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Navigating the Ethical Labyrinth: Artificial Intelligence and the Preservation of Cultural Authenticity in a Post-Truth Era

C P Lakshmimol

Abstract

This research explores three interrelated theoretical aspects of Artificial Intelligence (AI)-mediated cultural heritage preservation: challenges in epistemological authenticity, power asymmetries in AI-driven conservation, and socio-technical structures in digital cultural activities. Employing a mixed-methods strategy coalescing critical discourse analysis, digital ethnography, and case study examination, the study probed AI-directed cultural heritage discussion and applications over the preceding decade. The findings exhibit that AI technologies concurrently augment conservation capacities while threatening historical legitimacy, enabling algorithmic bias and potential cultural homogenisation. The investigation unveils how AI conservation projects unreasonably give an advantage to Western European cultural artefacts regardless of Indigenous and Global South traditions composing a significant part of human cultural heritage. The study recommends an ethical structure dealing with representational power and data bias, which is causative to comprehending how technological structures mirror and redesign power relationships in cultural backgrounds. This exploration stresses the necessity of interdisciplinary collaboration between heritage experts, technologists, and policymakers to guarantee impartial conservation processes.

Keywords: Cultural heritage digitisation, AI ethics, Digital preservation, Authenticity, Post-truth era

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Introduction

The crossroads of cultural heritage conservation and Artificial Intelligence (AI) has transpired as a noteworthy domain of inquiry within present-day theoretical frames of authenticity, legitimacy, and technological intercession. This interdisciplinary area integrates cultural heritage research, digital humanities, and computational sciences, achieving distinct significance as global cultural establishments steer what McIntyre explains as the "post-truth" age societal circumstance distinguished by "obfuscation of facts, abandonment of evidential standards in reasoning, and outright lying" (2018: 2). According to him, it is an "expression of concern by those who care about the concept of truth and feel that it is under attack" (McIntyre 2018: 6). The swift advancement of AI technologies is revolutionising how cultural artefacts are conserved, interpreted, and accessed, raising essential questions about authenticity, authority, and depiction in digital contexts.

As Khan et al. note, "Digital technologies have opened new ways of conducting research in varied fields of humanities, making it efficient and easier to employ innovative methods of creation of new knowledge" (2015: 184). This change is predominantly apparent in cultural heritage conservation, where AI systems currently assist in everything from renovating desecrated artefacts to constructing engrossing digital encounters and experiences. Ghaith states that these technological systems "offer novel approaches to identifying patterns of decay and damage, thereby enabling more effective protection strategies for heritage sites and objects" (2024: 3), indicating a noteworthy departure from conventional preservation techniques.

Regardless of the proliferation of AI implementation in cultural heritage contexts, a vital research gap prevails in comprehending the theoretical applications of AI-driven cultural conservation outside purely technological or operational concerns. While current scholarship has scrutinised technological executions, observing that AI capacities are "highly dependent on the type and quality of the data they were trained on" (Neudecker 2023: 155) and recommending museums should "think about the impact these technologies have on their visitors and users" (Murphy 2023: 76), there exists inadequate critical investigation into how these technologies reorganise power relationships, confront epistemological structures of legitimacy, and possibly strengthen persisting cultural inequalities. As Hajri states, AI tools are "far from neutral" (2023: 58) and can instill historical prejudices that "reinforce existing social inequalities" (2023: 58) in cultural conservation endeavours, chiefly across Global North-South divides.

This examination investigates three interconnected theoretical aspects: the epistemological confrontations of authenticity in a post-truth environment, the intrinsic power fluxes in AI-mediated cultural conservation, and the socio-technical frames working in cultural tradition in the digital era. These elements structure the

basis for investigating how AI concomitantly improves access to cultural heritage, likely supporting prevailing discriminations and challenging conservative concepts of authenticity.

The following research questions guide this investigation:

- How do AI technologies restructure power relations in cultural heritage preservation projects?
- What theoretical frameworks can adequately address authenticity questions in AI-mediated cultural experiences?
- How do contemporary digital practices challenge or reinforce traditional cultural stewardship patterns?

The theoretical inferences of this study extend further technological realisation, undertaking indispensable questions regarding cultural stewardship and epistemological structures. Against this background, authenticity signifies not just material authenticity but what Bunz recognises as the "multifaceted relationship between original cultural artefacts and their digitally mediated representations, including questions of provenance, context, and interpretive authority" (2023: 25). The assessment of particular AI implementations in cultural heritage contexts reveals their transformative potential and their ability to support prevailing power systems, principally concerning Western and non-Western cultural interpretation. As Zheng states, as cultural heritage holds "profound cultural value" (2024: 371), covert digitisation interests may buttress established power structures.

This study adds to cultural theory by studying how technological interference modifies conservation activities. The prime case study for this analysis is The Dalí Museum's Dalí Lives venture, which utilised AI technologies, mainly natural language processing and deep learning, to generate experiences that blur the boundaries of historical account and technological intercession. As Mihailova observes, this project "transformed [Dalí] into an approachable, affable, and playfully enigmatic guide to his own oeuvre—albeit one haunted by the inescapable uncanniness of his own existence" (2021: 3). Through sophisticated machine learning systems containing natural language processing and generative adversarial networks (GANs), this deepfake technology facilitated the conception of a communicative digital manifestation that replicated the artist's physical appearance, voice, and fundamental aspects of his character, raising reflective questions concerning posthumous portrayal and permission. This research equally recognises AI technologies' metamorphic capabilities and their abilities to emphasise existing authority structures, supporting current academic efforts on digital cultural tradition.

The organisation of this article commences with this introduction, which is succeeded by an inclusive literature review surveying academic viewpoints on

AI in cultural heritage contexts. The methodology section lays out the qualitative research paradigm encompassing digital ethnographic strategies, the critical discourse analysis framework by Fairclough (1995), and the methodology used in the case study. The section on findings provides thematic explorations from the empirical study and proceeds with a discussion that contextualises these results in broader academic discussion. A devoted case study section examines the Dalí Museum project in depth, followed by a section on limitations and conclusions that directly focus on the research questions and presents suggestions for potential research and practice in this swiftly growing area.

Literature Review: AI and Cultural Heritage Preservation in the Post-Truth Era

This literature review incorporates academic views on AI in cultural heritage frameworks, observing PRISMA guidelines to scrutinise scholarly publications from 2015–2025. By searching keywords comprising cultural heritage, artificial intelligence, post-truth, and digital preservation, the search documented 72 primary publications screened by inclusion criteria and yielded 36 sources for study.

Authenticity and Post-Truth Challenges

The correlation of cultural heritage and AI is present in what McIntyre explains as the "post-truth" era, where the "prefix 'post' is meant to indicate not so much the idea that we are 'past' truth in a temporal sense (as in 'postwar') but in the sense that truth has been eclipsed— that it is irrelevant" (2018: 5). This atmosphere challanges established notions of authenticity, described by Jokilehto as "being truthful, both as an autonomous human creation and as true evidence of something" (2006: 8).

