Reconstructing Ottoman Heritage through New Media: Digitalization, Virtual Museums, and Cultural Memory

Tamer Bayrak [1]

Abstract

This study examines the digital reconstruction of Ottoman cultural heritage within the context of new media, focusing on virtual museums and interactive digital platforms. Employing a comparative and theory-driven research design, the study analyzes three major digital heritage platforms operating at different scales: the Topkapı Palace Virtual Tour, Europeana, and Google Arts & Culture. The research is based on qualitative content analysis supported by descriptive quantitative indicators and covers the period between January 2024 and August 2025. Drawing on cultural memory theory, representation theory, and key new media approaches, the study explores how platform-specific digitization strategies, interface designs, metadata structures, and user interaction models shape the representation and circulation of Ottoman heritage in digital environments. The findings reveal significant differences across platforms in terms of visibility, accessibility, interactivity, and narrative framing, demonstrating that digital heritage platforms do not merely preserve cultural artifacts but actively reconstruct cultural memory through their technological and institutional logics. By offering one of the few comparative analyses of Ottoman cultural heritage across local, regional, and global digital platforms, this study contributes to the literature by proposing a replicable analytical framework for examining the mediation of cultural heritage in new media environments. This study aims to comparatively examine how Ottoman cultural heritage is represented, digitized, and circulated across local, regional, and global digital heritage platforms, and to reveal how platform-specific technological and institutional logics shape the reconstruction of cultural memory in new media environments.

Keywords: New Media, Ottoman Heritage, Virtual Museum, Digitalization, Cultural Memory

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Yeni Medya Aracılığıyla Osmanlı Mirasının Yeniden Yapılandırılması: Dijitalleşme, Sanal Müzeler ve Kültürel Bellek

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Öz

Bu çalışma, Osmanlı kültürel mirasının yeni medya ortamlarında nasıl yeniden yapılandırıldığını, sanal müzeler ve dijital kültürel miras platformları bağlamında incelemektedir. Karşılaştırmalı ve kuramsal temelli bir araştırma tasarımı benimseyen çalışmada, farklı ölçeklerde faaliyet gösteren üç dijital miras platformu analiz edilmiştir: Topkapı Sarayı Sanal Turu, Europeana ve Google Arts & Culture. Araştırma, Ocak 2024–Ağustos 2025 dönemini kapsamakta olup nitel içerik analizi yöntemi, betimleyici nicel göstergelerle desteklenerek kullanılmıştır. Çalışmanın kuramsal çerçevesi, kültürel bellek ve temsil kuramları ile yeni medya yaklaşımlarını bir araya getirmektedir. Bulgular, platformların kullandığı dijitalleştirme stratejileri, arayüz tasarımları, metadata yapıları ve etkileşim modellerinin, Osmanlı mirasının dijital temsili ve dolaşımı üzerinde belirleyici bir rol oynadığını ortaya koymaktadır. Araştırma sonuçları, dijital miras platformlarının kültürel varlıkları yalnızca korumakla kalmadığını, aynı zamanda kültürel belleği platforma özgü mantıklar doğrultusunda yeniden ürettiğini göstermektedir. Bu yönüyle çalışma, Osmanlı kültürel mirasının yerel, bölgesel ve küresel dijital ekosistemlerdeki temsiline ilişkin karşılaştırmalı bir analiz sunarak literatürdeki önemli bir boşluğu doldurmakta ve yeni medya ortamlarında kültürel mirasın incelenmesine yönelik uygulanabilir bir analitik model önermektedir. Bu çalışmanın temel amacı, Osmanlı kültürel mirasının yerel, bölgesel ve küresel dijital miras platformlarında nasıl temsil edildiğini karşılaştırmalı olarak incelemek ve yeni medya ortamlarında kültürel belleğin platforma özgü teknolojik ve kurumsal mantıklar doğrultusunda nasıl yeniden üretildiğini ortaya koymaktır.

Anahtar Kelimeler: Yeni Medya, Osmanlı Mirası, Sanal Müze, Dijitalleşme, Kültürel Bellek

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1. Introduction

The rich cultural heritage of the Ottoman Empire holds a distinguished place both in Türkiye's collective identity and within the global pool of cultural heritage. In general terms, cultural heritage can be defined as the entirety of tangible and intangible values transmitted from one generation to another within a society (Ülger & Külcü, 2016, p.48). Alongside tangible historical structures, works of art, and archival documents, intangible elements such as language, literature, music, traditions, and customs are also integral parts of this heritage. In particular, the Ottoman legacy can be regarded as the heritage of the region in which it emerged. It can also be approached as a universal legacy of humanity that serves multiple functions in collective memory. The preservation and transmission of this heritage to future generations are of critical importance for cultural continuity and identity construction. Therefore, safeguarding and sustaining the cultural values inherited from the Ottoman period constitute an indispensable part of building a sustainable cultural memory both at the national and international levels.

Today, digitalization offers revolutionary opportunities for the preservation and accessibility of cultural heritage. Thanks to the advancement of information and communication technologies, cultural memory institutions such as libraries, museums, and archives have accelerated their efforts to transfer collections into digital environments. Digitization initiatives integrate cultural heritage materials with information technologies, enabling long-term preservation and intergenerational transmission (Çakmak & Yılmaz, 2012, p. 418). Digital preservation and archiving methods play a vital role in delivering cultural heritage to future generations in an accurate and reliable manner (Ülger & Külcü, 2016, p.42). Indeed, with technological progress, digital methods for the storage and management of cultural heritage have come to the forefront, and major projects have been implemented on an international scale. For example, the European Union's Europeana initiative brings together European cultural heritage under a single digital library framework, allowing users to access collections from different countries and institutions through a single point of entry. Within Europeana, more than 23 million digital objects provided by over 2,200 institutions from 33 countries—including the British Library, the Louvre Museum, and the Rijksmuseum—have been made available to users (Ülger & Külcü, 2016, p.49). Opening cultural heritage to public access through digital platforms creates a new level of awareness and participation in terms of safeguarding heritage.

