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CHANGING THE CULTURAL PARADIGM IN THE DIGITAL AGE***

Abstract: The paper discusses the interaction and inter-relationship between culture and socio-technological changes caused by the development of digital media, with an overview of changes that are happening in the field of culture and cultural participation in the last few decades. These changes occur in the domain of audiences, cultural creativity, cultural institutions and cultural markets. Paying special attention to the participatory turn in the field of culture, the paper provides an overview of the main trends and innovations in the field of cultural creativity and dissemination of cultural goods given to digital media, which are illustrated by various practical examples. The review and analysis of the transformation of the cultural sphere offered in this paper may be of importance to cultural theorists and practitioners, individuals involved in the process of cultural creation or management of cultural institutions, and cultural policy makers.

Key words: participatory turn, cultural creation, dissemination of culture, audience, market, cultural institution, digital media.

INTRODUCTION

Today, radical changes are taking place in the sphere of culture, resulting not only in changed patterns of behaviour and preferences of users, the evolution of cultural markets and changes in cultural content, but also in changes in perceptions, views and value systems: *the change of cultural paradigm.* These changes are primarily the result of the rapid development of new media and digitalization in the field of communications.

Unlike traditional, mass media, the development of digital media in the late 20th and early 21st centuries has enabled convergence, interactivity, and global audience networking. One-sided communication with little feedback from the unrelated audience characteristic of the mass media era is transformed into networking and interaction of the active audience. A significant share of the audience are members of the digital

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generation (Michael Prensky introduced the now widespread term "digital natives" - Prensky 2001), whose way of communicating, interacting and sharing is significantly different and whose affinities differ from traditional audiences. Digital technologies and media have enabled the development of new ways of consuming and communicating media and cultural content, transmission and digitalization of cultural heritage and preservation of cultural identity.

These circumstances have been current for the last few decades, but the Covid-19 virus pandemic accelerated them dramatically in 2020 and 2021, crystallizing their effects. In the post-pandemic age, it is predicted that the benefits of online engagement, whether in free time or working hours, will take precedence and become a part of everyday life.

The well-known motto that culture is a mirror of society and that society is a mirror of culture illustrates the phenomenon that culture adapts to socio-technological changes (which today are predominantly caused by digital media), changing the nature of cultural goods and the way they are created and offered to the public. On the other hand, the society is changing in accordance with these changes; the audience is shaping, changing and profiling its preferences and habits in accordance with the cultural offer. The theoretical foundation of these cultural change is so called cultural evolution, which culture consider as an evolutionary process, and cultural phenomenon as an cumulative of individual-level interactions on the population level. Acerbi elaborated that cultural evolution approach to digital media is an useful and interesting framework for studying the effects and the developments of media in the digital age in cultural sphere (2016).

The aim of this paper is to explain the interaction and mutual shaping of socio-technological changes brought by digital media and cultural spheres in the field of audiences, creators of cultural goods, cultural institutions and cultural markets and to present the transformation of the cultural sphere in accordance with this interaction. Understanding the transformation of the cultural sphere can be of great importance to theorists and practitioners of culture and media, and above all to professionals involved in the process of cultural creation or management of cultural institutions, as well as creators of cultural policies.

INTERACTION OF DIGITAL MEDIA AND CULTURE

Digitalization of cultural material increases its availability and fluency, and progress in the field of so-called "immersive" technologies significantly increase the audience's experience in cultural participation. There are changes in the *dissemination of culture* - the public can access and participate in activities outside local borders, without physical and geographical, and thus cultural constraints. Since technology provides an opportunity to change media content, its form, meaning and purpose, audiences around the world are entering a kind of "cultural mix", where cultural goods gain multicultural perspectives and dimensions. Due to the richness of forms of media content (visual, video, audio, textual or multimedia), the cultural offer is enriched. Users have the opportunity to follow one phenomenon or story from different sources, in different forms on different media platforms. Motives and contents from the book are often translated into video games, animated films and comics, and even musical interpretations, which

we call a *transmedia narrative*. The more important the information, in the more forms it will be present (on social networks, in online and printed newspapers, on television, on podcasts, on radio, websites, blogs, forums, etc.) (Bonifazio & Vito, 2021). Although technology has enabled this transformation, the transmedia narrative is becoming an increasingly common response of the cultural offer to this change and an important strategy for animating audiences in the 21st century cultural market, and even an important strategy for promoting and disseminating cultural heritage. (Basaraba 2022).

