State of the Problem: Towards a Virtual Observatory for Culture

Jürgen Renn

Contribution to the 4th Open Access Conference

March 29, 2006

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Towards a Virtual Observatory for Culture

• The apparently marginal role of humanities
• Towards a paradigm shift in the humanities
• Future perspectives
Electronic journals play only a marginal role in the humanities

- Careers in the humanities are largely based on the traditional publication of books and monographs
- Data sets relevant to the humanities are heterogeneous, fragmented, and widely distributed
- Holders of data often have different interests from scholars, including commercial interests
- There is no-self-sustaining dynamics tending to open-access, only scout solutions, exploring but not settling a new territory and the activities of the big players, aiming at conquest rather than at sustainable infrastructures.
Jürgen Renn, Max Planck Institute for the History of Science, March 29, 2006

The Crisis of Culture and Science in the Information Age

Dead links
Towards a Virtual Observatory for Culture

• The apparently marginal role of humanities

• Towards a paradigm shift in the humanities

• Future perspectives
• In both cases we are dealing with the acquisition of fragmented, distributed data sets for which longevity is critical.
• In both cases we are dealing with data that are artificially separated by the methods with which they have been acquired.
• In both cases we are dealing with the acquisition of fragmented, distributed data sets for which longevity is critical.
• In both cases we are dealing with data that are artificially separated by the methods with which they have been acquired.
Find all old radio galaxies in the range of $0.4 < z < 0.7$ that lie within 2' of an extended x-ray source.

There are 125 galaxies with the following coordinates. Thank you for using the VO today.
• the role of standards
• the role of a sustainable, interactive infrastructure for data, tools, and research results
• the role of open-access of high-quality data as a condition for federating data
• build seed collections around objects and themes, not institutions or disciplines
• meta-data without data are empty, data without metadata are lost
• the need to avoid reinventing the wheel
  • the agora principle: co-development of data, tools, and research in a growing universal working environment
  • the 90-10 rule: build 10 percent of the services that are used by 90 percent, let the users build the rest from the components
  • the possibility of making discoveries at the borderlines
legal issues are central because holders of source data are not necessarily part of the scientific community

- language technology largely plays the role of algorithms as a glue of the virtual observatory
- the need to create web-weavers for processing data according to content
- the need for handling enriched (scholarly) metadata and creating dynamic ontologies
- the potential of turning research results into data structures
- the potential of turning global link structures into meaningful relations
• Status quo in the humanities: learning from existing agora communities and building up overarching infrastructures
**Text Identification**

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**Current Edition**

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**Publication Date**

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**Text Category**

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**Remarks**

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**Copyright**


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Click on images for enlargements.
### Dictionary Access

#### Experimental!

Dictionary entries possibly relevant to **metimur**:

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• There is a constant exchange between specific projects such as CDLI and overarching infrastructures such as ECHO
• Characteristics of a center capable of maintaining a dynamic exchange with specific projects:
  – local developmental resources
  – mixture of scholarly and technical competencies
  – high mobility of personal
  – availability of matching funds
Towards a Virtual Observatory for Culture

- The apparently marginal role of humanities
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• The major obstacle to bring cultural heritage to the Internet is the lack of an infrastructure adequate to the scholarly needs of the humanities and of cultural heritage as a whole.