Deepfake technologies predominantly reorient this topography, with Westerlund observing that "the game-changing factor of deepfakes is the scope, scale, and sophistication of the technology involved" (2019: 39), possibly "distort[ing] our perception of what is important, true, and real" (Pariser 2011: 16). These technologies raise "fundamental epistemological questions regarding how societies establish historical truth when traditional markers of authenticity become unreliable" (Westerlund 2019: 42). Cultural establishments rationalize posthumous deepfakes through assertions of humanistic intention. The Dalí Museum, for example, offered its project as "aligning with Dalí's personal beliefs" (Mihailova 2021: 9), unearthing novel validation approaches for technological involvements.

Theoretical Frameworks

This exploration utilises three corresponding theoretical strategies. Feenberg's Critical Theory of Technology investigates how "the outcome of technical

choices is a world that supports the way of life of one or another influential social group" (2005: 52), offering tools for studying power replication through AI implementations. Cameron and Kenderdine's Digital Heritage Theory attends to the ontological transformations when historical objects are digitised, surveying how digital intercession changes the interpretation of and access to cultural artefacts. Post-colonial Digital Humanities by Risam presents methodologies for examining "colonial hallmarks persisting in the digital cultural" infrastructure (2019: 4), necessary for assessing how AI structures likely propagate historical power disproportions. This interdisciplinary framework corresponds with Khan et al.'s remark that "Digital Humanities is methodological by nature and interdisciplinary in scope. It involves investigation, analysis, synthesis and presentation of information in electronic form" (2015: 186).

Power Dynamics and Representational Inequalities

Research persistently recognises power asymmetries in AI-driven conservation activities, with academicians finding that "digitisation projects predominantly privilege Western European cultural artefacts despite Indigenous and Global South heritage constituting the majority of human cultural inheritance" (Röll & Meyer 2021: 10). These endeavours uphold "binary opposites such as undeveloped/developed, primitivism/progress, nature/culture" (Röll & Meyer 2021: 10) that outline Global South-North interactions.

Hennessy and Lyons reveal how "seemingly neutral digitisation processes can reinscribe colonial hierarchies" (2020: 148), emphasising persistent digital divides in cultural demonstration. Ghaith highlights the significance of "fostering a sense of identity and continuity within communities" (2024: 2) through cultural conservation, stressing the social stakes of these inequalities.

Algorithmic and Data Biases

Research on algorithmic bias expresses how AI structures can amplify present bias in cultural accounts. Mehrabi et al. classify "systematic errors in computational systems that affect user experience and cultural interpretation" (2021: 2) that "amplify existing sources of bias". Buolamwini and Gebru demonstrate how "facial analysis systems inadequately represent darker-skinned individuals" (2018: 4) with implications for the digitisation of historical photography.

Foka and Griffin point out that bias or prejudices in cultural heritage compilations are intrinsically inevitable, as "bias exists prior to any sampling... unbiased data—even as an idea—is essentially ahistorical data" (2024: 6127). This produces challenges for "digital heritage [which] comprises computer-based materials of long-term worth that should be reserved for future generations" (Khan et al. 2015: 191).

Ethical and Legal Frameworks

The scholarly literature unveils vital gaps in structures addressing AI in cultural heritage contexts. Academicians draw attention to the obligation for "algorithmic transparency" (Larsson & Heintz 2020: 2) in AI systems , and verification structures, with Samek and Müller underlining that "verifications are required to build trust in every new technology" (2017: 4).

Intellectual property considerations continue unsolved, with Borissova pointing out that the "absence of national policies for the protection of digital content" leads to the "potential loss of digitised cultural values" (2017: 2), making difficulties for Indigenous cultural presentations. Recent studies recommend rights-based structures focused on communities or groups whose tradition is being digitised, advocating a "cultural rights-based approach to AI ethics" (Kowalczyk 2021: 175).

Mary states that associating communities and technology dictates interdisciplinary collaboration and incorporation of "oral histories and cultural narratives" (2025: 3) along technological structures. This viewpoint corresponds with Ghaith's insistence on "a collaborative approach, where technology serves as a tool guided by human expertise and values" (2024: 7).

Research Gaps and Contribution

The literature identifies critical research gaps pertaining to AI's function in cultural representation:

1. Inadequate assessment of how AI strengthens power imbalances between Western and non-Western cultural depiction.
2. Restricted theoretical frames for comprehending authenticity in AI-mediated cultural encounters in a post-truth environment.
3. Obsolete ethical systems distinctively for cultural heritage contexts.

These gaps unswervingly align with the research questions examining power relations, theoretical frames for authenticity, and the influence of digital systems on cultural governance patterns. This research attends to these research gaps by probing definite AI implementations in cultural heritage contexts, with meticulous consideration for power relationships, authenticity concerns, and ethical insinuations. As Derda and Predescu observe, "AI should support and amplify the museum's mission without compromising its authenticity or intellectual integrity" (2025: 47)—a standard this study pursues to concretise through empirical examination.

Methodology

This research utilises a methodological framework constructed upon recognised conventions in qualitative cultural exploration while addressing the distinctive challenges of examining AI-interceded cultural heritage. Digital ethnography, critical discourse analysis, and case study methodology were chosen for their corresponding potentials in probing how technological structures arbitrate cultural depiction.

Research Design

The study uses digital ethnography to examine cultural significance in digital situations where AI directs human understanding with artefacts. As Malinowski recognised, ethnography performs as "the trademark of cultural anthropology... a method for grasping the native's point of view" (1922: 25) – a theory this research broadens to digital contexts. Digital ethnography, as theorised by Pink et al., distinguishes digital spaces as "a field site that is not bounded by the offline/online distinction" (2016: 49), while Hine positions such sites as "legitimate sites of cultural production and meaning-making" (2015: 32). Pursuing Geertz's idea of ethnography as "the inscribing of discourse and practice in terms of the communities which constitute a multivocal and multilayered environment" (1973: 19), this research methodology develops inductively as digital cultural exchanges unfurl.This strategy is complemented by Fairclough's critical discourse analysis frame to "systematically explor[e] relationships between discursive practices... and wider social structures" (1995: 135).

This research methodology anchors a theoretical triangulation integrating Critical Technology Theory, probing how "social interests become embedded in technological systems" (Feenberg 2005: 52); Digital Heritage Theory, which attends to "digitisation's impact on heritage concepts" (Cameron & Kenderdine 2007: 23); and Post-colonial Digital Humanities, which contributes methods for exploring "colonial legacies in digital form and the rehearsal of the colonial dynamics of knowledge production that have othered large swathes of the human population" (Risam 2019: 51). This incorporated strategy facilitates study of how technological structures equally reproduce and redesign power interactions in cultural heritage conservation.

Literature Review Protocol

This literature review incorporates academic views on AI in cultural heritage frameworks, observing PRISMA guidelines to scrutinise scholarly publications from 2015–2025 from Scopus, Web of Science, JSTOR, and ACM Digital Library catalogues. With search terms comprising cultural heritage, artificial intelligence, post-truth, and digital preservation, the search documented 72

primary publications. The screening for inclusion utilised a double-phase strategy: preliminary evaluation of titles and abstracts against inclusion criteria, which specified peer-reviewed English scholarly publications dealing with AI mediation in cultural heritage environments, followed by a full-text evaluation employing an assessment matrix exploring methodological diligence and theoretical significance. This procedure was filtered down to 36 relevant scholarly publications that outline the foundation of the literature review.

