

DIGITAL METAMORPHOSIS OF CULTURAL AND ARTISTIC HERITAGE IN ROMANIA. *HYPERHERITAGE, HYPERMEDIA AND THE EMERGENCE OF A HYPERTEXT SOCIETY*

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ABSTRACT

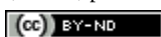
Contemporary society and culture increasingly unfold under the sign of the “hyper”, reflecting ongoing metamorphoses shaped by the pervasive influence of new technologies. This article examines the emerging notion of “digital heritage” in Romania through the lens of hypermedia and hypertext, emphasizing the transformation of traditional heritage institutions into interactive, technologically mediated environments. Using the case studies of national digital heritage platforms such as e-cultura.ro, culturalia.ro or *Platform for Heritage* (vxd.ro/PPP), this study highlights how digital tools reshape the production, dissemination, and reception of cultural content. The study situates Romania within the broader global discourse on digital heritage, exploring the socio-cultural implications of hypermedia practices, user interaction, and the reconfiguration of collective memory in the digital era.

Keywords: digital heritage; digital metamorphosis, hyper-heritage; hypermedia; hypertext society

INTRODUCTION

The theoretical framework of this study brings together two complementary domains: national heritage, on the one hand, and hypermedia architectures, on the other. This dual perspective makes it possible to account for both the technological infrastructures and the artistic or cultural practices that shape the current processes of digital metamorphosis (Locoro and Ravarini 2021, 167–181). Discussions on knowledge and information societies (Jeanneret 2005, 66–76), evolving technological boundaries (Wertheim 1999), and the interplay between the virtual and the real (Rotaru 2010, 22) highlight critical themes such as virtual spaces, platformization, digital mobility, and digital democracy. The digital transformation of the cultural and heritage sectors entails collaboration among diverse social actors, ultimately

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reshaping institutional practices, audience engagement, and broader public perceptions of cultural and artistic heritage (Ory-Lavolée 2002).

The *hyper* has become a defining feature of contemporary culture, marking a context in which traditional boundaries of space, time, and media are blurred; concepts such as *hypermedia*, *hypertext*, and *hyperheritage* represent intertwined phenomena at the core of this cultural and technological transformation. Ted Nelson's foundational work on hypertext (1965, 84–100) anticipated an informational environment organized not around linear narratives but through interactive, dynamic, and networked structures. Ascher's theorization of a *hypertext society* (2002) extends this perspective by conceptualizing contemporary social life as a non-linear constellation of connections, characterized by mobility, fragmentation, and processes of recombination (also Ascher 2004).

This article investigates the ways in which hypertextual infrastructures expand public engagement with national and artistic heritage. The analysis attends to multiple levels of public discourse: the legislative framework; the institutional ecosystem, including governmental bodies such as the Ministry of Culture (UMP), the Ministry of Economy, Digitalization, Entrepreneurship and Tourism, and the National Institute for Cultural Heritage, museum institutions and private sector initiative, that mediate heritage in both physical and digital forms. Methodologically, the study employs a mixed-method approach. It integrates quantitative data extracted from Tempo.ro, including national-level heritage inventories (museum collections, institutional distribution, and visitor statistics); and a digital ethnography approach of three digital heritage platforms, in Romania. Within a hypertextual society, digital tools do more than facilitate access to heritage information: they enable collaborative meaning-making, reflecting the participatory (Samuels 2008), relational, and multi-layered logic that underpins hyperheritage.

ROMANIAN NATIONAL HERITAGE: SOCIO-CULTURAL AND LEGAL CONTEXT

The first part of this study provides an overview of Romania's diverse and multilayered cultural and artistic heritage, which includes both tangible and intangible components. It also examines the legal and institutional frameworks governing preservation and promotion, including national legislation aligned with European and international standards, such as UNESCO conventions and the Faro Convention.

Public museums and collections, through exhibitions, educational programs, and digital platforms, preserve, interpret, and disseminate heritage, reinforcing its contemporary relevance while ensuring its accessibility for future generations. As public institutions and cultural sphere actors, they embody the dynamic ecosystem of Romanian heritage, where preservation, creativity, and public engagement converge to sustain cultural memory and identity.

Situating Romania's heritage within this broader socio-cultural and legal context underscores ongoing efforts to safeguard, valorize, and transmit cultural knowledge across generations. It also emphasizes the ways in which heritage functions as a dynamic cultural resource, constantly reinterpreted in relation to social transformations, technological innovations, and contemporary cultural practices. This framework sets the stage for analyzing how digital technologies, hypermedia infrastructures, and hyper-heritage processes contribute to new modalities of accessing, understanding, and engaging with cultural patrimony.

National, cultural and artistic heritage: symbolic, historic and legal aspects

The concept of national heritage refers to assets of symbolic, historical, and state-recognized significance, encompassing both tangible and intangible assets, which serve as markers of the nation's historical continuity and civic identity (Nora 1972; Lyotard 1979; Oprea 2013). Tangible heritage includes historical monuments, archaeological sites, museum collections, historic architecture, urban ensembles, and archaeological landscapes, while intangible heritage comprises folk traditions, oral histories, performing arts, ritual practices, and contemporary artistic expressions (Abid 2003; Carp 2004). Together, these elements reflect Romania's complex historical trajectory and the modern and continuity of Romania's cultural identity.

In Romania, the preservation of tangible and intangible heritage is governed by legislation aligned with European standards. Romanian National Heritage is legally protected under Law no. 182/2000 on the protection of historical monuments (republished 2008, updated 2014), which establishes inventories, protection measures, and responsibilities for both central and local authorities, and under Decree no. 187/1990, which regulates the management and conservation of archaeological sites. Romania's ratification of the UNESCO Convention for the Protection of the World Cultural and Natural Heritage (1972), the Convention for the Safeguarding of the Intangible Cultural Heritage (2003), and the Council of Europe's Faro Convention on the Value of Cultural Heritage for Society (2005).

Within the national context, specific laws regulate heritage protection, classification, and administrative procedures, for instance, Law 422/2001 on the Protection of Historical Monuments, Law 182/2000 on the Protection of Movable Cultural Heritage, and associated governmental decisions. The institutional ecosystem includes the Ministry of Culture, the National Institute for Cultural Heritage (INP), regional cultural directorates, county museums, and specialized research institutions. Their responsibilities extend from conservation and inventorying to digitalization, education, and public dissemination.

