

# 2ND MEETING OF DCHE EXPERT GROUP

## Knowledge Management

Luxemburg 13th/14th of November 2017

Dr. Marinos IOANNIDES, Digital Heritage Research Lab  
CYPRUS University of Technology



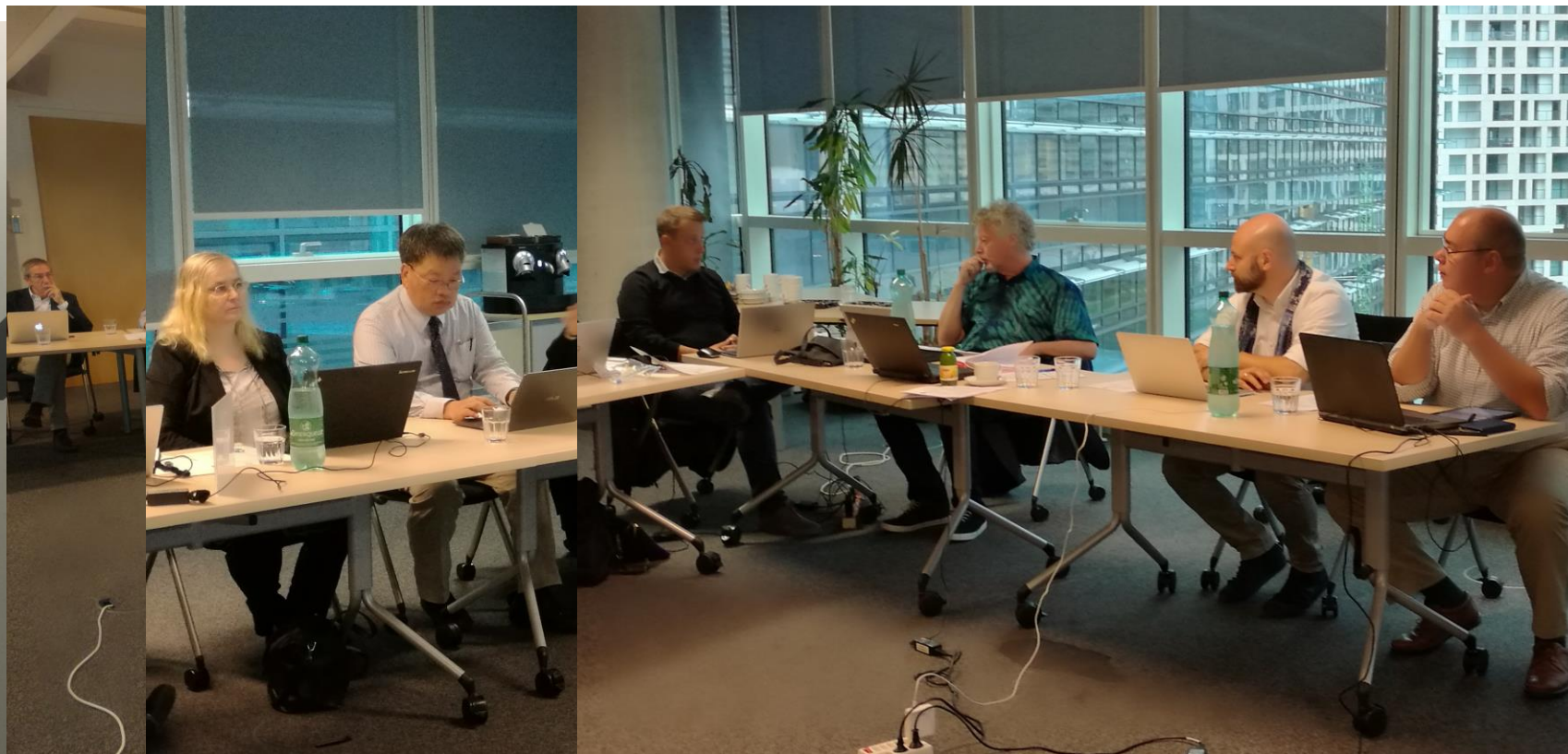
# HOLISTIC DOCUMENTATION IN CULTURAL HERITAGE