Internet technology has caused a significant change in the scope and manner in which we transfer, process and receive messages in all spheres of our lives: in education, leisure, in cultural life and professional work. The development of media technology and the new opportunities that digital media provide in terms of communication, cause changes in the behaviour of the audience (and non-public) in the media and online sphere, but also in real life. The new generations called *digital natives* (Prensky 2001) have grown up in the digital world, and acquired patterns of behaviour, reasoning, thinking, communicating, deciding, and acting that are different from the way previous generations, digital immigrants and their predecessors, undertake (Arsenijević 2020). The basic principles of their modus operandi are interaction, proactivity, involvement and collaborative problem solving.

Young people today have different expectations from cultural content, designing their own models of communication, interaction and action from everyday life. New generations adopt culture by using digital media, by working and researching, while gaining real experience and being involved, with constant interaction and constant feedback (Arsenijević 2020). Their role is transformed from a passive recipient - characteristic of the traditional model - to an independent, proactive and interactive subject of the process of cultural perception and creation. Creativity, self-initiative, curiosity and active learning make them express the tendency to participate in the formation and in changing the cultural experience. Even in real life, outside of the use of digital media, their habits take on the peculiarity of inclusion and participation. As members of this generation make up not only children, but also adult audiences, their influence on the process of cultural development is extremely great and over time it becomes ever more significant. Changes in this regard lead to the transformation of culture, which slowly and not always willingly adapts, introducing new dynamics, changing the roles of those who create cultural goods and those who experience them, as well as their relationships.

Thanks to interactive new media, users in the media space are no longer just unrelated actors: they interpret, reinterpret, rework, add new meanings, connotations and dimensions; they create new cultural and artistic projects. Cultural participation evolves into an *act of interaction and involvement*, engagement and active contribution of the audience in the work, not just the reception of cultural content (Jenkins et al. 2009). This phenomenon, often called "*participatory turn*", refers to a set of changes that characterize new forms of audience participation in culture enabled by digital media: creators collaborate with those who distribute content, and observers become collaborators and initiators of cultural production. In the cultural market, the public is increasingly invited to participate in collecting cultural content, promoting and presenting cultural heritage, preserving and protecting cultural resources - in the domain of interaction of culture

and audience, but also to participate in the creation and implementation of cultural pro-grams and content - which is the domain of audience participation. Participatory prac-tice in art is the creation of a contextualized framework through which the audience is invited to actively participate, in a more or less democratic and inclusive sense, by artists or cultural institutions. The audience is involved in the process of reshaping and adding value to existing works of art or in the process of creating completely new, unique works of art. "Art does not come exclusively from the creativity and imagination of talented individuals - it can spring from the collaboration of many amateurs, non-established artists" (Arsenijević & Milojević 2020: 52). By joint creation a cultural content and the increase of the audience involvement, a stronger attachment between culture and audience is made, better adoption of the content and greater animation of the audience.

Participatory art projects are often organized on the border of political or social ac-tivism, including the public sphere in the process of cultural creation (Čubrilo 2018). Cooperation, which is the basic foundation of participatory culture and art, can have different internal dynamics, all depending on how the authorship is organized (ibidem). Cooperation and interaction during cultural production can be structured and regulated in various ways, from individual micro-contributions of the audience without its partici-pation in deciding on the final outcome of the work, to joint work or shared authorship (Literat 2012). Miller calls this structuring of the space of participation (Müller 2009).

