

Museum audience engagement during the Covid-19 pandemic.

Audience engagement museale durante la pandemia da Covid-19.

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ABSTRACT ITALIANO

Quale ruolo hanno rivestito le tecnologie digitali nell'educazione museale durante la pandemia? Quali strategie di audience development, e quindi di differenziazione, ampliamento e costruzione di relazioni, sono state messe in atto per promuovere il coinvolgimento emotivo dei visitatori? Questo articolo intende offrire una riflessione sull'uso dei serious games e dello storytelling per favorire il potenziamento dei processi partecipativi e l'implementazione di un museo accessibile, interattivo e inclusivo che possa rappresentare un dispositivo per l'apprendimento e la cittadinanza attiva.

ENGLISH ABSTRACT

Which role did digital technologies play in museum education during the pandemic? What audience development strategies, and thus audience differentiation, widening and relationship-building, were put forward to promote the emotional engagement of visitors? This paper aims to offer a reflection on the use of serious games and storytelling to encourage the enhancement of participative processes and the implementation of an accessible, interactive and inclusive museum that can serve as a device for learning and active citizenship.

Introduction

Museums represent a significant resource for our country, but it is necessary to identify modes of enhancement that materialize what would otherwise remain mere potential wealth (Nardi, 2004). Museums can contribute to the dissemination of an approach aimed at consolidating knowledge, improving the quality of life, democratizing knowledge, and social responsibility (Xanthoudaki, 2013). This contribution aims to provide a brief reflection on the role of digital technologies in museum fruition during the Covid-19 pandemic, with particular reference to the use of serious games and digital storytelling. The health emergency has proven to be a driving force in the exponential digitization of cultural heritage. Despite the difficulties, the museum remains connected (Bonacini, 2021) in an attempt to maintain the bond with its audience and ensure the so-called cultural engagement, a prominent feature in the lifelong education of every individual, capable of promoting social and cultural awareness, as well as a sense of active citizenship (Bonacini, 2021).

The digitalization of museums during the Covid-19 era

The MiBACT (Ministry for Cultural Heritage and Activities and Tourism) (*) issued on February 21, 2018, the Ministerial Decree no. 113, Adoption of minimum uniform levels of quality for museums and places of culture belonging to the public and activation of the National Museum System. Part III of Annex 1 is dedicated to Communication and Relations with the Territory. It reads as follows:

Museums have the institutional purpose of offering the community a cultural service based essentially on the conservation and enhancement of their collections. Fundamental tools are communication and the promotion of the territory.

And furthermore:

Adequate space should also be given to the use of technologies. The importance of the network as the first knowledge approach between the user/visitor and the museum institutions has been highlighted several times. Therefore, the availability of online information on museum access, collections, services, extra activities - including social networks, applications, etc. - and their effectiveness in terms of information updating and completeness becomes of primary importance.

Furthermore, within the framework of the Recommendation on the Protection and Promotion of Museums and Collections, their Diversity and Role in Society (UNESCO, 2015), the educational role is placed among the main functions of museums, also emphasizing the close correlation between Museums and Information and Communication Technologies (ICTs): "The changes brought about by the rise of information and communication technologies (ICTs) offer opportunities for museums in terms of the preservation, study, creation, and transmission of heritage and related knowledge" (Article 19). At the beginning of 2020, the Covid-19 pandemic ushered museums into uncharted territory. They had to close their doors overnight, making their physical collections inaccessible and leading to a mass migration to the digital realm as the sole means of being present in users' lives. This sudden disruption prompted a reconsideration of strategies, tackling relevant issues, and opting for operational methods based on virtual interactions rather than physical ones (Noehrer, Gilmore, Jay & Yehudi, 2021). The lack of digital skills and adequate access to training and devices in the sector was exposed by the pandemic, exacerbating persistent issues related to the adoption of new technologies (Merritt, 2021). To continue operating in a context of multiple closures and restrictions, museums were forced to change and/or accelerate their digital practices and processes, and many institutions, along with their audiences, were thrown into the "digital abyss" (Finnis & Kennedy, 2020, p. 11). There has also been a significant increase in the production of online content and the republishing and repackaging of content (Finnis & Kennedy, 2020). Museums have been particularly affected by the COVID-19 pandemic, with almost 90% of them, which is more than 85,000 institutions worldwide, closing during the crisis. Museums play an essential role in our societies: they not only preserve

our common heritage but also provide spaces that promote inspiration, dialogue, and education.