## Europeana Task Force Group Survey on Advanced documentation of 3D Digital Assets

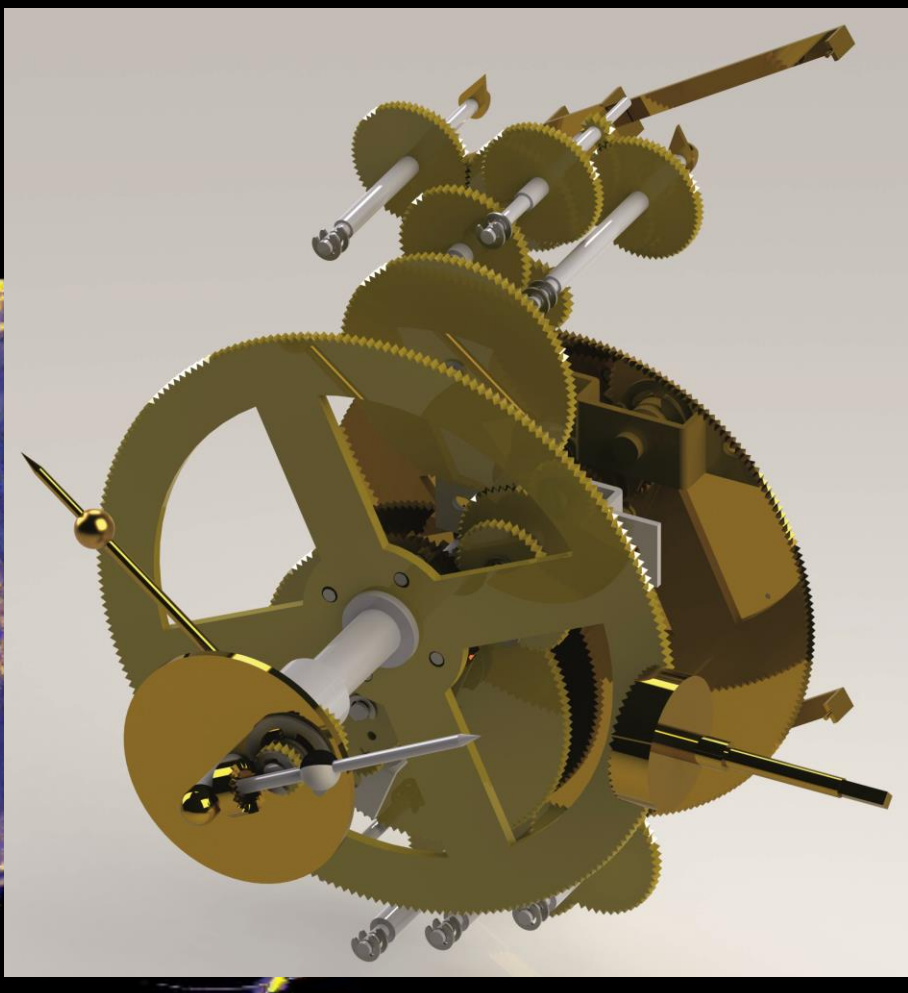
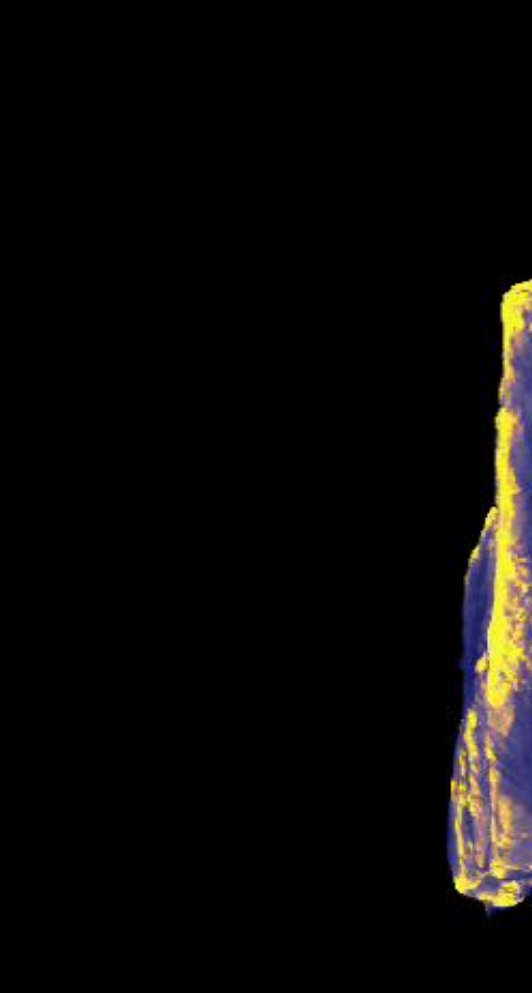
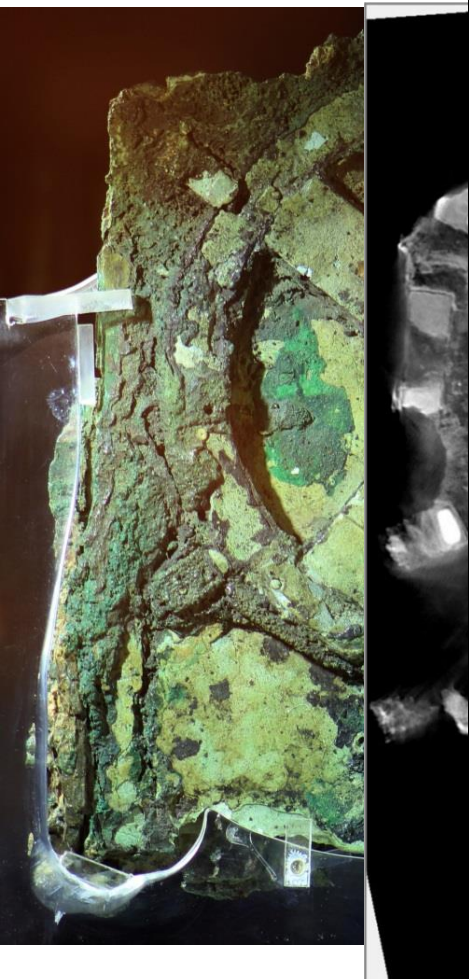
The e-documentation of Cultural Heritage (CH) assets is inherently a multimedia process and a great challenge, addressed through digital representation of the shape, appearance and conservation condition of the heritage/cultural object for which 3D digital model is expected to become the representation. 3D reconstructions should progress beyond current levels to provide

