



## AN UNFORGETTABLE MUSEUM EXPERIENCE. MISSION IMPOSSIBLE?

My heart breaks every time someone says museums are boring because I think exhibitions can be a powerful melting pot for cultural heritage assets with the help of technology and the touch of design. I trained as a designer and then specialised in curation and exhibition studies before I became a research assistant in the computer science field. This is a story of my interdisciplinary research about the curation of a centralised database as a collaborative online platform dedicated to cultural heritage with a hope to create unforgettable (but also meaningful) experiences through exhibitions.

Digital technologies provide powerful and compelling computer applications for humans to interact with computer-generated environments. Although mostly known for its application in the other industries, today we have a broad range of digital technologies at our disposal which would be useful to make people enjoy cultural heritage but are rarely used in the field. And yet many of the cultural heritage objects are hiding in the depots of museums because there is always limited space to exhibit all. In the meantime among the many ways to engage the audience through interpretive tools such as wall text and audio guides, when it comes to digital technologies, they are usually implemented at the end of the exhibition curation process. As a result, it has been normalized through the years that museums are sterile places showing limited objects in limited spaces usually referred to as “white cube”.

Being a designer specialised in museum curation and exhibitions, I decided to approach this problem, in the only way I know: as a design challenge. What if we use digital technologies to blur the boundary between real and virtual in order to enrich the experience of cultural heritage exhibitions? I decided to conduct experiments through design, curation, and digital sciences in order to find a way to build digital infrastructures around powerful user experiences making the collections and exhibitions even more interactive and informative.

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POSTED ON

02 February 2021

For example, in the field of archaeology, most of the activities are not reversible such as the excavation process. When an archaeological site is excavated we can not undo the process. But we can use digital technologies to virtually simulate an excavation and create an online platform for different scientists to collaborate in the same virtual space from different locations while sharing the same archaeological data.

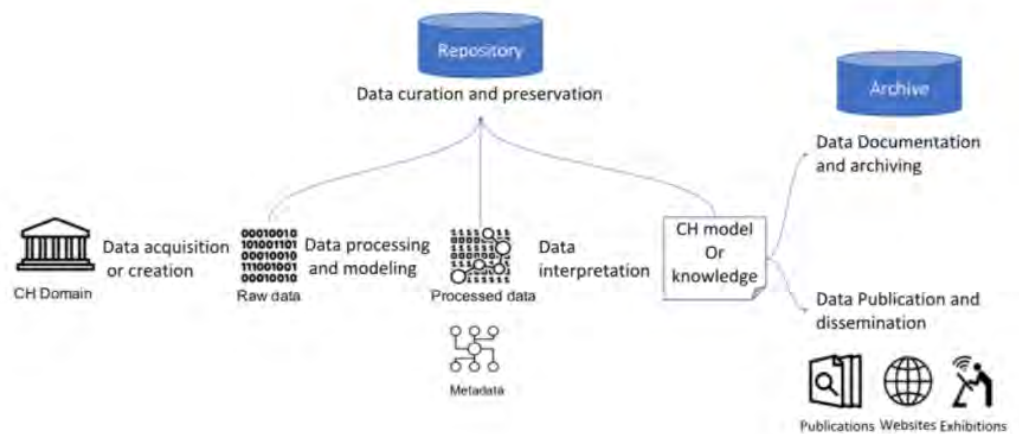


Fig. 1 - Proposed schema for Digital Curation Framework

But how? I have only practised designing and curating in the “real world”. So, the first thing I learned about the “digital world” is that if I want to archive the objects or the exhibitions I have to create their digital twins. Then I could use these digital twins to create a large-scale collaborative online environment which supports the processes of conducting experiments and gathering related texts, images, digital artefacts by curating, analysing, linking, preserving. It is not an easy task. And there is no “one easy solution” to this problem as in all design problems. But luckily I am a part of an interdisciplinary programme so I was listening to the fellow scientists’ challenges while I trained to learn the basics of diverse disciplines. The problem was that, in the end, I was more confused. So, I decided to look back at what is already inside me. *Et voilà!*

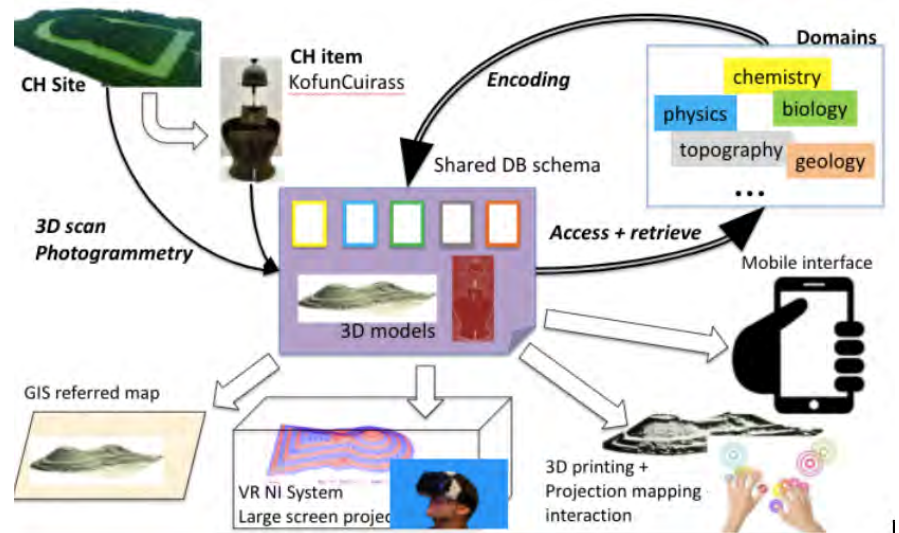


Fig. 2 - Proposed workflow for BeArcheo project.

I discovered that there is a niche area where I can combine all my experience and knowledge called digital curation. Digital curation is a fairly new practice dealing with the process of creation and management of digital assets during their entire lifecycle by working on the relationship between the cultural heritage objects and their digital counterparts. It provides a huge advantage to overcome the current challenges of the reconstruction, visualisation, analysis and management of archaeological data as well as its dissemination. It also helps to increase collaboration among multinational and multidisciplinary research projects, online platforms and repositories for collecting, sharing and preserving.

As a perfect example above all, one of our latest EU-RISE projects, Beyond Archaeology (BeArcheo project) consists of the excavations of archaeological sites and monumental tombs of Tobiotsuka Kofun in Okayama Prefecture of Japan. With my research team, we are responsible for the creation of a centralised database combining the archaeological data, the archaeometric analyses of the site and the excavated materials through an online platform and finally we are due to the dissemi-

nation of the findings in the form of an exhibition. The exhibition will be an interactive playground that combines digital storytelling techniques with semantic relations. Advanced user interfaces with the centralised database will create enriched user experiences for visitors while shedding light to all the aspects of archaeological activities from the excavation to the exhibition.

Similar to our intention with BeArcheo’s open-access online platform, during the Covid-19 outbreak, most of the cultural institutions started to see the potential of digital tools to publish their exhibitions online and make their content available digitally for visitors. We’re now living in a “brave new world” of challenges and opportunities, which, in my opinion, needs brave new experiences. I strongly believe that there are new ways to make exhibitions enjoyable without losing educational and experiential narratives. Therefore I hope that my research will help to create meaningful digital audience engagement and to deepen the understanding of the complexity of the cultural heritage objects. And, hopefully, create unforgettable exhibition experiences!