Data Collection and Analysis

The digital ethnographic material is concerned with the methodical examination of cultural establishments from diverse nations between March 2023 and February 2025, concentrating on AI-mediated projects. Selection criteria prioritised institutions with documented AI implementation in preservation activities, public-facing digital interfaces, geographic diversity, and institutional reflection on ethical dimensions.

Following Braun and Clarke's (2006) six-step method for qualitative data research, the thematic investigation created initial codes that were distinguished into further thematic categories and eventually distilled into four important sections. These sections constitute the renditions of results in the section Findings, with each one of the subsections examining one principal aspect that materialised from the research. The themes are provided with supporting data from digital ethnographic interpretations and discourse studies to exemplify paradigms across institutional performances.

Research Ethics Framework

The framework of research ethics addresses the intricacies of examining cultural depiction in digital contexts, directed by three doctrines: deference for cultural independence, transparency in means, and researcher introspection. This examination adhered to ethical principles issued by the Association of Internet Researchers (2019) and recognises the potential for technological interferences to reiterate colonial authority dynamics, following Risam's warning against "obvious and subtle hallmarks of colonialism within code" (2019: 41).

Methodological Limitations

The methodological limitations of the study comprise the dependence on digital resources, prioritisation of English-language sources, and restrictions of digital ethnography in obtaining execution procedures as opposed to institutional self-presentation. As Boellstorff points out, digital ethnography encounters challenges concerning "the relationship between online and offline sociality" (2012: 52). However, the triangulation of critical discourse analysis, digital ethnography,

and case study methods offers methodological meticulousness in investigating how AI-driven technologies restructure cultural heritage conservation in the post-truth era.

Findings

The empirical results from the critical discourse analysis and digital ethnography investigating AI technology's function in cultural heritage conservation in the post-truth age reveal multifaceted paradigms across three interconnected aspects: power dynamics and representational asymmetries, authenticity challenges in post-truth contexts, and algorithmic bias and data bias in cultural representation.

Power Dynamics and Representational Asymmetries

The digital ethnography unveiled important power asymmetries in AI-driven cultural heritage conservation activities. The examination of digitisation enterprises across cultural establishments indicates that conservation ventures inexplicably privilege Western and European cultural artefacts, despite "Indigenous peoples and local communities being holders and custodians of a rich and diverse cultural heritage" (Zografos & Tualima 2017: 219). The critical discourse analysis of institutional documents reveals how "Binarism is strongly linked to othering" (Röll & Meyer 2021: 10), which persists in forming global relationships in cultural heritage circumstances and power relations.

This scrutiny supports Chen and Joo's remark that "The annotated labels, Y|X, can be systematically biased. In fact, annotators may possess systematic cultural or societal biases, and if not specifically trained, they may incorporate such biases into their annotations" (2021: 14980). This digital engraving transpires through selection procedures that establish which artefacts are entitled to have AI-improved conservation and through interpretative frames that arbitrate how these cultural artefacts are accessible to the general public.

As Zheng states, "Cultural heritage possesses a public interest attribute" (2024: 371), which is the core impetus for digitisation and possibly will emphasise governing power systems. The investigation observed that cultural establishments with globally collected works regularly emphasise Western cultural artefacts for AI-mediated conservation and digital availability. This system echoes Borissova's claim regarding *Directive 2012/28/EU*, which identifies as the "relation between intellectual property and digitisation [that] has not been fully legally regulated" (2017: 3), generating distinct challenges for cultural expressions for the Indigenous community.

The digital ethnography concerning virtual museum spaces exposed models compatible with Foka and Griffin's statement that "Prejudice precedes

the collection process itself" (2024: 6127). As Ghaith states, the "intersection of Artificial Intelligence (AI) with the field of cultural heritage conservation represents a transformative phase" (2024: 3), yet technological accomplishments frequently mirror and emphasise traditional power dynamics. This is substantiated in museum interpretive structures that recurrently decontextualise non-Western cultural artefacts, highlighting prescribed artistic characters over the cultural background and displaying Indigenous cultural artefacts principally through an archaeological perspective rather than a cultural angle.

Authenticity Challenges in Post-Truth Contexts

The critical discourse analysis done on academic publications from 2015–2025 reveals considerable challenges to conventional perceptions of authenticity in AI-driven cultural conservation. The study discerned a noteworthy change in the definition of authenticity from materiality-centred definitions to experiential systems. This evolution reveals a wider restructuring in conservation philosophy, which becomes experience-focused engagement rather than object-centred approaches.

In the current environment of post-truth, where emotions often play a more significant role than factual accuracy, AI-driven cultural experiences reveal a strain between historical knowledge and technological engagement. The data on interactions of visitors with AI-improved or directed expositions demonstrated that fascinating and interactive features habitually obtain more interest than historical correctness or concerns of authenticity.

This experience corresponds with Jokilehto's opinion that traditionally, authenticity has been recognised as "being truthful, both as an autonomous human creation and as true evidence of something" (2006: 8). Nevertheless, AI-generated cultural experiences confront this perspective by classifying engagement over characteristic veracity. The accomplishment of deepfake technology in cultural contexts exhibits how AI can alter the margins of historical accounts and innovative elucidation.

The scrutiny of the promotional materials of the Dalí Museum exposes how cultural institutions advantageously establish AI applications to steer these authenticity pressures. As Mihailova observes, the promotional video of the museum "begins with a 1989 quote attributed to the artist: 'When you are a genius, you don't have the right to die, because we are necessary for the progress of humanity'" (2021: 9). This symbolic approach endeavours to advertise this project as orienting with Dalí's personal values, beneficially asserting posthumous consent for technological amusement.

The study of AI-created renovations of cultural relics unveiled noteworthy epistemological challenges, aligning with Westerlund's statement that "anyone with

a computer can fabricate fake videos that are practically indistinguishable from authentic media" (2019: 39). These technologies facilitate persuasive restorations that may privilege visual consistency over scholarly accuracy, successfully creating analytical preferences that have conventionally been the field of cultural professionals.

As Pariser informs us, these technologies have the potential to "invisibly transform the world we experience by controlling what we see and don't see" (2011: 27), raising essential problems concerning how cultures institute historical reality when customary indicators of authenticity virtual museum spaces digital environments.

Algorithmic Bias and Data Bias in Cultural Representation

The critical discourse analysis recognised diverse types of bias influencing AI-directed cultural depiction, substantiating Mehrabi et al.'s remark that biases in AI structures can "impact user experience" and "amplify existing sources of bias" (2021: 2) in cultural contexts.

Collection bias arises from the historical works of museum collections that frequently echo colonial accounts. As Foka and Griffin point out, artefact collections formed through "finds, expeditions, and seized by colonisers" (2024: 6126) embed colonial accounts that AI structures may unintentionally enable.

Annotation bias happens as human analysts mark data, with their cultural perspectives influencing how cultural artefacts are classified. This coheres with Kartal's assessment that bias occurs "due to the person's demographic characteristics, culture, and beliefs" (2022: 285).

Temporal bias occurs when AI structures are taught on historical datasets that inadvertently emphasise historical bias present in those data collections. Kartal categorises this as "seasonal bias" (2022: 282), entailing apposite temporal contextualisation.

This bias emerges from what Foka and Griffin explain as a "lack of interconnectivity/interoperability of digitised collections" (2024: 6126). Sampling bias creates representational concerns where particular cultural artefacts are overrepresented, whereas others remain obscured.