Participatory practice, collaborative and interactive principles and audience proac-tivity indicate that perhaps the most significant direction of change that culture is going through is what the academic community calls the *Ludo logical direction*. The tendency of the audience not only to consume or interpret cultural and artistic goods, but also to experiment and actively engage in their modification or production, indicates a certain playful character. Cultural and artistic institutions and the cultural market are develop-ing offers that respond to this affinity of the audience and that encourage it. The media has playful qualities that enable the reconceptualization of culture and self-education - Zimmerman even claims that we live in an age of play (Zimmerman, 2015 according to Glas et al. 2019). Although play has always been an integral element of many cultural practices, a trend has emerged since the 1960s in which everyday cultural practices have become far more permeated by play (Glas et al. 2019; Bonacini & Giaccone 2021). This cultural change has been further accelerated by the emergence of a multitude of digital media where the play is increasingly associated with everyday activities. In the field of culture and art, there are more and more offers that have a game character: vid-eo games and interactive documentaries that deal with literary, historical, philological, scientific, environmental and other topics, web tools and software applications based on game principles for (collaborative) adoption, dissemination, modification and even production of cultural content (Bonifazio & Vito, 2021; Basaraba 2022). Games mo-tivate citizens to get involved, to change attitudes, to develop awareness and even to change behaviour (Glas et al. 2019; Bonacini & Giaccone 2021).

In addition to changing role of the audience, cultural content is *constantly being upgraded* and losing its final shape. Thanks to the increase of technological possibilities of content manipulation, increasing the availability and interaction of the audience in its reception, interpretation and reinterpretation, cultural content is constantly changing

(Lessig 2008; Jenkins, Ford & Green 2013; Basaraba 2022). Digital media have enabled involvement of the public in a simple and inexpensive way. Public can participate in the construction of cultural collections and repositories of cultural goods, in the redistribution of the content of cultural institutions, their supplementation or co-construction. There is a destabilization of the notions of the original and the copy: through the circulation and modifications, decontextualization, cultural goods evolve and new goods emerge, shifting existing boundaries of cultural production. In the last few years, culture has undergone essential changes in which the focus has shifted from the finality of the cultural content to the process of its co-construction.

As Carpentier have put it in his book "Media and Participation: A Place of Ideological-Democratic Struggle", cultural participation can no longer be canonized in the 21st century (Carpentier 2011). By following a social discourse that insists on individual empowerment and more proactive participation of users of products or services, the boundaries between culture and audience are erased; there are no longer boundaries between producers and consumers, facilities and reception. Many of these trends have also been reflected in culture, and the practice of online cultural participation is emerging as a significant movement - from visual form of expression, through virtual symphonies, to creative writing (Beech 2010; Literat & Glăveanu 2016; Cayari 2016).

ADAPTION OF CULTURAL INSTITUTIONS AND MARKETS

New generations of audiences introduce new patterns, styles and preferences in cultural perception, and by changing its "appetite" and expectations, reshape the ways in which cultural institutions and markets form and place their content, ways and forms in which they communicate with their users, how they animate them and in what form they create cultural works.

Extensive research on the expectations of the audience when visiting cultural sites confirms these views. Researchers have identified the following key expectations: education and dissemination of knowledge, entertainment and active involvement or engagement (De Rojas & Camarero 2008; Kempiak et al. 2017 according to Liu 2020).

Accordingly, in the last few decades, cultural institutions have changed the traditional ways of functioning that are characteristic of the era that was present before the globalized and digital age. An interactive relationship between the audience and cultural institutions is being developed and more emphasis is being placed on increasing the *interaction, participation and experiences* of the audience (the term "*immersion*" is often used). An audience that experiences cultural content is an audience that is more cognitively and emotionally involved, which is the basic precondition for its understanding and adoption of attitudes and values that are transmitted through it. The audience which consumes the event is also a more motivated and loyal audience (Liu 2020). Adaptation to new social, economic and technological trends in museums is called New Museology.

Popular mechanisms for increasing audience participation and experiences are *gamification, edutainment and interactivity*. Gamification presents the application of elements that are characteristic of the game (clear rules, competition with others, ranking and scoring) in other areas of human life and work. Edutainment is about creating a fun

experience for better learning, or using fun to create a motivating learning environment (Aksakal 2015). This hybrid genre relies heavily on narrative or game-like formats, visual material, and informal addressing styles. Fun, game and interactive elements bring a level of engagement that motivates learning and stimulates the retention of attention and knowledge, given that the audience is sensory, physically and emotionally involved in the act of adopting culture. The perspective of the visitor of the exhibition is transformed into the perspective of the one who is included in the cultural content, the one who actually participates in it or creates it. The experience offered by the educational-entertaining environment is immersive and participatory, often interpreted from the angle of the so-called "flow" (Csikszentmihalyi 1990).

