

# **Using the WWW to Develop Cultural Heritage Destinations: an Exploratory Study**

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## **Introduction**

Cultural heritage tourism refers to "visits by persons from outside the host community motivated wholly or in part by interest in the historical, artistic, scientific or lifestyle/heritage offerings of a community, region, group or institution" (Lord, 1999). Cultural heritage tourism is a fast growing, multi-faceted, quickly evolving form of tourism that sometimes evades established definitions. In some respects it looks like a specialty segment of the tourism and travel industry, one of hundreds of tourism specialties that have arisen alongside mass tourism. In other respects it looks like an adjunct or complement to mainstream pleasure tourism or business travel. Cultural heritage tourism is being developed both as a primary objective and as a by-product of other activities by a wide variety of players, including economic development projects, museums, ethnic groups, travel agencies, educators, international agencies, and entrepreneurial local development agencies.

A properly developed cultural heritage tourism industry is increasingly advocated as an attractive alternative to mass tourism, providing sustainable livelihoods to small local operators, protecting and sustaining the cultural resource, and educating visitors and locals alike (e.g. NWHO, 1999). However, transformation of cultural heritage sites into travel destinations is seldom straightforward. Cultural heritage sites are often maintained by groups whose primary responsibility is conservation of the physical assets of heritage, especially built environments, artefacts, or other forms of material culture. Development of travel destinations around cultural heritage sites is a newer and sometimes secondary concern often arising from the need to generate revenue to help support conservation efforts. Conservation and preservation along with developing and managing visitation are thus major issues facing the cultural heritage tourism sector.

Like other parts of the tourism and travel industry, cultural heritage tourism is certain to become increasingly reliant on information and communication technologies (ICTs) for purposes of promotion, distribution, and delivery of products and services. Web-based electronic commerce, in particular, is profoundly affecting business models and distribution channels across the entire travel and tourism industry. Many actors in the cultural heritage industry are beginning to provide global visibility to heritage attractions by placing material on the World Wide Web. Undoubtedly, through their greatly enhanced richness and reach, the new interactive ICTs are opening up new horizons for the cultural heritage tourism industry. While ICTs provide powerful tools for promotion and delivery of tourism products and services, the real challenges lie in the development of viable business models for sustainable cultural heritage destinations.

The research reported here is part of a larger project examining the use of electronic commerce, broadly defined, to promote, distribute, and govern protected cultural and natural assets for purposes of sustainable development. The present paper provides an overview of the status of cultural heritage tourism on the WWW, paying particular attention to identification and characterization of online cultural heritage players. After a brief description of the cultural heritage tourism industry and consideration of the ways in which ICTs may be expected to affect this industry, we describe and analyze the presence of cultural heritage tourism on the Web, showing the heterogeneity of this segment of the tourism and travel industry, the diverse origins and forms of this kind of tourism, and the fairly widespread tendency to use cultural heritage

themes to complement and amplify the attraction of places through a process of ancillary branding. We then turn to an analysis of UNESCO World Heritage Sites (WHS) on the WWW. The WHS program is the only internationally accepted mechanism for recognizing and protecting both cultural and natural sites that are deemed to be humankind's irreplaceable cultural heritage. We describe patterns of visibility of the sites designated as cultural on the WWW and show that a small number of them have become highly visible virtual destinations through extensive references to the heritage site by a range of other websites. However, most World Heritage sites are largely invisible on the Web to would-be travelers, and few provide web-based access to travel planning services.<sup>2</sup>

The cultural heritage tourism industry is at a relatively early stage in the process of transformation of heritage places into travel destinations. Moreover, this industry has not yet made widespread systematic use of information, communication, and multimedia technologies for the twin strategic purposes of achieving sustainability and competitive advantage by developing destinations that cater to those segments of the client base that are able to pay for specialized services. Such services might include educational multimedia, volunteer involvement in research, learning vacations, highly customized or personalized visits, etc. This paper is intended to help benchmark the development of what we expect will become a highly interactive, ICT-intensive cultural heritage tourism industry and encourage exchanges among practitioners and researchers regarding the emergence and management of this industry. It also contributes to filling a gap in the literature on visitation to historic sites, much of which has focused on the actual visit (Light, 1996; Moscardo, 1996) and has only occasionally examined the role of virtual visitation and the Internet in the development of destinations (Cano and Prentice, 1998).