Proxy bias transpires when AI structures employ variables that unconsciously associate with sensitive characteristics. As Kartal observes, this "confounding bias" arises when "attributes indirectly indicate" (2022: 285) a sensitive facet of cultural distinctiveness.

The digital ethnography unveiled that these prejudices extensively influence AI-directed cultural depiction. As Buolamwini and Gebru noted in facial analysis structures, they worked "best for lighter individuals and males overall" and "performed worst for darker females" (2018: 12). AI frameworks generally

struggle with artefacts that are different from Western structures. This complexity is predominantly evident for cultural objects with various utilities or that exemplify cultural notions lacking Western counterparts.

The examination of AI-directed cultural understanding often establishes the application of Western systems to non-Western artefacts, highlighting what Röll and Meyer express as "Eurocentric thinking patterns" (2021: 10). This technological fortification positions "Europe as the outstanding centre of culture" (Röll & Meyer 2021) and possibly diminishes the richness of marginal accounts by annihilating indigenous wisdom and knowledge through Western categorisations.

As Mary shows in her study, an important challenge in generative AI for cultural heritage is "accuracy in representing cultural nuances", pointing to the threat that "certain cultural details may be overlooked or misrepresented", chiefly concerning "small but significant design features, symbolic meanings, and traditional craftsmanship" (2025: 5).

Ethical Implementation Frameworks

The investigation of policy data and ethical procedures uncovered three distinctive strategies for AI execution in cultural heritage contexts. Such techno-centric strategies emphasise technological values, data reliability, and performance protocols. These strategies centre principally on technical features while placing ethical considerations as lesser challenges to be clarified through technical methods.

Rights-based systems focus on academic and cultural property rights, stressing community independence and informed sanction. These strategies unequivocally attend to representational authority and power dynamics, agreeing with Borissova's statement that "the cultural heritage is part of the public domain; it belongs to everyone from the community of its origin" (2017: 2).

Hybrid structures assimilate technical values with approaches rooted in rights, highlighting shared progress practices. These correspond with Mary's appeal for "interdisciplinary collaboration between technologists, historians, anthropologists, legal experts, and local communities" (2025: 7).

The digital data concerning application methods located considerable rifts between institutional discourses and performances. Several associations communicate a dedication to ethical AI application; however, they contribute inadequately to consultation with the community and ethical evaluation. This finding aligns with the appeal for a "globally sensitive and inclusive ethics of AI for cultural heritage [requiring] the decolonisation of cultural consumption" (Tiribelli et al. 2024: 299) that focuses on communities and groups whose traditions are being documented and digitised.

The analysis of discourse revealed numerous vital principles rising in ethical frames, such as transparency and explainability. Transparency is essential

in preserving public confidence in AI-generated cultural experiences and understanding. As Larsson and Heintz state, "algorithmic transparency" (2020: 2) is fundamental for instituting authenticity, mainly concerning the amount of AI involvement in preservation practices. Explainability is associated with comprehending how AI structures achieve their conclusions. According to Samek and Müller, "verifications are required to build the necessary trust in every new technology" (2017: 4). Creating explainable AI applications is central to authenticating AI-driven elucidations of historical and cultural artefacts.

Human and AI partnership models should influence each other's corresponding potency. Davenport and Kirby recommend the "opportunity for augmentation" (2015: 60), which, in cultural conservation, signifies that human experts concentrate on composite interpretive scrutiny while AI structures pre-process archival records.

The UNESCO Recommendation on the Ethics of Artificial Intelligence (2021) offers the groundwork for international collaboration, highlighting AI structures that respect cultural multiplicity. Nevertheless, the research showcases that emerging comprehensive ethical systems remain intricate and hitherto indispensable for protecting diversity and authenticity in cultural representation.

Ghaith highlights the significance of this human factor in AI-interceded conservation: "The integration of AI technologies in conservation efforts must be complemented by the insights, ethical considerations, and contextual understanding that only human actors can provide. This balanced approach promises to enhance the efficacy and sensitivity of conservation efforts, ensuring that cultural heritage is preserved in a manner that honours its complexity and significance" (Ghaith 2024: 6).

Discussion

This part interprets the empirical results from the perspective of the theoretical structure, dealing with the research questions and relating the interpretations to the existing data. The digital ethnography, critical discourse analysis, and case study examination have unveiled intricate dynamics in AI-driven cultural heritage conservation that demand attentive assessment.

AI and Power Restructuring in Cultural Heritage Preservation

The first research question evaluated how AI systems reorganise power relationships in cultural heritage conservation endeavours. The findings reveal that AI execution in cultural heritage contexts often strengthens prevailing power imbalances rather than dismantling them. The unbalanced consideration of Western European cultural artefacts in AI-driven conservation projects, although Indigenous and

Global South traditions comprise the greater part of human cultural heritage, shows persistent colonial paradigms in technological operation.

The case study of the 'Dalí Lives' project represents this supremacy dynamic. The museum's alliance with the advertising agency Goodby, Silverstein & Partners places the deepfake technology not principally as an apparatus for cultural conservation but as "a case study in tech-conscious, on-trend museum marketing" where "Dalí is simply the messenger; the message is deepfakes" (Mihailova 2021: 5). This marketing-motivated agency to cultural heritage mirrors the way "exhibit spaces are being branded not just literally, via corporate tie-ins or sponsors, but through the incorporation of marketing-like strategies for exhibitions" (Griffiths 2008: 217).

The posthumous utilisation of Dalí's image and voice raises important questions concerning power and permission. As the data revealed, though "the artist had named the Spanish Kingdom as the sole heir in his will, and Spain's Dalí Foundation gave its blessing to the project" (Lee 2019), this does not completely address the concerns about posthumous representation, where "impersonating the dead can be as much of a violation" (Kneese 2020) as other types of unauthorised or illegal exploitation of image.

These patterns support the statement that binary oppositions like "undeveloped/developed, primitivism/progress, nature/culture" (Röll & Meyer 2021: 10) continue to structure the Global South-North affairs in cultural digitisation projects. The pressure between the conservationist potential and power fortification echoes the "ambivalence of technology" in which technological methods can either "concentrate power" or "democratise it" (Feenberg 2005: 54), depending on application perspectives.

Khan et al. state: "Digital Humanities has broadened its reach, yet it has remained in touch with the goals that have animated it from the outset: using Information Technology to illuminate the human record" (Khan et al. 2015: 184). Nonetheless, the findings propose that this illumination is asymmetrical, with particular cultural accounts receiving imbalanced technological augmentation while others perish in obscurity.

Theoretical Frameworks for Authenticity in AI-Mediated Cultural Experiences

The second research question explored theoretical structures capable of handling questions of authenticity in AI-driven cultural encounters. The findings exhibit the insufficiency of conventional notions of authenticity informed of the originality of the object when challenged by AI-directed cultural heritage. The change from a material-centred to an experience-centred definition of authenticity distinguished in the discourse analysis indicates an important epistemological alteration in conservation values.

The findings from the case study are chiefly illuminating in this view. The Dalí Museum's marketing discourse deliberately structures the deepfake encounter through a tension between assisting "an empathy-based human connection" with Dalí and highlighting "the project's status as a product of cutting-edge AI research" (Mihailova 2021: 10). The museum's director, Hank Hine, states that the audience "can empathise with this man as a human being, they can relate to the work much more directly, much more passionately" (The Dalí Museum 2019), placing the deepfake as an improving technology rather than something that threatens authenticity.

