

Several Time Machine projects already under way



Some cities decided not to wait for the EU's green light to launch their Time Machines. Amsterdam, Nuremberg, Paris, Jerusalem, Budapest and Naples have all decided to dig through their archives and create a huge database linking their history on a national and European level. Why? We spoke with Julia Noordegraaf, Professor of Heritage and Digital Culture at the University of Amsterdam, and Sander Münster, who heads the Department of Media Design at Dresden Technical University, to find out.



Why does this project interest you, as a person, as a researcher?

JN : As Professor of Digital Heritage I focus on bringing together and promoting research about the reuse and meaning of digital heritage, as well as the impact of digitization on the perception and appreciation of cultural heritage. Time Machine links up very well to these aims. I believe that the Time Machine application is a great chance not only to intensify research on Cultural Heritage and collaboration amongst researchers, businesses, public authorities and other stakeholders in that field.

You went into the project very quickly, was it obvious?

SM: I am following the Venice Time Machine activities since long, so I was very happy about having met Frederic Kaplan as the mastermind behind those activities personally at a conference in Canada in mid 2017. We quickly found out that we shared common interest so he invited me to join the time machine and I was pleased to do so.

When did Amsterdam want her Time Machine?

JN : It all started with the research program Creative Amsterdam: An E-Humanities Perspective (University of Amsterdam, <http://www.create.humanities.uva.nl/>) in which we were reconstructing Amsterdam cultural life by digitizing and linking data on cultural sectors such as performing arts and visual arts. We quickly realized two things: First, that spatial representations would be an excellent way to organize and present our data; and, second, that the research potential of our datasets would be much larger if we could also connect our sets to other data on urban history. This would make it possible to reconstruct cultural change in light of broader urban, economic, social and political developments. As it turned out, much of these other datasets were already available and accessible, but not yet connected. When we learned about the Venice Time Machine (VTM) in 2016 we realized this was the exactly the kind of infrastructure and vision we need to bring these heterogeneous and fragmented sources and data together.

You scan 15 thousand documents a day from old registers, have you already started to link the information obtained to tell a story?

JN : The Amsterdam City Archive has been digitizing records on a massive scale for quite some time now. With the Amsterdam Time Machine network we support these efforts and develop research projects and other applications on these sources. One of the main sources that is currently being digitized is the Archive of the Amsterdam Notaries 1578-1915, which spans 30.000 large volumes and was recently added to the UNESCO Memory of the World register. In the project [Golden Agents: Creative Industries and the Making of the Dutch Golden Age](#), one of the collaborators on the Amsterdam Time Machine, two millions scans of notarial acts, especially probate inventories, will be

made available, in order to provide insight in the consumption of cultural goods in seventeenth-century Amsterdam.

Do you have the right to access all the documents of the past in Dresden or are some of them classified as confidential today?

SM: Not classified but sometimes limited accessible due to copyright. We recently conducted a worldwide survey amongst scholars in Cultural Heritage - data accessibility in terms of legal issues, commercial ownership or findability due to improper tagging or local storage are major hurdles yet.

Do you need to know the past to build the future?

JN : The past is of crucial importance for knowing where we are and where we are heading. At times of unprecedented globalization and digitization people increasingly feel the need to anchor their individual and group identities in history. Cultural heritage plays an important role in these processes of identity construction. Heritage is our 'cultural DNA': material objects (artworks, monuments) and immaterial forms of heritage (values, ideas) are the essential building blocks of local, national, or transnational identities and indispensable for preparing individuals and societies for an uncertain future. Just as much as today's genetics may work to the benefit of physical health, understanding the interactions between cultural heritage and identities contributes substantially to the quality of individual life and society.

What tools do you use? Are you going to create new ones?

SM: We are researchers, so we are keen to push forward the frontiers of what is technically possible. Some of our key areas of tool development are to create historic city models out of old photos by photogrammetry or to create 4D browser based user-centred interfaces.

But it is not only a question of tools. Information systems are complex sociotechnical settings with an interplay between technology, content and user needs. It is our interest to cover and investigate this full spectrum within our research.

Tomorrow the project could take a European scale thanks to obtaining the Flagship, why is it important?

JN : The histories of cities like Amsterdam, Venice or Paris cannot be reconstructed without taking into account the international dimension. Place and space is an excellent way to represent local history, but of course people, ideas and products were not tied to specific locales. Mobility, then, is at the core of Dutch and European history, and this should be represented in the European infrastructure for historical data. For this we need technological advancements as proposed in Flagship.

SM : Europe is still struggling to find its own way into the age of information. Since Cultural heritage is a main pillar of both, European identity and reputation, it may be definitely worth to strengthen and enrich by digital means.