### **Cultural Heritage Tourism**

The rapid and widespread growth of the tourism industry, together with the adoption of information technology and the use of the Internet, are driving the development of new niche areas of tourism and new destinations. Changing cultural values, business and national competition for tourism, and information technologies are all facilitating "greater emphasis on more individualistic or specialized forms of holidays" (Rayman-Bacchus and Molina, 2001). Cultural heritage tourism is one of these specialized areas of tourism. An increasing number of areas are being promoted as "heritage" destinations, due to the attractiveness of heritage as part of a travel experience (Herbert, 1995).

Culture and heritage resources are closely related to the development of tourism. Cultural and heritage tourism occurs when "participation in a cultural or heritage activity is a significant factor for travelling" (CTC, 1999). Such tourism involves visitor encounters with an authentic heritage or cultural experience, one that is not created solely or primarily for the purpose of attracting tourists. The concept of cultural heritage is often based on material objects or remains of the past that become invested with values and commodified for tourism (Hewison, 1987; Sletvold, 1996; Robb, 1998). Heritage is found in many forms, with a range of cultural and heritage aspects of each destination attracting the tourist.

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<sup>2</sup> In a forthcoming paper we describe and analyze the ways in which UNESCO World Heritage Sites are becoming Web-supported travel destinations.

World Heritage Sites are considered to be the centerpiece of the global heritage tourism industry, (Shackley, 1998) and the WHS list is growing rapidly (in 2001 there were 694 recognized World Heritage sites). The concept of World Heritage refers to sites that are recognized to be of universal value. The World Heritage designation requires national government nominations and international accreditation. The original purpose of WHS designation was to assist with management and preservation of the cultural heritage site and to encourage the development of management plans (Wagner, 1995). However, designation as a World Heritage site under UNESCO's 1972 World Heritage Site Convention is believed to increase tourist visitation (Shackley, 1998; Carter, Jolliffe and Baum, 2000).

Heritage is a fragile non-renewable resource that must be protected to maintain its authenticity and also to preserve heritage for future generations. Many World Heritage Sites are becoming major cultural tourism attractions of their host country, and are symbols of national character and culture (Ratz and Puczko, 1999; Shackley, 1998). By definition, no two World Heritage Sites are alike. However, they all share common problems such as the need for a critical balance between visitation and conservation (Shackley, 1997). Mutual benefits should be derived for heritage and tourism from the sustainable development of World Heritage Sites (Drost, 1996; Robb, 1996). Many WHS are struggling with the need to attract visitors while trying to deal with their preservation problems. These are related to the deterioration of the heritage resource caused in part by the impact of visitation. Visitor impacts can be reduced by managing visitation as well as by informing visitors of the consequences of their actions (Moscardo, 1996). However, any such policy is only as good as the degree to which it is successfully interpreted to visitors (Robb, 1996).

The managers of heritage attractions thus face a number of challenges in developing responsible and sustainable visitation. The ideological context of heritage tourism is fundamentally different than that of general tourism (Garrod and Fyall, 2000). Admission pricing is one strategy that heritage managers can adopt to control visitation and also to generate revenues in support of preservation. In this respect tourism is regarded as a positive force for the preservation of places designated as World Heritage Sites (Drost, 1996). Studying the attitudes of heritage tourism managers Garrod and Fyall (2000) found that for the most part managers are reluctant to use pricing policy techniques to influence visitor demand. Heritage managers are perhaps prejudiced in this regard by the fundamental mission of heritage attractions, which includes both preserving and providing public access to the heritage places they manage. This observation is supported by previous research on heritage tourism (Balcar and Pearce, 1996) that found that site owners and managers had differing views on the importance of preservation versus the visitor experience. The nature of access, which in the past has relied largely on the physical visit, is of course changing with the use of the Internet to support virtual visitation.

Tourism relating to heritage and culture is growing quickly. The Canadian Tourism Commission (CTC) reports that cultural and heritage tourism is growing at a rate of 15% annually in Canada. The World Tourism Organization (WTO) reports that 37% of all international trips include a cultural component (CTC, 1999). In 1999 alone approximately 54 million adults had visited a museum or historical site in the past year (TIA, 1999).

## Stalking the Cultural Heritage Tourist

Who are cultural heritage tourists? In North America they are highly educated, well-travelled baby boomers (CTC, 1999). Travelers who include cultural events on their trips are more likely to have substantially higher than average household incomes (TIA, 1998). They are often professionals 33-44 years of age with post secondary education (CTC, 1999). Learning-oriented travel is an important niche market among this audience. Family groups consisting mainly of baby boomers and their children make up a key audience to cultural heritage attractions (Rubenstein and Loten, 1998). US cultural heritage tourists spend more money per trip than the average traveler, travel for longer periods of time, are more likely to have a graduate degree, and are more likely to spend more than \$1000 when they travel (TIA, 1997).