Beyond legal definitions, cultural heritage encompasses the broader social, ritual, and knowledge-based dimensions of heritage, emphasizes the relational and performative aspects of heritage, situating material objects within social contexts and highlighting the interactions between communities, traditions, symbolic meaning and collective memory. It includes practices, oral histories, folk rituals, local festivals,

vernacular architecture, and ethnographic collections, which form a living continuum between past and present (Poinsot 1999).

Artistic heritage represents the aesthetic, creative, and symbolic dimensions of culture, encompassing visual arts, performing arts, literature, music, and contemporary artistic productions. Artistic heritage intersects with national and cultural heritage, as historic artworks, monumental architecture, and contemporary artistic practices simultaneously contribute to identity formation, cultural dialogue, and civic cohesion. Artistic heritage represents both the historical canon and the ongoing evolution of contemporary artistic practices that articulate national identity and cultural expression and respond to social, political, and technological change. For example, historic artworks, ecclesiastical and secular architecture, folk-inspired visual arts, and literary works contribute to shaping narratives of national identity, collective memory, and cultural continuity (De Certeau 1974; Carp 2004). The integration of medieval ecclesiastical frescoes, Brâncuși's modernist sculptures, and contemporary visual art practices demonstrates how Romanian artistic heritage spans multiple temporal layers, connecting local traditions with global cultural currents.

Through exhibitions, public art projects, performances, and festivals, artistic heritage operates as a space for reflection, experimentation, and education, allowing communities to engage with aesthetic experience while simultaneously reinforcing identity and belonging (Souchier et al. 2003; Cameron and Kenderdine 2007).

Public museums and collections: cultural mediation

Public museums constitute a central component of Romania's cultural infrastructure, as they house collections documenting the nation's historical, artistic, and scientific achievements, ranging from archaeological artifacts and historical documents to fine arts, ethnographic objects, and contemporary artistic works (Bernier 2001). Museums function as mediators, facilitating audience engagement while preserving the symbolic, aesthetic, and social integrity of cultural heritage.

The museum as an institution, historically constituted as an "imagined community" within 19th-century Europe (Nora 1972), evolved by the late 20th century into sites of artistic and patrimonial difference, continuing today as privileged spaces for constructing the "meanings of the material past" (De Certeau apud Le Goff et al. 1974, 57). Art museums primarily function to conserve artistic heritage, safeguarding works inscribed within the mobile cultural patrimony, while also serving as venues for exhibiting contemporary art (O'Doherty 1976, 1986), within which authorized discourses are maintained (Poinsot 1999).

Museums play a crucial role in democratizing heritage, providing access to cultural resources across social and geographic boundaries, fostering awareness, identity, and cultural citizenship (Marinescu 2015). Visitors are central to the museum experience, as museums operate as spaces of interaction, learning, and interpretation. Contemporary museology emphasizes participatory engagement, encouraging audiences to explore, interpret, and co-construct meaning, often through digital and interactive technologies (Zreik, 2018).

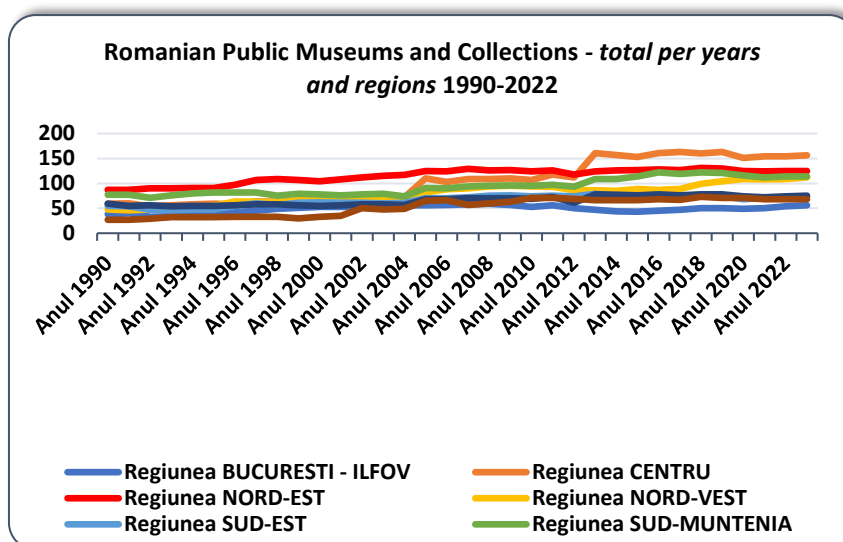


Figure 1. Public museums and collections in Romania, all regions, 1990–2023.
Data source: INS–TEMPO Database; statistical data processed by Daniela Stoica, INSOC, Romanian Academy.

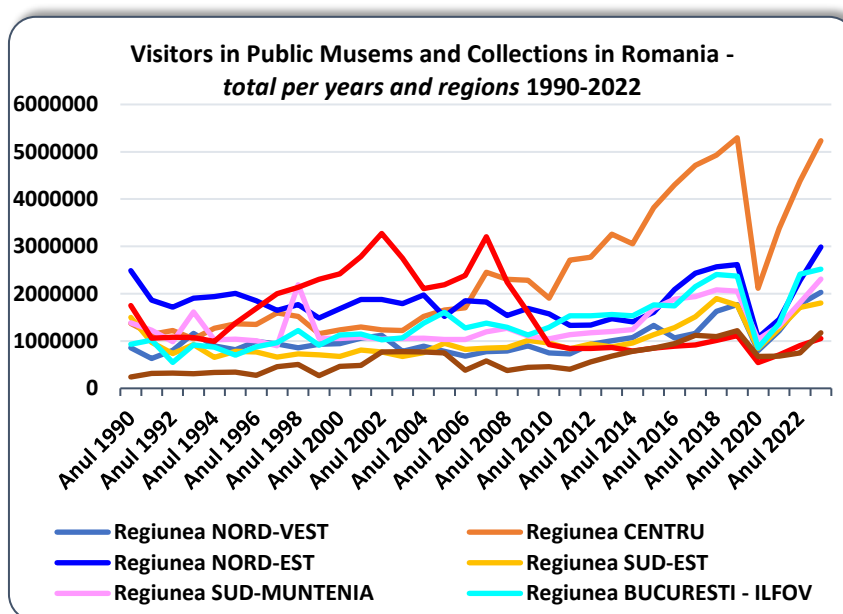


Figure 2. Number of visitors in public museums and collections in Romania, all regions, 1990–2023.
Data source: INS–TEMPO Database; statistical data processed by Daniela Stoica, INSOC, Romanian Academy.