Museum theatre, for example, represents the field of museum offer in the direction of applying the principles of edutainment and interaction in culture; it represents the use of theatrical techniques for educational, informational, and entertainment purposes by museums (Jackson & Kidd 2021). Museum performances are designed through the process of creative drama, which includes active participation of the audience, creation of scripts, division of roles and final performance of the play, all through research and interpretation of the heritage nurtured by the museum (Nakamura 2013). In interactive performances, actors, in collaboration with visitors, paint historical characters and tell stories, or the interpretation is done by using props, lighting, or special effects to convey historical or scientific facts. Interpretation of historical characters by the audience increases the authenticity of the experience, emotional experience; it facilitates easier taking of perspective by the audience in cultural experience and learning (Jackson & Kidd 2021).

Gamification is used as a popular mechanism to encourage audience engagement and motivation for cultural participation. The game can overwhelm the more rigid structure in which it takes place and can generate unpredictable results which is especially interesting in the field of culture (Glas et al 2019). New media have great power to attract and animate audience, especially when used at the systemic and strategic level of cultural promotion. The use of attractive applications that encourage understanding and respect for culture and tradition can, for example, contribute to citizens not only exercising it, but also participating in preserving heritage and combating its destruction or neglect (Economou 2015). Digital technologies based on gamification are also used to store data (such as geophysical research), for modelling (such as geographic information systems) and for audience interaction (via mobile applications, games, virtual or augmented reality), such as cultural tourism or visits to museums.

To achieve this multiple mission, cultural institutions are increasingly relying on new storytelling techniques and technologies. This helps the audience to "immerse" in the content, and thus engages on a sensory, physical and even emotional level, analogous to what Chikszentmihalyi calls "flow" (Csikszentmihalyi 1990). *Multimedia representations* of content in a virtual environment play a significant role in the user engagement process. They stimulate the visitors' senses which allows the cultural content to be rediscovered. The goal of the cultural institution is to improve the experience of visitors by making the transmission of cultural content a unique event, in relation to which the user has positive and original associations. The audience increasingly encounters sites and monuments and learns about the past through digital media, in the form of *virtual*

reconstructions, digital presentation of artefacts, multimedia records and the like. This is especially the case with the younger generations, who are often provided with the first experience of cultural heritage through a digital surrogate, which in turn shapes their understanding and perception. The interaction between the audience and the cultural content has become ever more transferable in the online sphere, in various forms. Digital media, such as social networking platforms, online games and virtual reality, digital collections and interactive applications at exhibitions, offer new opportunities for cultural institutions and the cultural market to communicate, animate and educate their visitors (Tykhonova & Widmann 2021; Basaraba 2022). In order to increase audience motivation and involvement, museums are introducing museum applications with elements of the gamification, such as tasks, prizes and player rankings (Rubino et al. 2015; Su & Cheng 2015 according to Economou 2015; Bonacini & Giaccone 2021).

Virtual exhibitions are used in order to help different groups of users to understand the meaning of cultural property, and even to adapt them to the level of their prior knowledge. Digital resources can be used to help prepare a visit to a site or cultural institution; they can make it more understandable and acceptable, and even enable a guided visit after real (scheduled) time. Some sites use virtual exhibitions to connect with other sites to provide a broader context and understanding of the content. Digital technologies are also increasingly used during visits to cultural and traditional heritage (Economou 2015; UNESCO 2020). A very useful and interesting innovation is the emergence of many, often free, applications for mobile phones of users for cultural tourism, which give suggestions for possible visits in accordance with the user's location, interests and previous choices. The use of social media helps the public to personalize the material of digital heritage, to connect with it and "bring it together", to share it with different communities and make it "their own", erasing the boundaries between the public and personal spheres. By providing different types of interaction with cultural heritage material, digital applications promote its understanding and encourage users to appreciate and respect it.

