The Participative Web and Cultural Heritage

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  - Participative Web as a form of cultural heritage
    - Documented events, lives, stories of our time, discourse

The Participative Web (Web 2.0)
- On line communities
  - Examples: MySpace, Facebook, YouTube, BitTorrent, Wikipedia, Technorati, CiteULike, Second Life.
  - Blogs, discussion forums, file-sharing, social bookmarking, chat, collaboration, immersive game environments
  - Contributed content: music, photos, stories, opinions urls
  - Social organization of the contributed content: tags, ratings
- Driven by users
  - Contributed content, ratings
  - Professional and amateur
  - Ease of use, and low or no cost content production tools

Web 2.0 technologies
- Rich user experience: Ajax, Flex, ...
  - Using the client to do much of the processing, minimizing the communication with the server
- P2P technologies: BitTorrent, Skype
  - Empowering clients to connect directly to each other
- Mashups
  - APIs for combining functionality across applications
- Service oriented architectures
  - Detaching the client from the service, services become interchangeable, combined by general workflows, negotiated, contracted
  - Services can be provided by software or by humans.
Issues:
How to introduce order in the chaos?

- Indexing hierarchies
  - Dewey’s system - order in space: one thing can be at one place at a given time
  - Not true in the virtual world
- Done with particular purpose (context) -> particular organization
- Decontextualized, universal systems \( \rightarrow \) Ontologies
  - Many links, no strict hierarchies
  - But hard for non–professional ontology authors
  - Hard to reach agreement – purpose or context still implicit

*Hierarchical and sequential structures, especially popular since Gutenberg, are usually forced and artificial. Intertwingularity is not generally acknowledged – people keep pretending they can make things hierarchical, categorizable and sequential when they can’t.* – Ted Nelson (1974) “Computer Lib/Machine Dreams”, p. 31

Why do we need “order” in the virtual world?

- To be able to search and find things
  - But we have very powerful search engines for text
  - Tags for images, music, video
- To be able to discover new things
  - By browsing
  - Is it feasible to browse in this amount of material?
  - By “filling the gaps” in the organization, e.g. the missing elements in the periodic table of elements
- If things are found only through “filling the gaps” they probably serve only one purpose – to justify the schema...

More: David Weinberger (2007) Everything is Miscellaneous

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Tradeoffs: Complexity of metamodel / effort for search (use) and indexing

Social issues

- Why participate?
  - Particular purpose: e.g. write a school report
  - For pleasure, self-expression
  - To be a member of a community of “experts”
  - To contribute to a cause one cares about
- Wisdom of the crowd or emerging expertise?
- Quality?
Adaptive Museums

- Virtual content
- Physical content
- User-generated content
- Displayed content

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- Physical content
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- Displayed content
- Digitized content
- Indexing
- Organization
- Ontologies
- User feedback elicitation
- User profiling
- Stereotypes
- Navigation
- Personalized "tours"

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- Navigation
- Different "tours" for people with different interests and time

Web 1.0 Online Museum

- All contents prepared by museum
- Users can browse, or be guided
- but they can't contribute anything

Very few examples: mostly to stereotypes based on age (dis)ability
Lack of motivation for adaptive presentations.
Why adapt to the user?
Instead, the user should learn what the museum decides to teach!
Now Imagine:

Virtual museum:
Why user generated content?

- Stories are interesting, give life to museum artifacts
- People like to tell stories and to listen to them; people learn best from stories
  - A museum artifact + story = powerful experience
  - Story telling has emotional connection with the museum
  - Through sharing stories among peoples’ social network, more visitors and potential participants are drawn to the museum content (marketing)
- Traditionally oral history was not part of museums
- New creating stories is very easy (blogs); digital cameras provide a cheap and easy way to document or reproduce personal documents
- We document our lives, but also our collective history, endless amount of viewpoints and perspectives
- Need for community involvement as government funding winds down
- Allows to preserve diversity, small local museums to survive (long tail)