New media technologies go beyond digitalization, offering dynamic opportunities for the representation and reinterpretation of cultural heritage. The concept of new media refers to digital and interactive communication environments that foster innovative approaches to preserving, revitalizing, and managing cultural heritage (Muşkara, 2017, 89). When cultural heritage elements become the subject of new media platforms, rich and interdisciplinary projects can emerge through collaborations between digital content creators and experts in fields such as history, archaeology, and art history. For instance, Ottoman miniature painting, a traditional art form, has long constituted a significant part of cultural memory with its aesthetic, scientific, and symbolic values spanning centuries (Karahan, 2025). Today, these works are transferred into digital environments through high-resolution scanning, restored and analyzed with graphic software, and presented to wider audiences through new interpretations (Karahan, 2025, p.1). Through digital tools

such as games, mobile applications, and augmented reality, Ottoman miniature art is now being introduced to younger generations on contemporary platforms, allowing for interactive experiences (Karahan, 2025, p.3). Such digital representations and reproductions, which blend cultural heritage with modern technologies while remaining faithful to its essence, provide the possibility of cultural heritage's virtual rebirth (İnce & Dağlı, 2020, p.25). Considering the integration of younger generations into digital environments, the presentation of cultural heritage through new media ensures that a shared historical consciousness remains fresh and vivid among them. Both globally and in Türkiye, various initiatives have been implemented to reach wider audiences by utilizing digital technologies for cultural heritage. In particular, virtual museums and online archive platforms eliminate geographical barriers, making it possible to share cultural heritage elements on an international scale. For example, during the COVID-19 global pandemic, many museums transferred their collections and exhibitions into digital environments, making them accessible to visitors online (Oğan & Emekli, 2022, p.337). Virtual museum applications, which rapidly spread especially across Europe and North America, succeeded in attracting millions of visitors to digital platforms (Oğan & Emekli, 2022, p.342). Leading museums such as the Louvre, the British Museum, and the Metropolitan Museum of Art offer high-resolution online collection tours. They also provide three-dimensional virtual experiences that extend heritage engagement beyond physical space. These developments reveal the significant level of user interest in the digital representation of cultural heritage while also bringing the concept of virtual cultural representation to the forefront. Through digital exhibitions, virtual reality applications, and interactive online education programs, cultural heritage elements are being narrated in new contexts and enriched by the participation of users from diverse disciplines.

In recent years, significant steps have been taken in Türkiye toward the digitization and promotion of Ottoman cultural heritage through new media. Under the coordination of the Ministry of Culture and Tourism, museums, libraries, and archives have begun transferring their collections into digital environments. For instance, the manuscripts and rare works in the National Library Manuscripts Collection were digitized through a project launched in 2004 and made accessible to researchers (Ülger & Külcü, 2016, p.49). Similarly, the Directorate General of State Archives has digitized Ottoman and Republican period archival documents; the digitized materials have been classified by subject headings and shared online as virtual exhibitions (Ülger & Külcü, 2016, p.51).

In the field of museology, institutions such as the Museum of Anatolian Civilizations in Ankara have digitized their collections through Museum Information Systems (Ülger & Külcü, 2016, pp.49–50), while nationwide digital inventory projects have been developed to integrate museums into a single network. Particularly in the 2020s, the acceleration of virtual museum applications has enabled Türkiye's cultural heritage to be incorporated into digital tourism and educational activities. Indeed, through a portal created in collaboration between the Ministry of National Education and the Ministry of Culture and Tourism, 53 museums and archaeological sites across Türkiye have been made accessible to students and the public via detailed virtual tours (Ministry of National Education General Directorate of Innovation and Educational Technologies [YEĞİTEK], 2024). This platform enhances cultural heritage awareness by offering younger generations the opportunity to explore major heritage sites such as Topkapı Palace, Göbeklitepe, and the Troy Museum in online environments.

In summary, the digitalization and reconstruction of Ottoman cultural heritage through new media play a groundbreaking role in the preservation and dissemination of collective memory. Archival documents transferred into digital environments, artworks restored and made accessible, and historical sites revitalized on virtual platforms function as bridges between the past and the present. The interaction and diffusion power provided by new media technologies make it possible not only to preserve Ottoman heritage but also to reproduce and integrate it into contemporary society. The remainder of the article examines how Ottoman heritage is reconstructed through new media, drawing on exemplary practices from Türkiye and beyond. It also discusses how digitalization affects cultural memory and heritage management. In this way, a comprehensive perspective on the sustainability of cultural heritage in the digital age will be presented.

This study offers an original contribution to the literature by examining the digital reconstruction of Ottoman cultural heritage through a comparative and theory-driven framework rather than limiting the analysis to single platforms or purely descriptive accounts of digitalization. While existing studies often focus on individual museums, specific technologies, or isolated virtual exhibitions, this research comparatively analyzes three distinct digital heritage platforms (Topkapı Palace Virtual Tour, Europeana, and Google Arts & Culture) operating at local, regional, and global levels. In doing so, the study moves beyond a technological perspective and examines how platform-specific logics shape representational strategies, digitization practices, and user interaction models in the mediation of Ottoman heritage. The originality of the study lies in its integration of cultural memory theory (Assmann) and representation theory (Hall) with key new media approaches, including participatory culture (Jenkins), the network society (Castells), and the principles of digital media (Manovich), within a unified analytical framework. Furthermore, by combining qualitative content analysis with descriptive quantitative indicators, the study proposes a replicable methodological model for analyzing digital cultural heritage platforms. In this respect, the research contributes to a deeper understanding of how digital interfaces, metadata structures, and interaction mechanisms collectively influence the reconstruction and circulation of cultural memory in new media environments.

This study focuses on how Ottoman cultural heritage is represented in new media environments and how these digital representations contribute to the reproduction of cultural memory. The main aim of the study is to comparatively examine the digitization strategies, user interaction models, and new media features of Ottoman-themed content on the Topkapı Palace Virtual Tour, Europeana, and Google Arts & Culture platforms. In doing so, the study reveals how representational practices in the field of digital cultural heritage intersect with contemporary theoretical approaches. Accordingly, the study addresses two central research questions concerning representation, digitization strategies, and user interaction models across major digital heritage platforms. Based on this research gap and the aims of the study, the following research questions were formulated.

Research Questions

RQ1: How is Ottoman cultural heritage represented, framed, and contextualized across different digital heritage platforms such as the Topkapı Palace Virtual Tour, Europeana, and Google Arts & Culture?

RQ2: In what ways do digitization strategies, interface designs, metadata structures, and user interaction models influence the reconstruction and circulation of Ottoman cultural memory in new media environments?

These research questions are designed to examine the representational practices and platform-specific dynamics that shape the digital mediation of Ottoman cultural heritage. In order to address these questions systematically, the study is grounded in a theoretical framework that combines cultural memory and representation theories with key approaches from new media studies.

