



# Digital Strategies for Heritage (DISH) 2013

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## Chefs' Table session

**Table Number:** 12

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**Table Host:** Wim Hupperetz

**Title:** The Digital Heritage Paradox: 3D Reconstructions Tool or Token?

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### Introduction

3D reconstructions: tool or token?

The complex, layered and dynamic aspects of heritage objects and sites on the one hand and technically sophisticated but static and simplifying visualizations on the other hand has resulted in a paradox. A paradox that potentially can frustrate both academics and the general public.

Virtual reconstructions of ancient objects, buildings, sites and even complete cultural landscapes are derived by a wide range of specialized interpretative steps and decisions. These reconstructions are increasingly used both as a research tool and as a means to transfer academic knowledge to the wider public. However, the ways in which archaeological reconstructions are made and the degree to which archaeological, architectural or historical evidence, interpretation and -often an important aspect- sheer imagination play a role, usually is not made explicit. With the increased use of virtual reconstructions in academic debate, the demand for clear guidelines and 'annotations'[1] in the construction and use of virtual reconstructions has grown correspondingly.

Visual reconstructions operate on the nodes of interaction between research on heritage, public history, the heritage perspective (with related questions of cultural belonging) and the visualization domain. It is time to address the need for new integrated and more multi-disciplinary approaches, and create opportunities based on heritage reflection to improve research agenda's and research tools.

### Curatorial practice

Apart from this theoretical reflection on heritage there is another paradox visible that is related. It is the paradox between and the growing gap between the curatorial practice with no urgency to use technology and the societal practice where (sensor) technology is touching nearly every object, site and person and where data, people and objects are integrated into one digital system. Another paradox that potentially can frustrate both curators and museum visitors.

Museums curators are being considered to be very reluctant to use technological tools in their curatorial practice. But the key question until now was: is technology really touching the objects that are curated? In other words if technology is not touching the real object – as sensor technology will do in the near future – there is no urgency to use technology. Until now, the role of digital visualizations

with regard to dynamic heritage has hardly been addressed. Heritage remains are highly dynamic. New discoveries and changing insights continuously change academic knowledge and interpretation of objects, sites and landscapes. In addition, modern perceptions on the significance of specific remains for modern society are also changing, because of changing ideas about the past. The dynamic nature of heritage implies that any reconstruction or visualization is limited to specific temporal and geographical contexts. In some ways, they say as much about the time of reconstruction as they do about the past. In recent decades, the significance of digital visualizations and reconstruction for heritage has become apparent. Such digital imagery plays an increasingly important role to present heritage to a wider public. Moreover, the possibilities for such visualization in heritage are being explored, especially with regard to the varieties in reconstructing landscapes, objects and buildings on the basis of a fragmented past. One of the main new questions will be: what happens if museum objects will turn into smart objects? Will this create a curatorial revolution?

Wim Hupperetz is involved in two major EU funded projects V-MUST and meSch that aim at providing heritage professionals technological tools for the creation of, respectively, virtual museums and smart exhibits.

[1] See: <http://www.londoncharter.org/> FOR THE COMPUTER-BASED VISUALISATION OF CULTURAL HERITAGE

## Discussion

Paradox

- Museological challenges
- Stratigraphical – Layered
- Several layers
- From object to content
- Complex layers
- How is heritage perceived and conceptualised?
- Easier to create visualisations
- Story telling is complex. Audiences want simplified reconstructions.
  - Easy story bits ready to consume.
- Each and every story, artefact, has several stories and/or layers.
- Digitalisation
  - Development
  - Connection on a more personal level.
- Philosophical.
  - Future is on our doorstep.

3D Reconstructions

- Models ready to be distributed online.
- What do people gain by studying these models.
- Are these models used in the correct manner?
- Audience participation by contextualising the image he or she has.
  - Alters perception and gives the audience a 'real live' experience.
  - Engagement with visitors.
  - Immersiveness.
- Future is on our doorstep.
- Embrace it.

- Experience

Summary: Two paradoxes in the digital heritage domain. 3D reconstruction as an asset to a museological exhibition. Getting a grip on an artefact by adding content and context. This is done by adding extra 'layers' to the story of an artefact.

(1) The complex, layered and dynamic aspects of heritage objects and sites on the one hand and technically sophisticated but static and simplifying visualisations have resulted in a paradox.

Troy – there are many [versions] of the story of Troy. None of these versions are a portrayal of the 'absolute' truth. □ digital visualisation versus static appearances

- a. Using 3D in the 'right' way?
- b. What is the potential? I.e., online, museums, research tools.
- c. Scientific?
- d. Downside?

3D models can be used to add an extra layer to the artefacts on display. In some cases these models may be derived from scientific models, in other cases the actual scientific model is displayed in an exhibition. An example of this could be the use of augmented reality in outdoor spaces.

Great value for educational purposes. It makes the past more tangible for people such as high school students. It's a hands on approach on how to make heritage more accessible for the younger visitors. However, is this comparable to models and reconstructions used in the gaming industry? One should not be afraid to shy away from the gaming industry and collaborate minds on their respective technologies. The models used in a heritage institution should be annotated. One must be able to determine which sources have been used. This does not really apply for the movie and gaming industry. These models are based more on interpretation. 3D models are more accessible for a broader audience. Using scientific models may be too difficult to grasp for a broader audience. Experience – cultural heritage context.

Technology can be distracting for the younger generation. Technology should not distract the visitor from the actual artefacts on display in the exhibition. Adding more screens to an exhibition should not be necessary. It should be a more seamless experience for both the visitor and the museum.

(2) The curatorial practice – no urgency to use technology where data, people and objects are integrated into one digital system. This paradox can frustrate both curators and museum visitors. The internet of things. Linking data to data (i.e. Google). The next step is that it's connected to data – data – people (i.e. Facebook). The next step is: data – data – people – artefacts. This is called the internet of things. All elements in our society are connected to each other.

People trust museums. Reliability of museum's reputation. People perceive museums to portray the truth, de facto. How to integrate technology with museums and enhance visitor experience.