Virtual worlds and immersive technologies are now a frequently used resource in the field of cultural heritage that enable the general public to consume distant cultural content (in space and time). The possibilities for visitors to explore the sites in their original condition are also increasing, and it is believed that a personalized virtual museum will be provided in the future. A report by the United Nations Educational, Scientific and Cultural Organization (UNESCO) explicitly points to the importance of information and communication technologies for the nurturing and development of modern museums in terms of preserving, studying, creating and transmitting cultural heritage (UNESCO 2020). Thanks to constant development, these media in recent years offer an increasingly accurate, detailed and rich presentation and simulation of reality. Virtual worlds are an element of many museum applications, which offer the possibility of exploring a remote place, manipulating sensitive, rare or distant relics without the risk of damage, benefiting from additional multimedia information and monitoring cross-correlations within content (Arsenijević 2020). Immersive technologies have a clear potential to support the experience of cultural heritage by the public, complementing current tools and practices based on material goods such as museums, exhibitions, books and visual content. Augmented reality allows users to share cultural experiences, even if they are not in

the same location. In this way, the public is enabled to explore physically distant environments (e.g. a tour of the Dresden Museum or of the Sistine Chapel).

Research on the effects of digital interpretation and presentation of the Old Town Cultural Site in Kashiyung, Taiwan, for example, has shown that audiences expect immersive experiences during the visit. Audiences, especially younger ones, want to participate in joint and interactive activities through digital platforms (Liu 2020). Based on the analysis of visitors' experience, it was concluded that dynamic presentation through multimedia and three-dimensional animations and interactive participation of visitors have obvious advantages in reviving historical scenes and damaged artefacts and helping visitors to quickly, intuitively and easily understand heritage and increase interest in this topic. In addition, the play elements in the activities for the visitors had a significant contribution to the fun experience and created an experience that enabled their perception, engagement and communication. Another study of visitors' experience of interactive digital media, conducted by Kempiac and associates in Northern Ireland, found that digital interactive media is a key form of cultural heritage presentation and a significant part of visitors' experience (Kempiak et al. 2017 according to Liu 2020).

Serious and interactive games (video games designed for learning) are emerging as a new means of acquiring cultural content (Paliokas & Sylaiou 2016; Bollo 2018; Chartofili & Fokide 2019; Basaraba 2022) and are beginning to be modern marketing tool for the promotion of cultural heritage and audience animation. They promote learning and increase cognitive engagement of players (Boyle et al. 2012) through practice, interaction, and problem solving (De Gloria et al. 2014; Kim & Lee 2015 according to Bonacini & Giaccone 2021). Mortara et al. (2014) point out that serious games in culture are used for the development of cultural awareness and awareness of cultural heritage, as well as for historical reconstruction. Cultural awareness is focused on learning about intangible heritage, including language, customs, traditions, spiritual believes, folklore and rules of conduct in society, and enables the player to develop habits based on a given culture. The development of awareness of cultural heritage is enabled through immersive, realistic reconstruction of real sites, and the player adopts architectural, artistic or natural values that are built into it. Serious historical reconstruction games focus on a faithful account of a particular historical period, event, or process that occurred in the past; they include terms from archaeology, art, sociology, and politics. As awareness develops that digital games are works of art (Bottai 2018; Viola 2018 according to Bonacini & Giaccone 2021) and that new ways of engaging younger audiences are essential, institutions such as museums are becoming their own producers.

During the pandemic, a large number of museums around the world intensified their work on providing virtual offers of their content, through commercial and free virtual tours. Closing cultural institutions for visitors encouraged them to find other ways to increase cultural participation of the audience. The report of the international research on museum innovation, which was conducted from December 2020 to May 2021 on about 200 museums in 39 countries, indicates that most museums pay attention to technological and interactive techniques of audience involvement. One third of the museums managed to adapt their offer during the pandemic using digital platforms,

through online lessons and workshops, online exhibitions and presentations, or by creating video games based on the content of the settings. In addition, online guided tours, live streams, museum offerings based on virtual and augmented reality, websites and social media were used (Tykhonova & Widmann 2021: 20). After the first wave of free digital offerings, the post-pandemic period marked the reorientation of museums to commercial work, using online tools and platforms.