# THE EVENT IN VIENNA

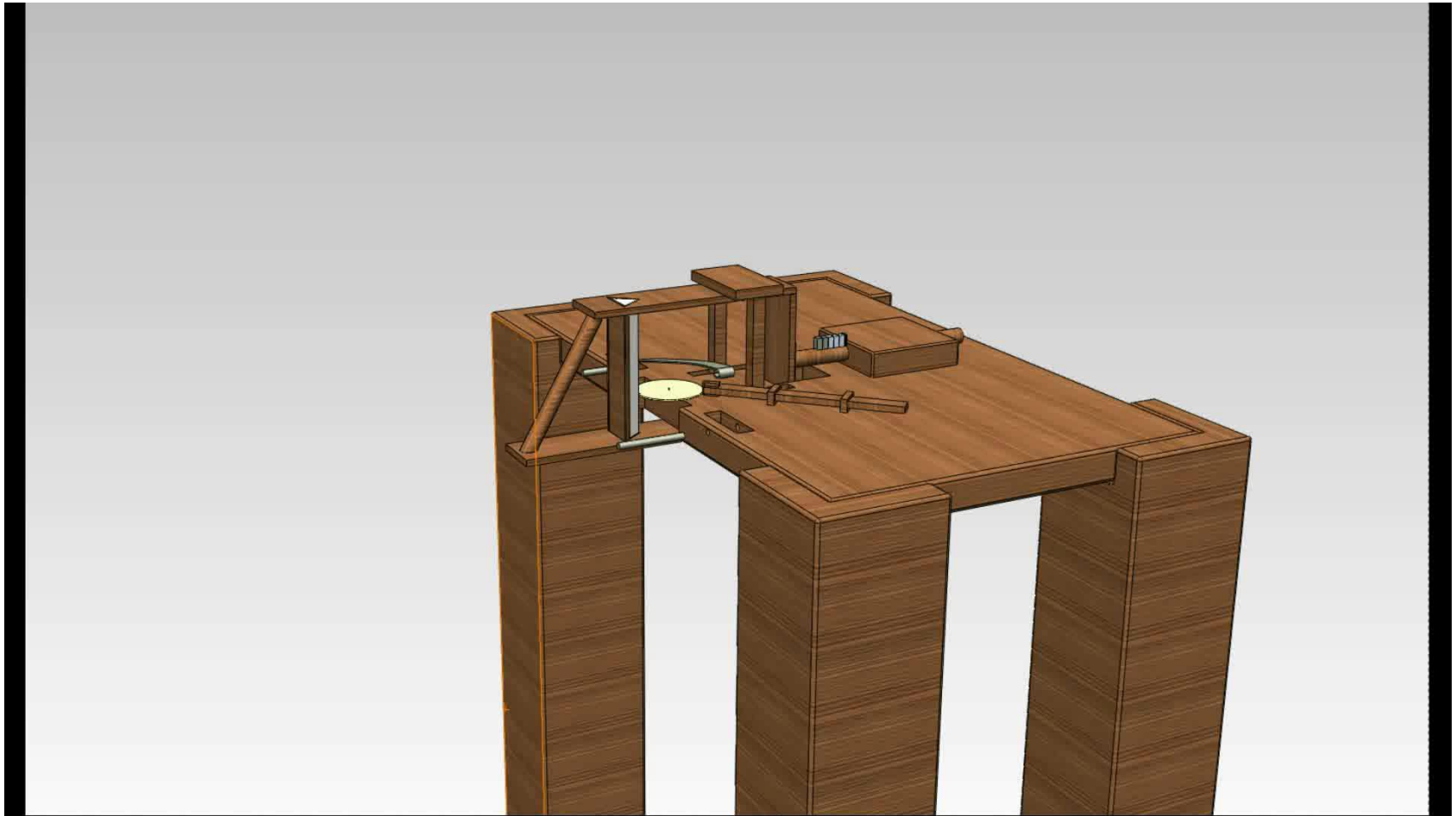


**Start: 2<sup>nd</sup> of April 2017**

**End: 31<sup>st</sup> December 2018 with an extension until May 2018**



## THE KNOW-HOW



# THE CHURCH IN 1909

(Nicosia, State Archives of Cyprus)



