompanying family, which can later be told and re-told through the medium of the photograph album or slideshow. The fundamental characteristic of the family gaze is, therefore, that the family is both the subject and the object of the practice of tourist photography.

Other writers have more readily embraced Urry's theorization of the relationship between photography and tourism. Markwell (1997), for example, employs a very similar conceptual framework in his study of photographs taken by students on a nature-based field trip, even though he never actually refers to Urry's work. Jenkins (2003) also adopts Urry's notion of the closed circle of reproduction of the tourist gaze, implicating tourist photography as a central driver in the process. What is more unusual about her work, however, is that it actually goes on to test this notion empirically. Jenkins conducted a detailed content analysis of the imagery contained in 17 brochures encouraging Canadian backpacker tourists to visit Australia. She then undertook 30 semi-structured interviews and administered a face-to-face questionnaire with a further 90 backpackers traveling to and in Australia, the purpose being to identify their practices, preferences, and behaviors relating to their travel photography. There then followed an exercise described as "auto-photography," in which 10 backpackers were each given five disposable cameras and asked to photograph their experiences of backpacking in Australia. The cameras were returned to the researcher who, having developed the film, attempted to relate the photographs empirically back to the brochure images. Jenkins' major conclusion is that, very much like the tourists in Urry's tourist gaze, backpackers to Australia do indeed tend to seek out particular views that were considered "photogenic" or "iconic," and to reproduce

these in their photographs. Jenkins' findings therefore lend some support to Urry's notion of the closed circle of reproduction of the tourist gaze.

The purpose of this article is to conduct a further empirical test of Urry's closed circle of reproduction. It differs from Jenkins' work in three main respects. First, the fieldwork is based not on backpackers to Australia but among general tourists to the small seaside town on Aberystwyth in Wales. Second, the medium of tourism imagery being considered is not brochures (which do not exist in sufficient quantities in the case of Aberystwyth) but contemporary postcards depicting the town. Third, a more rigorous approach is taken to the comparing the image representations. A common content analysis protocol was used with both the postcards and the photographs. This was done to investigate how far tourists' photographs of Aberystwyth mirrored postcards of the town. A strong relationship might be interpreted as confirmation that Urry's closed circle of representation is at work.

Visitor-Employed Photography

The tourist photographs in this study were collected using visitor-employed photography (VEP). This was first used as a practical research technique in the early 1970s by Cherem and Traweek (1977), being later developed by Cherem and Driver (1983) and Chenoweth (1984) in the context of wilderness-area management. Since then it has been used in a variety of contexts, including the analysis of outdoor experiences, landscape preferences, and community planning (e.g., Dakin 2003; Loeffler 2004; Oku and Fukamachi 2006; OPENspace 2005; Schuster, Johnson, and Taylor 2004; Stedman et al. 2004; Taylor et al. 1995; Yamashita 2002). The technique has also been used to study children's experiences and perceptions of place (e.g., Dodman 2003; Douglas 1998; Germain 2004). Other research applications are in the field of health and well-being, where the technique has been used to investigate the experiences of both health practitioners and patients (e.g., Hurworth et al. 2005; Rapport, Doel, and Elwyn 2007). A large number of personality research studies have also used the technique to explore the question "Who am I?" (for a review, see Burke and Dollinger 2005), the first being conducted in the early 1980s by Ziller and Lewis (1981). Other researchers in the field of health studies have used the technique as a tool of action research, with the intention of empowering participants and thereby to influence policy agendas and public opinion (e.g., Wang and Burris 1997).

Perhaps surprisingly in view of the intimate relationship that exists between photography and the tourist experience, there have been relatively few

applications of VEP in the field of tourism. Prominent exceptions include the work of Haywood (1990), who examines tourists' perceptions of the city of Toronto; Jutla (2000), who compares tourists' and residents' visual images of the hill town of Simla in India; Groves and Timothy (2001), who use VEP to measure the importance to tourists' satisfaction of particular components of a trip to Quebec City; and MacKay and Couldwell (2004), who examine the visual components of the tourist image of an outdoor heritage museum in Canada.

While all of the studies noted above employ some variant of the basic VEP technique, there has been a tendency for different researchers to claim it as their own, naming it according to the use to which the technique is being put (Balomenou 2007). For the purposes of this analysis, the technique is termed "visitor-employed photography." This is simply because it is the more widely known term in the field of tourism, travel, and recreation.

The relative paucity of VEP studies in the specific context of tourism remains an enigma. Where studies of the role of the photograph in tourism have been undertaken, the tendency has been to employ photographs taken by professional photographers for the purposes of promoting a tourism destination in brochures, guidebooks, and advertisements, rather than photographs taken by the tourists themselves. Indeed, most of the previous studies in this area, such as those by Dann (1988), Edelheim (2007), Hunter (2008), Pritchard (2001), Scarles (2004), and Uzzell (1984), rely on pictures used by the tourism industry to illustrate particular destinations in their brochures. While tourism studies have sometimes used photographs, most notably in the context of research into the images that tourists (potential or actual) hold of particular destinations, these are normally "found" images (Feighey 2003) insofar as they have been created by the tourism industry and already exist in various media such as brochures. Such research typically involves people being shown photographs of particular destinations and asked to respond verbally to them (MacKay and Couldwell 2004; Pike 2002). The use of VEP is particularly appropriate in the context of the present study because it employs photographs that have been taken by tourists themselves, who adopt an active role in the research as generators of the pictures, rather than passive respondents to pre-existing ones. Indeed, according to Urry's view, tourists are both receivers and modifiers of tourism images. This implies that their role is not a trivial one and must be explicitly incorporated into an empirical investigation of the tourist gaze.