It should be born in mind, however, that technology enables an increase in the audience experience through the inclusion of sensory mechanisms, but that it is not a necessary element. Strategies that are not technologically intensive, such as museum theatre, also increase the audience's experience. Loyalty of the audience is achieved when they feel welcome, appreciated and included, and the transfer of cultural values is most intense with such an audience. The emphasis of the adaptation of cultural institutions, therefore, is not in offering a larger amount of information and content, but in a higher quality of the process of cultural participation. While the wealth of a museum was once measured by the items it possessed, its value today is represented by the quality of disseminating information related to those items.

EXAMPLES

One of the very popular directions of online participation in culture and the arts, which experienced tremendous growth during the isolation period during the global Covid-19 virus pandemic, is the collective creation of music online. Among the first endeavours created within this direction of participation is the virtual choir of the modern composer Eric Whitaker. The first work was recorded in 2013, in which several thousand recordings of people performing the same song are compiled and recombined into a collective performance (e.g. "Flight to Paradise" includes more than 8,400 audio recordings, over 5,900 singers from 101 countries[1]). The next example is the collection and compilation of sound recordings by online participants in the collective performance of the classical music piece "Pachelbel's Canon D" in 2012, in which 106 musicians from 30 countries[2] participated. The practice of collective online participation in classical music (and music in general) is developing more and more, and virtual symphonies are being organized (Cayari 2016).

The mouvie "Cadavre Exquis" was created by involving the audience in the design of the script via the social network "Twitter". The screenwriter started the story with a "tweet", while the audience had the freedom to develop the plot, collectively devising the content. Each participant would follow up on the previous text as part of their contribution (one tweet). Each day, the screenwriter chose one, the best tweet, until the continuation of the story was concluded (Arsenijević & Milojević 2020).

The Johnny Cash Project is an animated film composed with the help of artistic images of the audience and accompanied by the most famous songs by the musician

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1 The choir's performance can be seen on the following site: https://www.youtube.com/watch?v=Y8oDnUga0JU

2 The performance of the virtual symphony is available on the site: https://www.youtube.com/watch?v=PsHRaOd0v7A.

Johnny Cash[3]. The film features art paintings from over 250,000 individuals from over 170 countries around the world. These examples show the involvement of the audience in a (highly)structured space of participation, within pre-designed art products.

Fan fiction is a form of creative collaborative writing, in which fans of a particular work amateurishly develop alternative personal stories and different endings of original works and represent a type of audience participation in reworking existing or creating new pieces. One of the most popular fanfiction sites (fanfiction.net) gathers more than 12 million participants, of which over 40,000 texts are based on just one video game ("Final Fantasy"). Users review, revise and supplement their work, and one part of the community is involved in compiling tips and guides for developing the composition of the work, for using and integrating dialogue into stories, creating plots and using metaphors, and for compiling useful reviews of texts into so called meta-writing (Black, 2009; Magnifico, Lammersb & Curwood 2020). Over 400,000 texts were written based on the book series "Harry Potter", within which the Lexicon of Harry Potter was created (e-encyclopaedia of all concepts, characters and events in the book series). The cultural transformation of Harry Potter books into the domain of fanfiction in China is interesting, where books are composed based on the same motif, but using concepts and environments that are similar to Chinese culture.

The film project "Life in a Day[4]" is an example of online collective participation of users, the result of which is recognized in world cinema. Through an open call, the project encouraged individuals from all over the world to record a short video that illustrates their lives in one day. More than 5,000 hours of video were submitted, which was later edited and created into a documentary. The project was rated as a historic global experiment in the creation of the world's largest movie by users (Literat & Glăveanu 2016).

Furthermore, "Wiki Painting" is an online collaborative painting via an Internet platform, in which users-artists have no restrictions on the number or type of changes within the image, nor in the direction of their own changes (Literat & Glăveanu 2016). Wikipainting is an example of creative artistic participation of the audience, where the final product is not defined, and the space of participation is low-structured.