Adaptive Museums

Virtual physical

Digitized content

User generated content

Displayed content

User generated content

Content:
pictures, art, memoirs, series, comments

Tags

Ratings

Groups, Self-organization

Data-mining

CR

The “Miscellaneous” museum, a group experience as much as individual; interaction with artifacts and with others

An example of a virtual museum

Author
Glen Gower is an Ottawa-based game entertainment producer.
Check out HockeyMusic.ca for more hockey entertainment stuff.
If you’re in Ottawa, visit OttawaStart.com, a daily guide to what’s happening in the city.

http://interact10ways.com/usa/information_interactive.htm

http://www.biomotionlab.ca/Demos/BMLwalker.html


virtual

physical

Digital content
The project “I lived socialism” started as a website on 26th March 2004 and was the first website for personal recollections from the socialist years in Bulgaria. The project is based exclusively on the use of Internet as a tool and place for storytelling and is the first of that kind in Eastern Europe.

Every week, 3 new stories are published on the website. The oldest narrator is 81 years old (a famous Bulgarian actor Petar Sabakov). The youngest: 20 years old student.

The project got some international publicity - New York Times wrote about it (November 2004) and the Vienna Institute for Human Sciences presented the project (March 2005).

**Virtual museum with user generated content**

- Web sets a new standard of interaction with content
- Cheap small devices with big capabilities - e.g. storing user profile data, interests, preferences etc., interacting with embedded and ambient devices
- Feedback can be provided immediately; communication among people in a physical group (e.g. in the museum)
- Visitors can leave traces: stories, comments, ratings, tags while walking by physical displays and objects
- Visualizing selectively these can enhance the experience

**Historic Documentaries on YouTube**

- East Berlin in pictures
  [http://www.youtube.com/watch?v=V5lpYuCX78Y](http://www.youtube.com/watch?v=V5lpYuCX78Y)
- East?West Berlin Contrasts (April 1990)
  [http://www.youtube.com/watch?v=2U3J_Asg](http://www.youtube.com/watch?v=2U3J_Asg)
- Crossing the Berlin border on the S-Bahn (late ’80s) by JanPB, 6208 views
  [http://www.youtube.com/watch?v=36bPDUA‐Azg0](http://www.youtube.com/watch?v=36bPDUA‐Azg0)
- DDR Wachaufzug/Guards changing by nicolaihenrik, 3552 views
  [http://www.youtube.com/watch?v=3X‐g](http://www.youtube.com/watch?v=3X‐g)

**Adaptive Museums**

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**Physical museum – why user generated content?**

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Participatory Art on YouTube

- Morphing, animations
- 500 years of women in art:
  [Link]
- Vassiliy Kandinski animation by kdd121s:
  [Link]
- Migueleitor64 - Views: 4043
  [Link]
- nataliehuynh
  [Link]

Physical museum with UGC

- Your cell phone betrays your browsing history on the web to the museum system
- vague idea of your interests

Tour selection
- the most popular tour
- the recommended one (similar people usually take)
- the tour that < your favorite celebrity > took

As you walk your device (cell, or museum guide system)
- Tells you stories related to artifacts: from the web, from the museum base, from other users
- E.g. You know, "50% of the visitors find Mona Lisa ugly"
- Allows you to leave a comment, feedback, record a story.
- Feedback is used to adapt the tour

Next to the artifact is a screen displaying related information that summarizes the reactions of the majority of users standing in front

A form of participation

- [Image]

Issues

- Will there be a distinction between museum content and contributed content?
- Who is the authority for truth, quality, worthiness?
  - The crowds?
  - A group of self-selected dedicated people who care?
  - E.g. Wikipedia...
- What is our cultural heritage?
  - Used to be the works of only selected few artists, the rest has been forgotten.
  - Now we can keep everything – the past (the heritage) will be messy, complex, unclear, just like the present.
- Place for User modelling – to filter what is relevant to YOU