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Revised and updated Research Proposal

January 2022

Digital Cultural Heritage and The Local Time Machine Project Network.

A Conceptual Framework.

Digital Cultural Heritage is a new and rising subfield within the larger field of Digital Humanities. The definitions of Digital Humanities are many (for examples see - Schreibman, Siemens, and Unsworth 2004; Klein and Gold, 2016; Schreibman, Siemens, and Unsworth 2016.) but at-large can be summed up to “[..] work [..] done at the intersection of computational methods and humanities materials” (Drucker 2021, p1). The Time Machine Organization (TMO) can be said to be the largest collaborative endeavour within the field of Digital Cultural Heritage up to date, holding the long-term vision of using historical sources to speculatively recreate past periods of time in a 4D Mirror World (Time Machine Manifesto 2019, Kaplan and Di Lenardo 2020). This research project will a) provide a conceptual history of digital Cultural Heritage, its contemporary characteristics and introduce the landscape of its’ key players, explaining why this research projects’ main focus will lay on the TMO; b) structurally analyse the building blocks of TMO, the Local Time Machine (LTM) projects, as they perform the move of analogue heritage memory sources into digital environments and b) investigate the implications thereof for the neighbouring knowledge fields of History, Memory and Media, as well as Heritage Studies.

Western human societies are currently undergoing a massive revolution in terms of knowledge production. Within the humanities, literary critic and media theorist Katherine Hayles has noted the ongoing “momentous shift from print to digital media” (Hayles 2012, 7) and further explored how digital media influences the reading and writing of texts. Within the field of digital Cultural Heritage, recent literature on the shift from heritage to digital Cultural Heritage include collections of theoretical writings on topics related to the concept (Cameron and Kenderdine 2007; Parry 2007; Kalay et al. 2008; Lewi et al. 2019), the field investigated as to its practitioners and its relationship to Digital Humanities (Münster 2017; Münster et al. 2019), applications, problems and solutions discussed by practitioners (for example, in the *Journal on Computing and Cultural Heritage*), as well as a recent broad reflection on digital

heritage in the age of more-than-human world (Cameron 2021). To the best of my knowledge, there is yet a comprehensive account of the history and contemporary uses, characteristics, and key-players of the concept of digital Cultural Heritage yet to be conducted. It is also crucially important to map and document exactly how this slow revolution from analogue to a world of digital Cultural Heritage is happening to be conscious about what is being gained as well as lost in the digital making and experiencing of heritage and the implications thereof.

Firstly, it is needed to understand the conceptual thinking thus far as to what has been and is digital Cultural Heritage, what is the TMO and LTM projects' role within. Secondly, to develop an understanding of how the move from analogue to digital heritage worlds is happening and how digital Cultural Heritage differs from previous heritage memory environments. Thirdly, to investigate how the coming digital Cultural Heritage 4D Mirror World will change the neighbouring knowledge fields of History, Memory and Media, as well as Heritage Studies.

The ensuing guiding Research Questions are as follows -

1. What is the history of the digital Cultural Heritage concept? What are the fields current key characteristics and players? What is the role of TMO within the landscape?
2. In the context of digital Cultural Heritage and LTM projects – who is doing the creating, with what kinds of tools and access practices, filled with what kind of content? How do all these aspects differ from previous media modes of heritage memory construction – their (mainly) analogue sources?
3. What are the implications thereof from the perspective of the neighbouring knowledge fields of History, Memory and Media, as well as Heritage Studies?

This project will use theoretical and methodological triangulation to gain most holistic understanding of this interdisciplinary research problem – conceptual history, content analysis, structurally analytical concept of “Travelling Memories”, survey questionnaire, semi-structured interviews and, lastly, the Broad Model for interdisciplinary research.

A conceptual history of digital Cultural Heritage will be conducted in order to understand the development and current definitions, characteristics and key contemporary players of the field. Content analysis will be conducted on the available TMO and LTM related documents to map the origins of the endeavour and the LTM projects' development and role within. In

order to map, structurally analyze and understand the move and the implications of the move from analogue to digital media in heritage memory environments, the concept of “Travelling Memory” (Erlil 2011) will be used to investigate how the a) carriers, b) media, c) content stories, d) practices of access and lastly c) symbols used within LTM projects have altered from their analogue sources. A survey questionnaire will be used to gain first-hand information about these travels of the LTM projects. To deepen the analysis, semi-structured interviews will be conducted with selected LTM project case examples. Lastly, the research results and their implications will be inspected from the perspectives of History, Memory and Media, as well as Heritage Studies using the Broad Model for interdisciplinary research (Repko, Szostak and Buchberger 2017).

This project will provide new knowledge-based insights and result in a comprehensive study on digital Cultural Heritage and the largest contemporary collaborative endeavour within the field. Analytical insights will be provided in the form of a map that records the move of analogue heritage memory sources into digital environments and analysis of the implications thereof. It will directly contribute to the TMO action Pillar One – the building of critical theory for digital Cultural Heritage.

Tentative Bibliography

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3. Drucker, Johanna. 2021. *The Digital Humanities Coursebook: An Introduction to Digital Methods for Research and Scholarship*. London and New York: Routledge.
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5. Kalay, Yehuda, Thomas Kvan, Janice Affleck. 2008. *New Heritage*. New Media and Cultural Heritage. London and New York: Routledge.
6. Kaplan, Frederic, and Isabella Di Lenardo. 2020. "The Advent of the 4D Mirror World." *Urban Planning* 5 (2): 307–10.
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10. Münster, S., F. I. Apollonio, P. Bell, P. Kuroczynski, I. Di Lenardo, F. Rinaudo, and R. Tamborrino. 2019. "DIGITAL CULTURAL HERITAGE MEETS DIGITAL HUMANITIES." *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences XLII-2/W15* (August): 813–20.
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13. Schreibman, Susan, Raymond George Siemens, and John Unsworth, eds. 2016. *A New Companion to Digital Humanities*. Hoboken: Wiley Blackwell.
14. Schreibman, Susan, Raymond George Siemens, and John Unsworth, eds. 2004. *A Companion to Digital Humanities*. Hoboken: Wiley Blackwell.
15. Time Machine. 2019. "Time Machine Manifesto. Big Data of the Past for the Future of Europe." Vienna: Time Machine

Tentative working plan

2022

January – April

- Conceptual history of DCH and its key characteristics
- Hand-in for revision

May – June

- History of TMO and LTM projects' role within
- Hand-in for revision

July – August

- "Travelling Memory" concept structural analysis of LTM projects

September

- Semi-structured interviews with representative LTM case examples
- In-depth case analysis of representative LTM case examples
- Hand-in for revision

October – December

- Interdisciplinary analysis of implications for the fields of History, Memory, Media and Heritage Studies
- Hand-in for revision

2023

January – March

- Editing of the main text body

April – June

- Conclusions and discussion
- Introduction
- Formatting and proofreading
- Handing in for revision

August – September

- Last editing