Serious Games and heritage mediation: strategies for identifying, valuing and transmitting the Intangible Cultural Heritage

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Serious Games and Intangible Cultural Heritage

The article introduces Serious Games as heritage mediation tools that favour the processes of identification, appreciation and transmission of the Intangible Cultural Heritage (ICH). For this purpose, it reviews part of the literature on the subject, emphasizing how this type of game has been used by cultural sites and institutions in the treatment of cultural heritage and presenting two good practices. It also explores how a particular category of game, the location-based mobile games, can promote participatory methodologies involving the Intangible Cultural Heritage, their communities and their visitors.

Keywords: serious games, heritage mediation, intangible cultural heritage, participatory methodologies.

Serious Games are currently understood as digital games with pedagogical and entertainment bases that provide a fun and immersive experience while complying with at least one pedagogical or instructional objective (Sawyer & Rejeski, 2002). Regarding the application of these games in the context of cultural heritage, it is stressed that their greatest potential relates to the affective domain of...
the learning process, whereas the empathy with the plot of a game and its characters can help in the understanding of historical processes and different cultures, as well as in the identification and appreciation of a certain cultural heritage (Mortara et al., 2014). Moreover, the immersive feature of games may provide a concrete context in which visitors to cultural sites and institutions can appreciate and communicate with cultural heritage, often displayed in a decontextualized way (Belotti et al., 2012). Still reflecting on the communication strategies of cultural heritage, it is highlighted that games have the interactivity as one of their fundamental elements. That is to say, the player has always agency (to a greater or lesser degree) on the course of the narrative since the outcome of the game relies directly on his choices and actions (Zimmerman, 2004). The agency and the control of actions by those who learn are particularly valued by the constructivist and social constructivist learning theories, and cultural entities (such as museums, galleries and archives), as well as heritage sites, have long been considered ideal places for the application of such approaches (Jeffery-Clay, 1998; Falk & Dierking, 2008).

In view of the fact that Serious Games are digital tools that make use of diverse multimedia resources, they can contribute especially to the identification and transmission of the ICH. This is because the scenic elements of games such as the narrative, the characters and the dialogues have the potential to display the intangible dimension of cultural heritage, contextualizing it into an activity with measurable rules, goals, and outcomes. Considering the great diversity of cultural heritage, some authors propose different categorizations for the Serious Games within the cultural sector. Mortara et al. (2014) establish three categories of these games based on their pedagogical goals: cultural awareness, historical reconstruction and awareness of heritage. In the first category are considered the games that cope particularly with ICH dimensions such as language, habits, traditions, spiritual beliefs, folklore and rules of behaviour in a society. In addition, the authors make a point of how these tools can aid in the treatment of ICH:

“SGs have the potential to recreate accurately not only a physical setting but rather: provide a holistic experience including sounds (spoken language, traditional music) and aesthetic elements; bring to life folkloristic and religious events; give the opportunity to practice in first person behavioural codes and habits through in-game tasks; and much more (Mortara et al., 2014: 319).

In general, the production of serious games in the scope of the ICH is restricted when compared to one of its pairs with other pedagogical objectives. This reality is reflected in the minor number of studies that address this issue in a specific and exhaustive way. However, Mortara et al. (2014) present some examples of games for cultural awareness, demonstrating the thematic richness of this field: Icura, Discover Babylon and Papakwaq. The first addresses aspects of Japanese culture and etiquette; the second discusses the contributions of ancient Mesopotamia to modern culture and the third presents a collection of cultural goods belonging to the native Thai people Atayal, as their beliefs, traditions and ceremonies.

This article draws attention to another example cited by Mortara et al. (2014): Yong’s China Quest Adventure (Figure 1). In this adventure video game set in ancient China, players take the role of a scholar of Confucian teachings whose goal is to learn the traditions of Chinese culture and writing. Various aspects of Chinese history and culture are portrayed throughout the narrative, such as techniques and tools used in the context of calligraphy and painting, the process of building the Wall of China and the ancient mythology.
Yong’s China Quest Adventure was developed by My Learning, an entity that provides didactic resources inspired by the collections and cultural heritage safeguarded by various cultural institutions in England. The project is funded by the Arts Council England and currently managed by the Leeds Museums and Galleries. Thus, in addition to the identification and communication of aspects of China’s ICH, the game also serves as a platform for dissemination and appreciation of the collection and the research work carried out by the following entities: Leeds Museums and Galleries, Sheffield Museums, Thackray Museum and National Railway Museum. This example shows the polyvalence of Serious Games for cultural heritage, as it emphasizes that a game can be both a heritage mediation tool that assists in the identification and valuation of cultural assets and a strategy for the promotion of exhibitions, collections and cultural entities.

Mobile Location-Based Games and participatory methodologies for the treatment of cultural heritage

Some authors also categorize Serious Games for cultural heritage based on their genre and their technical features. In this perspective, a type of game particularly suitable to favour participative methodologies is presented: the mobile location-based games. Briefly, this category includes games that “are facilitated by mobile devices in such a way that the game activity evolves according to the players’ location” (Avouris & Yiannoutsou, 2012: 2120). These games may allow up to two types of participation: on-site and from distance. The first is related to the physical exploration of a locality with the aid of mobile positioning systems (such as GPS). This participation usually carried out by the visitors of a certain cultural site or entity is essential for the progress of the narrative and for the achievement of the goals foreseen by the game. The second relates to the engagement of those who seek to contribute to the construction of the game’s universe, narrative, content and goals. For this, the game ought to be executed on a collaborative platform in which users...
are not only allowed to play but also play a part in the expansion of the game universe.

An example of a mobile location-based game that allows both types of participation mentioned above is *Tidy City* (Figure 2). Developed by the TOTEM - *Theories and Tools for Distributed Authoring of Mobile Mixed Reality Games* research project, this game is organized from a sequence of missions/challenges, in which players must solve puzzles in order to collect virtual objects and place them in their (physical) places of origin. For this effect, a range of information/instructions related to the target object and its place of origin is provided. Therefore, although the game requires face-to-face interaction with objects or other material elements, this interaction can be used solely as a ground for the identification, presentation and communication of ICH. For instance, in a locality, there may be a monument that refers to a specific ethnic group that has somehow marked the development of that space. In this case, the range of information and instructions that players access to solve the puzzle of a mission can refer to the language, beliefs, art, rituals, popular culture and other cultural demonstrations that characterized or still characterizes that group.


In a collaborative and open platform, the members of a given community can be responsible for the elaboration and management of the contents of the game, through which they can communicate pieces of knowledge linked to their ICH to the visitors (players), in a process that reinforces the community agency over its cultural goods. The collaborative character, when well-managed, opens a prospect of possibilities and, above all, allows the communication of the ICH to be performed horizontally and in a plural manner, considering that in this type of game there is not only an official narrative about cultural goods but a set of stories and perceptions about them.

**Conclusion**

This paper presented the Serious Games as tools capable of favouring the processes of recognition, valuation and transmission of the Intangible Cultural Heritage (ICH), making use of the contributions of literature on the subject and also showing two
examples. First, it explored how this type of game can be understood at the same time as a mediation strategy that assists in the recognition and valuation of cultural goods and as a strategy for the promotion of exhibitions, collections and cultural entities. In the second moment was specifically addressed how mobile location-based games can facilitate participatory methodologies of recognition, display and interpretation of the ICH. Finally, it should be noted that although recent, the field of Serious Games for cultural heritage already presents sufficient data to justify the investment in such tools by institutions of safeguard. Thus, this article sought to contribute briefly to the discussion on the implementation of digital technologies in the treatment of cultural heritage, in this specific case of ICH.

References