A CHURCH →

A MONUMENT OF OUTSTANDING AND UNIVERSAL VALUE



United Nations  
Educational, Scientific and  
Cultural Organization



World Heritage  
Convention

# A MONUMENT OF OUTSTANDING AND UNIVERSAL VALUE

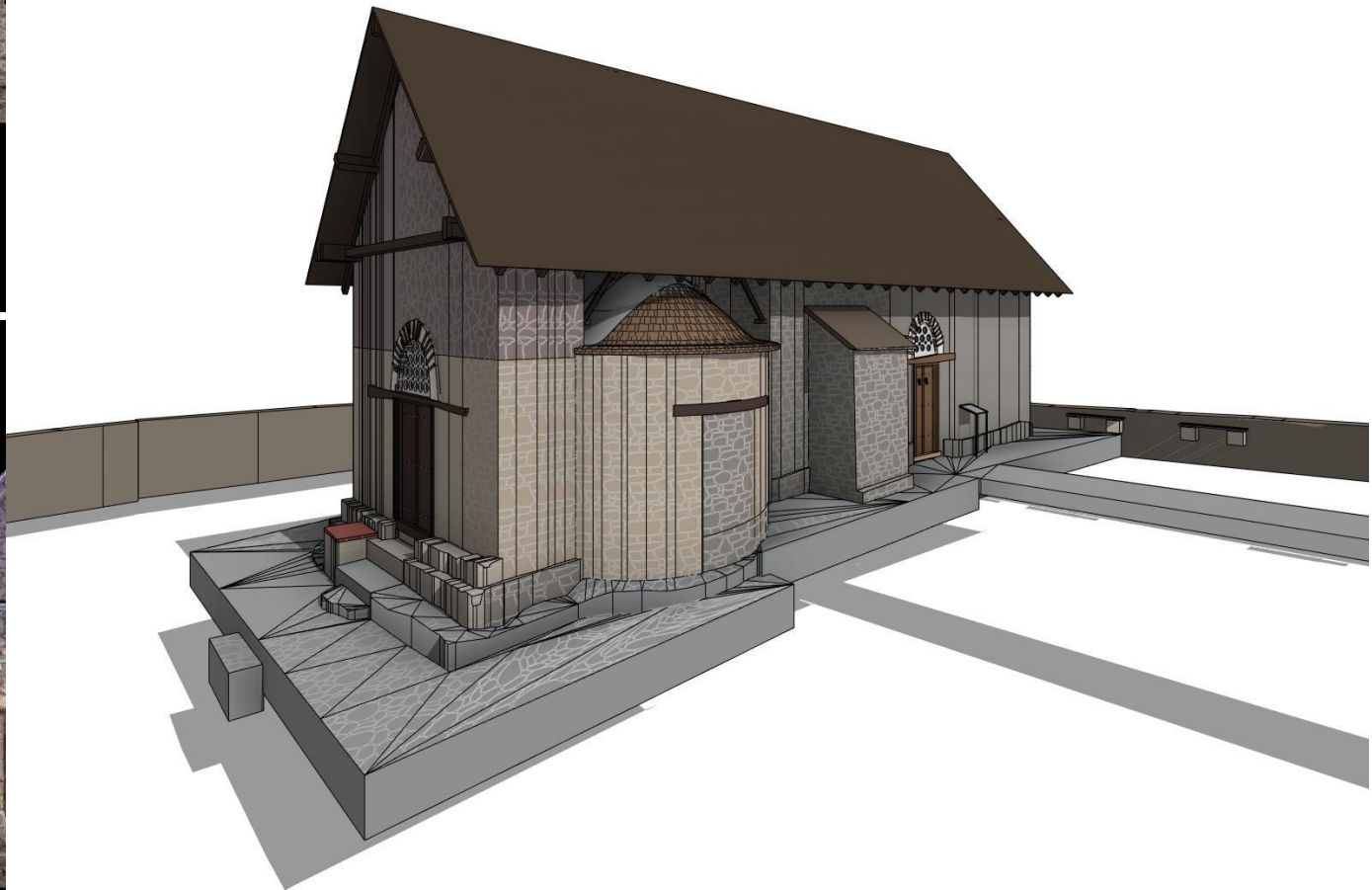
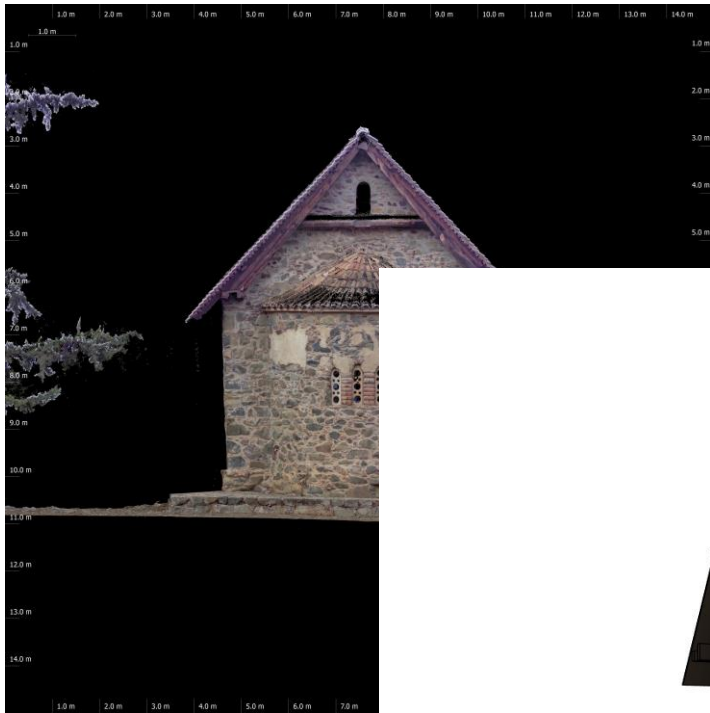


