Digitizing Cultural and Natural Heritage

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Marjo Mäenpää
University of Art and Design, Helsinki
School of Art and Media, Pori

Marjo Mäenpää, marjo.maenpaa@taik.fi
1. Digitizing of cultural heritage

   **Tangible heritage**
   **Intangible heritage**
   **Case Multimedia for National Museum of Finland at 2000**

2. 3D models – modeling

3. Digital Devices in Museums from PDA’s to virtual space, sound and digital touch

4. Museums and social media
Virtual and material world – Tangible vs. Intangible Heritage

Discussions on the impact of the multimedia technologies in the museums tend to assume differences between material world and virtual world.

Digitizing cultural artifacts
– archeological context, historic monuments, buildings or ruins
– reconstructing the disappeared heritage or presenting the object that could not be seen in the museum

Digital representations:
• Always a representation of certain relevant characteristics of an artifact
• It is not the complete artifact
• The relevance depends upon the purposes creating the artifact
• There could be as many digital representation of the same artifact than there is purposes for their creation

Some reasons to make digital representations:
• Documentation and analysis for use by cultural heritage professionals
• Applications for dissemination to the general public
Tangible objects:

Material world carries meanings like aura, history, social and cultural meaning, religious and nationalist context

http://www.museosuomi.fi/item

Intangible heritage:

Material objects may produce valid culturally based interpretations like in use, history, ownership, education, cultural interpretations.

The cultural components of the material object is an example intangible heritage –

In addition stories, music, performance, dance are all examples of intangible cultural heritage.
Multimedia:
A tool for interpreting or expression in its own sake
(Witcomb, 2007, 36)

Multimedia presentations have been understood serving specific educational interests

Through multimedia presentation – however – museums were presenting interpretations about the history, culture, etc

Experimental multimedia in museum might act as releaser of memory in much the same way as objects can make unconscious memories conscious (Witcomb, 2007, 37)

A concept for interactive multimedia

How to trigger experience based on knowledge?
What is the expertise of museum behind the exhibitions, how to make connections between the information, research and exhibition?
How to use added value of multimedia, does interactivity bring something more?
Design is intelligence made visible.
Cases to see during the lecture

Community around cultural heritage, museums:

Art Babble [http://www.artbabble.org/](http://www.artbabble.org/) online video platform

Brooklyn museum

Ever wish you could remix the gallery experience?
3-D models and modeling:
Technologies are cultural concepts (Cameron, 2007, 50)
Critical distinctions between:
- material and immaterial
- original-material and copy-material

Valter Benjamin, Jean Baudrillard about simulations and mechanical reproduction and art “losing their auratic, iconic, and ritualistic qualities” (Benjamin 1970)
- Authenticity – the historical fact or interpretation about the presence in space and time
- Heritage institutions move from the collection of physical artifacts to photographic and filmic forms of reproduction and recently digital creation and delivery
“As the significance of digital images has grown, the form of factual has become virtualized.” (Flynn, 2007, 349)

Re-production of cultural heritage?

http://sketchup.google.com/3dwarehouse/details?mid=d704ada96917eee0137d9ca24aa269c
The space of virtual heritage is not neutral ground

Spatial representation has various standards according to culture and history – in Europe the photorealism or it’s simulated geometric 3D equivalent is taken as standard. 3D Studio Max was initially designed for the viewer looking at art painting form a fixed position – model form Renaissance (Flynn, 2007, 352)

Virtual environments lack the richness of association and the levels of user engagement that we find in computer games – interaction has often been used to mean a form of interpassivity, where the user has limited options within a preprogrammed menu. (Flynn 354)
Or creating new spaces visitors to touch and participate?

Marjo Mäenpää, marjo.maenpaa@taik.fi

Ichim / Paris 2003

Digital Devices in Museums from PDA's to virtual space, sound and digital touch

Digital multimedia in museums:
- Web sites
- Interactive kiosks, computer interfaces
- Holograms
- Digitized films
- Sound – pod casts

SF MOMA podcast
http://www.sfmoma.org/education/edu_podcasts_archive.html

Marjo Mäenpää, marjo.maenpaa@taik.fi
Co-presenting museum information

Anthropological Museum in Vancouver, Canada 2005

Users are reading facts about the museum objects from PDA...

...what are they really watching?

Marjo Mäenpää, marjo.maenpaa@taik.fi

New interfaces? New devices? Usability?

Ichim / Paris 2003

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Multimodality in museums: information for all senses

Avatars - der geist - a ghost telling stories from 30year war in actual historical plases in Heidelberg castle
http://www.zgdv.de/zgdv/
Zentrum für Graphische Datenverarbeitung
w. V. Darmstad

A telebuddy, an avatar hidin in a doll - guiding visitoris in museum - for children.
http://www.telebuddy.de/index_en.htm

The wall of evolution in the American Museum of Natural History in New York
Marjo Mäenpää, marjo.maenpaa@taik.fi
Tactile Virtual Media...

The City Wall in Helsinki:
http://citywall.org/
and
http://www.youtube.com/watch?v=IldDrCcZkZY

ShowMe tools and Smart Board in use:
http://www.youtube.com/watch?v=bN6kRlyA3_A

and Mobile Media installation
http://www.youtube.com/watch?v=OUVe6VAa1cQ

Examples from Japan: The reconstruction of old city of Osaka to virtual mobile

Marjo Mäenpää, marjo.maenpaa@taik.fi

Cases to see during the lecture

Best of Web nominees 2009 – a list for benchmarking:

eLearning:
http://www.yksityinenkielitoimisto.net/eoppiminen/fi1.html

Art education
http://www.pbs.org/independentlens/offthemap/

Intangible cultural heritage
http://www.lib.helsinki.fi/julkaisut/kiehtovakirja/

Semantic web – tagging
http://www.digitalvaults.org

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