The Picture Postcard in Tourism

While brochures may be the predominant vehicle of tourism imagery (Hunter 2008; Molina and Esteban 2006), it would be a mistake to underestimate the power that the picture postcard has exerted over the popular images of tourist destinations, particularly in the developed world where mass tourism is rather longer established. Indeed, Pritchard and Morgan (2003) argue that the postcard is every bit as important as promotional material, travelogues, and travel writing in creating discourses of place. Such discourses go on to shape, perhaps even determine, destination images, thereby influencing tourists' expectations of a place, their interactions with it, and their post-experience evaluation of the destination.

Indeed, postcards can be said to exert significant power in the construction and representation of destination images. For example, Pritchard and Morgan (2003) undertake a discourse analysis based on 12 picture postcards of Wales, their aim being to determine which images of three competing identities are privileged by the process of tourism representation and which are disadvantaged. Their findings suggest an implicit "remapping" of Wales in which the capital city, Cardiff, is celebrated as the modern metropolitan hub of the country, while other communities are reduced to mere artifacts of spectacle and theatricality. In much the same way, a study by Marwick (2001) of postcards from Malta shows how the stereotypical image of the island as an exotic "sun-and-sea" destination is now giving way to a more sophisticated set of images which attempt to penetrate into the "backstage" realities of life on the island.

Other studies have investigated the role of postcards in cultural representation. Albers and James (1988), for example, study the relationships between tourism, ethnicity, and photography using a sample of postcards dating back over a 35-year period. Edwards (1996) examines a museum collection of postcards with the aim of investigating how cultural identities are shaped by the representational forces of tourism photography. Mamiya (1992), meanwhile, investigates how Hawaiian culture has been represented and shaped by postcards. Burns (2004) examines six postcards from North Africa and the Eastern Mediterranean in the light of the visual imagery of tourism, cultural representation, and colonial discourses.

Few such studies have proceeded to examine the role of postcards in reinforcing the tourist gaze, either theoretically or empirically. A rare exception is the study by Waitt and Head (2002), which examines the role of postcards in perpetuating the "frontier myth" of the Australian outback. Focusing particularly on postcards from the

Kimberley, the authors show how postcards exploit a number of categorical binaries—including those between society and nature; human and animal; and civilized and wild—thereby constructing a place image that is suitable to being sold to tourists. Waitt and Head (2002, p. 324) thereby link postcards directly to the tourist gaze, arguing that they “give shape to tourist practices, helping to guide the tourist gaze . . . As a guide, postcards instruct tourists how and what to see, in terms of where and when to gaze, and how the ‘capture’ a particular site.”

Postcards have therefore only rarely been the subject of empirical research into the tourist gaze. Even so, it would seem that there is a widespread conviction that they are an important element of it. Like tourist photographs, postcards represent a “trophy” of the tourist gaze: tangible evidence that the trophy-bearer has visited the destination and in some sense consumed it. Arguably, the habit of sending postcards exists because the act stands as a sign of the sender’s act of conspicuous consumption. If this is indeed the case, then one might expect tourist photographs and postcards to contain similar representations of the destination being visited.

Method

The VEP element of this study took place in the summer of 2005. First, a pilot survey was undertaken involving five tourists who were randomly intercepted on the seafront and asked to volunteer for the study. Each was given a 27-exposure single-use camera with built-in flash, a brief sociodemographic questionnaire, a photo log, and a reply-paid envelope in which they could return their completed survey form, photo log, and camera. Volunteers were asked to take up to 12 photographs to reflect what they enjoyed about their visit. Volunteers were encouraged to take the remaining exposures on the film for their own purposes. The researchers would then have two sets of photographs developed, one of which would be sent to the volunteer as an incentive for participation in the study and the other retained by the researchers for analysis. Volunteers were not offered any financial reward as this could have resulted in self-selection bias.

The original study also employed a matched sample of local residents. However there were grounds for believing that residents would not necessarily view or use the town in the same way as tourists (Jutla 2000), so the data collected from the residents were not used in the present analysis. The findings of research comparing the image perceptions of tourist and residents are reported elsewhere (Garrod 2007, 2008).

The pilot study had a completion rate of 80%. Most volunteers reported that they had enjoyed the exercise. The commitment of volunteers to the task was reflected in the care they had evidently taken in selecting subjects and taking photographs. The pilot study suggested a number of minor adjustments to the sociodemographic survey form and to the format of the photo logs, and these were made prior to undertaking the main study.

The main study involved intercepting 25 tourists at three randomly determined points along the seafront over four survey days. The intention was to collect approximately 100 photographs for further analysis. The sample size of 25 participants was derived using conservative estimates of the likely completion rate (expected to be approximately 50%) and the expected number of photographs returned per participant (an average of eight photographs per person) based on the results of previous studies using VEP. The target of 100 photographs was chosen partly in view of the resources available for analyzing them, which were by no means unlimited. It was important that the sample would not be overly large given the very labor-intensive nature of the content analysis to which the photographs were to be subjected. At the same time, the sample size needed to be sufficient to enable a rigorous statistical analysis to be carried out. Furthermore, it was intended that the photographs would be compared with a sample of around 100 postcard images and it was desirable to have two reasonably equal sample sizes. Previous studies using the VEP method to evaluate tourism destination imagery have operated successfully using a similar number of participants (e.g., Jenkins 2003; Jutla 2000; OPENspace 2005).

