

Remembering the Old World

An Analysis of the Interaction Between Virtual Heritage and Cultural Memory

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ABSTRACT

Preserving cultural heritage is becoming increasingly difficult. Archaeological heritage in the Middle East is targeted and deliberately destroyed by terrorist organizations such as Daesh, and valuable Syrian heritage is destroyed in the country's civil war. One possibility for preserving cultural heritage is by creating a virtual reality environment, embedded with cultural heritage, often defined as 'virtual heritage' or by three-dimensionally printing pieces of heritage. It is important to discuss the effects of new media on heritage, as these are still poorly understood. This paper examines the virtualization of cultural heritage through the lens of cultural memory studies. I ask the research question: how does virtualization affect the process of creating cultural memory through heritage? First, I examine the essence of heritage and its role in creating cultural memory. Second, I examine the effects of virtualization on the link between heritage and its locality. The conclusion of this paper is that the effects of virtualization on the process of constructing cultural memory through heritage are two-fold. First, the scale of the heritage is increased from a local, regional or national level to a global dimension. This allows for a new way of formulating identity, moved away from nationality and towards a global identity. Second, the process of creating cultural memory is democratised, allowing more individuals to concern themselves with heritage preservation and identity formation.

KEYWORDS

Heritage, Cultural Memory, Globalization, Identity, Virtualization

INTRODUCTION

The cultural heritage in the Middle East is under heavy fire. It is used as a way to fuel war and terrorism, and perhaps even as a way to destroy the modern connection to the past. UNESCO has resolved, together with the Dubai Museum, to save cultural heritage in the Middle East the fate of destruction by digital preservation. By taking over a million pictures of cultural heritage in the Middle East, UNESCO will create a virtual database from which scholars can 3D print the heritage in order to preserve it (Sevcenko 2010, 20). Other digital approaches have arisen as well: one possibility for preserving cultural heritage is to create a virtual environment embedded with cultural heritage, often categorized as 'virtual heritage' (Tan and Rahaman 2009, 144). With the advent of digital technology, the desire to preserve cultural heritage in danger has taken on a new,



digital form. However, the process that cultural heritage goes through when it is transformed into virtual heritage is as of yet poorly understood. Therefore, it would be wise to examine and discuss the effects of virtualization on cultural heritage and the process of creating cultural memory.

This paper examines the virtualization of cultural heritage through the lens of cultural memory studies, by asking the research question: how does virtualization affect the process of constructing cultural memory through heritage? My hypothesis is that the effects of virtualization on the process of constructing cultural memory from *lieux de memoire* are two-fold. First, the scale of the *lieux de memoire* is increased, from a local, regional or national level to that of a global dimension. Second, virtualization alters the process of interaction with heritage and the creation of cultural memory. The process is democratized, meaning that individuals have more control over the creation of cultural memory in *lieux de memoire*, often because they themselves have become the caretakers of the virtual heritage. This paper is set up as follows. First, I examine the essence of cultural heritage and try to establish what that exactly entails, in order to further the discussion on the nature of heritage in terms of virtualization. In doing so, I elaborate on the distinct theories of cultural memory and Nora's *lieux de memoire*. Secondly, I reflect on the issues arising from ties of cultural heritage to its locality in terms of virtualization. Thirdly, I examine how both visitors and interaction play a vital role in the creation of cultural memory and heritage. I argue that because individuals on the Internet themselves have become the caretakers of the virtual heritage; the control over the creation of cultural memory is transferred to a larger amount of individuals than before. In the conclusion, I return to the research question and bring together all the argumentative strands to form a coherent theory about virtualization, cultural memory and heritage.

