



Frontiers in Digital Cultural Heritage: Research and Teaching Methods

DIGHT-Net Seminar, 15–17 April 2026
Tallinn University

This three-day workshop will explore emerging research and teaching methods in Digital Cultural Heritage Studies. It focuses on two interconnected dimensions: research and teaching. On the one hand, it presents case studies drawn from ongoing and completed research projects, discussed by scholars from different disciplinary backgrounds in order to highlight emerging methodologies and analytical approaches. On the other hand, it examines innovative teaching tools, formats, and pedagogical practices, addressing both how digital cultural heritage studies are taught in the academy and how digital methods are reshaping education and training in the cultural heritage field.



**Wednesday, 15 April
Day 1**

**Tallinn University (Narva mnt 25)
Room A-206**

12.20 – 12.30: Marjolein Uittenbogaard: Welcome

12.30 – 13.30: Emily Clark (University of Amsterdam): Sonic Heritage in the Netherlands: Colonial Histories and Digital Afterlives

This presentation shares reflections at the mid-point of a four-year project investigating ethnographic sound archives in the Netherlands (*Audibilities of the Dutch Colonial Past*, NWO-Veni, 2023–2028). The three case study collections were created according to early- and mid-twentieth-century notions of what kind of “evidence” sound recordings could capture and how they could contribute to the production of knowledge about human difference and the past. I trace the afterlives of these collections as they are transferred between institutions, digitised, datafied, and used for a range of purposes, from restitution and artistic reinterpretation to data-driven comparative musicology scholarship. I thus investigate how digitised sonic heritage is used in contemporary knowledge-making practices that constitute both continuities with and critical breaks from the colonial epistemologies that contextualised its creation.

13.45 – 14.45: Maral Mohsenin (Eye Filmmuseum director of collections): Digital Cultural Heritage: A Film Archive’s Perspective

Archives are custodians of cultural heritage, with access and research often forming two of their core responsibilities. At Eye Filmmuseum, as in many other archives, preservation and knowledge sharing are closely intertwined. This talk reflects on digital cultural heritage from the perspective of a film archive and museum, addressing both born-digital and digitised materials. While digitisation is often associated with increased accessibility, the reality is more complex. Cultural heritage, such as film, does not automatically translate into easy or unrestricted access. Technical, legal, and preservation-related challenges continue to shape how materials can be consulted, studied, and reused. In the context of research and teaching, these constraints significantly influence the ways in which digital objects can be mobilised. Taking a step back, the paper focuses on the digital objects themselves as they are preserved within the archive. It examines the practical challenges they pose for research, while also outlining some theoretical considerations regarding their status both as archival objects and as part of a broader cultural heritage landscape.

15:00 – 16:00: Marie-Joy van der Deure (CLARIAH): Archival Landscapes of AI

This presentation explores how climate histories can be researched through digital audiovisual collections. It introduces the project *Archival Landscapes of AI* (University of Amsterdam, 2025–2027), which develops data enrichments to search historic film collections for reuse in moving-image installations, fostering critical reflection on histories of extraction. The presentation also addresses the CLARIAH infrastructure through this historical lens, demonstrating how digital audiovisual collections can be accessed and connected with quantitative (meta)data to analyse and visualise historical developments in climate debates. Together, these approaches highlight both the challenges and the potential of digital audiovisual archives for research and pedagogy related to climate history.

16.30 – 18.00: Site visit **KuMu, The Triumph of Galatea: Art in the Age of Artificial Intelligence** (<https://kumu.ekm.ee/en/syndmus/triumph-of-galatea-art-in-the-age-of-artificial-intelligence/>.) *Only available for project members and speakers*

19:00: Dinner at Han's Street Food, Viru Food Court (*self-paid dinner*)
Only available for project members and speakers

Thursday, 16 April
Day 2

Tallinn University (Narva mnt 25)
Room A-206

10.00 – 10.30: Welcome and coffee

10.30 – 11.00: Hannu Salmi (University of Turku): **Introduction: Digital Cultural Heritage – Teaching and Research at a Transformative Moment**

11.00 – 12.00: Inés Matres (University of Helsinki): **New Research Infrastructures for Digital Cultural Heritage in Finland and Ways to Make Data-intensive Tools Accessible to Humanities Researchers**

In this presentation, Inés Matres will introduce the DARIAH-FI research infrastructure network and its efforts to jointly develop new data services and tools for researchers working with large-scale, complex, or visual cultural heritage data. These tools are developed on top of existing services such as Finna (a search service providing access to materials from archives, libraries, and museums in Finland) and Astia (the search interface of the National Archives of Finland). In addition to providing an overview of services currently under development, the talk introduces ways of making these tools accessible to researchers, including webinars and discussions with early-career scholars.