## WHY THIS MONUMENT IS OF OUTSTANDING AND UNIVERSAL VALUE?

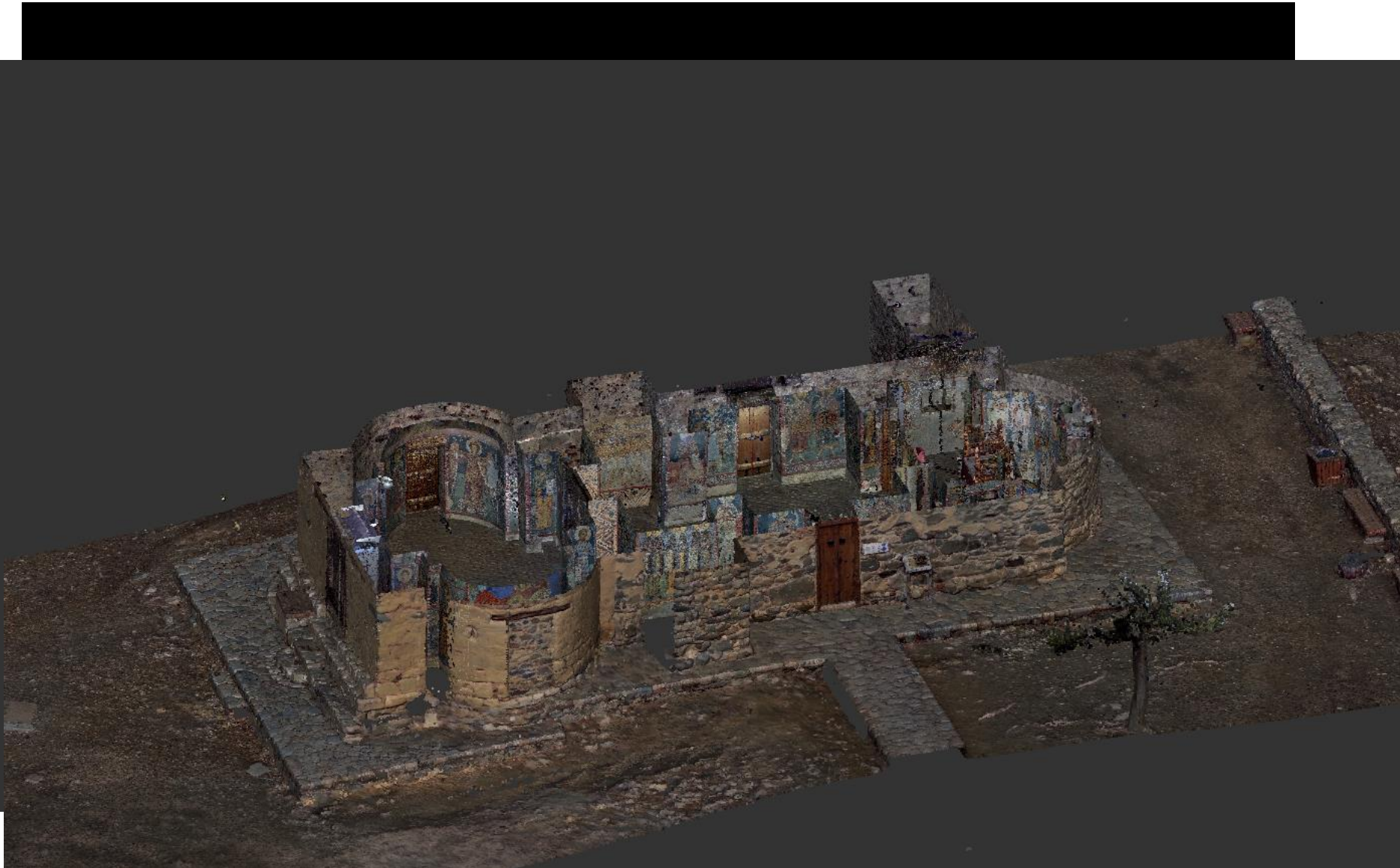
This monument is characterized as one of the churches and monasteries of the former Byzantine Empire. It belongs to the complex of 10 monuments included on the World Heritage List, all richly decorated with murals, provides an overview of Byzantine and post-Byzantine painting in Cyprus. They range from small churches whose rural architectural style is in stark contrast to their highly refined decoration.