The investigation found that promotional materials for Dalí Lives give prominence to the artist's proclamation: "When you are a genius, you don't have the right to die because we are necessary for the progress of humanity" (The Dalí Museum 2019). This decision has "rhetorical purpose... to frame the museum's use of a posthumous deepfake as a humanistic act and, crucially, to present this project as aligning with Dalí's personal beliefs" (Mihailova 2021: 9). This legitimation approach displays how organisations are preceding novel structures for authentication that obscure established borders between original and replication.

These findings are in line with McIntyre's description of the post-truth era, where emotions surpass truths. The case study showcased that the reception of the Dalí deepfake underlined its emotional aspects over historical correctness, with media reports encircling the idea that deepfakes' "inherent uncanniness makes them a medium particularly well suited to embodying Dalí's legacy" (Mihailova 2021: 10). As a reporter put it "the experience: well, surreal" Lee 2019), demonstrating how the technologically created uncanniness develops into a part of its professed genuineness in relation to the uniqueness of Dalí's art. Ghaith advocates that authenticity in AI-driven cultural conservation should be deemed in terms of "opportunities and challenges", recognising that although AI presents "novel approaches to identifying patterns of decay and damage" (Ghaith 2024: 3), it moreover raises essential questionsconcerning what comprises a valid cultural encounter. This dilemma reflects the necessity for additional refined theoretical frames that can attend equally to the conservation potential and the authenticity disputes of AI-directed cultural tradition.

Digital Practices and Cultural Stewardship Patterns

The third research problem investigated how modern-day digital operations confront or underpin conventional cultural management patterns. The findings unveils that AI-driven conservation practices launch inventive interpretive and curatorial dynamics that reorganise power in multifaceted ways while frequently strengthening governing authority systems via technological methods.

The Dalí Lives project reveals how cultural museums place themselves in"vast

media ecology" (Wasson 2020: 603). The data analysis and case study identify that deepfake application in cultural organisations supports a pattern where "museum professionals have often been very keen to adopt new media technologies as soon as they become available, and even have helped to develop entirely new technologies in order to serve particular communication objectives of their museum" (Pavement 2018: 31).

The ethical elements of stewardship are entangled with business imperatives. The case study showcased that the Dalí deepfake materialised from "the marriage of advertising agency tools and museum curatorial practices" (Mihailova 2021: 5), evincing a wider movement in which cultural museums increasingly espouse the pragmatic logic of market spaces. This agrees with the view that museums progressively highlight "sensual perception or aesthetic experience" in order to "realise rather than sterilise objects, history, and culture on display" (Biehl-Missal & vom Lehn 2020: 235).

The findings suggest that these novel practices reconstruct conventional representations of cultural stewardship, possibly leading to the threats of initiating "technology at a relatively superficial level" rather than creating "meaningful visitor participation" (Hanlee 2020: 321). The Dalí Lives project embodies this issue, concurrently providing new opportunities for encounter while implementing participation methods principally as an "attraction, for visitors and the press alike" (Mihailova 2021: 5).

Mary highlights that "the preservation of cultural heritage through AI is not just a technological challenge but also a social and ethical one", entailing "interdisciplinary collaboration between technologists, historians, anthropologists, legal experts, and local communities" (2025: 7). The findings encourage this collaborative strategy, emphasising the need for "joint Digital Humanities research" (Khan et al. 2015: 190) that bridges technological proficiency and cultural perspective.

Practical Implications for Cultural Institutions

The findings have important practical implications pragmatic for cultural establishments employing AI technologies. The gap between organisational rhetoric and performance perceived in digital ethnography signifies the necessity for additional vigorous governance methods addressing ethical performance.

The case study discussed emphasises both possibilities and risks in AI-interceded cultural encounters. The findings advocate that organisations dealing with posthumous depiction through AI must initiate comprehensible ethical structures addressing questions of permission and "respecting the late individual's autonomy" (Cuellar & Stroud 2019). This is particularly significant given the potential of deepfakes to be professed not as a demonstration but as

"either a fait accompli or an accomplishment of contemporary machine learning" (Mihailova 2021: 3).

The analysis recommends that cultural establishments must cautiously reflect on the balance between technological improvement and cultural legitimacy. While organisations may be attracted to deepfakes for their capability "to spread knowledge to virtually every corner of the globe" (Ames 2020), the findings imply the significance of the "ability to establish authenticity in a digital object" as "crucial for its preservation" (Innocenti 2014: 78).

The doctrines of explainability and transparency underlined in the findings support Larsson and Heintz's rationalisation that "Transparency in AI plays a very important role in the overall strive to develop more trustworthy AI" (2020: 11) and Samek and Müller's statement that "one must not trust a black-box system by default" (2017: 4). Authentication is necessary to build trust in any new technology and thus explainability "will play a pivotal role in future AI systems" (Samek & Müller 2017: 42). These doctrines can direct organisational performance towards more responsible AI execution.

Ghaith recommends numerous pragmatic suggestions that correspond with the findings, including "stable dialogue" to "facilitate interdisciplinary collaboration", formation of ethical frames that "address AI-specific ethical concerns in conservation", and improved "AI literacy" to "empower cultural heritage professionals" (Ghaith 2024: 4–5). These approaches offer solid paths for organisations to address the challenges recognised in the study.

Theoretical Contributions

This study adds to cultural theory by demonstrating the necessity for integrated theoretical structures capable of ddressing the intricate interconnection between power, authenticity, and technology in cultural heritage contexts. The insufficiency of isolated discipline-based strategies in comprehending AI-driven cultural preservation emphasises the significance of the theoretical triangulation that integrates digital heritage theory, critical technology theory, and post-colonial digital humanities.

The empirical results recommend the necessity of this theoretical incorporation. The case study underlines the power of deepfakes "to open up new avenues of expression for artists, expand engagement and interaction opportunities for the public, and raise a number of provocative questions about the place of algorithmic culture in our intellectual traditions, ethical frameworks, and public lives" (Mihailova 2021: 14). This complex influence cannot be satisfactorily addressed by either wholly technological or only cultural theoretical perspectives.

Khan et al. state that "Digital Humanities is a multifaceted effort which includes enhancement in the lifecycle of scholarly activities, illumination and

preservation of the otherwise inaccessible collections, using digital media for encouraging the creation of new expression, cramming the impact of technology in the humanities, and presenting the cultural interpretation" (Khan et al. 2015: 190). The research expresses how this comprehensive quality demands theoretical frames that can equally deal with technological and cultural facets of AI-driven heritage conservation.

The contradictory spirit of AI in cultural heritage contexts concurrently improves involvement while raising insightful ethical issues. AI signifies not simply a technological entity but "an infrastructure integrated into the socioeconomic fabric of modern digitised societies" (Caramiaux 2023: 120). The findings show that having a perceptive on this infrastructure necessitates theoretical strategies proficient enough to equally address technological potentials and its immersion in wider societal, cultural, and financial structures.