These are the general demographic characteristics of mainstream North American cultural heritage tourists as reported in the tourism literature. However, the segments of cultural heritage tourism are not well described. Two dimensions of segmentation are mentioned in the literature. The first dimension might be called affiliation: it measures degrees of the tourist's motivation to visit a particular cultural heritage attraction, ranging from very motivated to indifferent. According to Gail Dexter Lord (1999), 15% of tourists travel to a place specifically because of its cultural attractions. These 'greatly motivated' tourists represent the core of cultural tourism and are usually the ones targeted by the heritage attraction's marketing campaigns. However, most cultural heritage tourism activities are complements to other travel activities. The US National Endowment for the Arts defines cultural tourists as special interest travelers who rank the arts, heritage and/or other cultural activities as one of the top five reasons for traveling (NEA 1999). In 1997, 92.4 million (46%) of US travelers included a cultural, arts, heritage or historic activity while on a trip of 50 miles or more (TIA, 1998). 29% or 26.7 million travelers added extra time to their trip because of a cultural activity or event (ibid.). Lord (1999) estimates that about 30% of tourists visit a destination partly because of the heritage attraction and partly for other reasons. A further 20% visit a destination primarily for other reasons but will plan to visit a cultural heritage attraction while at the destination. Another 20% are 'accidental cultural heritage tourists' who do not plan to visit a cultural heritage attraction but end up doing so because of friends or family. The final 15% are not likely to visit a cultural heritage attraction. Lord advocates developing demand for cultural heritage tourism products and services by broadening the market toward those tourists who consume these products and services as part of a larger travel experience, i.e. develop cultural heritage tourism activity as an adjunct or complement to a destination visitation.

The second segmentation dimension might be called the specialization dimension, measuring the relative breadth of categories of cultural heritage tourism. For example, a broad category might be 'museums' while subcategories might be 'art museums', 'science museums', 'children's museums', 'historical museums', etc. Such taxonomies are frequently used to list and organize information about cultural heritage tourism, but it is not clear how closely these official classifications correspond to tourists' conceptualization of cultural heritage tourism destinations and events. Clearly the tourist's awareness, prior knowledge and experience, cultural identity, and perception of quality and value are factors that affect motivation to visit and selection of travel experiences (Murphy, Pritchard, and Smith, 2000; Ryan, 1998). A further twist in the

segmentation and dynamics of cultural heritage tourism is the increasing interest and participation in this kind of tourism by diaspora groups of non-European origin.<sup>3</sup>

The field of cultural and heritage tourism is of such breadth as to permit a proliferation of categories of attractions. Museumland.com, a European Union-supported portal for museums and cultural heritage, organizes attractions into 45 categories (see Table 1) spanning a huge range of contemporary cultural productions and historical resources and sites. The enormous range of choice in cultural and heritage tourism favors part-time consumers of cultural heritage travel experiences, who however are less discriminating than the 'very motivated' minority of cultural heritage tourists.

**Table 1: categories of historical and cultural attractions covered by Museumland.com**

Abbey, Air, Aquarium, Archaeological, Archives, Art Gallery, Artistic, Biological Park, Botanical Garden, Car, Castle, Children Museums, Church Collection, Collection of Regalia, Decorative Arts, Design & Architecture, Ethnological, Famous people houses, Gallery, Garden, Historic, Industrial, Library, Maritime, Mineralogy, Monument, Music, National Park, Natural, Natural Reserve, Nature, On line exhibition, Photographic, Planetarium, Religious, Scientific-Technological, Sculpture Park, Transport, Tropical Garden, University, Virtual Museum, War, Wax, Wildlife Park, Zoo

### Web Based Visitation and Cultural Heritage

The travel and tourism industry, historically a fast adopter of information and communication technologies, has become a major driver of internet-based e-commerce. While growth of other forms of consumer e-commerce leveled off, online travel spending increased by 17% in 2000, reaching \$1.2 billion in January 2001 (Nielsen/Net Ratings 2001) and accounting for nearly a third of all e-commerce sales transactions (ibid). Furthermore, the rate of visitation of travel-related websites is increasing rapidly and online travel sites also stimulate a large amount of offline revenue. In January 2001 online travel sites resulted in an additional \$681 million in offline revenues (ibid).

