

# 21 Tourism Policies for Communicating World Heritage Values: The Case of the Old Town of Corfu in Greece

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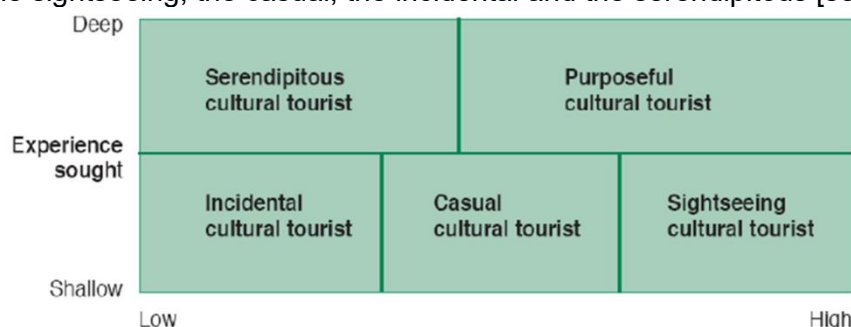
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## 21.1 Abstract

The use of multimedia tools for the promotion of cultural heritage and the creation of interactive gamification environments can support learning and have been in the center of mixed reality research for years. This paper presents a work-in-progress that has been designed for deeper access to cultural knowledge, with the use of different technologies and addressed to different user categories. The “360° interactive visual Corfu guide” is a tool aimed for visitors that focuses at the cultural and historical familiarization with monuments and offers high interactivity with several points of interest, with no physical visit necessary. The project utilizes 360o videos in order to create immersive and authentic experiences.

## 21.2 Introduction

World Heritage Sites are highly touristic destinations that welcome several kinds of visitors on a yearly basis. Before travelling, a visitor usually prepares the visit by searching information about the destination beforehand either from a website, a travel guide or some other traditional promotional means. The amount and kind of information seeking depends on the level of knowledge the visitor wishes to acquire according to different tourist typologies. Tourist behavior analysis has shown that when visiting a cultural destination, the interest to gain deeper knowledge of the destination’s culture increases, as the mankind’s inherent curiosity and desire to explore cultural identities across the world is one of the main motivations of tourism [see 1]. According to tourist typologies, visitor behavior has been categorized based on the visitor’s travel experience and motivation for holiday-taking into the above: the purposeful, the sightseeing, the casual, the incidental and the serendipitous [see 2&3].



**Figure 1:** Tourist typologies according to the importance of cultural tourism

The purposeful cultural tourist commonly has a primary motivation to live a deep experience of the destination's culture. The serendipitous cultural tourist usually experiences sightseeing gaining some knowledge of the destination's culture. The casual and incidental tourist usually choose a destination due to other reasons, such as sea, sun, sports, etc, yet while visiting they are engaged to some cultural activity and get a shallow knowledge of the destination's culture. There are two basic dimensions in the segmentation of the cultural tourism market: (i) the importance of cultural motives in the decision to visit a destination and (ii) the depth of experience [see 2]. Visitor behavior seems to be determined by their attitudes, actions and motivations [see 3].

### **21.3 Worldschooled and incidental learning in travelling**

Learning is a continuous process not only referring to students or academic learners. Anyone can be a potential learner, because learning can be formal, non-formal and informal [see 4]. When referring to travelling, a new pedagogical approach for learning rises, which is called "worldschooling". This term was first mentioned by Gerzon [see 5] who is a traveler and writer, and defines it as "... when the whole world is your school, instead of school being your whole world". Worldschooled, regardless of demographic characteristics and personal interests, promotes human development at three areas: social and personal development, and experiential academics [see 6]. For the personal development which is related to the cultivation of everyday life skills and lifelong learning, knowledge is constructed through out-of-classroom experiences.

Toward this direction, travelling can be educational because it broadens the mind as people learn and interpret experiences [see 7]. There are also many times when a visitor travels without having planned visits to museums or archaeological sites, and without intention to learn deeply about the place he visits but travels solely for purposes of recreation or relaxing. This visitor can come across many interesting sites and coming in contact with new environments he can learn effortlessly without having sought it at first. This process is called "incidental learning". As in incidental learning there is a sense of unplanned process without existing a specific intention to learn, purpose and goal-driven [see 8], the "learner" learns through an activity quite unrelated to the educational process and thus not directly perceived by the learner himself but also by others [see 9].

### **21.4 Smart education, learning and smart technologies**

When Aristotle was referring to *techne*, *episteme*, and *phronesis*, defined the theoretical framework for learning and travel [see 10]. *Techne* is the knowledge of craftsmanship, *episteme* is the propositional knowledge, and *phronesis* is the wisdom. A visitor can meet all three of these elements in the new places he discovers. The opportunity of travel promotes skills and cutting edge technologies can forward, and reinforce the random or incidental learning, and transform it into deliberate learning. Thus, travelling can be emerging as the platform supporting the new pedagogy of the 21st century, which focuses to the ability to learn, communicate, collaborate, participate, explore and create. These skills are known as "the 4 Cs": critical thinking, communication, collaboration, and creativity [see 11]. In the service of 4 Cs, the current trend of education, "Smart Education", offers through technological development, smart learning environments providing experiences to learners [see 12&13]. There are many different types of technology used to sustain, and enhance "smart" learning. Devices, and technologies are inextricably linked [see 12]. Smart devices, which are small, portable, and affordable (e.g. smartphones/tablets, laptop, Google glasses etc.), support learners anytime, and anywhere and smart software provides adaptability, and flexibility. Thus, learning can be succeed easily and effortlessly, as most people always carry small portable

devices such as mobile phones and tablets, especially the latest technology that supports "smart" technologies.