# THE RECONSTRUCTED MONUMENT



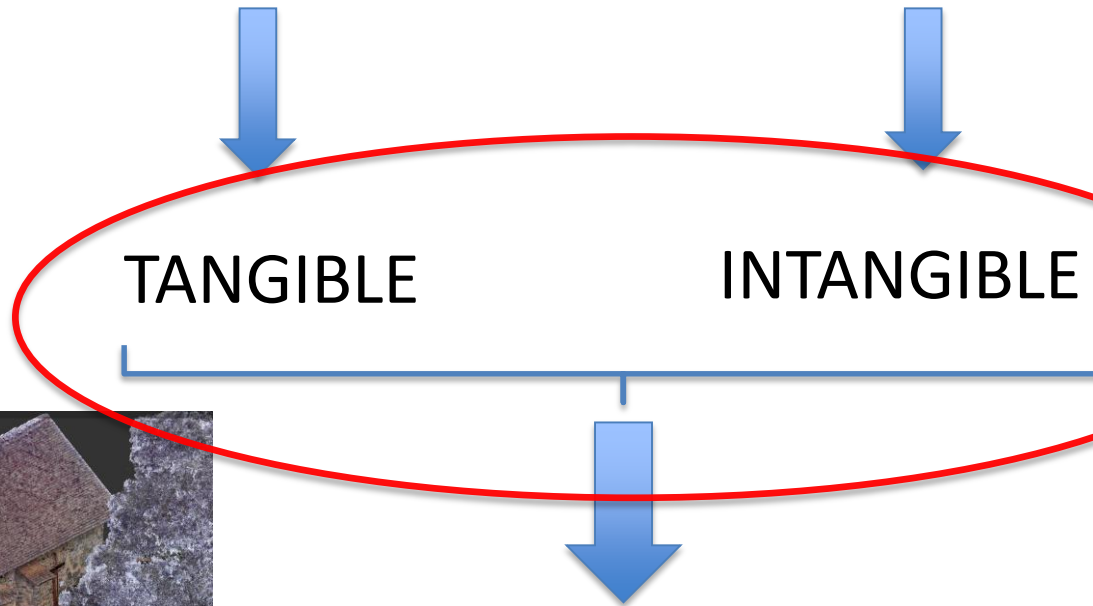
# THE RECONSTRUCTED MONUMENT



# MONUMENT?

# THE MONUMENTS TALKS !

3D Structure and the Story or Memory

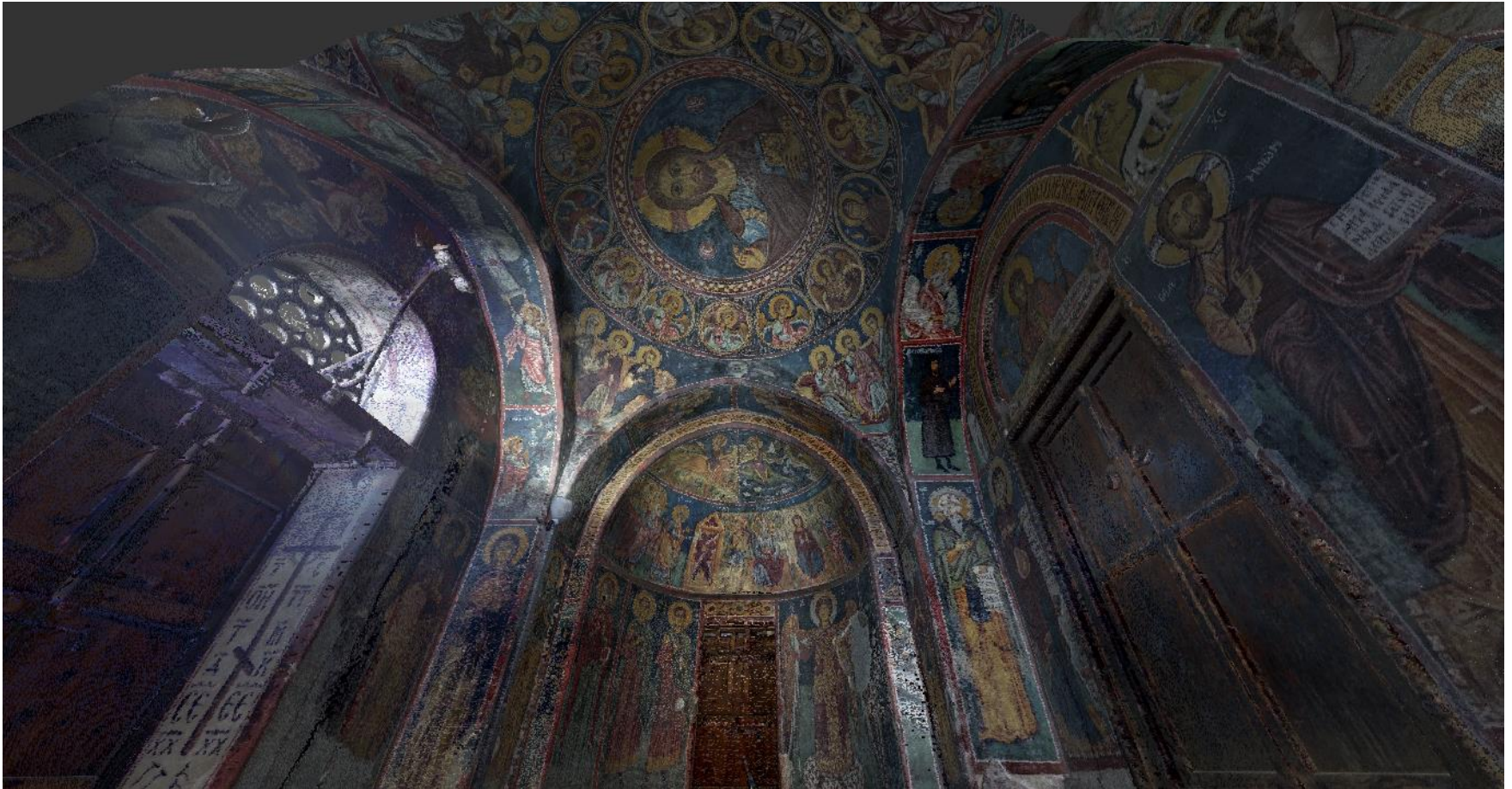


MONUMENT == Cultural Heritage **e-MONUMENT?**

# THE INTANGIBLE



## THE INTANGIBLE



# The Mixed Reality (MR) Continuum



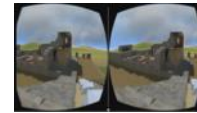