Rapid advances in ICTs challenge the tourism and travel industry at many levels because they deeply affect the organization and governance of tourism and travel value chains and thus the economics of the industry (Buhalis, 1998, 2000; Werthner and Carter, 1999; O'Connor, 1999; Frew, 2000). Web-based visitation is becoming commonplace as the tourism industry adopts networked interactive multimedia technologies for purposes of promotion, communication, and coordination. The adoption of web technologies in this industry is affecting the ways that tourists become aware of destinations, the ways that tourists select destinations, and the ways that tourists experience destinations.

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<sup>3</sup> Different groups with claims on cultural heritage may expect a heritage site to play different or incompatible symbolic roles, provoking "dissonance" around the site and complicating the packaging, presentation, and marketing of a site for cultural heritage tourism purposes. Two recent articles illustrate this point. Finley (2001) describes how the coastal slave forts of Ghana, now transformed into World Heritage monuments, become "battlegrounds ... for symbolic possession of the past," representing different things to Ghanaians, African Americans, and white North Americans and Europeans. Light (2000) describes the ways in which Eastern European countries' attempts to develop post-communist identities (in part through tourism) must accommodate tourists' interests in the heritage of communism.

Often a direct relationship is assumed between the visibility of a destination in a medium and tourism demand to experience the destination. In the early years of the WWW, it has been possible to stimulate latent demand for visitation to heritage attractions by the use of the Internet (Davis and Prentice, 1995). The WWW is introducing many tourists to the global scale of cultural heritage tourism, exposing them to locations they might have never known existed. But opportunities are shifting away from traditional intermediaries toward new intermediaries and destinations offering “individual travel and dynamic packages, and targeting minisegments” (Buhalis, 1998). The proliferation of tourism attractions and the superabundance of information on the Web create confusion in the mind of the consumer, leading to the need for new travel intermediaries to filter information, to recommend, and to act as gatekeepers providing access to customized experiences (Olsen and Connolly, 2000). It is in the interest of tourism and travel services to play this role and bundle and package travel experiences in order to resist price-based commodification of tourism services. A tourism attraction has four basic options for reaching the customer. The first is to dispense entirely with intermediaries and communicate directly with the customer. The second is to band together with similar attractions and market the entire vertical category. The third is to band together with complementary cultural heritage tourism attractions to create a cultural heritage destination. The fourth is to associate the cultural attraction as an adjunct to non-cultural attractions in a destination that uses heritage as one theme among others (Lord, 1999 and others).

In order to attain awareness by international tourists and become part of their travel plans, attractions and sites will increasingly have to be incorporated into online Destination Management Systems (DMS). Destination management systems are a “combination of technology enablers and demand drivers” that “provide timely, appropriate, and accurate information to consumers” for purposes of demand development and travel planning. They are “increasingly regarded as amalgams of small and medium enterprises” (Buhalis and Spada, 2000) that, along with other private and public actors in the tourism industry, constitute themselves into virtual tourism destination marketing organizations (Palmer and McCole, 2000). A destination management system serves multiple constituencies (notably tourism suppliers, tour operators, public sector actors, travel agents, and travelers), each of which seeks different features in the system.<sup>4</sup> Furthermore, technological developments can be expected to lead to multichannel multimedia DMS serving purposes not only of travel information distribution, planning, and fulfillment, but also of travel-related education and entertainment. Increasing complexity of DMS technology and increasing reliance on interactive destination sites as part of the tourism and travel experience will undoubtedly require destinations to make significantly greater investments in their ICT communication and coordination platforms.

Branding combines the marketing of products and services with the commodification of culture, heritage and place. The diffusion of interactive media within the tourism industry and among consumers can be expected to lead to rich interaction throughout the entire customer transaction cycle (Gretzel, Yuan, and Fesenmaier, 2000), in effect extending the visit from the moment the tourist becomes aware of an attraction to the moment the tourist has returned from a visit and

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<sup>4</sup> Buhalis and Spada (2000) describe different stakeholder groups’ expected functionalities of Destination Management Systems in terms of success criteria.