For the purpose of this research, I collected data on public museums and collections in Romania, available through the TEMPO database of the National Institute of Statistics (Institutul Național de Statistică, INS).

This data reveals a significant increase in both the number of museums and public collections, as well as the number of visitors, over the period 1990–2023. In 1990, Romania had 450 public museums and collections, which increased to 778 by 2023. Similarly, visitor numbers rose from 10,511,329 in 1990 to 19,107,498 in 2023. This growth reflects not only an expansion of cultural infrastructure but also a rising public engagement with heritage, forming a foundation for the subsequent digital transformations of museum institutions.

NATIONAL HERITAGE AND DIGITAL METAMORPHOSIS

Romanian digital heritage initiatives exemplify broader socio-technological transformations, illustrating how national, cultural, and artistic heritage is produced, mediated, and consumed under contemporary social metamorphosis. They reveal how national, cultural, and artistic heritage is increasingly produced, mediated, and consumed through digital infrastructures that alter traditional modes of access, interpretation, and institutional authority. Under these conditions, heritage is no longer perceived solely as a static repository of objects or narratives but as a dynamic, multi-layered system in continuous evolution.

In this context, cultural and artistic heritage in Romania is progressively reframed through new modes of mediation. Digital practices, such as large-scale digitization projects, virtual exhibitions, interactive archives, 3D modeling, and immersive experiences (Marconcini and Pracchi 2019), expand and diversify the ways in which heritage can be experienced, understood, and contextualized. These developments reflect a shift from preservation-as-storage to preservation-as-mediation, where technological innovation, platforms, and user-driven interactions shape the ontology of heritage itself.

Digital metamorphosis thus positions Romanian heritage within a global shift toward networked cultural memory. Initiatives such as the digitization of museum collections, the development of national portals (e.g., culturalia.ro), and the emergence of specialized platforms (including interactive 3D models, augmented reality reconstructions, and hypermedia-based museum experiences) illustrate how institutions adapt to new technological paradigms and new expectations from audiences.

Through these processes, national heritage becomes increasingly embedded within the broader hypertextual and hypermedia architectures that define contemporary cultural production. This dynamic environment enables new forms of accessibility, participation, and interpretation, while also raising essential questions about preservation standards, technological sustainability, digital inequalities, and the evolving role of institutions in curating collective memory.

European and national digital heritage

The digital environments allow for interactive and collaborative engagement with heritage assets, supporting the creation of *digital commons*, defined as collectively managed spaces promoting equitable access, co-creation, and knowledge sharing (Ostrom 1990). This paradigm allows museums, libraries, and cultural institutions to reconceptualize their collections as dynamic systems of meaning rather than static objects (Manovich 2001, 112–115).

Digitization has emerged as a strategic priority, both for conservation and public engagement, and at governmental, intergovernmental, institutional, and social levels, initiatives have been implemented to digitise artworks and the various forms that constitute national, regional, and local cultural and artistic heritage. These efforts are increasingly visible in public and media discourse, reflecting transformations in cultural policies, heritage practices, and memory frameworks. These transformations concern not only institutional actors but also citizens. Heritage, including digital heritage, should be understood as a *dispositif*, an ensemble of agents enabling dynamic action through the articulation of heritage with notions such as the past, transmission, protection, collectivity, and emotion (Paveau 2010).

The emerging domain of “digital heritage” encompasses the creation, understanding, interpretation, and presentation of tangible and intangible heritage, including the use of digital methodologies for its conservation and protection (*Charte sur la conservation du patrimoine numérique*, 17 October 2003; see also Abid 2003, 93–101).

The digitization of heritage is a key focus of recent European national and cultural policy, represents both an opportunity and a challenge for Romanian institutions. In Romania, the National Programme for the Digitisation of Cultural Resources and the creation of the Digital Library of Romania were established through Government Decision (HG) no. 1676 of 10 December 2008 and Order no. 2371 of 6 June 2008, which amended methodological norms for the registration, management, and inventory of museum assets, public collections, and memorial houses. Romanian institutions also adhere to European Union recommendations on the digitization, online accessibility, and digital preservation of cultural materials (27 October 2011) and the EU Recommendation 2021/1970 on the European Common Data Space for Cultural Heritage (10 November 2021; eur-lex.europa.eu/legal-content).

At European level, the 2011 Report *The New Renaissance* by the Reflection Group on Bringing Europe’s Cultural Heritage Online highlights that “digitisation is more than a technical option; it is a moral obligation. At a time when cultural goods are increasingly consumed online, and screens and digital devices become ubiquitous, it is crucial to bring culture online. Failing to do so risks eroding and losing the foundation of European countries and civilisation over the past centuries” (Bruxelles, 10 January 2011, point 2.3.2, online). *Europeana*, the European digital cultural platform, launched in 2008 as a pan-European digital archive (europeana.eu/portal), is now designed by the European Commission as the basis for building a *common*

data space for cultural heritage; as for now, Europeana offers access to 52 million cultural heritage assets (europeana.eu/en/discovering-europe).

In Romania, the Ministry of Culture, as well as heritage institutions, libraries, research institutes, etc. created online databases. This year, the Romanian Academy Library launched e-acad. However, regional museums face financial, logistical, and technical constraints that limit digital transformation, disparities that shape access to heritage, participation in cultural life, and the ways in which communities interpret collective memory. Though the integration of digital technologies into heritage practice is uneven, it highlights the need for strategic national policies, institutional support, and professional training. In this direction, the Romanian Ministry of Culture, through its Project Management Unit, started the ePatrimoniu project, a common platform for the whole Romanian heritage, co-financed by the European Union (2021–2027) which includes *Digitalization in Culture* (<https://www.umpcultura.ro/e-cultura>).