ESSENCE AND CULTURAL MEMORY

In his address at the New Heritage Conference in 2006, Neil Silberman discusses the consequences of the application of digital media to heritage with regards to preservation. He points out the issues underlying the essence of tangible heritage, asking:

Do ancient societies and the societies who built them [...] have an unambiguous essence that can be agreed upon by all researchers and that will survive into an indefinite future despite the continuing, dramatic evolution of historiography itself?
(Silberman 2006, 1)

'Heritage' itself can be seen as subjective, as it is directly connected to a common societal memory (Bessière 1998, 26). This means that the essence of tangible heritage is a social construct, not merely an unchanging physical object. Tangible cultural heritage, although its physical essence remains roughly the same since its creation, is constantly altered by the social

interpretation of the heritage. “By its nature, heritage is a social activity embedded in a changing contemporary context” (Silberman 2006, 1). Consequently, heritage is not merely a heritage object in space – it exists within the contemporary and the past, making it a heritage object in time. Tangible heritage thus constitutes continuity between the past and present (Bessière 1998, 26). Furthermore, it is an interaction of constant change, because the actors, environment, and social situation surrounding it continuously change and therefore alter the identity of the heritage (Bessière 1998, 27). This construction lies at the heart of heritage’s essence. For example, a historical building is alive and never completes – it is changed and altered over time. While this represents the physical change the buildings go through, it is true also for the interpretation of these buildings, which changes over time. A good example of this would be the Hagia Sophia in Istanbul, which at first was the prime religious building in the Chalcedonian world and later on became a mosque under the rule of the Ottoman Empire. Another example would be the Parthenon, of which the interpretations likewise changed from the house of ‘pagan’ Greek gods to a Christian church, and then from a mosque under the Ottoman Empire to finally the icon of heritage through UNESCO and the symbol of Greek independence (St. Clair 2014, 61). As Rahaman puts it, the “typological, temporal, material and historical aspects of architecture inhibit it to become an isolated geometric representation” (2009, 147). Every building, and every other type of heritage that is fixed to a certain locality, will be subject to considerable change in interpretation, use, and appearance over time. Therefore, the qualities that make heritage are not purely physical: the Hagia Sophia is not only ‘heritage’ because of its grandeur and architectural style, but because it was the focal point for the Christian world.

It is not only buildings and stationary objects that are altered over time through changing interpretations. To underline this argument, I will briefly touch upon the case of the Unicorn Tapestries. The Unicorn Tapestries are one of the most popular attractions at The Cloisters, which houses some of the Metropolitan Museum’s medieval European art collection. Seen as magnificent works of art, the decision was made to preserve them digitally in high resolution. In order to facilitate this, high-resolution photographs were taken of one-meter-square sections, to later be reassembled into a digital, definite record of the Unicorn Tapestries (Silberman 2006). However, during the two weeks of photography, the museum realised that the pictures when combined showed strange discrepancies, and it was impossible to create a uniform image of the tapestry. Two mathematicians, Gregory and David Chudnovsky, then attempted to digitally reconstruct the tapestry. They discovered that the tapestry itself is ‘alive’, every fibre and thread had “[...] shifted [...] with every small variation of temperature, humidity and air currents.” (Silberman, 6). Thus, by the computation of every possible change in the structure of the tapestry, a new highly detailed digital image was produced. The Chudnovsky brothers had succeeded in safeguarding the tapestry in a digital version.

The question is: have they truly safeguarded the entire tapestry, or only its physical attributes? It is not only the physical attributes of heritage that make it heritage, as explained above; it is also the interpretation that makes an object 'heritage'. If stripped from its 'meaning' as *lieux de mémoire*, a site of memory, the Akropolis would be a construction made out of rocks, plants and other materials, but would hold no significant meaning next to its physical properties (St. Clair 2014, 57-62). Kirshenblatt-Gimblett observes that "tangible heritage, without intangible heritage, is a mere husk or inert matter." (Kirshenblatt-Gimblett 2004, 59). The Unicorn Tapestries, removed as they are from their context in the virtual world, are seemingly separated from this intangible heritage. Each narrative, tradition, and even the geographical locality play an important role in the existence of heritage. This is called cultural memory – an incredibly dense concept, that means, among other things, the narratives that are attributed to a particular place, which can refer back to a specific time or event, or even the current importance of a location (Erl 2008, 8).