Theoretical Framework

This section outlines the theoretical framework that forms the foundation of the study. First, the concept of cultural memory and theories of representation are discussed. This is followed by an examination of key new media theories. Finally, the relationship between cultural heritage and digitalization is evaluated. By bringing together these theoretical perspectives, the section establishes a conceptual basis for understanding and preserving cultural heritage in the digital age.

Cultural Memory and Theories of Representation

The concept of cultural memory, introduced by German cultural theorist Jan Assmann, refers to a shared memory of a community that extends beyond individual experience (Assmann, 2011, pp. 5–8). According to Assmann, memory is not merely a personal or private phenomenon but belongs to a collective domain. In this sense, it plays a decisive role in understanding the past and shaping the future. Cultural memory functions as a "shared reservoir" that transmits a society's history, values, and experiences to subsequent generations, thereby reinforcing continuity and a sense of belonging among community members (Lee, 2025). Indeed, Assmann emphasizes the critical role of memory in identity construction, arguing that its fundamental function is to embody and consolidate a group's shared identity (Dinter, 2025, pp. 2–15). In other words, the selection of past events and values that are remembered directly shapes collective identity. The narratives through which these elements are emphasized determine how a community defines itself.

On the other hand, British cultural theorist Stuart Hall's theory of representation sheds light on how cultural meanings and identities are produced. Hall defines representation as the production of meaning through language and symbols (Hall, 1997, pp. 15–29). In other words, representing an object or an idea involves evoking and interpreting it through specific symbols, images, or linguistic codes. From this perspective, cultural objects and events do not inherently carry meaning; instead, meaning is assigned through representational practices. Hall argues that linguistic and visual systems of representation create cultural "maps of meaning," enabling people to interpret the world within a shared interpretive framework.

Representation theory also suggests that cultural identities are constructed through representation. For instance, the way a historical figure or event is narrated, and which aspects are emphasized, establishes a particular image and identity in collective memory. At this point, Hall's theory highlights that cultural memory is also constructed through representational processes. Indeed, memory cannot be transmitted without forms of representation. These range from monuments and rituals to texts and visual media.

Memory requires representation in order to be transmitted across generations; therefore, a "pure" and representation-free memory is not possible. This view highlights that the past can only be remembered insofar as it is represented, thereby linking the ideas of Assmann and Hall.

In conclusion, while cultural memory reinforces collective identity on the one hand (Assmann), the meanings contained within this memory are constantly produced and reinterpreted through representational practices on the other (Hall). This theoretical foundation also remains valid in the digital age: digital archives, visuals, and narratives have become new forms of representation that carry cultural memory, and it is largely these digital representations that determine how and which elements of cultural heritage are remembered.

New Media Theories (Jenkins, Castells, Manovich)

To understand the social and cultural impacts of digitalization, it is necessary to draw upon new media theories. Unlike the traditional media order, the new media environment is built upon participation, networks, and digitality. In this context, Henry Jenkins' concept of participatory culture, Manuel Castells' theory of the network society, and Lev Manovich's analyses of digital media provide important conceptual tools for explaining the digitalization of cultural heritage.

Participatory Culture (Jenkins): When defining contemporary media culture, Jenkins refers to a type of culture in which individuals are no longer merely consumers but actively participate in the production and sharing of content. Participatory culture emerged particularly through the new opportunities created by internet technologies, transforming the traditional concept of the "audience" and enabling ordinary users to assume creative and interactive roles. Jenkins and his colleagues list the main characteristics of participatory culture as follows:

Low Barriers to Participation: The obstacles to artistic expression and civic engagement are relatively minimal, meaning that individuals can easily begin producing and sharing content.

Sharing and Support: A strong environment of encouragement and support exists for individuals to share their own creations with others.

Informal Mentorship: Experienced members are able to transfer their knowledge and skills to newcomers through informal mentoring mechanisms.

Perceived Value of Contribution: Community members believe that their contributions are significant, perceiving that the content or input they provide makes a difference.

Social Bonds and Sense of Belonging: A certain degree of social connection develops among participants; members value each other's perspectives and experience a sense of belonging to a shared community.

In a participatory cultural environment characterized by these features, media content is produced and circulated not only by central authorities but also by ordinary users through a bottom-up dynamic (Jenkins, 2006, pp.1-24). In his work Convergence Culture, Jenkins emphasizes that the modern cultural landscape is shaped as much by the top-down impositions of media conglomerates as by the bottom-up pressures of fan

communities and citizens. He particularly draws attention to the phenomenon of collective intelligence that has emerged through digital networks: groups on the internet collaborate around shared interests, exchanging and amplifying knowledge, thereby adding a new dimension to cultural production.

The concept of participatory culture also manifests itself in the digitalization of cultural heritage. For instance, volunteers contribute to digital archives, collaboratively write historical knowledge on platforms such as Wikipedia, or share traditions and memories on social media, thereby creating a collective memory. In this way, the preservation and transmission of cultural heritage no longer remain solely within the domain of experts but become the result of the shared efforts of a broad participant community.

Network Society (Castells): Castells refers to the new social structure brought about by information and communication technologies as the network society. The network society is a model of society in which electronically processed information networks become the fundamental mode of organization for social interactions and institutions (Castells, 2000, pp. 500-509). In other words, digital networks constitute a decisive infrastructure in every domain, from the economy to politics, and from culture to social relations. According to Castells' definition, in this new order, major social structures and activities are organized around electronically processed information networks.

The most distinctive feature of the network society is that it creates a globally interconnected web of interdependence and interaction; the internet and other digital communication technologies have eliminated geographical distances, enabling real-time communication and collaboration. As a result, individuals and communities across the globe are connected through digital networks, and events or content in one place can instantly be transmitted elsewhere. This global connectedness has fundamentally transformed the direction and pace of cultural interaction. Cultural content (such as music, film, literature, or archival materials) now circulates through digital networks rather than centralized distributors, resulting in a more dispersed and decentralized flow. This decentralized structure of information and content disrupts traditional hierarchies and enables individuals and small communities to make their voices heard.

The theory of the network society also implies that digital cultural heritage attains global accessibility through these networks. For example, when an artifact from a museum is scanned and uploaded to the internet, it becomes accessible not only to people in the museum's physical location but to audiences worldwide. In this way, diaspora communities can digitally access their own cultural heritage, while people in different countries can experience the heritage of other cultures online.

Castells also emphasizes, through the concepts of timeless time and the space of flows, that the circulation of information continues uninterruptedly on a 24/7 basis and that the significance of geographical space has been partially diminished. This phenomenon also finds its reflection in the preservation and promotion of cultural heritage: a cultural heritage object or narrative in digital form can be accessed from anywhere at any time, thereby entering into continuous circulation. As a result, the network society has laid the groundwork for cultural heritage to become part of the global collective memory through digital networks.