Romanian heritage, including monuments, historical collections, archival documents, and intangible practices, is now understood as both material and immaterial, dynamic, participatory, and mediated through technological, social, and aesthetic processes. These digitally mediated environments transform traditional conceptions of national, cultural, and artistic heritage, allowing for hybrid experiences that combine preservation, education, and interactive engagement (Cameron and Kenderdine 2007).

Hyper-heritage: access and participation

Heritage is no longer understood solely as a static collection of objects but as a process of co-construction involving institutions, communities, and digital technologies (Lipovetsky and Charles 2004). Digitally mediated heritage, including virtual reconstructions, online collections, and interactive platforms, allows audiences to engage with heritage in immersive and sensory ways (Liarokapis et al. 2025), promoting education, research, cultural participation (Souchier et al. 2003; Zreik 2018) and the co-creation of content.

New spaces for creativity, education, and economic production are emerging (Mathien 2005, 7), defining a cultural sphere “circumscribed within a communicating technological support” (Grancher 2003) and prompting a redefinition of cultural and heritage policies at national, European, and international levels.

Internet-mediated experiences increasingly combine educational content with playful exhibition modes (edutainment), facilitating the learning of complex concepts. The concept of hyper-heritage builds upon these foundations, describing hybridized, digitized cultural environments shaped by information and communication technologies (ICTs), immersive devices (Niccolucci et al. 2022), and networked communication protocols (Zreik 2018).

The principles of hyperheritage, understood as the convergence of hypermedia logics with heritage production and dissemination. Hyperheritage emphasizes: relationality, through interconnected databases, linked collections, and cross-institutional digital ecosystems; interactivity, enabled by participatory platforms,

user contributions, and multimodal interfaces; temporal expansion, as digital technologies collapse temporal distances, making past and present coexist within layered virtual environments; hybrid authenticity, where the cultural value of heritage is constructed through the interplay between physical artifacts and their digital surrogates.

Post-humanist perspectives inform the understanding of hyperheritage by highlighting how technological systems extend, rather than replace, human cognition and corporeality (Rotaru 2010). Activities in cyberspace occupy an intermediate space between the social, aesthetic, and ritual, operating reflexively at the boundary between individual and collective experience (Hammer 2004, 260–268). Digital platforms enact post-human mediation, allowing users and artifacts to interact in hybrid spaces that are simultaneously physical, digital, and semiotically rich. Virtuality thus becomes a complementary dimension (Turkle 1996) that expands perception, participation, and engagement with national, cultural, and artistic heritage.

The digitisation of culture intersects with broader political questions of access, equity, and citizenship. Heritage is closely linked to the modern invention of cultural rights, while the digital divide represents a critical barrier to democratic participation. Economic, professional, educational, and social transformations are closely linked with processes of cultural democratization and debates regarding access to heritage resources, both cultural and technical, as legitimate claims connected to human rights (Poulot 1988, 332–341). The proliferation of Internet access and digital networks raises questions regarding digital democracy, cyber-citizenship, and the persistence of the digital divide (Perriault 2002).

Intellectual property and ethical considerations in digital heritage

In Romania, copyright is regulated under Law no. 8/1996 (revised), which aligns with European Union directives and covers both moral and economic rights for contemporary and historic works, such as the WIPO Copyright Treaty (1996) and the UNESCO Recommendation concerning the Status of the Artist (1980), ensuring that artistic creativity is both legally safeguarded and socially valorized.

Romanian museums, archives, and cultural institutions increasingly confront legal and ethical challenges when digitizing collections, reproducing artworks, or publishing cultural data online. Copyright considerations shape the extent to which cultural heritage can be openly accessed, shared, or remixed, particularly for contemporary artistic expressions still under copyright protection (Lessig 2004). Strategies such as obtaining permissions, respecting moral rights (the right to attribution and integrity of the work), and using licenses, including Creative Commons or institutionally negotiated agreements, are essential to ensure ethical and lawful dissemination (Ficsor 2002; Ginsburg 2003). High-resolution images, 3D scans, and virtual exhibitions must navigate the tension between public benefit and the protection of creators' rights. For instance, reproducing Brâncuși's sculptures or 20th-century paintings requires careful consideration of copyright durations (70 years *post mortem*

auctoris in Romania) and licensing agreements when shared in online repositories or educational platforms.

Digitally mediated platforms increasingly adopt a model of “ethical hyperheritage”, where interactive access, virtual reconstructions, and educational engagement coexist with legal and moral respect for creators’ rights. Copyright laws govern the reproduction, distribution, and public display of these works, with legal protections varying according to the age of the artwork, authorship, and licensing frameworks (Parry 2007; Byrne 2014).

Initiatives that foster digital commons illustrate the tension between openness and protection, emphasizing the participatory and collaborative ethos of hyper-heritage while operating within defined legal and ethical boundaries (Ostrom 1990).

MUSEUMS, HYPERMEDIA AND THE NEW APPLICATIONS

This part highlights the integration of 3D modeling, virtual and augmented reality, and immersive interfaces, showing how these tools extend accessibility, interpretation, and conservation of cultural heritage. The digitization of museum-held heritage highlights the interplay between technology and museology, establishing new relationships with audiences, simplifying access to artworks, and reshaping public perceptions of art. Technological mediation and virtualization of artworks serve as critical tools for conservation, exploration, knowledge production, and cultural mediation, valued by both artists and museum professionals (Noël-Cadet 2004). Nonetheless, technological proficiency cannot replace art education: interpretive guidance, pedagogical expertise, and the experiential act of learning remain central to cultural understanding.

Such approaches ensure that cultural knowledge remains both accessible and experientially rich, bridging the past and present while fostering inclusive, reflective, and participatory encounters with national, cultural, and artistic heritage.

The hyper-museum: museums and virtuality

The digitization of museum collections, through virtual tours, immersive spaces, and technologies such as virtual and augmented reality, presents new opportunities for cultural memory and the contemporary art scene (Levy 2001, 44). These technologies enhance visibility, democratize access to museum spaces, and facilitate engagement with global audiences. Museums’ presence on the World Wide Web has expanded through various stages, from brochure-style websites, content-focused platforms, and educational portals, to fully virtual museums, online collections, hyper-museums, digital museums, and cyber-museums (ICOM, Virtual Library Museum Pages, vtmp.museophile.com; Carp 2004). The introduction of 3D imaging, virtual tours, and immersive exhibitions aligns the museum with Malraux’s notion

of the “imaginary museum” (1965), enabling exhibitions “without walls” and redefining spatial and ideological engagement.