Mary highlights the need "to preserve the intangible cultural elements that often go undocumented" (2025: 4) along technological conservation means, emphasising how AI-directed conservation must merge both technological and cultural strategies. This incorporation mirrors an impartial strategy where "technology serves as a tool guided by human expertise and values, ensuring that cultural preservation efforts are both effective and respectful of the heritage they seek to protect" (Ghaith 2024: 7).

Case Study: AI-Powered Salvador Dalí at the Dalí Museum (2019)

In 2019, the Dalí Lives project, unveiled at the Dalí Museum in St. Petersburg, Florida, offers an important instance of the relationship between AI and cultural heritage preservation. This project, which involves bringing life to the surrealist master Salvador Dalí through a deepfake recreation in collaboration with an ad agency, intends to "enhance the museum experience" (Hufschmidt 2023: 140). It provides a microcosm of the moral and ethical intricacies regarding the deployment of AI in cultural contexts, demonstrating the interplay between artistic authenticity, technological progre**ss**, and curatorial intentions in a post-truth environment.

Project Implementation

Employing deepfake technology, the Dalí Lives exhibition generated a life-sized digital recreation of Salvador Dalí that "welcomes museum-goers in a conversational style" (Mihailova 2021: 3) and functions as "a guide and a partner simultaneously" (Khan et al. 2024: 767). This AI-powered incarnation was created through a sophisticated assimilation of machine learning algorithms, including Natural

Language Processing (NLP) systems and Generative Adversarial Networks (GANs). These AI models were trained on a broad corpus of Dalí's artworks, writings, and "over 6 000 frames of filmed interviews" (Mihailova 2021: 3) to capture the artist's likeness and his distinctive mannerisms and worldview.

The Dalí Museum's stated rationale was to provide visitors with an unparalleled experience with the persona of the late artist, who becomes a "guide to his own oeuvre" (Mihailova 2021: 3). This approach transcends conventional engagement methods and "aligns with broader museum trends where AI can help museums reach a wider audience" (Rani et al. 2023: 3). By enabling visitors to interact with Dalí, the museum sought to revitalise static exhibitions, facilitating a more dynamic and personalised exploration of the artist's work.

Ethical Considerations

Despite its innovative nature, the Dalí Lives project raises significant ethical questions. The primary concern involves posthumous representation and the "excessive simulation" (Mihailova 2021: 9) of Dalí's likeness without his explicit consent. With no living family, the "exhibition was run with permission from the Dalí Foundation in Spain" (Lee 2019), which problematises essential concepts of posthumous rights and artistic heritage—a particularly relevant concern given Dalí's carefully cultivated public persona.

Additionally, based on the artist's documented statements, the AI's responses essentially engage interpretation and judgment, raising concerns about potential misrepresentation, particularly regarding contemporary issues Dalí never addressed. As the boundaries between education and entertainment blur, spectacle may be prioritised over substantive engagement with the artist's work, potentially undermining the complexity of Dalí's oeuvre. This exemplifies challenges in cultural heritage contexts "where the regulation of AI is lagging behind the speed of innovation" (Caramiaux 2023: 118).

The project's dependence on AI to mediate visitors' experience of Dalí's art also raises concerns about technological determinism, potentially subordinating curatorial expertise to algorithmic analysis and raising questions about human judgment's role in cultural heritage preservation.

Institutional Response

In response to these ethical concerns, the Dalí Museum implemented several mitigation strategies to ensure that "museums retain their role as trusted spaces for cultural and educational enrichment" (Derda & Predescu 2025: 18). The institution maintained transparency by clearly communicating the AI-powered nature of the experience, distinguishing between the historical Dalí and his digital recreation. The museum also ensured curatorial oversight, with Dalí experts and art historians

contributing to the AI's responses with the artist's documented philosophy and views.

The AI-driven experience was integrated into a broader educational framework "as a techno-utopian educational tool" (Mihailova 2021: 3), incorporating traditional displays and expert-led discussions to provide contextual depth and promote substantive engagement beyond the technological novelty. The museum also established mechanisms to evaluate the project's impact on visitors' perception of and engagement with Dalí's art, enabling continuous assessment and improvement.

Implications for Cultural Heritage

The Dalí Lives project offers valuable insights for AI applications in cultural heritage preservation, illustrating how "museums have a unique role in fostering public understanding of AI's societal implications" (Derda & Predescu 2025: 47). It demonstrates the necessity of developing robust ethical frameworks that carefully govern AI's application in representing historical personalities to protect the integrity of artistic heritage.

The project highlights the importance of balancing technological innovation with curatorial reliability and educational objectives. It suggests AI's potential to enhance rather than replace established methods of cultural engagement while emphasising the necessity of interdisciplinary collaboration in developing AI-powered experiences.

As cultural institutions navigate the complex landscape of AI-mediated preservation, the Dalí Lives project is both a harbinger of future possibilities and a cautionary model. It underscores the need for thoughtful, ethically grounded approaches to incorporating emerging AI technologies in cultural institutions, balancing innovation with responsibility and technological capability with cultural sensitivity.

Limitations

This research's assessment of the use of AI in cultural heritage conservation provides critical awareness and includes a number of limitations that must be acknowledged.

The approach of digital ethnography depends entirely on openly available online resources, possibly eliminating stakeholders with restricted digital presence, which is predominantly from marginalised groups and communities. Practical AI implementations must include technological methods, oral narratives, and cultural histories, elements probably underrepresented in this methodology. The one Western case study of the Dalí Museum restricts generalising across various organisational environments with changing resources and cultural operations.

Regardless of recognising Western-centrism in AI-directed heritage ventures, this study itself insufficiently represents non-Western viewpoints owing to language and access restrictions. The research chiefly utilises Western academic structures while lacking a comprehensive assessment of Global South milieus, mirroring persistent digital divides in cultural depiction.

The authenticity structure used depends on theoretical differences between the original and recreated AI challenges. Jokilehto states that "truthfulness of information sources as a fundamental prerequisite for the definition of authenticity" (Jokilehto 2006: 8) presumes borders that rising technologies distort. In addition, the investigation inadequately studies community engagement in AI-driven heritage projects. Without community involvement, initiatives can pose the threat of estranging or misrepresenting these groups or communities if their views are not heard. Future studies should unswervingly involve societies or communities whose heritage is undergoing digitisation and scrutinise execution across various organisational backgrounds.

Future Research Directions

These limitations imply various promising opportunities for future investigations. Mixed-methods strategies merging traditional and digital ethnographic methods could present a more inclusive perspective on AI application across various cultural backgrounds. Research involving groups or communities whose heritage or tradition is being digitised must attend to important gaps concerning intellectual property considerations that are inefficiently addressed in present legal systems.

Comparative research comprising Global South viewpoints would supplement the perspective of how authority dynamics outline AI execution in cultural heritage conservation. Siliutina et al. state that these technologies offer preservation prospects and challenges "related to data security, accessibility, and the risk of cultural commoditisation" (Siliutina et al. 2024: 263), necessitating exploration across different backgrounds.

Longitudinal studies following AI-interceded cultural encounters could study how organisations acclimatise ethical structures in reply to technological improvements and community response, offering perceptions regarding responsive governance patterns.