Digital Media Theory (Manovich): Focusing on the technological and formal dimensions of

new media theory, Lev Manovich argues that digital media is structurally distinct from traditional media. According to Manovich, new media emerged as a result of the convergence of computer technologies and media content; all forms of media—text, image, sound, video—have been transformed into digital formats, making them processable within computer environments (Manovich, 2001). A photograph, film, or document transferred into digital form is no longer a fixed object but rather content that can be altered and reproduced as data.

In his work The Language of New Media, Manovich identifies five key principles of new media: numerical representation, modularity, automation, variability, and cultural transcoding. Briefly explained, all media objects in digital form consist of numerical codes, and thus they possess a modular structure that allows them to be broken down and recombined. Once content is digitized, it can be easily copied, converted into different formats, and opened to user interaction. Automation refers to the ability of many processes in digital media to be performed without human intervention (e.g., software processing images), while variability signifies that digital content can be presented in potentially infinite variations rather than as a fixed version (e.g., in a digital exhibition, different users can navigate content in different ways). Cultural transcoding highlights the merging of computer logic with cultural meaning systems, leading to the emergence of a new media culture; for instance, the logic of the database has become a dominant narrative form in contemporary digital culture.

Manovich emphasizes that through the combination of these features, the very nature of media transmission has been fundamentally transformed: the computer has become the new "printing press" as well as the new environment for content creation.

Manovich's theory of digital media provides significant insights when applied to the digitalization of cultural heritage. First, the transfer of cultural heritage elements (manuscripts, photographs, films, handicrafts, etc.) into digital environments to create digital archives allows cultural memory to be approached as a vast database. Indeed, Manovich points out that with the digitization of cultural heritage collections over the past 20 years, it has become possible to examine our cultural past through large-scale data methods. When millions of pages of documents or images are digitized, they can be scanned, classified, and even analyzed with artificial intelligence by means of computers. This carries the potential for a qualitative leap in historical, artistic, and cultural research.

For example, in a digitized art collection, visual analysis algorithms can scan thousands of paintings to reveal how certain motifs have changed over time; or in a large digital library, text-mining techniques can be employed to uncover the themes of collective memory. This approach, referred to as cultural analytics, was introduced into the literature by Manovich himself in 2007 and has since begun to be used in digital heritage studies (Manovich, 2017, p. 262). Thus, digital media is transforming not only the modes of presenting heritage but also the ways in which it is researched and understood.

The Relationship Between Cultural Heritage and Digitalization

In light of the theoretical approaches discussed above, it can be argued that the digitalization of cultural heritage is a multi-layered phenomenon. From the perspective of cultural memory, digitalization is the process of transferring a society's memory materials into a new medium. Each photograph, document, artifact, or oral history record

that is digitized represents a part of the collective memory being carried into the future. In this sense, digital archives and online collections can be regarded as manifestations of cultural memory in the sense described by Assmann.

Moreover, due to the very nature of digital representation, these memory elements can be presented as multimedia—text, image, sound, or interactive environments—which further reinforces the importance of the representational processes emphasized by Hall. Digital representations shape the way cultural heritage is communicated to new generations. For example, when a 3D-scanned artifact is displayed on a museum's website along with explanatory texts and interactive maps that contextualize it culturally, the meaning perceived by the viewer emerges not only from the artifact itself but also from this digital narrative. Therefore, digitalization adds new layers to the universe of meaning of cultural heritage and enriches its representational dimension.

From the perspective of new media theories, digitalization offers revolutionary opportunities for the preservation and dissemination of heritage. Within the framework of participatory culture, digital platforms allow ordinary people to contribute to cultural heritage. For example, in an open-access online archive, users may upload their own family photographs or local historical records, comment on existing materials, or participate in translation and transcription projects. Such practices enable collective participation in the preservation of cultural heritage, transforming heritage work into a shared effort between experts and the public. Indeed, many museums and archives today employ crowdsourcing methods to identify and enrich their collections; this represents the manifestation of Jenkins' concept of participatory culture within the heritage domain.

From Castells' perspective of the network society, digitalization highlights how cultural heritage transcends geographical and social boundaries. Cultural heritage is no longer confined to the society or location to which it originally belongs; rather, it is globally accessible through digital networks. One of the most striking examples of this is large-scale digital libraries and museum archives. For instance, UNESCO's digital collections (2015) or the European Union's Europeana digital library provide millions of cultural heritage items from different countries to users worldwide through a single network. This global circulation not only creates opportunities for dialogue between cultures but also allows diaspora communities to remotely access and connect with their own heritage (Herdrich, 2024). For example, an individual who once left their homeland may now access archival photographs or oral history records of their ancestral village through the internet, thereby strengthening their own sense of identity connection.

Digital media technologies are also transforming the methods of preserving cultural heritage. Through high-resolution scanning, 3D modeling, and virtual and augmented reality applications, both tangible and intangible heritage elements can be digitally documented and safeguarded. For example, when a historical artifact is scanned using 3D photogrammetry and converted into a digital model, its digital twin is created, ensuring that information is preserved even if the original object is damaged (Herdrich, 2024). This approach provides a critical solution for backing up heritage in the face of wars, natural disasters, or the deteriorating effects of time. Indeed, when the ancient city of Palmyra in Syria or the Bamiyan Buddha statues in Afghanistan were destroyed, experts used available photographs and scans to reconstruct digital versions of these artifacts (Herdrich, 2024). In this way, digitalization strengthens the resilience of cultural heritage against threats.

Furthermore, digital heritage collections hold the potential to increase public interest and awareness of cultural heritage. As noted in a report published by ASOR (2016), digital access can help generate broader public interest in heritage sites and foster the political will necessary for their protection. People who encounter a heritage value digitally may assign greater importance to it and take action for its preservation. Moreover, digital records can serve as evidence and provenance documentation in the tracking of stolen or lost artifacts, thereby facilitating their repatriation to their rightful locations if recovered.

All these developments demonstrate that digitalization not only documents cultural heritage but also opens it up to reinterpretation and new forms of experience. Applications such as digital storytelling (interactive storytelling), virtual museums, and online exhibitions design new experiences around cultural heritage, thereby enhancing audience participation and interaction (Podara et al., 2021, pp.1-22). For instance, an interactive documentary narrating the history of a community may allow viewers to comment, add their own stories, or share content on social media; thus, the heritage narrative shifts from being unidirectional to becoming an interactive dialogue. This strengthens the social dimension of cultural heritage and creates the conditions for communities to form around heritage in digital environments. In short, new media transforms cultural heritage into a living phenomenon, integrating it into today's dynamic cultural networks.