The purpose of the sociodemographic questionnaire was to collect basic information on the participant’s age and gender, as well as to identify how long they were staying in the area and whether they were a first-time or repeat visitor. Previous studies using the VEP research suggest that such variables can be important determinants of the content of photographs taken by participants and it was important to test whether this might be the case in the present study and to allow for such effects in the subsequent content analysis of the photographs. The need to associate each photograph with information on the detailed personal characteristics and travel history of the photographer effectively ruled out downloading photographs from photo-sharing websites such as Flickr or social networking sites such as Facebook. Determining a suitable method for sampling the available photographs, which proved to be very heterogeneous in terms of their genre and content, also proved too problematic.

Participants were asked to complete log books as they went along. The advantage of this approach is that

participants do not need to rely on their memories to relate reasons why they took certain photographs and what they intended to convey in them. In particular, the decision to take a photograph can often be prompted by an emotional response to the subject, and it was considered important to capture this in real time. Using ex-post interviews with participants would not allow this effect to be captured. The purpose of the log book was therefore to capture the voices of the participants. Against each photograph, participants were invited to relate in detail what they intended to capture in the photograph, to describe what prompted them to take the photograph, and to say what they thought was special to them about the subject of the photograph in terms of their visit to Aberystwyth. The log book data was subsequently used for two purposes. The first was to enable relevant coding categories to be identified for use in the content analysis. The second was to ensure that participants' intentions were as fully as possible captured through the content analysis. For example, if a participant intended to capture a particularly blue sky but included the roof of a building in the shot, it would be the blue sky that would be emphasized in the content analysis rather than the building. The log books were therefore an integral part of the research approach, providing a pivotal link between the VEP and content analysis elements of the research.

The collection of the postcards took place during the following summer. At this time of year, most of the retail outlets in the town tend to display their complete range of postcards prominently in racks outside their premises. The researcher attempted to purchase one copy of every photographic picture postcard either depicting Aberystwyth or including a photographic image of the town. Thus, for example, a postcard entitled "West Wales" was collected because this was a "gallery-style" postcard incorporating two smaller photographs of Aberystwyth as well as one of the nearby village of Borth, one of a line of children dressed in traditional Welsh costume, one of the Welsh flag, and one of the Aberystwyth coat of arms. Cartoon postcards were not collected as these did not reflect the specific destination image of Aberystwyth. Postcards depicting artistic impressions of the town were not collected as it was found that these often included a significant degree of artistic license and could not therefore be effectively reproduced by tourists, even if they wanted to do so. A set of postcards showing old photographs of town (from before World War II) was not collected for much the same reason.

Some postcards were "gallery style," incorporating more than one photograph (the largest number of separate photographs included on any one postcard being

11). In such cases, each individual photograph was treated as a separate item for analysis. Sometimes it was found that a particular photograph has been used on more than gallery-style postcard, in which case the photograph was included only once in the content analysis.

Both the photographs and postcards were then subjected to systematic manifest content analysis (Bos and Tarnai 1999; Weber 1990) to document what features of the town (and the people and events taking place therein) they had captured. A coding grid was developed using the photographs collected in the pilot study and an in-depth reading of the entries made in the participants' photo logs. Articles by Fairweather and Swaffield (2001, 2002), Jutla (2000), MacKay and Couldwell (2004), Marwick (2001), Taylor et al. (1995), and Yamashita (2002) were also helpful in developing the coding grid. Photographs and postcards were coded using the following categories: location from which the shot was taken; prominence of people in the shot; relative prominence of built and natural features; prominence of bodies of water in the shot; specific buildings as a major and minor feature of the shot; specific attractions as a major and minor feature of the shot; public services and facilities as a main feature of the shot.

The photographs and postcards were treated in exactly the same way in the content analysis. Each was examined by eye, once by the lead researcher and then again by an independent person who had been fully briefed and trained in the technique. The judgments of the two coders were then compared and an inter-coder reliability statistic calculated. At the first attempt this was in the region of 90%. The entire data set was therefore re-coded following further clarification regarding how to apply the coding protocols. An inter-coder reliability statistic of just over 95% was recorded in respect of this second coding up of the data.

The resulting dataset was then subjected to chi-square analysis (Bryman and Cramer 1997; Foster 1998). The Yates correction method was used in the case of tables with only one degree of freedom. A 95% significance threshold was adopted. In each case the dataset was divided into tourists' photographs and postcards, with chi-square analysis used to identify statistical difference in what is captured in them.

Results

The main VEP survey achieved a completion rate of 52%, which was not unexpected given the nature of the exercise. The data nevertheless represent a fair reflection of the profile of tourists visiting Aberystwyth (see Ceredigion Tourism Quality Initiative 2007), with a good spread of age groups and occupations. With nine females and only four males, the sample leaned considerably toward the former,

Table 1
Sociodemographic Data on Visitor-Employed Photography Participants

Case Number	Nights in Aberystwyth	Times Visited Before	Age	Male/ Female	Occupation
100	2 or 3	Once	15 to 24	Male	Student
102	4, 5, or 6	More than 5	55 to 64	Female	Auditor
104	4, 5, or 6	More than 5	55 to 64	Male	Transport manager (retired)
106	7	Never	35 to 44	Female	NHS administrator
108	1	More than 5	45 to 54	Female	Nurse
110	1	2 or 3	35 to 44	Female	Resource worker for foster caregivers
111	1	More than 5	45 to 55	Female	Library assistant
116	1	Never	35 to 44	Male	Computer programmer
117	1	Never	35 to 44	Female	Teacher
119	More than 7	More than 5	45 to 55	Male	Hairdresser
120	More than 7	Never	25 to 34	Female	Veterinarian
122	More than 7	More than 5	35 to 44	Female	Bookkeeper
123	7	2 or 3	15 to 24	Female	Student at another university

Note: NHS = National Health Service

but further analysis of the data suggested that gender and age did not significantly influence the content of the photographs taken (for further details see Garrod 2008). The dataset also reflected wider trends in terms of the number of previous visits individuals had made to the area and the number of nights they were expecting to stay on the current visit. Recent data (Ceredigion Tourism Quality Initiative 2007) suggest that the median length of stay for tourists in the Aberystwyth area (not including day visitors) is 11 to 14 nights, while the median frequency of return visits to the Aberystwyth area is once a year or less. Table 1 provides further details.