Founded on values of respect and cultural diversity, museums strengthen social cohesion, promote creativity, and serve as vehicles of collective memory (UNESCO, 2020). It is important to note how the health emergency has highlighted immense disparities in terms of access to culture through digital technologies. About half of the world's population currently lacks the ability to use the Internet (IUT, 2020). This fact is reflected in the distribution of museum initiatives: 26.6% were observed in Western Europe and North America, 16.6% in Eastern Europe, 27.4% in Latin America, 20.3% in Asia, 7% in the Arab world, and only 2% in Africa (UNESCO, 2020). The closure of museums in our country "has highlighted the need to implement and develop alternative ways of enhancing and enjoying cultural heritage by the public and to rethink the contribution that digital technologies can provide" (ISTAT, 2020, p. 4). The process of digitizing the cultural heritage of our country also presents significant room for improvement. The latest census, conducted in 2018, reports the following: only 11.5% of museums had undertaken virtual cataloging of their heritage; among these, 20% had digitized all their works, and collections were made accessible online by only 6.1%. Regarding information and communication, 43% of museums had their own website, and 65.9% were active on major social media platforms (ISTAT, 2020).

According to UNESCO, the actions carried out by museums globally during the health emergency can be divided into five categories: the use of resources already digitized before the pandemic (virtual tours, online collections, digital exhibitions, publications); digitization of activities planned during the lockdown (concerts, thematic meetings, cultural events on digital platforms); improvement and increase of social media activities (strengthening existing websites and launching new channels); implementation of special activities (presentation of behind-the-scenes work at museums, interactive quizzes and videos, children's stories, and educational games) (UNESCO, 2020). These initiatives highlight the centrality of the visitor, who is now fully integrated into the process of democratic consumption of museum heritage, as referred to in literature as the "participatory turn" (Pruulmann-Vengerfeldt & Runnel, 2011). The concept of a participatory, interactive, inclusive, and accessible museum was promoted during the health emergency through the use of digital technologies. The museum experience has thus broadened its horizons, strengthening the participatory function (Cataldo, 2014; Runnel & Pruulmann-Vengerfeldt, 2014) and enabling the building of a sense of belonging and community with other users.

Museum Audience Engagement: Between Serious Games and Digital Storytelling

The concept of edutainment is at the core of serious games, a type of game that aims to educate while entertaining. This tool can prove to be particularly effective when applied in the museum environment. Firstly, by promoting innovative forms of entertainment, it helps attract user groups that are often distant from museums. Secondly, due to its flexible nature in addressing various topics, serious games are well-suited for themes such as cultural awareness (Froschauer et al., 2010; Huang *et al.*, 2013), historical reconstruction

(Christopoulos *et al.*, 2011; Doulamis *et al.*, 2011), and cultural heritage awareness (Cao *et al.*, 2011; Bellotti *et al.*, 2012; Froschauer *et al.*, 2011, 2013; Tangui, 2013).

Through instructional strategies such as interactive learning, experiential learning, learning by doing, problem-solving, role-playing, and educational games, serious games enhance the learning process (Coppola & Zanazzi, 2021). The use of gamification promotes group engagement in a cooperative and collaborative atmosphere, laying the foundation for a museum-based learning experience where users actively construct knowledge (Ćosović & Brkić, 2020). The use of such technologies proves to be a preferred tool in promoting and expanding museum practices (Akamca *et al.*, 2017). In our country, the National Museum of Science and Technology Leonardo da Vinci in Milan has been a pioneer in incorporating gamification into its educational and museum offerings, focusing on the virtual reality learning experience centered around technology and science topics (Mandarano, 2019). Even Google Arts and Culture, with its main goal of bringing art and culture to every corner of the world to make it accessible to all (Pesce *et al.*, 2019), has also included the use of serious games (Zhang, 2020).