*Mobile AR*



*Holographic AR (untethered)*



*Holographic AR (tethered)*



*Mobile VR*



*Desktop VR*

Real Environment

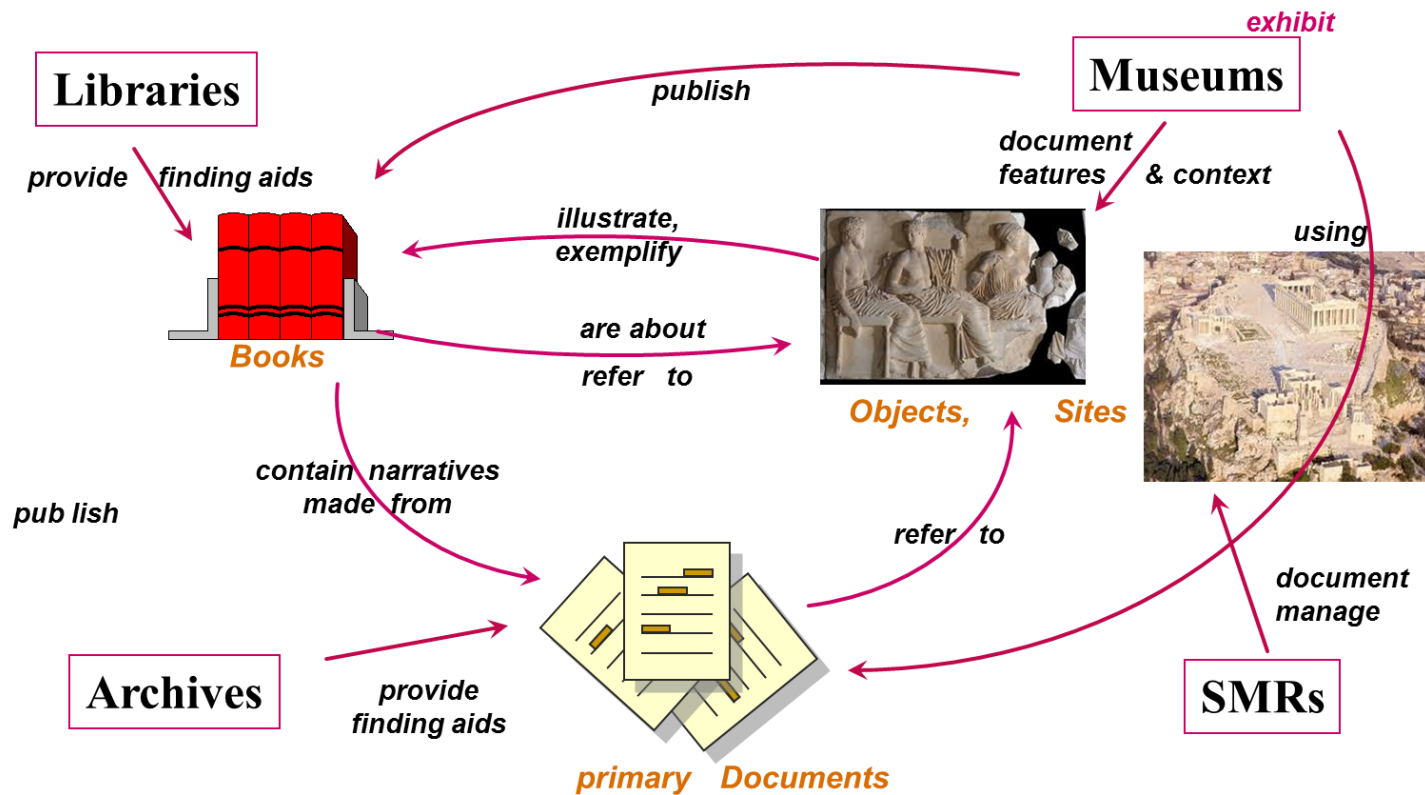
Virtual Environment

MR – VIRTUALITY CONTINUUM



# THE KNOWLEDGE

## Linked Data for Libraries, Archives and Museums



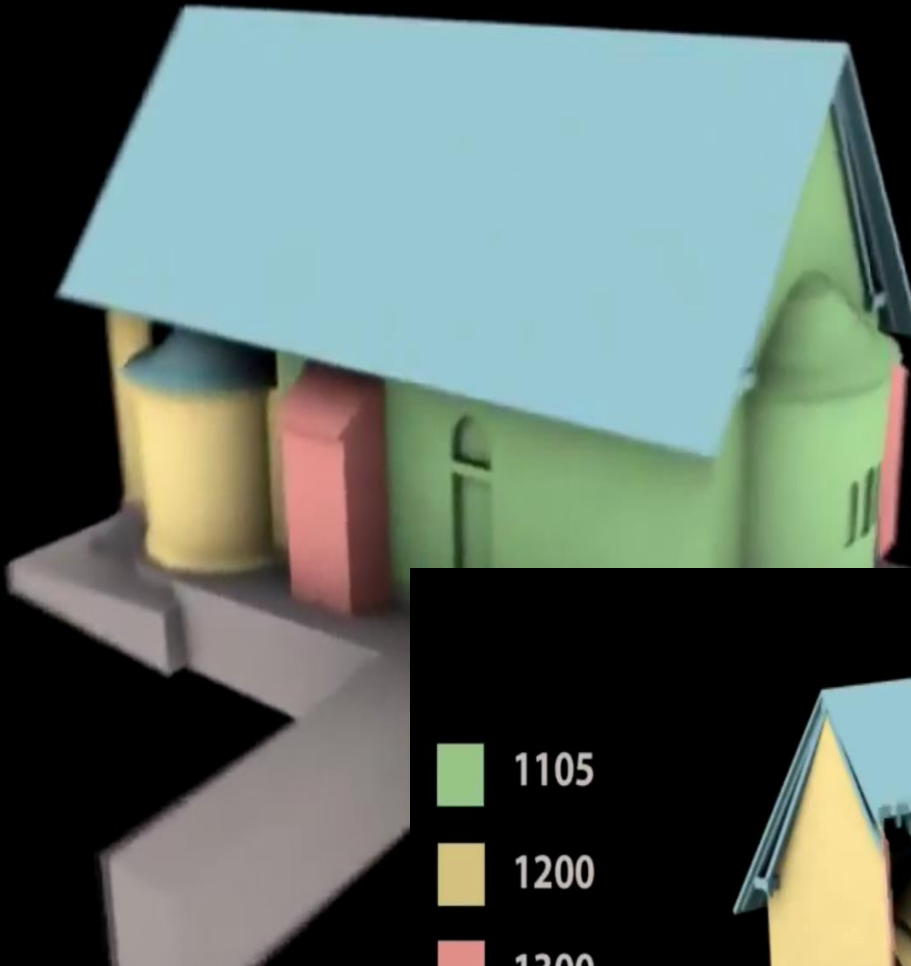
## WHO IS INTERESTED?