The virtual museum has been defined as “a logically structured collection of digitized objects composed of various media, whose connectivity and multi-access nature allow it to transcend traditional modes of communication and interaction with visitors; it has no physical location, and its objects and related information can be disseminated worldwide” (Grancher 2003). This concept has provoked significant debate: critics have framed virtual museums as “tombs for art” (Doray et al. 1999) or as “denaturing art by attributing a transitory substance to objects” (Bernier 2001), reflecting concerns over technological populism. Pierre Levy (2001, 29) notes that “virtual” encompasses multiple meanings: a technical sense linked to information technology, a postmodern sense, and a philosophical sense, leading to confusion whereby virtuality is commonly perceived as a lack of connection to material reality (Rotaru 2010, 26).

Museums, as institutions of memory, integrate digitized substitutes of collections, archives, and libraries within richly interactive environments, enabling remote access via cyberspace (Schweibenz 2004). New technologies increasingly shape visitor experience (Rotaru 2010, 12), allowing users to virtually connect to view collections. The availability of artworks online ensures cultural preservation: “making works of art accessible is infinitely preferable to their disappearance” (Arsenault 2003), while the virtualization of artworks enhances spatial imagination (Sauvageot 1994, 221).

Information and communication technologies, coupled with interdisciplinary collaboration, have transformed museum practices, emphasizing institutional impact on individuals and communities (Striepe 2013, 207–217). Museums increasingly pursue inclusive missions, leveraging technology to increase audience engagement and enhance knowledge acquisition. Virtual museums particularly facilitate access to contemporary art for younger audiences immersed in popular culture (Hill et al. 2014, 250–261), supporting long-term institutional strategies to cultivate relationships with audiences and communities (Schwartz 2005).

Museums are now hybrid, digitized cultural ecosystems where hypermedia, immersive technologies, and participatory digital practices converge. Museums transcend their physical boundaries, operating simultaneously as repositories of material heritage and interactive, networked platforms that support collaborative knowledge production, equitable access, and global engagement. Virtualization, therefore, is not merely a technical adaptation but a fundamental reconfiguration of museum practice, experience, and cultural mediation.

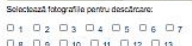
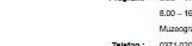
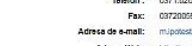
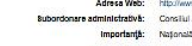
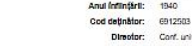
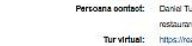
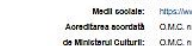
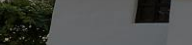
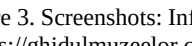
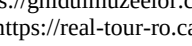
Building a Romanian hyper-heritage architecture

Recent technological innovations targeting cultural, museum, and heritage institutions emphasize relational and experiential engagement with objects and audiences. Interactive and immersive technologies transform cultural mediation into a participatory process, where visitors become co-actors in the museum experience.

The National Heritage Institute (patrimoniu.ro), through CIMEC (Center of Informatics, Memory and Cultural Synthesis, Collective of the Institute of Cultural Memory, now Digital Direction Direction, under INP since 2011) was the first Romanian partner for European project initiative. The Digital Heritage Directorate manages the principal digital information resources dedicated to Romanian cultural heritage, forming an essential infrastructure for the documentation, preservation, research, and public valorization of both mobile and immovable heritage. Among the resources for mobile heritage are the National Database of Mobile Cultural Heritage Susceptible to Classification (SI-PCN), the official registry of classified cultural goods, the National Collective Catalogue of Old Romanian Books, and the Catalogue of Incunabula, all of which support the identification, classification, and scholarly study of cultural objects. For immovable heritage, the Directorate oversees digital resources such as the inventory of ethnographic monuments in open-air museums, the national database of places of worship, and the National Archaeological Record (RAN), the authoritative system for recording archaeological sites and findings. Complementing these are several reference and support resources, including the databases of museums and collections, accredited heritage specialists, the reference bibliography of old books, terminological thesauri, the national corpus of archaeological research reports (1983–2017), and the theatrical repertory of Romania (1944–present). The Directorate also curates extensive documentary and visual archives – among them the digital archive of manuscripts, historical photographs, and old books; the digital image archive of the national cultural heritage; the central file of mobile heritage and its phototheque; and the archive of files for classified cultural goods, thereby ensuring long-term access to, and the systematic preservation of, Romania’s cultural memory in digital form. DDD/CIMEC inventories and participates in the digitisation of classified movable heritage (clasate.cimec.ro/), museums, and collections (ghidulmuzeelor.cimec.ro/), including museums offering virtual tours (213) and 3D digital collections (49) (cimec.ro/patrimoniu-mobil/muzee-cu-tururi-virtuale-si-colectii-digitale-3d/; <https://sketchfab.com/cimec>) and a digital library of cultural publications (biblioteca-digitala.ro). The museum platform creates a database of the museums and collections, which facilitates integrated access to local museums, virtual tours and online platforms.

A more recent initiative is e-culture, the Digital Library of Romania, a pilot project implemented at the level of the Ministry of Culture through the Project Management Unit, dedicated to the digitisation of mobile cultural heritage and aimed at creating the Digital Library of Romania (culturalia.ro), the national counterpart of the European Digital Library (europeana.eu). The project is co-financed by the European Union from the European Regional Development Fund, through the Operational Programme Competitiveness 2014–2020, Priority Axis 2, Action 2.3.3 “Improving digital content and systemic ICT infrastructure in the fields of e-education, e-inclusion, e-health, and e-culture” (ump.ro/e-cultura).

