What is ‘Virtual Heritage’ and Why Does It Matter?
What is ‘Virtual Heritage’

• Definition
  • Application of 3D technologies to traditional fields of Cultural Heritage
    • Art history, architectural history, archaeology, etc.

Example of Virtual Heritage: the Basilica of Maxentius, Rome today and when new in ca. AD 320.
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  • Application of 3D technologies to traditional fields of Cultural Heritage

• Goals
  • Documentation
  • Restoration
  • Experimentation
  • Dissemination
What is ‘Virtual Heritage’?

• Definition
• Goals

Documentation
Restoration

From the “state” to the “restoration” model: example of the Niobid statue group now in the Villa Medici, Rome and formerly in an ancient Roman fountain.
Why Does It Matter?

- Documentation
  - Preservation and access

Bamiyan Buddhas, Afghanistan (2001)

Bamiyan Buddhas destroyed (2001) and digitally restored (2015)
Why Does It Matter?

- Documentation
  - Preservation and Access
- Experimentation (virtual time travel)
  - Making study of history empirical (or, “simpirical”)
Simulation of one of 230 alignments of sun, Montecitorio Obelisk, and Ara Pacis in 9 BCE discovered using a restoration model of the northern Campus Martius, Rome.
Why Does It Matter?

• Documentation
  • Preservation and Access
• Experimentation
  • Making study of history empirical (or, “simpirical”)
• Dissemination
Golden Age of 3D

- Photogrammetry
  - → Documentation

- Open Source tools
  - → Support research in areas such as crowd control, acoustics, archaeoastronomy

- VR
  - → Makes dissemination easier and more rewarding for end users and more economical for creators
THANK YOU

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