ceases contact with the attraction – a moment that relationship-based marketing of attractions will attempt to postpone indefinitely. This interactivity is the foundation of branding in cyberspace. A unique attribute of heritage consumption is that its benefits are experiential and may be divorced from the place itself (Prentice, 1993). Multimedia technologies can extend the tourism experience across space and time. Cultural heritage tourism seems especially amenable to this technology-mediated visitation because visual and auditory images are so central to its experience. The heritage tourism destination is an ideal candidate for branding through the use of the World Wide Web. A web site helps to develop images and perceptions based on the characteristics and information given on the site. This is important because images of potential destinations generate a set of expectations about a place before that place is actually experienced (Cano and Prentice, 1999), determining a destination's potential for satisfaction (Coshall, 2000). Virtual travel experiences, developed to engage the potential tourist and intended to induce a physical visit, may take on a life of their own and come to substitute for an actual visit. This is especially appropriate in the case of heritage sites in which physical visitation is discouraged in order to conserve the resource, or is not possible for financial or other reasons. At the same time, as the virtual tourist's need for heightened and unique stimulation increases, the need for content and context authenticity is enhanced (Cloete and Jackson, 2000). Mass tourism is potentially detrimental to most cultural heritage resources. In many cases, for example at the Angkor World Heritage Site, it is inappropriate (Wagner, 1995). However, networked interactive multimedia technologies are ideal instruments to support segmentation of the customer base. This permits selection of those customers having the best fit with the destination, delivery of education and information at a distance, and production of simulated experiences for those visitors who might not have access to the real thing.

The inclusion of heritage sites on the World Heritage List provides a powerful branding of world culture that contributes towards developing the brand image of the particular WHS. The UNESCO designation is regarded as an obligation to both preserve and promote the destination (Drost, 1996). However, the development of destinations also involves the desire on the part of communities to develop their resources for tourism (Lord, 1993). Not all communities may be willing or able to develop as heritage destinations. This factor may account in part for the differences in the Web presence of cultural heritage destinations, such as World Heritage Sites.

### **The Presence of Heritage Tourism on the Web**

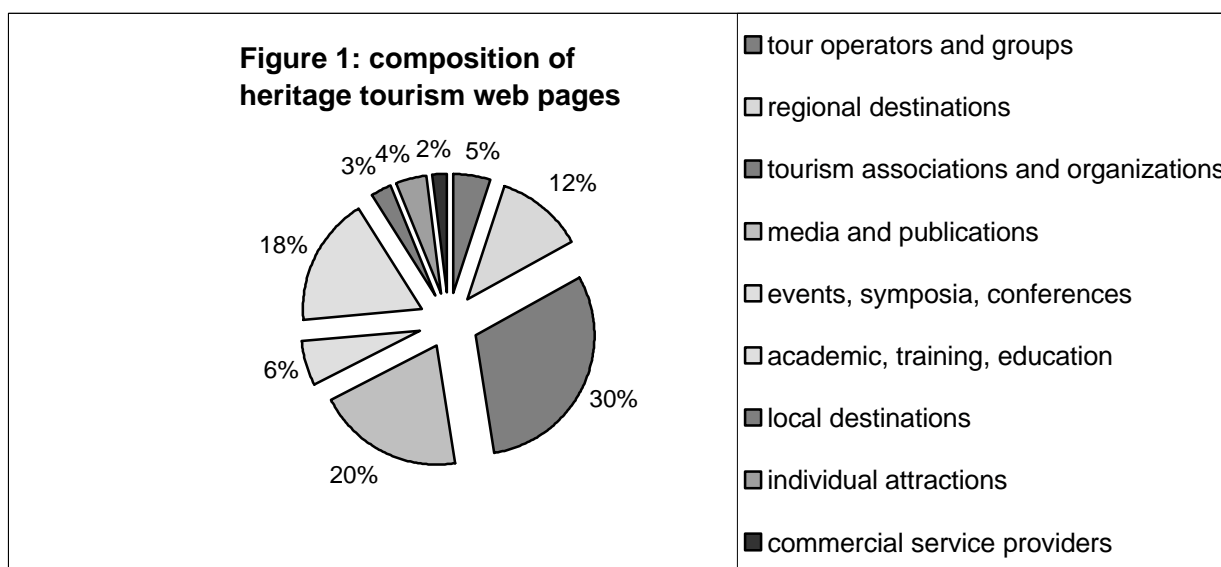
Earlier we saw that “heritage tourism” is a fairly heterogeneous category containing a variety of actors and carrying a range of meanings. In this section we follow a hypothetical novice tourist with a newly awakened interest in heritage tourism onto the Web in search of heritage travel experiences: “regular” experiences in the form of any attractions claiming to be heritage attractions, and “premium” experiences among UNESCO-recognized World Heritage Sites.