Muzee și Colecții din România
Memorialul Ipotesti - Centrul Național de Studii „Mihai Eminescu”

Foto: 1                                      

Selecționați fotografie pentru descărcare:

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Domeniu: Memoriale

Colecții: Memoriale - Istoria literaturii, Artă decorativă, Artă plastică

Descriere: În 1924 casa copilăriei lui Eminescu este dăruită. În 1940 este inaugurat primul muzeu memorial, înfrunz în casa reconstituită în 1934, pe temelie casei părintești a poetului. Înfrunz nu respecta structura originalului, această casă este și ea dăruită și în 1979 se inaugurează o altă casă (construită pe temelie casei dăruite în 1924). Până în 1991, Casa Memorială a fost sub egida Muzeului Județean Botoșani, din 1991 - 1992 sub tutela Inspectoratului pentru Cultură al Județului Botoșani. Din 1992 devine Memorialul Ipotesti - Centrul Național de Studii „Mihai Eminescu”. Memorialul Ipotesti cuprinde mai multe obiective de interes muzeal și cultural: Casa Memorială, monument reconstituit în 1979, am...

Județ: Botoșani

Localitate: Ipotesti

Comuna: Mihai Eminescu

Cod poștal: 717253

Acce: Mașina: DN 20B, DC 81

Program: 9.00 - 17.00 (juni-duminică) - 15 mai - 15 septembrie;
8.00 - 16.00 (juni-duminică) - 16 septembrie - 14 mai
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Adresa Web: <http://www.eminescu.ipotesti.ro>

Subordonare administrativă: Consiliul Județean Botoșani

Importanță: Națională

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Director: Conf. univ. dr. Alia Săineanu

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Tur virtual: <https://real-tour-ro.captur3d.io/view/memorialul-ipotesti/tur-virtual>

Medii sociale: <https://www.facebook.com/muzeul.ipotesti>

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☒ Revista Hyperion

☒ <https://www.revistahyperion.ro/>

☒ <https://biblioteca-digitala.ro/?pub=346-hyperion-fundatia-culturala-hyperion-caseta-botosanena>

☒ Glose - revista semestrială de studii românești

☒ <http://www.eminescu.ipotesti.ro/biblioteca.htm>

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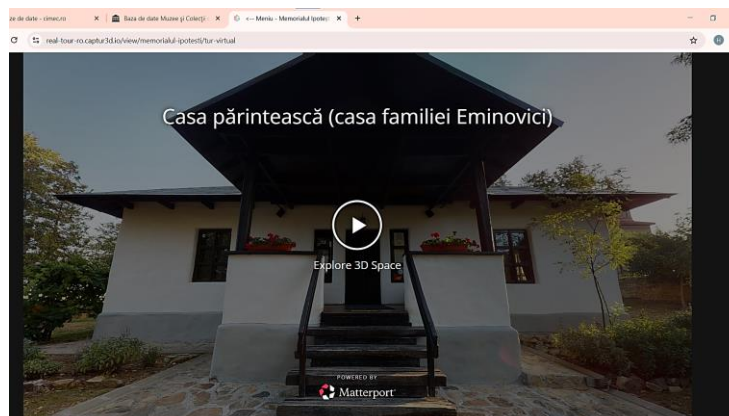


Figure 3. Screenshots: Information on Mihai Eminescu's memorial House on <https://ghidulmuzeelor.cimec.ro/> and the virtual tour, on Ipotesti Memorial (<https://real-tour-ro.captur3d.io/view/memorialul-ipotesti/tur-virtual>).



Figure 4. Screenshots: e-cultura.ro, culturalia.ro.

The digital artefacts operate as semiotic texts, where users interpret signs encoded in images, spatial reconstructions, and interactive affordances, generating new modes of figurative representation and spatial understanding (Bernier 2001). From a socio-semiotic standpoint, the digitalisation transforms museum engagement into a simultaneous sensory and cognitive exploration (Sauvageot 1994). As techno-semiotic devices, the platform functions as hypertexts or virtual architectures (Souchier et al. 2003, 118). Feedback highlights strong interest in interactive storytelling and gamified elements, aligning with Hammer's (2004) concept of online activity as a "liminal aesthetic practice", oscillating between individual cognition and collective cultural experience. This reflects Alsford's (1991) argument that hypermedia and museums are fundamentally information systems, where information, rather than physical object, constitutes the primary resource. The initial intersection of heritage, museums, new technologies, and art manifested in virtual tours (Marinescu 2015), whose utility was especially evident during the 2019 pandemic.

The Platform for Heritage (PPP)

The Platform for Heritage (PPP) represents a paradigmatic example of the digital transformation. Developed by the Collider Visuals team with support from the Administration of the National Cultural Fund (AFNC) and the Ministry of Culture, the platform was launched online in November 2024 (vxd.ro/PPP). It offers interactive 3D modeling and augmented reality using specialized photogrammetry techniques for eight of Romania's most prominent museums: the National Museum of Natural History "Grigore Antipa", the National Village Museum "Dimitrie Gusti", the National Museum of the Romanian Peasant, the National Museum of Romanian History, the National Geological Museum, the National Museum "King Ferdinand I", the National Technical Museum "Dimitrie Leonida", and the National Museum of Contemporary Art of Romania.

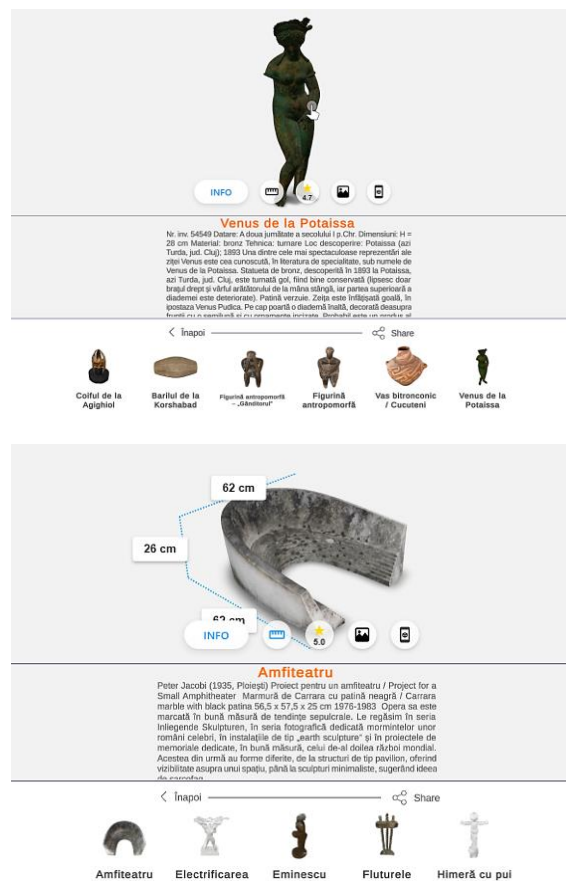


Figure 5. Screenshots including 3D image and text: *Venus of Potaissa*, National History Museum of Romania; *Amphitheater*, artwork by Peter Jacobi, National Museum of Contemporary Art of Romania; Platform for Heritage, <https://vxd.ro/PPP/>.