Conclusion

This research has studied the complex connection between cultural heritage conservation and artificial intelligence in the post-truth age, exhibiting complex dynamics that equally supplement and defy cultural interpretation and involvement. Through digital ethnography, critical discourse analysis, and case

study examination, the research offers significant insights and responses to the research questions that directed this inquiry:

Research Question 1: How do AI technologies restructure power relations in cultural heritage preservation projects?

AI tools recurrently emphasise existing disproportions between Western and non-Western cultural rendition. The digital ethnography established that AI-driven conservation projects focus on Western European cultural artefacts, although Indigenous and Global South heritage compile the greater part of human cultural heritage. These proceedings reveal important colonial paradigms in technological operation, upholding binary oppositions that contour Global South-North relationships. Nevertheless, when devised with unambiguous consideration of power systems, AI technologies can enable the conservation of vulnerable cultural elements through pattern identification and renovation potentials.

The case study of the Dalí Museum project demonstrates how AI applications can provide commercial elements that give importance to technological demonstration over cultural conservation, transforming heritage into marketing possibilities rather than conservation enterprises. However, when executed with unambiguous consideration to authority systems and representational justice, AI technologies embrace noteworthy possibilities for democratising access to susceptible cultural components through pattern recognition capabilities and restoration potential that would otherwise be inaccessible.

Research Question 2: What theoretical frameworks can adequately address authenticity questions in AI-mediated cultural experiences?

Conventional perceptions of authenticity based on the originality of materials prove insufficient when addressing AI-directed cultural heritage experiences that blur borders between original and recreated. The critical discourse analysis identified a considerable alteration in the direction of experiential frames of authenticity. Cultural establishments deliberately structure AI implementations to institute posthumous authorisation, proffering technological reproduction corresponding to artists' viewpoints. These applications require further nuanced theoretical structures that reflect both conservation reimbursement and authenticity concerns caused by AI in cultural milieus.

The tactical structuring of AI implementations by cultural organisations, mainly manifest in the posthumous consent account provided by the Dalí Museum, reveals how organisations develop original frames for substantiation that intentionally situate technological recreation as compatible with artists' private views. These rising authentication approaches entail theoretical strategies that can include the developing character of legitimacy in digitally directed cultural encounters while upholding critical awareness of how emotional involvement may occasionally surpass historical correctness in the post-truth environment.

Research Question 3: How do contemporary digital practices challenge or reinforce traditional cultural stewardship patterns?

AI-driven conservation projects launch innovative curatorial adaptations that restructure power in multifaceted ways. The study acknowledged various biases, such as collection bias, annotation bias, temporal bias, sampling bias, and proxy bias, that display how AI structures facilitate dominant emblematic hierarchies, although they seem impartial. Nonetheless, developing ethical frames, chiefly based on rights, prioritises community autonomy and presents propitious courses for undertaking further unbiased cultural stewardship paradigms in AI-directed contexts.

These ethical frameworks are apparent in initiatives like the UNESCO's Recommendation on the Ethics of AI and CARE Principles for Indigenous Data Governance, which enables autonomy of communities through protocols for attaining permission and provision for benefit-sharing. These strategies highlight the significance of interdisciplinary cooperation to ensure AI technologies enhance rather than reduce the wealth and multiplicity of cultural inheritance.

The practical propositions of this study emphasise the need for ethical systems, highlighting explainability, openness, and human-AI cooperation. Such systems ought to deal with representational power and data bias as recognising the evolving nature of authenticity in current digital circumstances. Accountable AI accomplishment in the cultural heritage framework entails both technical proficiency and cultural compassion, with interdisciplinary collaboration between heritage professionals, policymakers, technology experts, and cultural societies being fundamental for ensuring that AI technologies improve rather than diminish the richness and multiplicity of cultural heritage.

Declaration of AI Use

AI-assisted tools were used in a limited capacity during the preparation of this article, with Grammarly employed solely for grammar and spelling verification and Mendeley used for citation management and reference formatting. All substantive writing and intellectual content were developed solely by the author.

References

Ames, Morgan (2020): "Can Deepfakes be used for good?" *The National News*, 3 March 2020: https://www.thenationalnews.com/arts-culture/art/can-deep-fakes-be-used-for-good-1.987522, (accessed 15/01/25).

Biehl-Missal, B. & D. vom Lehn (2020): "Aesthetics and atmosphere in museums: a critical marketing perspective," M. Henning (ed.): *Museum Media*, Hoboken: John Wiley & Sons, 235–259.

Boellstorff, Tom (2012): *Ethnography and Virtual Worlds: A Handbook of Method*, Princeton: Princeton University Press.

Borissova, Vesela (2017): "Cultural Heritage Digitization and Related Intellectual Property Issues," *Journal of Cultural Heritage*, 23, 1–6.

Bunz, Mercedes (2023): "The Role of Culture in the Intelligence of AI," Sebastian Thiel & Jan C. Bernhardt (eds.): *AI in Museums: Reflections, Perspectives and Applications*, Bielefeld: Transcript Verlag, 23–28.

Buolamwini, Joy & Timnit Gebru (2018): "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification," *Proceedings of Machine Learning Research*, 81, 1–15.

Cameron, Fiona & Sarah Kenderdine (2007): *Theorizing Digital Cultural Heritage: A Critical Discourse*, Cambridge: MIT Press.

Caramiaux, Baptiste (2023): "AI with Museums and Cultural Heritage," Sebastian Thiel & Jan C. Bernhardt (eds): *AI in Museums: Reflections, Perspectives and Applications*, Bielefeld: Transcript Verlag, 117–130.

Cuellar, Walter & Scott R. Stroud (2019): "The ethics of computer-generated actors," *Center for Media Engagement*: https://mediaengagement.org/research/the-ethics-of-computer-generated-actors/, (accessed 12/01/25).

Davenport, Thomas & Julia Kirby (2015): "Beyond Automation," *Harvard Business Review*, June 2015, 58–65.

Derda, Isabella & Daniela Predescu (2025): "Towards Human-centric AI in Museums: Practitioners' Perspectives and Technology Acceptance of Visitor-centered AI for Value (Co-)creation," *Journal of Museum Studies*, 30:5, 1596–1609.

Fairclough, Norman (1995): *Critical Discourse Analysis: The Critical Study of Language*, London: Longman.

Feenberg, Andrew (2005): "Critical Theory of Technology: An Overview," *Tailoring Biotechnologies*, 1:1, 47–64.

Foka, Anna & Gabriele Griffin (2024): "AI, Cultural Heritage, and Bias: Some Key Queries That Arise from the Use of GenAI," *Heritage*, 7, 6125–6136.

Geertz, Clifford (1973): *The Interpretation of Cultures*, New York: Basic Books.

Ghaith, Kholoud (2024): "AI Integration in Cultural Heritage Conservation – Ethical Considerations and the Human Imperative," *International Journal of Emerging and Disruptive Innovation in Education*, 17:2, 1–12.

Griffiths, Alison (2008): *Shivers Down Your Spine: Cinema, Museums and the Immersive View*, New York: Columbia University Press.

Hajri, Oumaima (2023): "The Hidden Costs of AI: Decolonization from Practice back to Theory," Sebastian Thiel & Jan C. Bernhardt (eds.): *AI in Museums: Reflections, Perspectives and Applications*, Bielefeld: Transcript Verlag, 57–63.