Several typologies have been proposed for classifying websites (for a useful review see Pan and Fesenmaier, 2000). In this paper we are not attempting to characterize the features or contents of cultural heritage websites. Instead, we are beginning to map the Web presence of the various players in the cultural heritage tourism value chain in order to understand how they combine to form a cultural heritage destination. Using Google, a search engine known for its relatively broad coverage of the Web, we used the term “heritage tourism” to search for information about heritage destinations. We examined the information in the first two hundred of the more than



15,000 web pages found by the search engine, and we classified these pages into the following categories of heritage tourism players: 1) tour operators and tour groups; 2) regional destinations; 3) tourism associations and organizations; 4) media and publications; 5) events, conferences, and symposia; 6) academic, training, or educational sites; 7) local destinations; 8) individual attractions such as historic sites, museums, or resorts; and 9) commercial service providers. The results are shown in Figure 1.

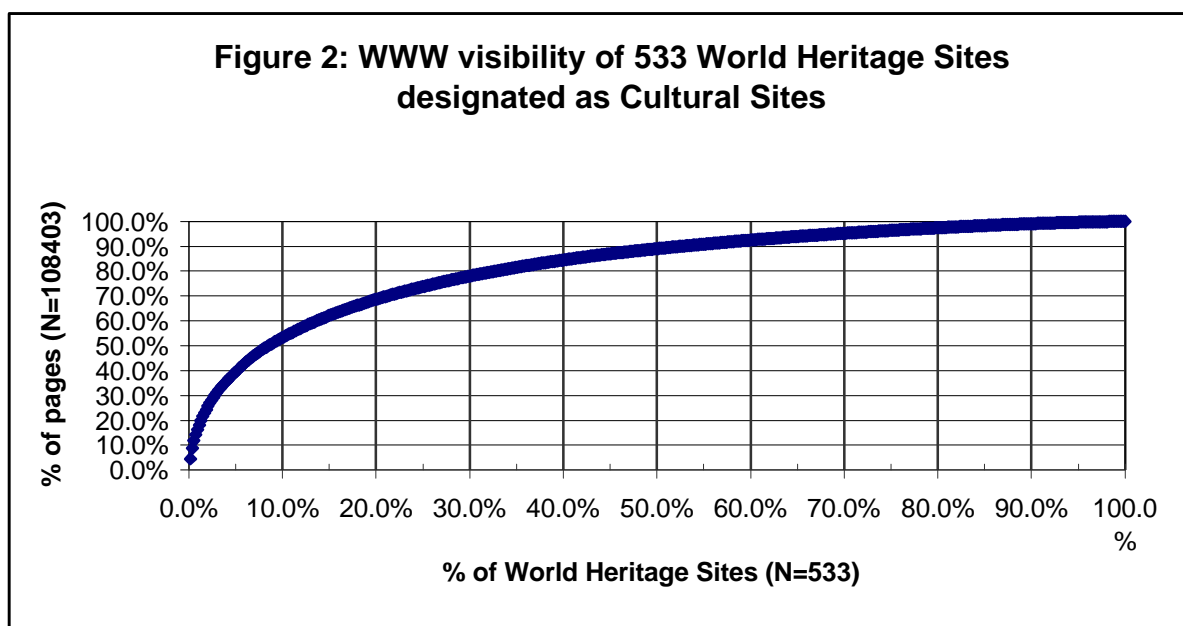
Figure 1 shows the extent to which intermediaries predominate in the communication of heritage tourism information on the WWW. Only four percent of the web pages in our sample present information about individual heritage attractions such as heritage centers or museums. Local and regional heritage destinations make up 3% and 12% of the pages, respectively. These destinations typically bundle a variety of tourism services and market them under the destination's brand. Tour operators and tour groups account of 5% of the heritage tourism pages. These operators and groups usually provide service, often themed, to tourists in a relatively small range of destinations. Thus, a quarter of heritage tourism web pages are primarily devoted to promotion of heritage attractions and sites.



The other three-quarters of heritage tourism pages are not primarily about heritage tourism sites or attractions but about the work of heritage tourism. The largest group of pages (30%) is that of heritage tourism associations and promotional organizations, which are often devoted to their development plans, programs, and projects. 20% of the heritage tourism web pages have to do with tourism talk (publications, discussion lists, or press releases) and 6% with conferences and other events. 21% of the pages concern education, training, or academic institutions. A small fraction (2%) represents providers of service to the heritage tourism industry (for example, consulting firms). No major comprehensive portal sites appear to exist for heritage tourism.

As noted earlier, recognized World Heritage Sites are regarded as a premium heritage tourism brand. Of the 694 recognized World Heritage Sites in May, 2001, 533 are designated as cultural

sites.<sup>5</sup> We searched for each of these 533 official UNESCO World Heritage Sites on Google, using the name of the site as provided by the English-language list of sites and the phrase “world heritage,” in order to ascertain the number of pages on the Web referring to each WHS as a heritage site.<sup>6</sup> We identified over 108,000 web pages referring to one or more of the 533 World Heritage Sites.<sup>7</sup> Figure 2 shows the distribution of these web pages among the 533 sites.