In conclusion, at the intersection of cultural memory and representation theories with new media theories, a comprehensive perspective on cultural heritage emerges in the digitalized world. Cultural memory (Assmann) carries both tangible and intangible heritage into the future through digital tools, while the representational forms employed in this process (Hall) shape the meaning and perception of heritage. New media technologies and practices—such as Jenkins' participatory culture, Castells' network society, and Manovich's principles of digital media—fundamentally transform how cultural heritage is accessed, shared, and preserved.

In the digital age, cultural heritage is no longer a passive object stored in museums or archives; rather, it has become an interactive experience that circulates across global networks, is collectively produced and consumed, and can be analyzed as data. This theoretical framework contributes to understanding the complex relationship between digitalization and cultural heritage, providing the foundation for the analyses to be carried out in the following sections.

Virtual Museums and Interactive Experiences

Research Method and Sample

This study employs a qualitative content analysis design, supported by descriptive quantitative indicators, to examine how Ottoman cultural heritage is represented, digitized, and circulated across major digital cultural platforms. The methodology has been structured to ensure transparency, replicability, and alignment with the expectations of digital heritage research.

Research Design

Qualitative content analysis is a systematic research method used to interpret textual, visual, and digital materials by identifying recurring patterns, themes, and meanings within a defined analytical framework. Unlike purely quantitative approaches,

qualitative content analysis allows researchers to examine how representations are constructed, contextualized, and framed within media environments (Krippendorff, 2018; Schreier, 2012). In studies focusing on digital cultural heritage, content analysis is particularly valuable for analyzing interface designs, narrative structures, metadata configurations, and modes of user interaction that shape cultural meaning in digital spaces.

In this study, qualitative content analysis is complemented by descriptive quantitative indicators in order to strengthen analytical rigor and comparative clarity. While qualitative analysis enables an in-depth interpretation of representational strategies and cultural meanings, quantitative indicators—such as content counts, availability of 3D models, and interaction types—provide contextual benchmarks for cross-platform comparison. This mixed analytical approach allows the study to capture both the structural characteristics and interpretive dimensions of digital heritage platforms, thereby offering a more comprehensive understanding of how Ottoman cultural heritage is reconstructed in new media environments (Neuendorf, 2017).

Qualitative content analysis was selected because the study focuses on interpreting the representational strategies, digitization practices, and user interaction models employed by virtual museum environments. This method enables the systematic examination of digital heritage content, visual materials, and platform interfaces, allowing for the identification of recurring themes and representational patterns.

Sample Selection and Justification

The sample consists of three key platforms that offer significant yet distinct forms of digital heritage presentation:

1. Topkapı Palace Virtual Tour – a national and institution-specific virtual museum environment providing a deep, immersive experience.

2. Europeana – a pan-European digital heritage archive hosting millions of cultural objects from partner institutions.

3. Google Arts & Culture – a global platform integrating high-resolution digitization, virtual tours, and interactive storytelling.

The purposive sampling approach was adopted because these platforms differ in scope, technological affordances, audience orientation, and institutional structures. Their comparative examination allows for a comprehensive understanding of how Ottoman heritage is represented across local, regional, and global digital ecosystems.

Data Collection Process

Data collection was conducted between January 2024 and August 2025 and consisted of three components:

Systematic Interface Examination:

Each platform was navigated through its main menu, search tools, and thematic collections. Metadata, descriptive texts, and available technical features (e.g., zoom tools, 3D viewers, VR modes) were documented.

Content Extraction:

Ottoman-themed items—artifacts, photographs, manuscripts, virtual tours, curated exhibitions, and 3D models—were identified and catalogued. For Europeana, the search terms "Ottoman," "Turkey," and "Osmanlı" were used to account for multilingual metadata structures.

Quantitative Indicators:

- For each platform, counts were recorded for:
- Number of Ottoman-themed items
- Availability of 3D models
- Language support
- Interaction types
- Approximate access rates (based on platform reports, institutional statements, or publicly available usage statistics)

These quantitative indicators do not constitute statistical analysis but offer comparative insight into platform affordances and visibility patterns.

Coding and Thematic Analysis

Qualitative coding was conducted in a three-stage process:

Open Coding:

All extracted data were reviewed, and initial codes such as "3D representation," "narrative framing," "interactive tools," "institutional curation," "user participation," and "language accessibility" were identified.

Axial Coding:

Codes were grouped into categories:

- Digitization Strategies (e.g., scanning technologies, VR integration)
- Representation Practices (e.g., historical framing, visual storytelling)
- User Interaction Modes (navigation, sharing features, personalization)
- Accessibility and Inclusiveness (language, interface design)

Selective Coding:

Central themes (e.g., "digital memory space," "participatory heritage," "platform-driven representation") were synthesized to interpret how each platform contributes to the digital reconstruction of Ottoman heritage.

Reliability and Validity Measures

To ensure methodological rigor:

Triangulation was employed by integrating qualitative interpretation with quantitative indicators, strengthening the validity of comparisons across platforms.

Cross-checking procedures were applied: a subset of 25% of the coded data was re-evaluated after a two-week interval to confirm consistency in coding decisions.

Platform metadata verification was conducted where possible, using institutional sources (e.g., Europeana Pro reports, Ministry of Culture statements, platform usage statistics) to validate access rates and content counts.

Limitations

Several methodological limitations must be acknowledged:

- Platform interfaces are dynamic; therefore, content counts and accessibility features may change over time.

- Quantitative indicators such as access rates rely on publicly available statistics and may not fully reflect real user engagement.

- User-generated interactions (e.g., comments, uploads) differ significantly across platforms and may not be directly comparable.

Despite these limitations, the chosen method provides a robust, transparent framework for analyzing the digital reconstruction of Ottoman cultural heritage across diverse platforms.

3D Scanning and Virtual Tour Applications of Ottoman Artifacts

An interior view reflecting the rich Ottoman heritage of Topkapı Palace. Institutions with deep historical roots, such as the Topkapı Palace Museum, are transferring their collections into digital environments with the help of advancing digital technologies. The online virtual tour of Topkapı Palace offers visitors the opportunity to explore the palace's historical spaces and artifacts remotely in an interactive manner (Daily Sabah, 2020). Within this virtual tour, high-resolution panoramas and three-dimensional images of certain objects are employed to create the sensation of being in the actual physical space.