As explained earlier, gamification in museums is a common form of audience animation, whether it is "live" activities during the visit (workshops, assignments, quizzes) or using various software applications to assist tours. However, some museums have gone a step further, towards designing digital games in order to bring their content closer to the audience from home. In 2015, the National Gallery of Modern Art in London launched the educational game "Tate Worlds", which promotes its art collection in a three-dimensional format. The game carefully combines educational goals with typical gameplay elements such as the search for hidden objects, adventure maps and roller coaster rides (Fagelson 2020).

As stated in the previous chapter, the design of serious games to support the dissemination of cultural heritage by cultural institutions is a very recent phenomenon.

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3   More on the film: http://www.aaronkoblin.com/project/johnny-cash-project/.
4   More on the film : http://www.youtube.com/user/lifeinaday.

"Mi Rasna" is an example of a serious game that has the content of a collection of as many as 55 cultural institutions from central Italy; it spreads heritage and promotes cultural tourism. The game reconstructs the Etruscan era, from the Villanovan culture (900-720 BC) to their disappearance at the end of the Hellenistic period (320-330 BC). Identifying with the local magistrate, the players are involved in the development of twelve Etruscan cities (Dodecapoli) and in solving problems related to the economy, agriculture, construction and other economic and social activities of the ancient Etruscan city (Bonacini & Giaccone 2021).

Virtual and augmented reality solutions allow audience to experience a visit to the Egyptian Temple, Machu Picchu and Stonehenge, a tour of the solar system (*Titans of Space*), exploration of the International Space Station and the interior of the human body, and even a return to *Jurassic Age Virtual Reality* (Office of Educational Technology 2017). The Van Gogh Museum in Amsterdam is, for example, a leading cultural institution in terms of offering an immersive experience. Using video projection, the museum allows a 3D walk and sightseeing on a starry night (the famous Van Gogh painting) or a virtual walk through the landscapes that Van Gogh painted. The Smithsonian Museum, on the other hand, in addition to simulations, offers a wide range of educational games and virtual interactive tours that, free and online, bring content closer to a wider audience and thus popularize art and culture.

For example, an innovative project to document indigenous plant knowledge for medical, agricultural, economic and religious use in the Subanon community in the Philippines has ensured that this ancestral knowledge is available to present and future generations in a multimedia format. The obtained documentation is packed in a multimedia format and other popular educational materials in English with Subanen translations. These materials are officially registered with the government's copyright office, in order to guarantee the intellectual property rights of the community. The community education program now uses them to teach children about their culture; they are also used as teaching material for adults who want to learn to read and write in the language of their ancestors. This self-documentation has proven to be a successful way to preserve orally transmitted botanical knowledge and make it available to present and future generations, contributing to the sustainability of this part of Subanen's intangible cultural heritage (https://ich.unesco.org/en/philippines-community-based-documentation-00261).

When it comes to the reconstruction of a certain historical event, in order for an individual to understand and learn the causes and development of the event itself, it is important to be actively and personally involved, which digital games allow (usually through role play) (Mortara et al., 2014). There are a number of digital educational games related to historical reconstruction, cultural heritage and raising cultural awareness. For example, "Itsura" educates players about Japanese culture, "Discover Babylon" examines the contribution of ancient Mesopotamia to modern culture, and "Papakwaka" is a game about the tribal beliefs, customs and ceremonies of the Atayal minority in Taiwan (Chartofili & Fokide 2019). In the game "Battle of Thermopylae", players can examine the historical context and importance of battle, opponents, their cultural differences and their strategic choices (Kristopoulos, Mavridis, Andreadis

& Karagianis 2013). Most studies reported positive learning outcomes. In addition, research has concluded that children's historical consciousness can indeed be nurtured through historical digital games (Mortara et al. 2014; McCall, 2016 according to Chartofili & Fokide 2019).

CONCLUSION

This paper presents that the application of digital technology in the field of culture, especially from the beginning of the 21st century. Those change has led to numerous and radical changes in the domain of audiences, cultural creators, institutions and cultural markets; they further increased the availability and circulation of cultural content and audience participation. The relationship between digitalisation and culture is therefore reciprocal and in mutual, as there is a direct influence between each other. According to a report by the United Nations Educational, Scientific and Cultural Organization (UNESCO), digitalisation is changing cultural experiences around the world, not only in terms of access, production and dissemination, but also in terms of increasing participation in cultural creation and in the knowledge society (UNESCO 2020). Digitalisation of cultural heritage has brought great opportunities for access to cultural material, while institutions can reach a wider audience and engage new users to develop creative and accessible content for leisure, culture and education.