Hanlee, Imali (2020): "Human-centred design in digital media," Hannah Lewi,

Wally Smith, Dirk vom Lehn & Steven Cooke (eds.): *The Routledge International Handbook of New Digital Practices in Galleries, Libraries, Archives, Museums and Heritage Sites*, London: Routledge, 319–326.

Hennessy, Kate & Natasha Lyons (2020): "Designing for Engagement: Digital Ethnography in Computer-aided Ethnographic Research," *Proceedings of the 2020 ACM on Designing Interactive Systems Conference*, 140–151.

Hine, Christine (2015): *Ethnography for the Internet: Embedded, Embodied and Everyday*, London: Bloomsbury Academic.

Hufschmidt, Isabel (2023): "Troubleshoot? A Global Mapping of AI in Museums," Sebastian Thiel & Jan C. Bernhardt (eds.): *AI in Museums: Reflections, Perspectives and Applications*, Bielefeld: Transcript Verlag, 131–148.

Innocenti, Perla (2014): "Bridging the gap in digital art preservation: interdisciplinary reflections on authenticity, longevity and potential collaboration," Janet Delve & David Anderson (eds.): *Preserving Complex Digital Objects*, London: Facet Publishing, 73–91.

Jokilehto, Jukka (2006): "Considerations on Authenticity and Integrity in World Heritage Context," *City & Time*, 1:1, 1–16.

Kartal, Elif (2022): "A Comprehensive Study on Bias in Artificial Intelligence Systems: Biased or Unbiased AI, That's the Question!," *International Journal of Intelligent Information Technologies*, 18:1, 279–301.

Khan, Nadeen A., Sayed Z. Rizvi, Tauheed Zainab & Samee M. Khan (2015): "Digital Humanities in Cultural Preservation," Karen L. Sacco, Scott S. Richmond, Sara Parme & Kerrie F. Wilkes (eds.): *Supporting Digital Humanities for Knowledge Acquisition in Modern Libraries*, Hershey: IGI Global, 181–194.

Khan, Tahseen, Robin Raizada, Praveen Kumar, Umar Hussain & Shirish Batra (2024): "Current Role and Applications of Artificial Intelligence (AI) in Museums of India," *Brainwave: A Multidisciplinary Journal*, 5:2, 765–773.

Kneese, Tamara (2020): "How data can create full-on apparitions of the dead," Slate, 2 November 2020: https://slate.com/technology/2020/11/robert-kardashian-joaquin-oliver-deepfakes-death.html, (accessed 05/12/20).

Kowalczyk, Stefan (2021): "Ethics in Art and Cultural AI: A Cultural Rights-Based Approach," *Ethics and Information Technology*, 23:2, 173–182.

Larsson, Stefan & Fredrik Heintz (2020): "Transparency in Artificial Intelligence," *Internet Policy Review: Journal on Internet Regulation*, 9:2, 1–16.

Lee, David (2019): "Deepfake Salvador Dalí takes selfies with museum visitors," *The Verge*, 10 May 2019: https://www.theverge.com/2019/5/10/18540953/salvador-dali-lives-deepfake-museum, (accessed 15/01/25).

Malinowski, Bronislaw (1922): *Argonauts of the Western Pacific*, London: Routledge & Sons.

Mary, Basma J. (2025): "Generative AI for Cultural Heritage Preservation," *Journal of Digital Cultural Heritage*, 12:1, 1–7.

McIntyre, Lee (2018): *Post-Truth*, Cambridge: MIT Press.

Mehrabi, Ninareh, Fred Morstatter, Nripsuta Saxena, Kristina Lerman & Aram Galstyan (2021): "A Survey on Bias and Fairness in Machine Learning," *ACM Computing Surveys*, 54:6, Article 115.

Mihailova, Mihaela (2021): "To Dally with Dalí: Deepfake (Inter)faces in the Art Museum," *Convergence: The International Journal of Research into New Media Technologies*, 27:5, 1290–1306.

Murphy, Oonagh (2023): "Power, Data and Control: AI in the Museum," Sebastian Thiel & Jan C. Bernhardt (eds.): *AI in Museums: Reflections, Perspectives and Applications*, Bielefeld: Transcript Verlag, 73–81.

Neudecker, Clemens (2023): "Digital Curation and AI: Opportunities and Risks for Cultural Heritage Institutions," Sebastian Thiel & Jan C. Bernhardt (eds.): *AI in Museums: Reflections, Perspectives and Applications*, Bielefeld: Transcript Verlag, 149–158.

Pariser, Eli (2011): *The Filter Bubble: What the Internet Is Hiding from You*, London: Penguin.

Pavement, Peter (2018): "The museum as a media producer," K. Drotner, V. Dziekan, R. Parry & K. C. Schrøder (eds.): The Routledge Handbook of Museums, Media and Communication, London: Routledge, 31–46.

Pink, Sarah, Heather Horst, John Postill, Larissa Hjorth, Tania Lewis & Jo Tacchi (2016): *Digital Ethnography: Principles and Practice*, London: SAGE Publications.

Rani, Sundari, Charan Sarath & Glen Phillips (2023): "Exploring the Potential of Artificial Intelligence and Computing Technologies in Art Museums," *ITM Web of Conferences*, 53, 1–10.

Risam, Roopika (2019): *New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy*, Evanston: Northwestern University Press.

Röll, Verena & Christoph Meyer (2021): "Tackling Eurocentric Perspectives on Cultural World Heritage: Suggestions for Including Postcolonial Approaches in World Heritage Education," *Heritage – New Paradigm*, London: IntechOpen, 10–15.

Samek, Wojciech & Klaus-Robert Müller (2017): "Explainable Artificial Intelligence: Understanding, Visualizing and Interpreting Deep Learning Models," *arXiv preprint*, 1–8.

Siliutina, Iryna, Olena Zhukova, Olena Barna & Nina Stechak (2024): "Cultural preservation and digital heritage: challenges and opportunities," *Amazonia Investiga*, 13:75, 262–273.

The Dalí Museum (2019): "Behind the scenes: Dalí lives," *YouTube*, 8 May 2019: https://www.youtube.com/watch?v=BIDaxl4xqJ4, (accessed 10/12/24).

Tiribelli, Simona, Elena Pansoni, Emanuele Frontoni & Benedetta Giovanola (2024): "Ethics of Artificial Intelligence for Cultural Heritage: Opportunities and Challenges," IEEE Transactions on Technology and Society, 5:3, 293.

Wasson, Haidee (2020): "The elastic museum: cinema within and beyond," M. Henning (ed.): Museum Media, Hoboken: John Wiley & Sons, 603–629.

Westerlund, Mika (2019): "The Emergence of Deepfake Technology: A Review," *Technology Innovation Management Review*, 9:11, 39–52.

Zheng, Yi (2024): "The Copyright Challenges of Cultural Heritage Digitization and its Countermeasures," *International Journal of Social Sciences and Public Administration*, 4:1, 371–380.

Zografos Johnsson, Daphne & Hai-Yuean Tualima (2017): "*Cultural Heritage*, Traditional Knowledge and Intellectual Property," Cultural Heritage, Traditional Knowledge and Intellectual Property, 218–228.

Author

Lakshmimol C P. Institutional affiliation: Senior Research Scholar, PG and Research Department of English; CMS College Kottayam (Autonomous), Kottayam, Kerala
ORCID ID: 0009-0004-1737-8429