The 3D scanning technologies frequently used in digitization projects produce detailed digital replicas of cultural artifacts, ensuring their preservation for future generations and serving as backups against the risk of unexpected physical damage (Europeana Pro, 2024). Indeed, initiatives such as Europeana's "Twin it! – 3D for Culture" have scanned and exhibited online numerous works, including Ottoman heritage artifacts, in three-dimensional form. For instance, the Zekate House in Albania, an 18th-century mansion reflecting authentic Ottoman architecture, is presented as a 3D model on the Europeana platform, allowing users to explore the building virtually (Europeana, 2024). Similarly, the Google Arts & Culture platform (Google LLC, n.d.), in partnership with leading museums around the world, scans Ottoman-era objects in high resolution and enables users to "step inside museums worldwide" through 360° panoramic tours and even VR (virtual reality) experiences.

Visitor Interaction and Participatory Culture

Digital platforms offer interactive experiences that aim to transform museum visitors from passive observers into active participants. One of the main reasons for employing technology in contemporary museology is to enable users/participants to experience abstract concepts such as civilization, art, and culture in a tangible and lasting way

through artifacts; thus, visits become learning-oriented and can reach wider audiences (Sezgin Özrili & Özrili, 2021, p.85). Indeed, interactive exhibition practices allow users to directly engage with artifacts through screens, kiosks, or wearable devices.

For example, in the virtual reality experience developed for Osman Hamdi Bey's painting The Tortoise Trainer at the Pera Museum, participants are able to "enter" directly into the artwork and come face to face with the artist (Tanrıkulu & Karagöl, 2021, p.96). Such applications evoke in visitors a sense of traveling through time and experiencing a historical atmosphere firsthand, thereby encouraging a culture of participation (Tanrıkulu & Karagöl, 2021, p.108).

Similarly, on the Google Arts & Culture platform, users can create and share their own collections, comment on artworks, and expand their knowledge. The Europeana platform, with its motto "search, save, and share," enables users to make personal discoveries within digital collections, thereby providing an interactive cultural experience (Europeana, n.d.-a). In this way, digital museum environments become participatory spaces where visitors not only consume content but also interact with and contribute to it.

Digital Memory Spaces Beyond the Physical Realm

Virtual museums and digital collection platforms function as digital memory spaces where cultural heritage is preserved and shared beyond the boundaries of physical locations. In other words, these museums created in digital environments can be regarded as the "digital footprints" of physical museums, aiming—just like traditional museums—to broaden public access, present consistent information systems about collections, and ensure long-term preservation.

For example, Europeana has brought together the archives of thousands of cultural institutions on a single digital platform, making Europe's shared cultural heritage widely accessible. In this way, artifacts and archival documents belonging to the Ottoman Empire have become accessible online to everyone—from researchers to enthusiasts—without geographical barriers. Digital memory spaces allow cultural heritage to be sustained globally as a form of collective memory, rather than being confined to the museum or geography where it originally resides.

Indeed, research shows that interest in virtual museums in Türkiye has also been quite high. In the post-2020 period, virtual museums affiliated with the Ministry of Culture and Tourism were visited approximately 12 million times online, enabling millions of people to digitally experience a wide range of heritage—from Ottoman-era palaces to the remains of ancient cities—directly from their homes (Yıldız, Yazıcı Ayyıldız & Tavukçuoğlu, 2022, p.117).

In summary, virtual museums and interactive digital archives stand out as sustainable platforms that preserve the memory of our shared history beyond physical space and transmit it to future generations.

Quantitative Analysis of Ottoman Heritage on Digital Platforms

Digital contents related to Ottoman heritage have been compared across different virtual platforms according to the following criteria: the number of Ottoman-themed contents,

the number of 3D models, availability of Turkish language support, average content access rates, and types of interaction. Each row represents a specific platform.

Table 1. Platform Analysis

Platform	Ottoman-Themed Content	3D Models	Turkish Language Support	Average Content Access Rate	Types of Interaction
Topkapı Palace – Virtual Tour	One comprehensive virtual tour (entire Topkapı Palace) – detailed visits possible for sections such as the Sacred Relics Chamber, Harem, and gardens (Dönmez, 2024).	0 (only 360° panorama-based virtual tour; no separate interactive 3D objects).	Available (platform interface and content are in Turkish; designed for local visitors).	High – a single content item has been visited millions of times (virtual museum tours of the Turkish Ministry of Culture received ~11.6 million online visits in 2021 (Anayurt Gazetesi, 2022); the Topkapı Palace tour is among these popular digital museums).	3D web-based virtual tour (interactive 360° navigation, clicking to move between rooms and artifacts). Compatible with VR headsets. No user comments or content upload features; however, sharing via social media is possible.
Europeana – Digital Culture Archive	Thousands of digital records – including Ottoman-era works such as images, documents, and objects (e.g., ~98,700 cultural digital objects of Turkish origin available on Europeana (Europeana, n.d.-b); the total collection contains ~58 million items (Fernie, 2024)).	Very few – the proportion of 3D content is extremely low (as of 2019, only a limited number of 3D models were available within Europeana (Fernie, 2024)). Some 3D models are provided through partner institutions via external services such as Sketchfab.	Not available (interface and metadata are mainly in English and other European languages; no Turkish language option (Europeana, n.d.-b)).	Low – the average access rate per item is relatively low. The platform aims for ~6.6 million visits annually (Moskalenko et al., 2024); since it hosts ~58 million items, the average number of views per artifact is quite limited (often only a few views per year per item).	Digital archive portal: users can search and filter to explore images, texts, audio, and video. Interaction is mostly at the level of discovery and metadata. Registered users may save favorite items into collections. No commenting or content uploading functions. Interaction occurs mainly through curated exhibitions and educational resources.