A small proportion of cultural World Heritage Sites enjoys a disproportionate share of visibility on the WWW.<sup>8</sup> The top 5% of the sites enjoy about 39% of all visibility gained by cultural WHS on the Web. The top 10% of the sites receive 53% of the visibility, the top 25% receive nearly three-quarters of the visibility, and the top 50% of the sites receive about 90% of the visibility. Table 2 shows the top 25 cultural WHS. They represent 4.7% of all cultural World Heritage Sites and 38% of all web pages referring to these sites.

Why do such a small number of sites account for the visibility of WHS on the WWW? This visibility can be interpreted in terms of a number of factors identified earlier in this paper. These include the maturity of individual World Heritage Sites (for example, the Historic Center of Rome), the general awareness among travelers of them as “branded heritage destinations,” (for example, the Great Wall of China or Angkor), and the extent of development of the cultural heritage tourism industry around the site. For example, 17 of the top 25 cultural World Heritage Sites are historic cities possessing a well developed tourism infrastructure, including specialized service providers and ancillary cultural attractions. The other principal factor is the degree of use

<sup>5</sup> 138 are designated as Natural sites, and 23 are designated as Mixed sites. The following analysis pertains only to the 533 Cultural sites.

<sup>6</sup> By “referring” we mean that the page contains the name of the individual WHS plus the term “world heritage” in English. Neither search term need be a hyperlink, although it may be.

<sup>7</sup> Because of inconsistent results by different researchers during the course of this work (apparently due in part to fluctuations in the Google data base), we completed the exercise three times and averaged the results.

<sup>8</sup> In other words, visibility is distributed according to Zipf’s Law.

of new information and communication technologies (ICTs) by heritage sites and their supporting industry.

Awareness of a WHS as a heritage destination takes time to emerge, and visibility of a WHS on the Web seems also to be related to the level of maturity and development of the WHS. For example, although The Old City of Jerusalem was inscribed on the World Heritage List in 1981, this particular WHS has been a heritage travel destination for centuries. Several other WHS have served as popular tourism destinations before acquiring the WHS designation. Obvious examples are the Great Wall of China, the Historic Center of Rome, Angkor, and the Taj Mahal. Several of the other sites, for example the Canadian and Mexican sites, appear on the other hand to be cases of successful deliberate branding and promotion of destinations as cultural heritage destinations under the WHS banner.

**Table 2: Web Visibility of 25 Most Web-Visible Cultural World Heritage Sites**

No.	Country	WHS	yr established	Referring pages	% of total references to cultural WHS
1	China	The Great Wall	1987	4883	4.5%
2	Italy/Holy See	Historic Centre of Rome	1980	4570	4.2%
3	Japan	Historic Monuments of Ancient Kyoto	1994	3440	3.2%
4	Canada	Historic Area of Quebec	1985	2615	2.4%
5	Jerusalem	The Old City of Jerusalem and its Walls	1981	2100	1.9%
6	Italy	Venice and its Lagoon	1987	2095	1.9%
7	Italy	Historic Centre of Florence	1982	1865	1.7%
8	Hungary	Budapest	1987	1830	1.7%
9	Czech Republic	Historic Centre of Prague	1992	1600	1.5%
10	Turkey	Historic Areas of Istanbul	1985	1430	1.3%
11	Cambodia	Angkor	1992	1430	1.3%
12	India	Taj Mahal	1983	1413	1.3%
13	Greece	Medieval City of Rhodes	1988	1185	1.1%
14	Japan	Hiroshima Peace Memorial (Genbaku Dome)	1996	1180	1.1%
15	Japan	Historic Monuments of Ancient Nara	1998	1165	1.1%
16	Croatia	Historic Complex of Split with the Palace of Diocletian	1979	1084	1.0%
17	Nepal	Kathmandu Valley	1979	980	0.9%
18	United Kingdom	Hadrian's Wall	1987	931	0.9%
19	Thailand	Historic City of Ayutthaya and associated historic towns	1991	903	0.8%
20	Mexico	Rock Paintings of the Sierra de San Francisco	1993	862	0.8%
21	Spain	Cathedral, the Alcazar and Archivo de Indias, Seville	1987	818	0.8%
22	Spain	Old City of Salamanca	1988	807	0.7%
23	Ecuador	Old City of Quito	1978	783	0.7%
24	Cuba	Old Havana and its Fortifications	1982	774	0.7%
25	Croatia	Old City of Dubrovnik	1979	772	0.7%

Our review of the cultural heritage tourism industry has shown how broad and variegated this segment of tourism is. Individual web sites offering information on WHS are set up by a wide variety of organizations with overlapping jurisdictions, including tour operators, national, regional and local organizations, and of course the operating agencies of the sites themselves. These actors are promoting the same World Heritage Sites for differing reasons, but their shared

interest is to increase awareness of the WHS, although not necessarily to maximize physical visitation.