## THE USERS

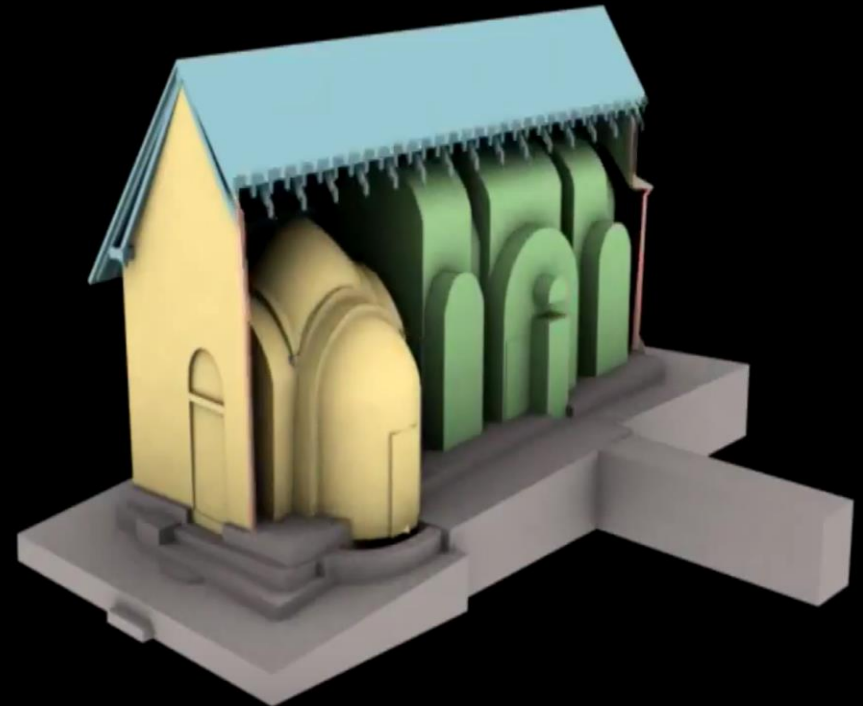
<b>Historian</b>	<b>Structural Engineer</b>	<b>Anthropologist</b>
<b>Archeologist</b>	<b>UX Designer</b>	<b>Archivist/ Librarian</b>
<b>Architect</b>	<b>Culturalist</b>	<b>Restorator/ Conservator</b>
<b>Civil Engineer</b>	<b>Exhibition Designer</b>	<b>Artist</b>
<b>Survey Engineer</b>	<b>Chemist</b>	<b>Curator</b>
<b>Mechanical Engineer</b>	<b>Physicist</b>	<b>Tourist Guide</b>
<b>Electrical Engineer</b>	<b>Mathematician</b>	<b>Teacher</b>
<b>ICT Specialist</b>	<b>Theologist</b>	<b>Scholar / Student</b>
<b>Computer Scientist</b>	<b>Geographer</b>	<b>Craftsman</b>
<b>Conservationist</b>	<b>Urban Designer</b>	
<b>Chemical Engineer</b>	<b>Environmental Engineer/ Scientist</b>	



- 1105
- 1200
- 1300
- 1959



- 1105
- 1200
- 1300
- 1959

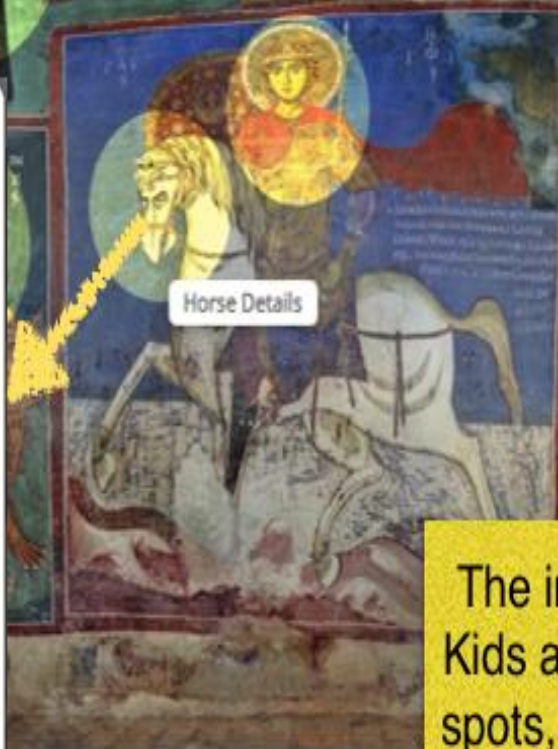


$f(t) = \text{Monument}$

Narthex, south conch. St. George, detail of horse's head



Look at this amazing detail where the eye cavity of the horse is painted with dark green shadow lines and black lines. The pupils of the eyes have been gouged out, but you can see that the irises are bright blue. The tongue of the horse is bright red.



The image has secret hotspots. Kids are encourage to find all the spots, to read the text and collect points.



Activities and Games:  
**HotSpot Images** Puzzles



## UNESCO CHAIR ON DIGITAL HERITAGE

# MNEMOSYNE



Start: 1<sup>st</sup> of January 2018

- Establishment of a national Committee on DCH:
  - National coordination
  - Take over the tasks related to the CH digitalisation, archiving, presentation and preservation
  - Represent CY in all issues related to DCH
  - ME Regional Hub