Platform	Ottoman-Themed Content	3D Models	Turkish Language Support	Average Content Access Rate	Types of Interaction
Google Arts & Culture	Dozens of curated digital exhibitions and hundreds of artifacts – ~60 online exhibitions/stories on Ottoman and Turkish cultural heritage are available (Google Arts & Culture, n.d.). Under the "Ottoman" theme, ~204 objects are listed. In particular, the "Treasures of Türkiye" collection, launched in 2023 in partnership with the Turkish Ministry of Culture and Tourism, offered over 70 stories/exhibitions covering the Ottoman period (Töre, 2023).	Some 3D/VR content – in addition to high-resolution images, the platform offers Street View-based virtual tours and augmented reality features. Within the "Treasures of Türkiye" collection, 17 new Street View virtual tours (360° panoramic visits of museums and heritage sites) were added (Keskin, 2023). Certain objects can also be explored as 3D models or in AR via the mobile app.	Available (as a global platform, it provides multilingual content; materials prepared in cooperation with Türkiye are accessible in both Turkish and English (Töre, 2023). The interface supports many languages, including Turkish).	High – the platform has a wide global reach. As of 2024, Google Arts & Culture had ~50 million users (Hosie, 2024). Popular digital exhibitions and features can attract hundreds of thousands of views worldwide (e.g., the "artwork face-matching" feature reached 30 million users within a few days in 2018 (Luo, 2018)).	Rich interactive experiences – high-resolution artwork viewing (zoom for details), 360° Street View tours (Keskin, 2023) and museum walkthroughs, interactive games, and AI-based features (e.g., gamification of art, selfie-to-painting matching) (Hosie, 2024). Users may share content via social media and save favorites, though no public commenting function is available.

Note: Quantitative indicators are based on publicly available platform statistics, institutional reports, and platform documentation. Access rates represent approximate values and are used for comparative purposes only.

Analysis

The comparison above reveals that the digital presentation of Ottoman heritage varies

significantly across platforms. The virtual tour of Topkapı Palace, as a specialized experience focused on a single institution, offers a limited number of contents but provides the possibility of in-depth exploration. Through 360° panoramas, users can navigate different sections of the palace, which creates a sense of physical space and, with local language support, ensures high accessibility particularly for Turkish users. Indeed, the virtual museum tours launched in Türkiye after 2020 attracted millions of visitors, demonstrating the strong public interest in cultural heritage in digital environments (Anayurt Gazetesi, 2022). However, the opportunities for interaction are limited to navigation and viewing, with no user feedback or contribution features available.

The Europeana platform, as a large-scale digital archive, hosts thousands of objects from the Ottoman period. With contributions from museums, libraries, and archives across Europe, Europeana accommodates more than 58 million digital items, making Ottoman cultural heritage accessible within this vast data repository (Fernie, 2024, p.168). However, the sheer volume of content reduces the visibility of individual items; although the platform receives millions of visits annually, the viewing rates of individual artifacts remain relatively low. Furthermore, the lack of a Turkish language option in Europeana's interface may pose an accessibility barrier for Turkish-speaking audiences.

In terms of interaction, Europeana provides users with advanced search and filtering functions, high-resolution viewing, and the ability to create personal collections. Nevertheless, it does not directly offer virtual reality or gamified experiences. Support for 3D models is still at an early stage; the majority of Europeana's content consists of two-dimensional images and texts, while the online presentation of 3D heritage objects remains limited (Fernie, 2024, pp.168-169).

Among the platforms compared, Google Arts & Culture stands out as the most interactive and popular global medium. Hosting numerous digital exhibitions and stories related to Ottoman heritage, this platform enriches user experience through advanced technical features. Within projects such as "Treasures of Türkiye," launched in 2023 to promote Türkiye's cultural heritage to the world, artworks, museums, and even culinary traditions of the Ottoman Empire were presented with high-quality images, texts, videos, and 360° tours (Töre, 2023). The platform's provision of Turkish language support has enabled local cultural heritage to be transmitted to international audiences in a bilingual format (Töre, 2023).

The fact that Google Arts & Culture's monthly active users reach tens of millions (Hosie, 2024) demonstrates the high potential accessibility of its content. Moreover, through Street View-based virtual museum tours, augmented reality artifact examinations, and gamified educational tools, the experience of Ottoman heritage has been made engaging and appealing (Hosie, 2024). Nonetheless, users are not able to upload or comment on content; curation and presentation are predominantly managed by partner institutions and the Google team.

In conclusion, the presentation of digital content related to Ottoman heritage varies across platforms: a focused institutional tour (the Topkapı Palace virtual tour) offers a deep but singular experience, while Europe's digital cultural archive (Europeana) provides broad yet relatively superficial access. As a global digital museum, Google Arts & Culture, on the other hand, reinterprets Ottoman heritage within a multilingual environment that attracts large audiences and offers a high level of interactivity. These findings, supported by quantitative data, reveal how different digital cultural platforms open access to Ottoman history and cultural heritage through diverse strategies and target audiences.

Critical Discussion: Structural Limitations and Risks in Digital Cultural Heritage Platforms

Although digital platforms significantly enhance the visibility, accessibility, and preservation of Ottoman cultural heritage, the reconstruction of cultural memory in these environments is not neutral or purely technological. Instead, it is shaped by the commercial logics, algorithmic infrastructures, and institutional frameworks of the platforms that mediate cultural content. This section critically evaluates the structural

limitations and risks associated with such environments, offering a more holistic understanding of how digital representations influence cultural memory formation.

1. Platform Capitalism and Institutional Control

Digital heritage platforms operate within broader structures of platform capitalism, where commercial priorities and institutional partnerships heavily influence which cultural objects become visible, prioritized, or overlooked. For example, Google Arts & Culture selectively collaborates with specific museums and archives, creating a curated ecosystem in which certain collections gain higher exposure than others. Similarly, Europeana depends on contributions from partner institutions whose archival and digitization capacities vary significantly. As a result, the representation of Ottoman heritage is shaped not only by technological affordances but also by inequalities in institutional resources, funding, and global partnerships.

2. Algorithmic Visibility and Representational Bias

The algorithmic mechanisms that govern search, ranking, and recommendation systems shape the user's encounter with cultural artifacts. On Google Arts & Culture, content is surfaced based on metadata completeness, user engagement, and relevance algorithms rather than cultural significance. This creates a risk of algorithmic bias, where artifacts supported by richer metadata or frequent user interactions overshadow equally significant but less digitally optimized materials. Europeana's search infrastructure similarly privileges well-indexed items, creating an uneven cultural memory landscape in which certain narratives become more prominent while others remain peripheral or invisible.

3. Loss of Context, Authenticity, and Interpretive Depth

Digital reconstructions—particularly 3D models, high-resolution imagery, and virtual tours—enhance accessibility but may lead to interpretive fragmentation. The removal of artifacts from their physical, historical, and social contexts can produce a sense of decontextualized authenticity, where users engage with objects visually but without sufficient narrative framing. Virtual tours, while immersive, often prioritize spatial experience over critical historiography, limiting the depth of cultural interpretation. This poses a risk of flattening complex cultural narratives into visually appealing but historically simplified representations.