An example of remote museum engagement that generated significant participatory interest during the Covid-19 pandemic is "Father and Son," developed in April 2017 for the National Archaeological Museum of Naples (Coppola & Zanazzi, 2021). This success has transformed the way serious games are perceived, now seen as valuable tools for cultural communication and marketing, considered to be "both contexts of informal learning and public engagement, functional for complementing or enhancing the cultural and tourist experience even in broad territorial contexts" (Bonacini, 2020, p. 80). The narrative and immersive dimension of "Father and Son" represents a new way of museum storytelling, presenting its collections and history in a fresh form of storytelling (Coppola & Zanazzi, 2021).

Digital activities during the pandemic phase have often highlighted the narrative capability of museums, which are increasingly seen not only as spaces for preservation and exhibition, but also as places for storytelling about the past, artistic experiences, and scientific disciplines. This is evidenced by the frequent use of terms like 'narrative' and 'story' in hashtags and initiative titles (Benedetti, 2020, 200).

In the context of museum communication, storytelling aims to engage the audience, to narrate the museum through anecdotes and stories, and to share curiosities related to collections by leveraging strategic topics that enable an emotional approach, fostering audience engagement (Maulini, 2019). Bonacini proposes a new vision of the museum as a place of connection:

The ability of storytelling to create a sense of community, transmit knowledge and understanding, evoke engagement, preserve individual and collective memories, build identities, convey values, and ultimately comprehend future events in light of the past would remain unexpressed if the connective function were not realized first. The change in direction lies in the definitive transformation of the museum into a museum of connection or, to continue highlighting the crucial role of storytelling in communication, a connected narrative (Bonacini, 2021, 277).

A decade ago, leading experts in digital storytelling believed that it constituted the most effective communicative and participatory technique capable of offering edutainment, the educational mission of museums (Bonacini, 2021).

It's not surprising, years later and considering what has occurred in digital cultural communication in the last year and a half of the "pandemic," that this conviction was accurate: for contemporary museums and cultural institutions searching for new narratives, new storytelling forms, and new languages in which to do so, realized in an increasingly interactive, engaging, and co-creative manner, this technique is the only one capable of developing those audience development and engagement strategies...that have social impacts and influence the relationship between museums and the public (Bonacini, 2021, 8).

Storytelling represents the best tool to ensure a successful engagement experience as it ensures the right synergy between interest, empathy, and imagination (Rousseau, Ripanti & Servi, 2017).

Conclusion

The forced closure of museums during the pandemic has reaffirmed the need for a rethinking of museum communication strategies, interpreting the web not only as a virtual space for information but also as a place to provide knowledge, new paths of engagement, and adaptation of heritage (Di Pietro, 2018).

The Covid-19 health emergency has certainly prompted new reflections on the potential of digital technologies in enhancing cultural heritage, outlining a multidisciplinary theoretical framework that highlights the educational potential inherent in the use of serious games and storytelling to encourage increasingly participatory, active, and interactive engagement (Coppola & Zanazzi, 2021).

The mechanics of active participation - when conducted honestly, transparently, and especially competently - is implicitly an exercise in active citizenship because it empowers individual resources and skills, contributes to strengthening critical thinking and the cultural, social, and creative capital of the territory (Bollo, 2017, 63).

In the critical phase of the health emergency, art, history, and beauty have proven to be an antidote to disorientation, and cultural heritage has been perceived as a cohesive element of a community engaged in a dramatic collective experience (Benedetti, 2020). The hope is that the pandemic experience can contribute to the development of new participatory models to be kept alive. It is hoped that the connection with the audience will be strengthened and that the museum, as a tool for understanding the present, will become increasingly participatory, interactive, inclusive, and a promoter of critical thinking and active citizenship.

As museums adapt to the digital age, audience engagement has become a top priority. Serious games and digital storytelling have emerged as powerful tools in this endeavor, transforming passive museum visits into immersive, participatory experiences.

By combining the elements of play, interactivity, and narrative, museums are successfully bridging the gap between the traditional and the digital, ensuring that their collections continue to captivate and educate audiences of all backgrounds and ages.

Note

(1) With the Decree reorganizing the responsibilities of ministries, approved by the Council of Ministers on Friday, February 26, 2021, the end of the MiBACT (Ministry for Cultural Heritage and Activities and Tourism) as we know it was officially announced, along with its transformation into the new Ministry of Culture, which will be acronymized as MiC.

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