

DIGITAL TECHNOLOGY AND HERITAGE - CHALLENGES AND ISSUES

11th & 12th March 2021

Digital applied to heritage represents an important field of digital humanities, and also of what is now known as “Heritage Science”. It encompasses all aspects of heritage, from cultural to natural, tangible to intangible, physical to digital. It brings together heterogeneous scientific competence in a dialogue that stimulates creativity and opens new perspectives for the understanding, transmission and sharing of heritage elements. This significant progress, in a field with a high social impact, will be touched upon through the presentation of the aims and results of recent or ongoing research, and of the challenges and issues researchers are confronted with, may they be ethical, technical, methodological or conceptual.

The objective of this event is to create the conditions for a scientific exchange on the current challenges of the digitization of heritage and the exploration of new possibilities offered by digital tools for the production and dissemination of knowledge.

It will bring together leading researchers in the field as well as project leaders who are currently financed by the *Agence Nationale de la Recherche* (ANR) and its funding partner agencies in the context of national and international projects, in particular the “Digital Heritage” call, which was launched in 2017 by the Joint Programming Initiative on Cultural Heritage and Global Change (JPI CH) or as part of the Generic Call for Proposals (AAPG), in particular in the "Digital revolution: relationship to knowledge and culture" panel.

The conference, organized by the ANR and the JPI CH in collaboration with the French Ministry of Culture, will mainly be open to specialists of computer science and Heritage science in the field of digital applied to Heritage.

Thursday 11th March 2021

1.30pm Opening

- Pascal Liévaux, Chair of the JPI Cultural Heritage
- Director General of Heritage, Ministry of Culture, France

2.00pm Anne Bajart, Deputy Head of Unit, DG Connect, Interactive technologies, Digital for Culture and Education, European Commission

2.15pm A few words from the supporting funding agency: Thierry Damerval (ANR, CEO, France)

2.30pm - 4.00pm

Topic I. Digitization and Patrimonialization: A critical approach

Moderated by Paulina Florjanowicz, Director of the Departments of Cultural Heritage, Ministry of Culture and National Heritage, MKiDN, Poland

Digitization is a means more and more often used to conserve and protect all or parts of a heritage asset. Nevertheless, this operation is carried out according to how the asset is socially, economically or politically perceived. It is also performed in the context of technical constraints that do not always allow for a full account of all the elements of the heritage asset to be conserved and protected. Therefore, digitization may lead to creating or reinforcing stereotypes that could hinder the comprehension of the heritage asset, or, subsequently, the progress of knowledge. This session will examine the critical approaches which are applied to the patrimonialization of Heritage via digital technology in order to reduce interpretation biases.

- 1) **Dream (DH):** The Dictionary / Grammar Reading Machine: Computational tools for accessing the World's Linguistic Heritage.
- 2) **Material (CE38):** Micro-geometry Approach of Texture Reproduction of Artistic Legacy.
- 3) **DigiCONFLICT (DH):** Digital Heritage in Cultural Conflicts.
- 4) **Memo-mines (CE38):** Converting Memorial Traces into Numerical Mediations: The case of mining memory.

4.00pm Poster session

Presentation of five posters (ALEGORIA, ANTRACT, APPI, DAPHNE, E-ROMA) and meeting with project leaders.

4.30pm-6.00pm

Topic II. Digital Technology as a New Means to Articulate Conservation and Dissemination

Introduction/modération par Costanza Miliani, Director of Institute of Heritage Science, CNR, Italy

The digital tool can make elements of local, national or international Heritage available to the public, without any restriction of access, or any temporal or geographical constraint. In particular, it offers the

possibility of making available Heritage assets that require drastic conservation measures for their protection. The digital tool has also the advantage of increasing opportunities in terms of cultural mediation, and of proposing interactive tools that involve the public in discovery courses, thus making them actors of their own knowledge acquisition process. Research presented during this session will centre on the use of public-friendly digital tools, with a particular emphasis on initiatives aimed at arousing public's awareness of Heritage issues.

- 1) **CADEAH (DH):** European History Reloaded: Curation and Appropriation of Digital Audiovisual Heritage.
- 2) **Home (DH):** History Of Medieval Europe
- 3) **Schedar (DH):** Safeguarding the Cultural Heritage of Dance Through Augmented Reality
- 4) **ARCH (DH):** Ancient Coinage as Related Cultural Heritage

Friday 12th March 2021

9.00am - 10.30am

Topic III. From one technology to another: Deploying the possibilities of digital technology

Moderated by Marieke van Erp, Head of the Digital Humanities Lab, Royal Academy, Netherlands.

Since the first attempts to digitalize heritage, the possibilities offered by digital technology have considerably increased. It is now possible to link several media to a same object. Now does arise the question of migrating data to new systems.

- 1) **Kamoulox (CE38):** On-line Unmixing for Large Historical Archives
- 2) **Read it (DH):** Reading Europe: Advanced data investigation tool
- 3) **Reseed (CE38):** Semantic Reverse-Engineering of Digital Heritage Objects
- 4) **Epique (CE38):** Towards a Quantitative Epistemology - Reconstructing the Long-term Evolution of Sciences through Large Scale analysis of science production.

10.30am Poster session

Presentation of nine posters (ECLAT, HDBEX, HORAE, HYPEROTLET, INTROSPECT, RESTAURE, SCHOPPER, SUMUM, URBANIA) and meeting with project leaders.

11.15am Project valorization experience: Aioli collaborative platform

12.15pm Concluding words: Etienne Anheim – Senior researcher, EHESS

12.30pm End

Full list of posters

ALEGORIA	Advanced Linking and Exploitation of diGitized geOgRaphic Iconographic heritAge
ANTRACT	Transdisciplinary Analysis of French Newsreels (1945-1969)
APPI	Digitalized atlas of the entire Picard dialect
DAPHNE	Discovering knowledge in historical prosopographical databases
ECLATS	Automatic Extraction of Geolinguistic Atlas Content and Spatial Analysis: application to Dialectology
E-ROMA	Expressive restoration of Gallo-Romanian statues by virtual sculpture and animation
HDBEX	Exploitation of Historical Big Data for the Digital Social Sciences: application to financial data
HORAE	Hours - Recognition, Analysis, Edit(ion)s
HYPEROTLET	Documenting documentation: European and French-speaking tradition
INTROSPECT	Introspection of the archaeological material culture in the digital era
RESTAURE	Computational Resources and Processing for Regional Languages
SCHOPPER	Simulating prehistoric humans behaviors in their palaeo-environments for investigation
SUMUM	A Multiscale and Multimodal Strategy of documentation of Tangible CH objects: acquisition, processing, study and diffusion
URBANIA	Digital valorising of historical scale models of cities for adaptative and innovative uses

About the projects

- JPI CH : projects funded by the ANR and national partner funding agencies, as part of the "Digital Heritage" call for projects launched in 2017 by the JPI CH
- ANR : projects funded within the framework of the Generic Call for Projects (AAPG), in particular the projects of the "Digital revolution: relationship to knowledge and culture" panel