12.00 – 13.00: Lunch

13.00 – 14.00: Eero Hyvönen (Aalto University, Helsinki): **Digital Humanities on the Semantic Web: From Infrastructure to Practical Applications, AI-based Knowledge Discovery, and Web of Wisdom**

Publishing cultural heritage (CH) data in the field of Digital Humanities (DH) has evolved through several phases: from text carving and handwriting, to printed texts, to online publication, to publishing FAIR linked data that is comprehensible to computers for data enrichment and analysis, and finally to AI-based knowledge discovery on the web – a “Web of Wisdom”. This presentation reviews lessons learned from the development of a national Semantic Web infrastructure and more than twenty systems built upon it, used by up to millions of end users between 2002 and 2024. The linked data underlying these applications include museum collections, bibliographical data from libraries, medieval and Renaissance manuscripts, military history sources, biographies, narratives, historical correspondence, archaeological finds, legislation, parliamentary speeches, and art. Designed for Digital Humanities researchers, application developers, and the wider public, these systems

include a Linked Open Data (LOD) service with a live SPARQL endpoint that can be used for DH research with modest programming skills, as well as a ready-to-use semantic portal built on top of it. This work has led to the so-called Sampo Model for creating and publishing CH Knowledge Graphs (KG) as LOD services and semantic portal user interfaces (UI).

14.15 – 15.15: Pelle Snickars (University of Lund): On the Research Program Digarv, Funded by the Swedish Research Council 2017–2025

In 2016, the Government of Sweden suddenly took an interest in the digital humanities, and as a result approximately €20 million was allocated to promote “data-driven research, especially in the humanities”. The so-called Digarv programme later came to involve fourteen different research projects, all situated at the intersection of academic research and cultural heritage institutions (<https://www.digarv.se/en/participating-research-projects/>). My talk draws together the various experiences of Digarv, highlighting both its advantages and its challenges, particularly with regard to issues of digitisation.

**Friday, 17 April
Day 3**

**Tallinn University (Narva mnt 25)
Room A-206**

10.00 – 10.30: Welcome and coffee

10.30 – 11.00: Francesco Mazzucchelli (University of Bologna): Opening Remarks – Digital Practices and Cultural Heritage: Case Studies, Research Perspectives, and Open Questions

11.00 – 11.45: Caterina Manco (University of Bologna): Preserving and Reconnecting Scientific Heritage: Challenges and Opportunities in the Aldrovandi Edition

The National Edition of the works of Ulisse Aldrovandi is a large-scale digital cultural heritage project that aims to integrate manuscripts, printed books, the herbarium, and nearly 4,000 woodblocks into an interoperable open-access platform. In its current phase, scholars work through a backend transcription tool that connects digital images, transcriptions, and a newly developed descriptive catalogue, supported by standardised editorial guidelines to ensure methodological coherence and data interoperability.

11.45 – 12.30: Valentina Presutti (University of Bologna): Data Quality and Ethics in Cultural Heritage Knowledge Graphs

Abstract: Digital cultural heritage risks turning into a distorted echo of the past, built on fragmented and biased data. This keynote argues that ensuring data quality is not merely a technical challenge, but an ethical responsibility: Knowledge Graphs (KGs) that represent our heritage actively shape historical narratives and influence the reliability of AI systems. The talk will highlight both the technical and ethical dimensions of this issue, focusing on challenges such as data heterogeneity and cultural bias. Drawing on examples

from our research such as ArCo, the KG of Italian Cultural Heritage, and ChoCo, a KG integrating musical harmony datasets, I will illustrate practical methodologies to enhance data quality, while also exposing their limits and pointing to open research challenges that demand attention.

12.30 – 13.30: Lunch

13.30 – 14.15: Paolo Martinelli (University of Bologna): Towards a Semiotics of Accessibility and Digital Inclusion in Learning Practices

In recent years, accessibility and inclusion have become central concerns in the design of digital environments for education and cultural heritage. These issues are often addressed primarily in technical or regulatory terms, focusing on standards, usability, and interface design. This contribution instead proposes a semiotic perspective on accessibility and inclusion, considering them as processes of mediation that shape how subjects gain access to cultural objects, texts, and knowledge practices. From this perspective, learning environments can be understood as semiotic ecosystems in which different media, supports, and forms of representation reorganise the conditions of interpretation and participation. Accessibility is therefore not only a matter of removing barriers, but also of transforming the semiotic configurations through which cultural content becomes intelligible and usable for different audiences. By examining learning contexts in which diverse linguistic, cognitive, and cultural backgrounds intersect, this contribution argues that accessibility can be interpreted as a practice of semiotic translation and reconfiguration.

14.15 – 15.00: Luca Vittori (University of Bologna): The GEL Database: A Multilingual Digital Platform for Mapping Knowledge in Global Education

The Global Education and Learning (GEL) Database is a multilingual digital platform developed within the UNESCO Chair in Global Citizenship Education in Higher Education at the University of Bologna. Conceived as an open-access initiative, GEL is part of a long-term research project aimed at identifying and mapping publications in the fields of Global Education (GE) and Global Citizenship Education (GCED). Currently encompassing eleven languages, the database is developed by research teams working in their respective mother tongues to identify and classify materials produced within their linguistic and cultural contexts. This approach enables the project to move beyond the structural dominance of Anglophone academic circuits and to mitigate linguistic and cultural bias in the representation of the field. As a result, GEL includes not only peer-reviewed journal articles but also grey literature, NGO reports, doctoral theses, and locally circulated materials – sources that have long informed research and practice in GE and GCED. Operating at the intersection of research, pedagogy, and public engagement, GEL supports scholars, practitioners, and policymakers by facilitating bibliographic inquiry and fostering the exchange of knowledge and practices across contexts.