The VEP survey thus provided a total of 164 usable photographs for further analysis. Of these, 112 were reported by those taking them to reflect generally positive perceptions of the town, so this was the dataset used in the subsequent statistical analysis. The original study allowed participants also to capture negative perceptions of the town if they so wished; however these are not typical tourist photographs and it would have been invalid to compare these with postcard images of the town, which are invariably based on positive perceptions. Meanwhile an exhaustive search found 70 different postcard pictures of the town fitting the selection criteria.

Contrary to prior expectations, the content of the photographs did not tend to vary systematically with the trip characteristics of the VEP participants: chi-square analysis found no significant differences in the content of photographs taken by those visiting the town on a short break (less than seven nights) and those taking a longer vacation in the area. On the other hand, there were some significant differences noted in the content of the photographs taken first-time and repeat visitors in terms of the location

from which the photographs were taken; for example, the former group tended to take photographs at a wider range of locations while the latter tended to restrict taking their photographs to the promenade area. Even so, there were no detectable differences in the specific subjects of the photographs (either as major or minor features) that were captured by first-time and repeat visitors, suggesting that the two groups tended to take reasonably similar photographs in terms of their subjects.

Even from a first visual pass of the tourist photographs and postcards, it was clear that there were some elements that were common to both data sets. Many tourist photographs were taken from the vantage point of the castle ruins looking north, with Old College (the first home of the University of Wales Aberystwyth, built originally as a hotel in the 1870s) and the Royal Pier in the foreground, and Constitution Hill with its funicular "cliff" railway and replica "Victorian camera obscura" in the background. This scene is also depicted on several postcards of Aberystwyth. An example tourist photograph and postcard are shown in figure 1 to illustrate the similarity.

While such similarities may seem too uncannily merely to be the result of chance, it was important that some rigorous means is employed to confirm or dismiss such conceptions. Chi-square statistical analysis was therefore applied. First, statistically significant differences were found in terms of where the VEP participant and the postcard photographer decided to take their shots (table 2). The professional photographer is more likely to ascend Constitution Hill (either on foot or using the electrified cliff railway) to capture the panoramic views of the town looking south, while the VEP participant is more likely to remain on the seafront promenade.

Figure 1
Reproduction of the Tourist Gaze? (a) Tourist Photograph; (b) Postcard Image of Aberystwyth

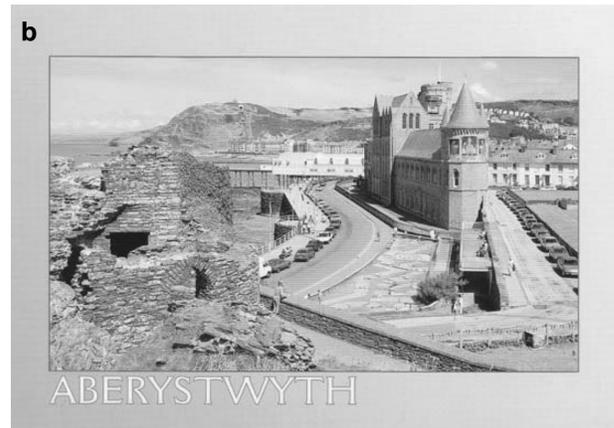


Table 2
Location from Which the Photographs Were Taken

Location	Photographs		Postcards	
	Number	%	Number	%
Promenade	35	31.3	14	20.0
Castle grounds	17	15.2	17	24.3
Constitution Hill	5	4.5	16	22.8
Other seafront area	27	24.1	13	18.1
Other	28	25.0	10	14.3
Chi-square = 190.54				
<i>df</i> = 4				
<i>p</i> -value = 0.0006				

Table 3
Degree of Prominence of People in the Photographs

Location	Photographs		Postcards	
	Number	%	Number	%
Foreground	10	9.4	1	1.4
Background	47	44.3	37	52.9
None visible	49	46.2	32	45.7
Chi-square = 4.97				
<i>df</i> = 2				
<i>p</i> -value = 0.083				

With regard to the prominence of people in the shot, no statistical difference was found in terms of the choices of VEP participants and postcard photographers (table 3). In this respect, it is interesting to note that neither postcards nor tourist photographs tended to feature people in the foreground of the shot.

Table 4, meanwhile, suggests that postcard photographers are significantly more likely to include at least some natural feature in their shots, be this sea, the beach, the nearby woods or mountain ranges in the distance.

Previous studies (e.g., Taylor et al. 1995; Yamashita 2002) have suggested that water may be particularly important to tourists' perceptions of leisure spaces. Table 5 presents the findings of this study, which suggest that the presence of water bodies (the sea, the Ystwyth or Rheidol rivers, and/or the marina) is significantly more likely to be a prominent feature of postcards than it is of tourists' photographs.