The availability of information and communication technologies (ICTs) and acceptance of them by the tourism industry varies from country to country. As previously discussed the travel and tourism industry and its heritage destinations are ideal candidates for using interactive technologies to attract visitors. Acceptance of the use of this new media may account for the increased visibility of WHS sites from more developed countries, such as Australia, Canada, the United States, Japan and Italy.

Finally, our inclusion of the English-language search term “world heritage” biased our portrait of World Heritage Sites on the WWW in favor of those that are able to promote their product in English. Although English is the lingua franca of the WWW, multilingual promotion is clearly necessary to position a site in specific travel markets.

These observations may indicate a cycle in developing visibility of WHS on the Web that is related to their maturity as World Heritage Sites, acceptance of ICTs in the aid of fulfilling their preservation and public access mandates, and development of a local supporting service industry. Also, it is likely that in several cases, current high levels of Web visibility are related to high levels of pre-Web awareness among travelers and travel organizations. However, the visibility of a WHS on the WWW could become a key factor in the emergence of the WHS as a virtual heritage destination that influences the actual pattern and nature of physical visitation. For new and emerging destinations (such as many of the World Heritage Sites), a significant web presence is likely to be increasingly influential in determining the traveler’s decision to visit.

## **Conclusions**

As indicated by a recent WTOBC (1999) study, if travel destinations are not on line then they are not on sale in key markets. Our review of the cultural heritage tourism literature and related Web-based visitation issues provides a context for understanding the emergence of a cultural heritage presence on the WWW. Difficulties in defining an industry whose partners (commercial tourism operations as well as not for profit heritage places) operate under differing missions extend to the examination of the emerging presence of such tourism on the Web. Here a number of actors are involved in the emergent online "cultural heritage tourism" sector, making various contributions to the visibility of this segment of tourism on the WWW.

Curiously, no major portal sites exist for heritage tourism as a whole. If portals existed they would lead the potential “heritage visitor” directly to a site that would offer an entry point to the “heritage experience” that is the basis of cultural heritage tourism. A portal website can provide information and links to related organizations of interest to the visitor as well as practical travel information. Portal sites could serve as a gateway for visitors, and ideally, allow visitors to plan their trips from one website, to make the process as easy as possible. No individual World Heritage destination appears to be making use of a dedicated Destination Management System.

Examining the presence of every one of the 533 cultural World Heritage Sites on the Web, we found that a small percentage of such heritage sites account for a relatively large proportion of the visibility of all cultural World Heritage destinations. This highly concentrated visibility can

be understood in terms of the emerging status of the cultural heritage tourism industry and also in terms of a number of other factors relating to the development of these sites and their use of information and communication technologies (ITCs) for purposes of communication and travel facilitation. Previous research has suggested that electronic destinations can be constructed through networks of hyperlinks among players in the tourism value chain (Palmer and McCole, 2000). Our findings suggest that volume of mentions, whether hyperlinked or not, are a feature of the hierarchy of presences of cultural heritage destinations on the WWW. In this paper we have not attempted to relate the WWW visibility of a cultural heritage destination with that destination's competitiveness or with the nature or quality of visitation generated by the Web presence. These are tasks for future research.

This paper contributes to an understanding of the role of information and communication technologies (ICTs) in the growth of heritage tourism destinations. The cultural heritage tourism sector seems slow to adopt these technologies. This is reflected by the rather low visibility of most World Heritage Sites on the Web and may be explained in part by the documented tensions between preservation and visitation, conservation and promotion that pervade the industry. The heritage mission has therefore possibly moderated the development of cultural heritage tourism as an industry and has contributed to resistance to adopt new technologies to foster the development of WHS as heritage destinations through use of the WWW. As the cultural heritage tourism industry progresses in its adoption of new technologies to fulfill its mandates, we expect to see a transformation of this industry with more heritage places becoming Web-supported travel destinations. In a forthcoming paper we will further explore and analyze this trend, using our case study group of all 694 UNESCO World Heritage Sites.

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