The platform results from close collaboration with museum staff and integrates functionalities such as 3D object visualization, augmented reality integration of 3D models into real-world environments, and educational resources on art, heritage objects, and the institutions themselves.

Interactive 3D reconstructions allow users to examine artefacts from all angles, increasing accessibility and enabling both scholarly research and public engagement. Augmented reality overlays recontextualize objects within their original spatial and historical environments, supporting “experiential interpretation” (Cameron and Kenderdine 2007), where semiotic meaning emerges through participatory engagement.

Traditional museum narratives, historically linear and fixed, are increasingly reconceptualized as interactive and non-linear scenarios, enabling users to navigate collections along multiple trajectories. A hypermedia design approach reconceptualizes museum narratives or scenarios as non-linear and interactive, incorporating all elements underpinning the story – diégèse, media, videos, 3D models, textual annotations, and augmented reality overlays, while formalizing potential user trajectories within the interactive experience. Hypermedia scenario models, or hyperscenarios, adopt Model-Driven Engineering (MDE) frameworks to structure content and interactions, enabling systematic design of non-linear, immersive, and participatory experiences (Jézéquel et al. 2012; Schmidt 2006). This approach allows museums to present cultural heritage in ways that support exploration, engagement, and interpretation, expanding the role of digital platforms in facilitating access, co-creation, and audience-centered experiences (Châtel-Innocenti and Besacier 2012, 2017).

The project also exemplifies responsible design practices, aiming to foster meaningful and educational interaction, in contrast to manipulative approaches that exploit cognitive and emotional vulnerabilities (interview with project coordinator Gheorghe Tudor-Gabriel, March 20, 2025). The discussions also highlighted the digitization gap in Romanian museums, noting that financial, logistical, and public engagement constraints account for the delayed adoption of digital practices (interview with Gheorghe Tudor-Gabriel, March 20, 2025).

SOME CONCLUSIONS

The ongoing digital transformation is reshaping Romanian cultural heritage into a hypermediated domain characterized by connectivity, immersion, and hybrid authenticity. Platforms such as e-patrimoniu, e-cultura, culturalia.ro, or Platform for Heritage exemplify the potential of hypermedia infrastructures to reconfigure access, interpretation, and participation, transforming traditional museum practices into dynamic, interactive, and participatory experiences. Through 3D modeling, augmented reality, and hypermedia scenarios, heritage objects cease to be static artefacts and become active nodes within complex networks of meaning, co-constructed by users, curators, and digital systems.

As Romanian institutions navigate technological, institutional, and political challenges, the emergence of hyperheritage signals not only new modes of cultural representation but also heightened responsibilities in curatorial practice, digital citizenship, and cultural policy. The design and implementation of digital heritage platforms necessitate careful attention to ethical, educational, and interpretive concerns, ensuring that technology complements rather than replaces the pedagogical and experiential functions of museums. By foregrounding accessibility, interactivity, and participatory engagement, such platforms contribute to the democratization of heritage and reinforce the social and symbolic functions of national, cultural, and artistic assets.

Future development in Romanian digital heritage should prioritize interoperability and standardized metadata, sustainable digital preservation, coordinated national digitization policies, and expanded training in digital curatorship. By facilitating meaningful interactions with heritage objects and promoting participatory learning, Romanian institutions can ensure that digital transformation strengthens cultural engagement and preserves both historical continuity and contemporary relevance.

Future research will focus on audience studies, user analytics, and socio-semiotic approaches to understand how digital platforms shape engagement, interpretation, and the circulation of meaning.

REFERENCES

- ABID, A. (2003). « L'UNESCO et la conservation du patrimoine numérique », *Documentation et bibliothèques* 49(3): 93–101.
- ALSFORD, S. (1991). "Museums as Hypermedia: Interactivity on a museum-wide scale", dans *Hypermedia & Interactivity in Museums. Proceedings of an international conference*, Archives and Museums Informatics, Pittsburgh, PA, pp. 7–16.
- ARSENAULT, C. (2003). « L'exposition virtuelle au-delà de l'an 2000 : produit muséal recyclé ou nouveau genre », *Observatoire de la Société des musées québécois*.
- ASCHER, F. (2002). « L'émergence de la société hypertexte », *Futuribles* 275: 37–45.
- ASCHER, F. (2004). « L'individu mobile dans une société hypertexte », dans Kaplan, D., Lafont, H., *Mobilités.net Villes, transports, technologies face aux nouvelles mobilités*, Fing-RATP, p. 45–49.
- ASCHER, F. (2005). *La société hypermoderne. Ces événements qui nous dépassent. Feignons d'en être les organisateurs*, Paris : Éditions de l'Aube.
- BERNIER, R. (2001). « Les musées sur Internet en quatre tableaux : le dernier avatar du musée (premier tableau) », *Archée*.
- BYRNE, D. (2014). *Heritage as Social Action*. In: L. Smith and N. Akagawa (Eds.), *Intangible Heritage*, 15–32. London: Routledge.
- CAMERON, F., S. KENDERDINE. (2007). *Theorizing Digital Cultural Heritage. A Critical Discourse*, Cambridge, MA : MIT Press.
- CARP, G. (2004). « Patrimoine numérique et musée de demain », *Les Nouvelles de l'ICOM*, no 4.
- CHÂTEL-INNOCENTI, P., G. BESACIER. (2012). « Une approche hypermédia pour la valorisation auprès du grand public de données patrimoniales numériques », *Inria HAL*, <https://inria.hal.science/hal-01525989/>, *A hypermedia approach for digital heritage data promotion to the general public*, Inria HAL, 2017.