The situation in respect of specific buildings and attractions is rather less clear (tables 6 and 7). In neither case is

Table 4
Degree of Prominence of Built and Natural Features in the Photographs

Location	Photographs		Postcards	
	Number	%	Number	%
Built features	35	31.2	10	14.3
Mixture of built and natural features	77	68.8	60	85.7
Chi-square (Yates) = 5.78				
<i>df</i> = 1				
<i>p</i> -value = 0.016				

Table 5
Degree of Prominence of Water Bodies in the Photographs

Location	Photographs		Postcards	
	Number	%	Number	%
Major	13	11.6	20	28.6
Minor	38	33.9	33	47.1
None visible	61	54.5	17	24.3
Chi-square = 17.92				
<i>df</i> = 2				
<i>p</i> -value = 0.0001				

there a statistically significant relationship between the subject of the photograph and the purpose for which it was taken. The results would seem to suggest, therefore, that a participant in the VEP study and a postcard photographer tend to focus on the same buildings and features of the town. Thus, in terms of buildings, both tourist photographs and postcards tend to include Old College, the castle ruins, the Royal Pier and, to a lesser degree, St. Michael's parish church. In terms of tourism attractions, the subject of both tourist photographs and postcards tends to be on the beach, the promenade, the miniature golf course, the camera obscura, and the castle flower gardens.

Discussion

While the work of Jenkins (2003) lends unreserved support to Urry's notion of the closed circle of reproduction of the tourist gaze, the findings of the present study recommend much greater circumspection. While casual inspection of the data certainly suggests similarities in the content of tourist photographs and picture postcards of the town, a more rigorous statistical analysis reveals a rather more ambiguous picture. While the analysis could not distinguish clearly between the content of the tourist photographs and postcards in terms of the specific buildings

Table 6
Specific Buildings As a Minor Feature of the Photographs

Location	Photographs		Postcards	
	Number	%	Number	%
Old College	17	21.3	31	24.0
Castle ruins	14	17.5	29	22.5
The Royal Pier	15	18.8	26	20.2
St Michael's Church	11	13.8	22	17.1
Other public building	23	28.8	21	16.3
Chi-square = 4.80				
<i>df</i> = 4				
<i>p</i> -value = 0.308				

Note: A minor feature was deemed to take up not more than 25% of the photograph or postcard. Note that more than one building could appear in any one photograph or postcard, hence $n > 112$.

Table 7
Specific Attractions As Minor Features of the Photographs

Location	Photographs		Postcards	
	Number	%	Number	%
Beach	21	12.7	44	17.3
Promenade	22	13.3	43	16.9
Miniature golf course	19	11.5	25	9.8
Camera obscura	13	7.9	21	8.2
Castle gardens	17	10.3	30	11.8
Other	73	44.2	92	36.1
Chi-square = 4.32				
<i>df</i> = 5				
<i>p</i> -value = 0.504				

Note: A minor feature was deemed to take up not more than 25% of the photograph or postcard. Note that more than one attraction could appear in any one photograph or postcard, hence $n > 112$.

and tourist attractions to be found in Aberystwyth, major differences were found in respect of several other dimensions, such as the prominence of natural features and bodies of water in the photographs. The former finding might suggest that tourist photographs do tend to replicate the visual imagery that has been (and is still being) created for Aberystwyth by the tourism industry. The latter finding, meanwhile, suggests that the relationship between tourist photographs and postcards is not as straightforward as this seems to suggest.

Thus, for example, the analysis tends to suggest that professional photographers may be more willing to seek out spectacular views of the whole town; for example from the top of Constitution Hill. While it could be argued that this is an effect of the peculiar nature of the exercise through which the tourist photographs were collected, it is

actually rather difficult to rationalize such an explanation. Tourists involved in the VEP exercise were approached on the promenade but were asked to take the camera with them as they went about their visit. This could just as easily have taken them to the top of Constitution Hill, a very popular place with tourists where other attractions are also to be found (such as the camera obscura, a café and, of course, the cliff railway). Weather conditions were good on all survey days, so it is unlikely that this would have deterred tourists either from ascending the hill or using their camera when they reached the top of it.

In contrast, there were no statistical differences between the two sets of pictures in terms of the prominence of people, neither tending to include individuals in the foreground. At one level this is perplexing because one might expect the typical “tourist” photograph to be one in which there is a smiling family—children and wife (the husband is invariably using the camera)—in front the iconic image or panoramic view that is being “captured.” Indeed, this is very much the implication of critics of Urry such as Crang (1997), Garlick (2002), and Haldrup and Larsen (2003), all of whom stress the sociality, reflexivity, and embodied nature of the performance of photography by tourists. Photographers taking pictures to be used on postcards, on the other hand, might not want to include people in the foreground of their shots. Doing so may overly personalize the postcards, causing people not to buy them because they show someone else having fun at the destination rather than themselves. Putting people in the photograph may also limit the “shelf life” of the postcards, which can take on a dated look as clothing fashions and hairstyles change. A qualitative analysis of the postcards by the researcher (using evidence such as clothing styles and the presence or absence of particular buildings with known dates of construction or demolition) suggested that the oldest postcard on sale in the town dated from the 1960s. The vast majority, however, dated from the 1990s or 2000s.

Meanwhile, no strong evidence was found to suggest that the specific subjects (particular buildings and other attractions) of photographs varied systematically according to whether they were taken by first-time and repeat visitors. This finding might lend some support to Urry’s notion of the closed circle of representation, in as much as both groups seem to be seeking out the clearly recognizable and iconic features of the town as the subject of their photographs. The finding also provides some reassurance that allowing participants to take only a maximum of 12 photographs of the town did not result in significant bias in terms of their choices of subject. If first-time visitors were not aware of what there is to photograph in Aberystwyth, then perhaps they would not

be able to decide what subjects they should select for their 12 available shots, potentially failing to take certain photographs to retain the exposure for a later time. Yet the findings of this analysis do not seem to support the hypothesis that that first-time and repeat visitors will seek out different subjects for their shots. This may in turn lend further support to Urry’s notion of the close circle of representation, insofar as their venue and subject choices may actually have been predetermined by the images of the town promoted by the tourism industry.