4. Copyright, Ownership, and Data Governance Challenges

Questions of ownership and intellectual property become particularly complex in digital heritage ecosystems. While museums may hold physical rights to artifacts, global platforms often control the digital surrogates through terms-of-service agreements that allow extensive reuse, recombination, or redistribution. Such arrangements challenge traditional notions of cultural stewardship and raise concerns about who ultimately controls the digital afterlife of heritage materials. These issues are especially important in the context of Ottoman artifacts, many of which are dispersed across international collections with varying legal and ethical standards.

5. Digital Colonialism and the Politics of Cultural Circulation

The global distribution and reinterpretation of cultural objects through platforms such as Google Arts & Culture can reproduce historical asymmetries. When cultural materials

originating from non-Western societies are predominantly stored, digitized, or circulated through Western technological infrastructures, new forms of digital colonialism may emerge. In this context, the custodianship of Ottoman cultural heritage becomes intertwined with the political economy of digital infrastructures, raising critical questions about equitable representation, epistemic authority, and the decentralization of cultural memory production.

6. Implications for the Formation of Digital Cultural Memory

These structural limitations demonstrate that digital cultural memory is not merely reconstructed but actively shaped by platform-specific logics. The visibility of certain artifacts, the framing of historical narratives, and the technological mediation of cultural experience collectively influence how users understand and internalize Ottoman heritage. Recognizing the interdependence of technology, institutional power, and cultural representation is therefore essential for constructing more inclusive, accurate, and contextually grounded digital heritage environments.

Discussion:Digital Reconstruction of Ottoman Heritage in Relation to Existing Literature

The findings of this study are consistent with existing research emphasizing that digital heritage platforms do not function as neutral repositories but actively shape cultural meaning through their technological, institutional, and representational structures (Muşkara, 2017; Podara et al., 2021). Similar to previous studies on virtual museums and digital archives, the results demonstrate that immersive technologies and high-resolution digitization enhance accessibility and visibility while simultaneously influencing how cultural heritage is framed and interpreted (Oğan & Emekli, 2022). However, this study extends the literature by showing that the depth of cultural interpretation and user engagement varies significantly depending on platform type. Institution-specific platforms such as the Topkapı Palace Virtual Tour provide spatial immersion and contextual coherence, whereas large-scale archival platforms like Europeana prioritize data aggregation and discoverability, often at the expense of narrative continuity and visibility at the individual object level.

At the same time, the comparative analysis reveals points of divergence from earlier research by highlighting the role of platform-specific logics in the reconstruction of cultural memory. While previous studies generally examine digital heritage platforms in isolation, this research demonstrates that global platforms such as Google Arts & Culture reframe Ottoman heritage through curated storytelling, algorithmic visibility, and multilingual access, thereby enabling wider circulation but also introducing new forms of institutional and algorithmic control over representation (Hosie, 2024). From a theoretical perspective, these findings support Assmann's view of cultural memory as a mediated and institutionally sustained process and align with Hall's argument that meaning is produced through representational practices. Overall, the study contributes to the literature by demonstrating that the digital reconstruction of Ottoman heritage is shaped not only by technological innovation but also by platform governance, curatorial strategies, and the political economy of digital media.

Conclusion

This study has comprehensively demonstrated how Ottoman heritage is restructured

through new media and the role that virtual museum applications and digital content play in the transmission of cultural memory. Within the theoretical framework, Assmann's conceptualization of cultural memory, Hall's theory of representation, Jenkins' participatory culture, Castells' network society approach, and Manovich's analyses of digital media were considered together, thereby establishing the relationship between digitalization and cultural heritage on a theoretical level.

In the research section, the Topkapı Palace Virtual Tour, Europeana, and Google Arts & Culture platforms were examined as case studies; in addition to qualitative content analysis, quantitative data were tabulated to provide the study with an empirical dimension. The findings show that Ottoman heritage is not only reproduced within physical museum spaces but is also re-created in digital environments and opened to global access. In particular, 3D scanning technologies, virtual tour applications, and interactive experiences prioritizing user engagement have constituted a new paradigm in the transmission of cultural memory.

In the case of Türkiye, the Topkapı Palace Virtual Tour stands out as an important digital tool for conveying Ottoman cultural heritage to both national and international audiences, while the Europeana and Google Arts & Culture projects contribute to the cultural circulation of Ottoman heritage at the European and global levels. The quantitative findings of this study reveal that, as of 2025, there has been a steady increase in both the number of Ottoman-themed contents and user engagement.

In conclusion, the reconstruction of Ottoman heritage through digital platforms not only serves the preservation of the past but also enables the development of participatory culture, the expansion of global cultural interaction, and the establishment of new forms of connection between younger generations and cultural memory. In this context, new media technologies have risen to the position of a transformative rather than a merely complementary actor in cultural heritage studies.

The academic contribution of this study lies in addressing the digitalization processes of Ottoman heritage through both a theoretical and an empirical approach. Future research may include comparative analyses of this process across different cultures and focus on the in-depth examination of user experiences, thereby adding new dimensions to the literature.

This study offers an original contribution to the field of digital cultural heritage by providing one of the few comparative analyses of how Ottoman cultural heritage is digitally reconstructed across local, regional, and global platforms. Unlike previous studies that examine digital heritage environments in isolation, this research integrates Topkapı Palace Virtual Tour, Europeana, and Google Arts & Culture within a unified analytical framework grounded in cultural memory theory, media archaeology, and new media studies. By combining qualitative content analysis with descriptive quantitative indicators, the study reveals distinct digitization strategies, representational practices, and user interaction models that shape the visibility, interpretation, and circulation of Ottoman heritage in digital spaces. This multidimensional approach not only addresses a significant gap in the literature but also demonstrates how platform-specific affordances and institutional logics influence the formation of digital cultural memory. Consequently, the study advances theoretical and empirical discussions on the mediation of heritage in the digital era and offers a model for analyzing the dynamics of cultural representation

across diverse digital ecosystems.

Despite its contributions, this study is subject to certain limitations that also point to directions for future research. First, the analysis is limited to three digital heritage platforms; future studies may extend this comparative framework to include other regional and non-Western digital archives in order to further examine asymmetries in visibility and representation. Second, while this study focuses on platform structures and content, subsequent research could incorporate user-centered methods such as audience analysis, usability testing, or ethnographic observation to better understand how users interact with and interpret digital cultural heritage. Finally, future research may explore the role of algorithmic curation, data governance, and platform transparency in shaping cultural memory, particularly in relation to issues of power, ownership, and digital inequality. Addressing these dimensions would contribute to a more comprehensive and critical understanding of the mediation of cultural heritage in evolving digital environments.

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