Cultural memory is linked to a myriad of different concepts, and was borne out of a distinct number of disciplinary fields in the 20th century. Therefore, cultural memory can be equated with many different concepts within disciplinary fields that are distinct highlighted aspects of the same phenomenon: memory and collective recollection. One of these concepts is heritage (Erl 2008). After the study of cultural memory returned in force in the 1980s, A. and J. Assmann have elaborated upon the process through which cultural memory is created, essentially bringing to a light a dualism within cultural memory. (Assmann 1992) The first aspect of cultural memory is the individual memories available to societies of the most immediate past. The second is that of collective memory, which consists of a large amount of *Erinnerungsfiguren* ("memory figures") that create "various possibilities to link the present to an ancient past" (Harth 2008, 86). Linking these two concepts is the idea of connectivity: individuals are only able to frame their individual identity within "the objectified forms of a commonly shared cultural tradition" (Harth 2008, 86) because their culture links every one of its adherers to the experience of living in a world that follows, in a conscious or subconscious way, particular agreed upon norms and memories. Within this process, technology and media play an exorbitant role. Old and new technology, such as photography, film, literature, and virtual reality allow us to keep records of the past, to create ways of remembering particular aspects of it, and to generalize a common set of memories (or memory figures) within a group.

Heritage and the reproduction of it are therefore part of a larger process in which individual identity is formed against the backdrop of a common inhabited world, following particular norms and (created) memories. This explains the apparent position of heritage as an intermediary between the past and the present and its temporal disjunction – something from the past within the present. However, it is not solely that; the "past" that heritage is considered to have originated in

is in itself shaped and altered by present-day processes of cultural memory. Therefore, the link between the heritage in the present and the ancient past it represents is not clear-cut: it is meandering and obfuscated by a myriad of shared created ideas and memories. In essence, heritage is shaped as much as individual identity by the context in which it resides, which is an agreed upon collective memory. At the same time, it is integral to formulating that same context – it is not merely placed within and shaped by the context, it itself is part of the context as well, as an *Erinnerungsfigur*.

It can be said that the most important aspect of an archaeological find is the context in which it is placed. Without context, incredibly important information is lost: the former physical location of the find, its connection to other finds, and its relation with the place it was in. The same rings true for heritage: the context in which it is placed is vital for understanding the essence of heritage. In order to explore this further, I will examine Nora's *lieux de memoire*, ("sites of memory") in the context of virtualization.

Lieux de memoire are, literally translated, sites of memory. These kind of heritage sites assume an incredibly important role in a society's communal fabric, as they illuminate "its ideas on identity, politics, community and nation" (Ferreira 2012, 69) They are the way in which cultural memory is ordered, in order to generate a focus for the performance of rituals involving shared remembrance. It is these spaces that Pierre Nora defines as *lieux de memoire*, sites that have become representations of events and memory that belong to the identity of a nation or a group of people identifying themselves as a delineated faction, separate from others (Nora 1989). Dominant discourses on these sites define their identity. It is notoriously hard to alter the official discourse on cultural heritage. An example would be Tiananmen Square, which is defined by the discourse of the Chinese government as a landmark of the Cultural Revolution, while the most recent notable event on the square were the pro-democracy protests of 1989. While this was a notorious and incredibly important event from a historical, political and cultural background, it is not perpetuated as part of or even an alternative to the official discourse on the heritage (Ganito 2010). As Staiff pointed out, it is the individuals interacting with heritage that are pivotal in creating the heritage – their social discourse, their active meaning-making, and their involvement in the 'heritage process' gives heritage its intrinsic essence, because every interpretation of heritage by visitors can be seen as a new way of exploring the heritage (Staiff 2014). *Lieux de memoire*, like Tiananmen Square, are now controlled by an official organization. However, when these are transformed into the virtual world, they are taken away from the official discourse, allowing individuals to perpetuate an alternative discourse about the heritage. This is what happens in the world of the MMORPG *Second Life*, which allows its users to create everything in the virtual world (Ferreira 2012). This opens up an enormous amount of possibilities to expand or

challenge the official discourse about particular heritage. The heritage is democratised, no longer under the control and care of an official organization, but user-created and interpreted in an infinite amount of ways. However, *lieux de memoire* are still fixed geographical points within a context in the real world. Once they are taken out of this context and placed in another, virtual location in cyberspace, do changes occur in the ‘sense of place’, or in the idea of being near heritage? What happens to the heritage when it is removed from the geographical location it exists in? I will answer these questions in the following section.