The completion rate for the VEP study was only 52% and this was disappointing, even if it was not entirely unanticipated given the nature of the study. Participants in the study remained anonymous throughout to meet ethical requirements and to avoid biasing the kinds of pictures people might take. It was not therefore possible to contact those not completing the task to find out why they did not ultimately comply. The reasons for the relatively low completion rate achieved in this study can therefore only be conjectured on. Individuals will typically respond to the challenge of tasks such as VEP in different ways. While some may volunteer readily and participate enthusiastically in the task that has been set for them, others will need to be persuaded to volunteer and will not have the necessary commitment to complete the task. Some may not be familiar with photography (although this is increasingly unlikely) and will not actually succeed in the task, while others may complete the task but simply forget to return the camera. It should also be borne in mind that while this completion rate may seem rather low, higher completion rates have only been achieved in VEP studies based on enclosed environments (with limited entry and exit points, e.g., MacKay and Couldwell, 2004) or where the participants are known personally to the researchers (e.g., Markwell 1997, where the participants were his students).

Concluding Remarks

This study set out to investigate empirically the existence or otherwise of a closed circle of tourism representation, in which the imagery employed by the tourism industry to draw tourists to particular destinations becomes the object of the tourist gaze and thereby the subject of tourists’ photographs. As tourists come to expect and to seek out these views, the more that particular imagery is used by the tourism industry in their promotional materials. A test of the circularity of the relationship might therefore be to examine the photographs taken by tourists with those that have been taken by professional photographers to feature on postcards, and to see how similar the two datasets actually are.

The above hypothesis is clearly a challenging one to test, requiring a range of research methods to be applied to visual data existing in two different media: tourists' photographs and picture postcards of the same destination. A set of research methods was therefore required to test the hypothesis, and insofar as no previous study has ever employed this particular combination of research methods with this specific pairing of media, this study is unique. While there is some similarity with Jenkins' (2003) study, it can be argued that the present study is more rigorous because it applies a common content analysis protocol to both datasets. This facilitated a more robust, and yet in some ways perhaps more nuanced interpretation of the data.

Indeed, the subtlety of the particular approach adopted in this article can be seen in the results presented above. A first visual pass of the tourists' photographs and postcards suggested a certain correspondence between the images promoted by the tourism industry and those received by the tourists (as in figure 1). However, a more distanced and objective analysis of the two datasets, suggests that while such similarities do exist, they do not exist in respect of every feature of the visual images captured by the two media. Of particular note was the tendency for postcards to depict a panoramic view of the town taken from one of the hills overlooking Aberystwyth, whereas tourists' photographs did not. There was also a marked tendency for postcards to feature natural features, particularly bodies of water, whereas tourist photographs were more concerned with the built features of the landscape. Yet in other respects, for example in terms of the inclusion of particular historic buildings and tourist attractions, the content of the tourist photographs and the postcards was not statistically different. This study therefore lends some support to Urry's notion of the closed circle of reproduction of the tourist gaze, but suggests that the processes involved might be more subtle and complex than simply for the two protagonists in the relationship to mimic one other in every respect.

At the same time, and contrary to expectations, the study found that tourists' photographs showed no significantly greater tendency to include people as foreground subjects, which is widely hypothesized to be the focal characteristic of tourist photography by writers such as Cragg (1997), Garlick (2002), and Haldrup and Larsen (2003). Postcards might be expected not to include individuals in the foreground, as this would probably make them less marketable, as well as giving them a shorter "shelf life." This finding tends to argue more in favor of Urry's tourist gaze than the "family gaze" of Haldrup and Larsen (2003).