- DE CERTEAU, M. (1974). « L'opération historique », dans Le Goff, J., Nora, P. (dir.), *Faire de l'histoire*, vol. 1, Nouveaux Problèmes, Paris : Gallimard.
- DORAY, P., J. BIBAUD. (1999). *Quel avenir pour les musées ou quelques points de repère ou sujet de l'usage des nouvelles technologies par les musées*, CIRST, Université de Québec à Montréal.
- FICSOR, M. (2002). *Conservation and Digital Documentation of Cultural Heritage*. Bucharest: Editura Academiei Române.
- GRANCHER, V. (2003). « Positionnement des musées face à l'émergence de nouvelles expressions et transversalités », Cycle de conférences World Wild Web 1994-2003, Fondation Cartier pour l'Art Contemporain.
- GINSBURG, F. (2003). Mediating Culture: Indigenous Media, Cultural Rights, and the Globalization of the Local. *Media, Culture & Society* 25 (3): 325–344.
- HAMMER, A. (2004). Weaving Trickster. Myth and Tribal Encounters on the World Wide Web. In E. W. Rothenbuhler, M. Coman (eds.), *Media Anthropology*, 260–268. Thousand Oaks: SAGE Publications.
- HILL, R., J. DOUILLETTE. (2014). Teens, New Media and Contemporary Art: Expanding Authority in the Museum Context. *Journal of Museum Education* 39(3): 250–261.
- JEANNERET, Y. (2005). La société de l'information comme figure imposée. Sur un usage particulier des mots en politique. In M. Mathien (ed.), *La "Société de l'Information". Entre mythes et réalités*, 66–76. Bruxelles : Établissements Emile Bruylant.
- LEVY, P. (2001). *Cyberculture*. Minneapolis : University of Minnesota Press.
- LESSIG, L. (2004). *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. New York: Penguin.
- LIAROKAPIS, F. et al. (2025). *ICTs, Immersive Technologies and Human-to-Human Communication in Cultural Heritage*, Springer.
- LIPOVETSKY, G., S. CHARLES. (2004). *Les temps hypermodernes*, Paris : Grasset.
- LYOTARD, J.-F. (1979). *La condition postmoderne. Rapport sur le savoir*, Paris : Les Éditions de Minuit.
- MALRAUX, A. (1965). *Le Musée Imaginaire*, Paris : Gallimard.
- MANOVICH, L. (2001). *The Language of New Media*. Cambridge, MA: MIT Press.
- MARCONCINI, F., V. PRACCHI. (2019). Immersive Technologies and Cultural Heritage, *International Journal of Cultural Heritage* 12(4).
- MARINESCU, A. H. (2015). Digitizarea patrimoniului muzeal. Colecțiile online ale Muzeului Național de Artă al României, *Revista Muzeelor*, « Curatoriat », Institutul Național pentru Cercetare și Formare Culturală (INCFC), Ministerul Culturii.
- NICCOLUCCI, F. et al. (2022). *Digital Twins and Immersive Devices in Cultural Heritage*, Florence : ArcheoPress.
- NOËL-CADET, N. (2004). Les expositions virtuelles comme outil de médiation, *Culture et recherche*, no 102.
- NORA, P. (1972). L'événement monstre, *Communications* 18(1): 162–172.
- NELSON, T. H. (1965). Complex Information Processing: A File Structure for the Complex, the Changing, and the Indeterminate, *ACM '65 Proceedings of the 1965 20th National Conference*, pp. 84–100.
- O'DOHERTY, B. (1986) [1976], *Inside the White Cube. The Ideology of the Gallery Space*, Santa Monica/ San Francisco: The Lapis Press.
- OPRIȘ, I. (2013). *Colecționism, muzeologizare, patrimonializare*, București, Editura Oscar Print.
- OSTROM, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- ORY-LAVOLÉE, B. (2002). La diffusion numérique du patrimoine, dimension de la politique culturelle, *Rapport à Mme la Ministre de la Culture et de la Communication*, available at: <http://www.culture.gouv.fr/culture/actualites/rapports/ory-lavollee/ory-lavollee.pdf>

- PARRY, R. (2007). *Recoding the Museum: Digital Heritage and the Technologies of Change*. London: Routledge.
- PERRIAULT, J. (2002). *L'accès au savoir en ligne*, Paris : Odile Jacob.
- POINSOT, J.-M. (1999). *Quand l'œuvre a lieu. L'art exposé et ses récits autorisés*, Villeurbanne : Art Edition.
- POULOT, D. (1988). Le droit au musée : un droit du citoyen ?, In G. Chianea, *Des Droits de l'homme et la conquête des libertés. Des Lumières aux révolutions de 1848*, 332–341, Saint-Martin-d'Hères : Presses Universitaires de Grenoble.
- ROTARU, I. (2010). *Comunicarea virtuală. Impactul noilor tehnologii informaționale și comunicaționale în spațiul educațional contemporan*, București : Tritonic.
- SAMUELS, E. (2008). *Participatory Practices in Digital Heritage*, MDPI Special Issue, 2018.
- SAUVAGEOT, A. (1994). *Voirs et savoirs. Esquisse d'une sociologie du regard*, Paris : PUF.
- SCHMIDT, D. (2006). *Model-Driven Engineering for Hypermedia*, Berlin : Springer.
- SCHWARTZ, D. F. (2005). Dude, Where's My Museum? Inviting Teens to Transform Museums, *Museum News*, Sept./Oct.
- Schweibenz, W. (2004). L'Évolution du musée virtuel, *Les Nouvelles de l'ICOM*, no 3.
- SOUCHIER, E., Y. JEANNERET, J. LE MAREC. (2003). (eds.), *Lire, écrire, récrire. Objets, signes et pratiques des médias informatisés*, Paris : Bibliothèque Publiques d'Informations.
- STRIEPE, S. E. (2013). How Some Art Museums Can Appeal to Teenagers, *Journal of Museum Education* 38(2): 207–217.
- The New Renaissance. (2011). *Report of the Comité des Sages on Bringing Europe's Cultural Heritage Online*, Bruxelles, available at : <http://www.muzee.org/romania/final-report-cdS3.pdf>
- TURKLE, S. (1996). Virtuality and Its Discontents, *The American Prospect* 7(24), Winter.
- WERTHEIM, M. (1999). *The Pearly Gates of Cyberspace. A History of Space from Dante to the Internet*, London: Virago Press.
- ZREIK, K. (2018). *HyperHeritage and Immersive Devices in Digital Culture*, Paris : CNRS Éditions.