VIRTUALIZATION, LOCALITY AND *LIEUX DE MEMOIRE*

Since the advent of certain forms of media, such as film and photography, scholars and philosophers have been discussing the issues arising from the mechanical reproduction of a physical object (Malpas 2006, 1). Walter Benjamin already in 1936 wrote about the apparent disconnection between artwork and its sole existence within a spacial and temporal place – a niche within the enormous map of the temporal and spatial world – when reproduced by photography or film (Benjamin 1969, 220). Heidegger explored the sense of place and the disruption of ‘nearness’ by the medium of television (Heidegger 1971). Their assumptions about the implications of film and photography on the sense of place within cultural heritage are also applicable to the new media of virtual reality.

Malpas engages the impact of new media - virtual reality - on heritage and the sense of place, and the apparent temporal and spacial disjunction of heritage when reproduced through new media. All heritage is tied to the narratives and culture of the place it inhabits, in the way that the Akropolis is part of Athenian narrative and culture, yet new media appears to dislodge the heritage from its spacial position within this context. Although Malpas acknowledges that the possibilities of new media are infinitely larger than those of old media such as film and photography, he warns that the reproduction will obliterate the wholeness of the cultural heritage through destroying its temporal and spatial presence (Malpas 2006). He points out that “that which is culturally significant is not mere ‘information’ but is itself tied to particular places and things, and to the practices and narratives that cohere around them.” (Malpas 2008, 198). The information he refers to here is found in cyberspace, which is “a whole of computerised information” (Veltman 1993). However, a counterargument to Malpas’s point would be that the narratives and practices surrounding heritage are just as well subject to change and re-interpretation. Intangible heritage that is inextricably linked to tangible heritage can be reinvented, leading to a radically different view on the heritage in question. Therefore, by becoming virtual, nothing essentially changes. The heritage is still tied to narratives and practices that might remain the same or become different, as they do in real life as well.

Veltman elaborates on the problem of bridging the distance between reality and simulation, and on what the precise difference between the two is. According to him, because the computer used to create virtual reality produces it through mathematics, the simulation can never be equal to the reality, as not all scenarios in reality have a mathematical algorithm that can explain and thus recreate them (Veltman 1993, 12-13). While Veltman's study is vital for understanding the difference between simulation and reality, it focuses more on virtual reality as a simulation than as a representation of something in the non-virtual world. As we see that heritage is shaped not only by its physicality, but also by the discourse on it, the fact that virtual reality cannot recreate all scenarios that could happen in real life becomes meaningless. The changing nature of heritage lies not within itself, but in the beholders. It is people that create the ever-changing essence of heritage. With the advent of the Internet, the fact is that users online are appropriating heritage and their interpretations can now much more easily become part of the discourse around heritage than ever before.

Other studies do indicate that especially virtualization can be a boon to the distribution of heritage amongst citizens and the process of democratizing heritage, as stated above. Ferreira examines the conception of user-created virtual heritage in the virtual world *Second Life* (2012). He observes that a distinct form of appropriation takes place within *Second Life*, in which particular sites of memory that were normally conserved by official organisations, are appropriated and recreated by the users within the virtual world. This leads to a new dimension for heritage: instead of *lieux de memoire* for nations, or particular groups, or other divisive systems, a global dimension and system appears. Cyberspace allows us to interact more freely with heritage and remove spatial constraints (Ferreira 2012, 70). It removes the tangible and intangible boundaries that are imposed upon real-life heritage in terms of approachability, nationality and identity. In that sense, virtualization of heritage can enhance the scale of cultural memory attached to heritage, bringing it from the local, regional and national spheres into the global dimension. However, a pitfall in Ferreira's study is that it primarily focuses on national heritage, which goes against the argument that Ferreira is propagating. The main example is the recreation of the city of Porto in *Second Life*, by *Portuguese*. As Porto is part of the national heritage of Portugal, the fact that Portuguese are restoring it online takes away from the argument about a new global dimension for heritage through the virtualization of heritage. However, when examining another instance of virtualization done by individuals rather than official organizations, a distinct idea of 'global' heritage emerges.