The change of the cultural paradigm and the appearance of the mentioned changes has numerous positive effects, since it enables a more accessible, richer and more intensive cultural life for a larger number of people. This is clearer especially when taken into account the benefits that participation in cultural life has for man and society (Arsenijević, 2020). The results of many studies show that culture and art have positive effects on the individual and society: they improve the health and mental state of people, increase their productivity and innovation, contribute to environmental protection and promote inclusion and democracy (Crossick & Kaszynska 2016, APPG 2017; Phillips 2018 according to Arsenijević & Milojević 2020). Recent studies have also confirmed that audience that participates in online creative and artistic projects, as well as audience that have passive online cultural participation (in terms of receiving cultural goods), are more inclined to engage in social and civic processes (KEA & PPMI 2019; Crossick & Kaszynska 2016 according to Arsenijević & Milojević 2020), and more willing to make an effort to protect the environment (Crossick & Kaszynska 2016: 7 according to Arsenijević & Milojević 2020).

Online cultural participation, whether it occurs through the active engagement of the audience in creative activities, or through passive forms of consumption and reception of cultural goods, provides numerous benefits to society. Therefore, this paper outlines the mechanisms for increasing cultural participation through digital technologies, which are an important step towards a more productive, harmonious and healthy society.

Nevertheless, it is important to note that there are reservations and criticisms about the technological impact in the sphere of culture in scientific and professional circles, addressing a range of different issues: inequality of participation in the digital

sphere, superficiality encouraged by the public, oblivion threatening content that is not promoted through technology, commercialization of cultural heritage, manipulation of artistic participation for political and other purposes, authenticity of cultural experience provided through digital media, exploitation of audiences for commercial purposes and so on. There are many dilemmas regarding possible negative effects and their consideration requires extensive discussion, which could not be covered in this paper.

Having in mind that technological development is inevitable and that the penetration of the online sphere in everyday life is increasing, which the facts unequivocally show, it is not productive to advocate the return of culture to the offline sphere. Analog channels of culture, which have been the only ones possible before the appearance of digital media, are valuable, but they are not up to the limitations imposed by recent trends of globalization, accelerated life, the emergence of pandemics and the like. The future is therefore inevitably digital, but digital does not exclude analogous. It is important to keep in mind that digital technologies should not make content, but should be a medium for communicating and presenting cultural heritage. Digital technologies should support and add to the audience's experience, and increase their interest (Liu, 2020). Therefore, it is more important to understand what this technology can offer, and to combine the good sides of the digitalization of the cultural sphere and what can still be realized in the analogous way.

In order to fully understand the long-term effects and impacts of digital technology on the quality of cultural participation, the only way is a dedicated and continuous research of the effects of technological influence on culture and art over a long period of time with longitudinal research. For now, the critiques are mostly based on speculations and philosophical debates, with the results supported by partial, short-term research.

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ПРОМЕНА КУЛТУРНЕ ПАРАДИГМЕ У ДИГИТАЛНОЈ ЕРИ

Резиме

У раду се разматра интеракција и међуоднос културе и друштвено-технолошких промена изазваних развојем дигиталних медија, уз преглед промена које се дешавају у сфери културе и културне партиципације у последњих неколико деценија. Ове промене јављају се у домену публике, у културном стваралаштву, у институцијама културе и на тржишту културе. Посвећујући посебну пажњу партиципативном преокрет у сфери културе, у раду се пружа преглед главних трендова и иновација у пољу културног стваралаштва и дисеминације културних добара поданих дигиталним медијима, који се илуструју путем разних примера из праксе. Преглед и анализа трансформације културне сфере у овом раду могу бити од значаја теоретичарима и практичарима културе, појединцима укљученим у процес културног стваралаштва или у управљању културним установама, те креаторима културних политика.

Кључне речи: партиципативни преокрет, културно стваралаштво, дисеминација културе, публика, тржиште, установа културе, дигитални медији.