

Generative AI and the Narrative Turn in Digital Cultural Heritage Education

M. Economou 1, A. Antoniou 2, M.E. Champion, 3, A. Chrysanthi 4, N. Lercari 5, and S. Sylaiou 6

1 Dpt. of Information Studies & The Hunterian, University of Glasgow, UK

2 Dpt. of Archival, Library and Information Studies, University of West Attica, Greece

3 University of South Australia, Australia

4 Dpt. of Cultural Technology and Communication, Aegean University, Greece

5. LMU Munich, Institute for Digital Cultural Heritage Studies, Munich, Germany

6. Dpt. of Surveying Engineering and Geoinformatics, International Hellenic University, Greece

Abstract

This panel explores how generative AI transforms higher education teaching in subjects pertaining to Digital Heritage (DH). Bringing together scholars from museology, digital heritage, game design, creative computing, and educational technology, it examines AI's impact on pedagogy, authorship, and interpretive authority. The discussion focuses on three themes: AI as a disruptor of traditional humanities education, its potential for collaborative narrative co-creation, and the need for new evaluation frameworks grounded in ethics and critical literacy. Addressing both institutional resistance and inevitable change, the panel aims to foster dialogue around inclusive, reflective, and ethically grounded approaches to AI-enhanced DH storytelling.

CCS Concepts

•Applied computing~Arts and humanities•Applied computing~Education~Interactive learning environments

1. Introduction

The advent of generative AI has brought unprecedented possibilities and complex challenges to the field of Cultural Heritage (CH). Particularly its integration into the creation and dissemination of narratives for CH calls for a renewed focus on how we teach, evaluate, and engage with digital storytelling practices. From automated narrative generation to personalized learning pathways, AI is reshaping the landscape in which cultural narratives are created and experienced. As such technologies gain more attention, university educators face new challenges and opportunities leading to debates over their role in authoring content, as well as the ethical dimensions of automating creative and interpretive processes.

At the same time, students and faculty are often hesitant, or even explicitly restricted from using tools like ChatGPT, due to academic integrity policies. Nevertheless, the influence of AI on both teaching and research is accelerating, making it imperative to address these tensions within appropriate pedagogical frameworks. Key among these is the need to develop students' and future

professionals' critical AI literacy, prevent over-reliance on automated outputs, and maintain depth and cultural sensitivity in creative and scientific outputs.

This panel brings together researchers who are also university teachers working at the intersection of digital cultural heritage, interactive narrative design, and evaluation to discuss emerging best practices and concerns. The panel aligns with broader goals of DH and education, including those highlighted by UNESCO [UNE21] that stress the importance of equitable, ethical, and human-centered uses of AI in education and cultural domains.

2. Panel theme and format

The panel will address the question: Can we effectively teach and evaluate cultural heritage narratives in the age of generative AI, and how? The format will be a moderated discussion guided by pre-agreed questions that focus on three core areas as described below. Each participant will respond to targeted questions, leading into an open discussion and Q&A session with the audience.

2.1. AI as a disruptor of traditional pedagogy in CH

AI challenges the centuries-old model of slow, meticulous scholarship by offering instant, comprehensive synthesis and analysis. This threatens the traditional role of books, lectures, and even human experts producing cultural narratives [ECE*24]. How can educators ethically incorporate generative AI in teaching for cultural heritage while adopting critical engagement and maintaining cultural/historical integrity?

2.2. Digital narrative co-creation and AI Literacy

AI enables new forms of intellectual engagement – interactive, dialogic, and personalized – that can deepen understanding but also transform knowledge-making through Interactive Digital Narrative (IDN) design [KEE*24, E*15]. How can generative systems support collaborative narrative design and how can students be empowered to critically interpret AI-mediated content?

2.3. Evaluation Frameworks

AI can accelerate research on cultural heritage content creation and design of interactive storytelling but also demands new standards for validation, interpretation, and ethical use [DSS*25, AWE*22]. How can we assess the quality, impact, and ethical dimensions of AI-generated content in educational and cultural contexts?

3. Panel Participants

Prof. Maria Economou, specializing in Digital Cultural Heritage and with long experience in university teaching and training of cultural heritage professionals in more than two countries, will chair the panel and guide discussion toward the pedagogical and practical implications of integrating AI into DH scholarship. She will also provide significant insights into how traditional and emerging evaluation frameworks can adapt, especially within museums and public heritage contexts.

With expertise in adaptive educational technologies and cultural information systems as well as cognitive approaches to CH, Dr. Angeliki Antoniou will explore how AI can support personalized learning in cultural heritage narratives and discuss the risks of algorithmic biases in educational outcomes. A longtime researcher and theorist in virtual heritage, A. Prof. Erik Champion will discuss recent developments in AI for generation of 3D scenes, the potential of AI as a critical learning tool for discerning unsatisfactory and inadequate digital heritage, and ways in which ‘difficult’ AI can communicate culturally significant presence. Dr. Angeliki Chrysanthi, specializing in interactive cultural narratives, will critically discuss practical examples of incorporating generative AI into various IDN and DH curricula. She will also highlight

instances of human-machine collaborative creativity in interpretative narrative design. Prof. Nicola Lercari, as Chair of Digital Cultural Heritage Studies, will critically discuss opportunities and ethical concerns of incorporating AI into Heritage Science curricula and fieldwork. Finally, Dr. Stella Sylaiou, with expertise in experimental museology and virtual museums, will address how immersive storytelling practices in cultural heritage institutions are being redefined through AI-enhanced tools.

4. Panel Contribution

This panel offers a timely and nuanced discussion on the profound transformations in teaching and communicating CH in the age of generative AI. This panel will foster interdisciplinary dialogue at the intersection of AI, education, and cultural heritage narratives. It will map out emerging practices, tensions, and pedagogical imperatives, offering an open format opportunity for scholars, educators, and cultural professionals who are dealing with the practical and ethical dimensions of generative technologies. Contributions call for openness, experimentation, and reflection rather than denial or panic. The future of how cultural heritage is communicated and disseminated to contemporary audiences depends on how well institutions and individuals adapt and plan for a new era.

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