The ancient city of Palmyra continued to be a popular heritage site for tourists until a large portion of it was destroyed by Daesh in 2015 (BBC 2015). After its destruction, a *Facebook* group called *Palmyra 3D Model* emerged. Here, one experienced in photogrammetry (the creation

of three-dimensional objects through the use of two-dimensional photos) decided to recreate the heritage found in Palmyra using photos shot by tourists over the many years the heritage was visited. Within a few weeks, his website had a 1000 likes, and he started to create three-dimensional, virtual models of the destroyed heritage. Although the work is progressing very slowly, as he is doing it on his own time, the efforts thus far prove very promising, and the reaction of the Facebook community to his work has been exciting. Here, the 'global nature' of the Palmyran heritage is exposed. Photos were sent in from all over the world and the followers on Facebook come from different parts of the world as well. It appears that the ancient heritage of Palmyra is considered by many to be part of a global heritage, reaching beyond national boundaries. The work that is done to create the Palmyra 3D Model is pivotal in transcending these national and international boundaries and organizations, and bringing the heritage in close contact with and under the control of regular individuals.

CONCLUSION

In this paper I set out to answer the research question: how does virtualization affect the process of constructing cultural memory through heritage? I examined this process in two distinct ways: first, I looked into the process of democratizing heritage and the essential nature of heritage. We see that heritage is subject to constant change, reinterpretation and reframing. It is placed within a context of collective memory, while it is also integral to shaping this context by existing as a reflection of society's ideas of identity, politics, community and nation. Heritage plays a vital role in the process of generating collective memory within and through which individuals formulate aspects of their identity. This process, however, is becoming accessible to a larger number of people through the Internet. It appears that on the Internet, individual users are rapidly appropriating heritage, in order to generate alternative discourses about the heritage. New ways of conserving and recreating individual and collective memories are being explored within the virtual world, and creating three-dimensional reconstructions of heritage and *lieux de memoire* appears to be an important part of the preservation of memory. Virtualization democratizes the creation of cultural memory through heritage, as it allows users to formulate a stronger connection to particular heritage, for they become the caretakers, the creators of discourse and the interpreters of heritage in the virtual world. The online community is therefore more able to suggest alternative discourses to the official discourse of heritage, and to coalesce around a new interpretation of heritage. Furthermore, it is able to actively participate in the virtualization and the safekeeping of distinct pieces of heritage, such as Palmyra.

The second way in which I examined the process of virtualization and the creation of cultural memory is the change in scale. Nora's *lieux de memoire* are spaces of remembrance that are tied to national identity (Nora 1984). However, it seems that the virtualization of heritage allows the

lieux de memoire to be adopted by a larger identity group than the national. This is exemplified by the group surrounding the 'Palmyra 3D Model', which consisted of different individuals from all over the world. The virtualization highlights the essential nature of heritage as an ever reinterpreted whole, and provides the ability for the heritage to acquire a global dimension, becoming essentially a *lieux de memoire* apart from a national identity; the heritage becomes part of a global cultural framework through and within which identity is formulated.

With an ever-changing nature, heritage will always be subject to reinterpretations and reinventions. As a focal point for the formulation of collective memories and through this in the formation of identity, it remains vital to study the effects of virtualization and the incorporation of new media on heritage. It is hoped that this study will have illuminated some of the distinct effects that virtualization and new media have on heritage and our understanding and interaction with it.

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