## **21.5 Learning from technology in tourism and travelling**

Nowadays, culture and tourism sectors are constantly looking for new means of visitor engagement [see P14]. Especially in the field of cultural heritage tourism, the utilization of new and innovative technologies enhances the learning experience of the visitor [see 15] and maximizes user satisfaction and understanding of a destination [see 16]. Web-based applications in cultural tourism make cultural heritage accessible to all [see 17] offering interaction with different options and different levels of information according to one's interest. Travellers, generally, have their mobile phones to communicate and/or take pictures. In Smart Cities, i.e. the cities which represent an environment where technology is embedded within the city [see 18], it is very likely to find points of interest with QR Codes. Mobile apps based on virtual and augmented reality allow visitors by shooting a QR Code or an exhibit to discover other information. There is also the possibility for visitors to add their own information and their own content and from simple visitors to transform themselves into product designers as expert content, a process that activates the principles of learning by design. Thus, symptomatic learning is transformed into deliberate and systematic. Learning by Design is not simply an exercise in applying the new digital media to learning but is an attempt to create social relations of learning and collaborative relations of pedagogical design [see 19&20].

The uses of Digital Cultural Products, which are basically constructed with interactive 3D models, are autonomous and offer interactive experience, creating new conditions for cultural tourism. This interaction takes on elements of game experience [see 21]. Such Digital Cultural Products is the Virtual Guide for physical visitors which will be able to learn by exploring, guided by virtual agents [see 22], and Virtual Tours, aimed at remote visitors - internet users [see 23]. 3D-holograms and telepresence devices promise to eliminate geographical distance enabling travellers to be virtually present in any location at any time. An interactive system with virtual tours does not just offer visitors -physical or remote - a dynamic tour experience but the opportunity to get to know the presence of a robot that is programmed for guided tours [see 24].

## **21.6 Visual Interactive Guide for access to cultural information**

The above research on the connectivity between travelling, use of technologies, user experience and learning led to the creation of a case study visual guide for Cultural Sites that utilizes 360° videos for general tour inside the room and offers interactivity with several points of interest. The user interacts with the points of interest and gets access to different levels and kinds of information for each point of interest, according to their interest. The case study has been implemented at the Town Hall of Corfu, situated in one of the most visited public squares of the Old Town of Corfu, a World Heritage Site inscribed at UNESCO's List since 2007. The Town Hall of Corfu is the former San Giacomo Theatre, a 16<sup>th</sup> century building and one of the most historic places in Corfu, with high cultural value but not normally accessible to visitors as it hosts the official Mayor's Office.

In the used methodology the first step was to choose the place and theme. After having chosen the place (Town Hall of Corfu and the Mayor's Office) the points of interest had been decided and the scenario was created for the general tour and for the presentation of each point of interest. Then, the design of the gamification experience was created in order to support incidental learning (no questions, no forced content, simply incidental learning at the first level) and the recording of the video with the use of 360° camera followed. Two kinds of videos were recorded, one that simply covered the room and one with the assistance of a professional tour

guide that presented both the room and each point of interest with information that occurred during the historical research.

The relevant documentation (photos, texts, audio and videos) was imbedded at the points of interest that had been marked with special graphics created for the case-study and the system was finally completed with the addition of interaction with the points of interest using UNITY 3D game development application. When a visitor is looking a point of interest, which have been signed with graphics, the access to extended information is presented. The information is either a short presentation, for example a guided tour of the room, photo galleries or other type of multimedia/content descriptive information.



**Figure 2:** 360° video capture of the Mayor's office showing a PoI [F2]

Visitors can explore the room physically by moving their heads and the audio experience is directional. For the case of distance visiting, a specific point outside the building has been chosen and by scanning on it with a mobile device it shows the option of interactive guidance. In that case someone can virtually visit the room while being on the outside of the building. Finally, issues of usability and aesthetics have also been taken into strong consideration, as those kinds of applications apply to wide audiences with a wide range of abilities [see 25] and need to be relevantly adjusted.



**Figure 3:** Capture of the professional guide presenting the room [F3]

At the moment the case study is being expanded to both operability and content. The content expansion aims at including other important sites of the Old Town of Corfu. Special focus will be given to buildings with cultural importance but not normally visited by tourists and to buildings under protection where visits are restricted due to safety reasons. In this manner accessibility will be offered to otherwise hidden treasures of the local cultural heritage, without risking the deterioration of the monument. In terms of operability, the design expert is working on elaboration customizable hotspots per scenes and alternative presentations of the available content such as video pop-up overlay, full scene change and floating controls. The next goal is to create a fully functional interactive guide for the monument ensemble.

## 21.7 Conclusions

It is evident that 360° videos can create highly immersive video environments that offer an increased sense of real presence to the users either locally or remotely. In particular augmented, virtual reality and 360° technologies provide with unique opportunities for the tourism destination market to assist the communication between specially targeted markets by

offering a rich environment to potential visitors. Despite the fact that technology itself does not replace the need for human guidance, it may help personalize the experience and make it more engaging and direct. When referring to monuments and sites, the use of such technologies also suggest a protective role as they provide with an alternative way of experiencing a place and help to prevent overcrowding at a protected Site.

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