References

- Albers, P. C., and W. R. James (1988). "Travel Photography: A Methodological Approach." *Annals of Tourism Research*, 15 (1): 134-58.
- Balomenou, N. (2007). "30 Years of Photo Elicitation Using Participant Generated Images: A Methodological Overview of 151 Studies." Working paper. Aberystwyth University.
- Bos, W., and C. Tarnai (1999). "Content Analysis in Empirical Social Research." *International Journal of Educational Research*, 31 (8): 659-71.
- Britton, R. A. (1979). "The Image of the Third World in Tourism Marketing." *Annals of Tourism Research*, 6 (3): 318-29.
- Bryman, A., and D. Cramer (1997). *Quantitative Data Analysis with SPSS for Windows: A Guide for Social Scientists*. London: Routledge.
- Buck, E. (1993). *Paradise Remade: The Politics of History and Culture in Hawai'i*. Philadelphia: Temple.
- Burke, P. A., and S. J. Dollinger (2005). "'A Picture's Worth a Thousand Words': Language Use in the Autophotographic Essay." *Personality and Social Psychology Bulletin*, 31 (4) 536-48.
- Burns, P. (2004). "Six Postcards from Arabia: A Visual Discourse of Colonial Travels in the Orient." *Tourist Studies*, 4 (3): 255-75.
- Ceredigion Tourism Quality Initiative (2007). "Menter Aberystwyth Visitor Satisfaction Survey 2006." <http://users.aber.ac.uk/jzm/reports.pdf/Visitor%20Satisfaction/All%20Aberystwyth%20report%202006%20saesneg.pdf> (accessed July 2, 2007).
- Chalfen, R. M. (1979). "Photography's Role in Tourism: Some Unexplored Relationships." *Annals of Tourism Research*, 6 (4): 435-47.
- Chenoweth, R. (1984). "Visitor Employed Photography: A Potential Tool for Landscape Architecture." *Landscape Journal*, 3 (2): 136-46.
- Cherem, G., and B. Driver (1983). "Visitor Employed Photography: A Technique to Measure Common Perceptions of Natural Environments." *Journal of Leisure Research*, 15: 65-83.
- Cherem, G., and D. Traweek (1977). "Visitor Employed Photography: A Tool for Interpretive Planning on River Environments. Proceedings of River Recreation Management and Research," pp. 236-44. USDA Forest Service GTR NC-28.
- Cohen, E., Y. Nir, and U. Almogor (1992). "Stranger-Local Interaction in Photography." *Annals of Tourism Research*, 19 (2): 213-33.
- Cornelissen, S. (2005). "Producing and Imaging 'Place' and 'People': The Political Economy of South African International Tourist Representation." *Review of International Political Economy*, 12 (4): 674-99.
- Cragg, M. (1997). "Picturing Practices: Research through the Tourist Gaze." *Progress in Human Geography*, 21 (3): 359-73.
- Dakin, S. (2003). "There's More to Landscape than Meets the Eye: Towards Inclusive Landscape Assessment in Resource and Environmental Management." *Canadian Geographer*, 47 (2): 185-200.
- Dann, G. (1988). "Images of Cyprus Projected by Tour Operators." *Problems of Tourism*, 3 (41): 43-70.
- Dodman, D. (2003). "Shooting in the City: A VEP Exploration of the Urban Environment in Kingston, Jamaica." *Area*, 35 (3): 293-304.
- Douglas, K. (1998). "Impressions: African American First-Year Students' Perceptions of a Predominantly White University." *Journal of Negro Studies*, 67 (4): 416-30.

- Edelheim, J.R. (2007). "Hidden Messages: A Polysemic Reading of Tourist Brochures." *Journal of Vacation Marketing*, 13 (1): 5-17.
- Edwards, E. (1996). "Postcards: Greetings from Another World." In *The Tourist Image: Myth and Myth-Making in Tourism*, edited by T. Selwyn. Chichester: John Wiley & Sons, pp. 197-221.
- Fairweather, J. R., and S. R. Swaffield (2001). "Visitor Experiences of Kaikoura: An Interpretive Study Using Photographs of Landscapes and Q Method." *Tourism Management*, 22 (3): 219-28.
- (2002). "Visitors' and Local's Experiences of Rotorua, New Zealand: An Interpretive Study Using Photographs of Landscapes and Q Method." *International Journal of Tourism Research*, 4 (4): 283-97.
- Fakeye, P. C., and J. L. Crompton (1991). "Image Differences Between Prospective First-Time and Repeat Visitors to the Lower Rio Grande Valley." *Journal of Travel Research* 30 (2): 3-13.
- Feighey, W. (2003). "Negative Image? Developing the Visual in Tourism Research." *Current Issues in Tourism*, 6 (1): 76-85.
- Foster, J. (1998). *Data Analysis using SPSS for Windows: A Beginner's Guide*. London: Sage.
- Garlick, S. (2002). "Revealing the Unseen: Tourism, Art and Photography." *Cultural Studies*, 16 (2): 289-305.
- Garrod, B. (2007). "A Snapshot into the Past: The Utility of Volunteer-Employed Photography Techniques in Planning and Managing Heritage Tourism." *Journal of Heritage Tourism*, 2 (1):14-35.
- (2008). "Exploring Place Perception: A Photo-Based Analysis.", *Annals of Tourism Research*, 35 (2): 381-401.
- Germain, R. (2004). "An Exploratory Study Using Cameras and Talking Mats to Access the Views of Young People with Learning Disabilities on the Out-of-School Activities." *British Journal of Learning Disabilities*, 32 (4): 170-74.
- Groves, D. L., and D. J. Timothy (2001) "Photographic Techniques and the Measurement of Impact and Importance Attributes on Trip Design: A Case Study. *Loisir et Société*, 24 (1), 311-17.
- Haldrup, M., and J. Larsen (2003). "The Family Gaze." *Tourist Studies*, 3 (1): 23-45.
- Haywood, M. (1990). "Visitor-Employed Photography: An Urban Visitor Assessment." *Journal of Travel Research*, 29 (1): 25-29.
- Hunter, W.C. (2008). "A Typology of Photographic Representations for Tourism: Depictions of Groomed Spaces." *Tourism Management*, 29 (2): 354-65.
- Hurworth, R., Clarke, E., Martin, J., and S. Thomsen (2005). "The Use of Photo-Interviewing: Three Examples from Health Evaluation and Research." *Evaluation Journal of Australia*, 4 (1 & 2): 52-62.
- Jenkins, O. H. (1999). "Understanding and Measuring Tourist Destination Images." *International Journal of Tourism Research*, 1 (1): 1-15.
- (2003). "Photography and Travel Brochures: The Circle of Representation." *Tourism Geographies*, 5 (3): 305-28.
- Jutla, R. S. (2000). "Visual Image of the City: Tourists' Versus Residents' Perceptions of Simla, a Hill Station in North India." *Tourism Geographies*, 2 (4): 404-20.
- Krippendorff, J. (1984). *The Holiday Makers: Understanding the Impact of Leisure and Travel*, translated by V. Andrassy. Oxford: Butterworth-Heinemann.
- Loeffler, T. (2004). "A Photo Elicitation Study of the Meanings of Outdoor Adventure Experiences." *Journal of Leisure Research*, 36 (4): 536-56.
- MacKay, K. J., and C. M. Couldwell (2004). "Using Visitor-Employed Photography to Investigate Destination Image." *Journal of Travel Research*, 42 (4): 390-96.
- MacKay, K. J., and D. R. Fesenmaier (1997). "Pictorial Element of Destination in Image Formation." *Annals of Tourism Research* 24 (3): 537-65.
- Mamiya, C. J. (1992). "Greetings from Paradise: The Representation of Hawaiian Culture in Postcards." *Journal of Communication Inquiry*, 16 (1): 86-101.
- Markwell, K. W. (1997). "Dimensions of Photography in a Nature-Based Tour." *Annals of Tourism Research*, 24 (1): 131-55.
- Marwick, K. (2001). "Postcards from Malta: Image, Consumption, Context." *Annals of Tourism Research*, 28 (2): 417-38.
- Milman, A., and A. Pizam (1995). "The Role of Awareness and Familiarity with a Destination." *Journal of Travel Research* 33 (1): 21-27.
- Molina, A., and A. Esteban (2006). "Tourism Brochures: Usefulness and Image." *Annals of Tourism Research* 33 (4): 1036-56.
- Morgan, N., and A. Pritchard (1998). *Tourism Promotion and Power: Creating Images, Creating Identities*. Chichester: Wiley.
- Oku, H., and K. Fukamachi (2006). "Preferences in Scenic Perception of Forest Visitors Through Their Attributes and Recreational Activity." *Landscape and Urban Planning*, 75 (1): 34-42.
- OPENspace (2005). "Evaluation of Visitor Experience at Ynyslas/Dyfi National Nature Reserve." Final Report, Countryside Council for Wales, March.
- Pike, S. (2002). "Destination Image Analysis: A Review of 142 Papers from 1973 to 2000." *Tourism Management*, 23 (5), 541-49.
- Pritchard, A. (2001). "Tourism and Representation: A Scale of Measured Gendered Portrayals." *Leisure Studies*, 20 (2), 79-94.
- Pritchard, A., and N. Morgan (2003). "Mythic Geographies of Representation and Identity: Contemporary Postcards of Wales." *Tourism and Cultural Change*, 1 (2): 111-30.
- Rapport, F., Doel, M. A., and G. Elywn (2007). "Snapshots and Snippets: General Practitioners' Reflections on Professional Space." *Health and Place*, 13 (2): 532-44.
- Scarles, C. (2004). "Mediating Landscapes: The Processes and Practices of Image Construction in Tourist Brochures of Scotland." *Tourist Studies*, 4 (1): 43-67.
- Schuster, E., Johnson, S., and J. Taylor (2004). "Wilderness Experience in the Rocky Mountain National Park 2002." Report to RMNP, USGS Open File Report 03-445, January.
- Stedman, R., Beckley, T., Wallace, S., and M. Ambard (2004). "A Picture and 1000 Words: Using Resident-Employed Photography to Understand Attachment to High Amenity Places." *Journal of Leisure Research*, 36 (4), 580-606.
- Tasci, A. D. A., and W. Gartner (2007). "Destination Image and its Functional Relationships." *Journal of Travel Research*, 45 (4): 413-25.
- Tasci, A. D. A., Gartner, W. C., and S. Tamer Cavusgil (2007). "Conceptualization and Operationalization of Destination Image" *Journal of Hospitality & Tourism Research*, 31 (2): 194-223.
- Taylor, J. G., Czarnowski, K. J., Sexton, N. R., and S. Flick (1995). "The Importance of Water to Rocky Mountain National Park Visitors: An Adaptation of Visitor-Employed Photography to Natural Resources Management." *Journal of Applied Recreation Research*, 20 (1): 61-85.
- Teymur, N. (1993). "Phototourism—or, the Social Epistemology of Photography in Tourism." *Tourism in Focus*, 6 (6): 16.
- Tuohino, A., and K. Pitkänen (2004). "The Transformation of a Neutral Lake Landscape into a Meaningful Experience—Interpreting Tourist Photos." *Journal of Tourism and Cultural Change* 2 (2): 77-93.

- Urry, J. (1990). *The Tourist Gaze: Leisure and Travel in Contemporary Societies*. London: Sage.
- Uzzell, D. (1984). "An Alternative Structuralist Approach to the Psychology of Tourism Marketing." *Annals of Tourism Research*, 11 (1), 79-99.
- Waitt, G., and L. Head (2002). "Postcards and Frontier Mythologies: Sustaining Views of the Kimberley as Timeless." *Environment and Planning D: Society and Space*, 20: 319-44.
- Wang, C., and M. A. Burris (1997). "Photovoice: Concept, Methodology and Use for Participatory Needs Assessment." *Health and Behavior*, 24 (3): 369-87.
- Weber, R. (1990). *Basic Content Analysis*. Newbury Park: Sage.
- Yamashita, S. (2002). "Perception and Evaluation of Water in Landscape: Use of Photo-Projective Method to Compare Child and Adult Residents' Perceptions of a Japanese River Environment." *Landscape and Urban Planning*, 62 (1): 3-17.
- Ziller, R. C., and D. Lewis (1981). "Orientations: Self, Social and Environmental Precepts Through Autophotography." *Personality and Social Psychology Bulletin*, 7 (2): 338-43.

Brian Garrod is a senior lecturer in tourism management at the Institute of Biological, Environmental and Rural Sciences (IBERS), Aberystwyth University.