The end of linear text in scholarly communication?

Key Note at INFORMATION VISUALISATION IN HUMANITIES, 23-24 March 2017, Torun

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Agenda

1. Introduction
2. A few Words on History
3. The Age of Digitization
4. Non Textual Scholarly Communication: Some Forms and Formats
5. Summary: Consequences for Libraries?
1. Introduction
Changed conditions in academic communication

Digitization: The Shift from print to electronic

- Digitization
- Number of Scientific Journals
- Serial Crisis
- Supplementary Material
- Hyperlinking
- Data Journals
- Video Journals

-> Multimedia Product
2. A few Words on History.....
2. History: Before the written....

Detail of a cave painting showing a wounded man, a wounded bison and a wooden spur (early Paleolithic)
2. History: Oral / Written Communication?
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2. History: Gutenberg movable-type printing press


[Picture of a copy of the Gutenberg Bible owned by the US Library of Congress]
2. History: 1665 – The first scientific journals

Title page of the first edition of ‘Le Journal des Sçavans’ (1665)

Title page of the first edition of ‘Philosophical Transactions’ (1665)
2. History: Encoding information

Voyager's Golden Record with information on the earth and mankind (in the Voyagers space probe, launched 1977)
3. The Age of Digitization
3. The Age of Digitization:

- Start: Storage of Digital Content
- 1995: WWW
- Today: Emoticons
3. The Age of Digitization:
What digitization implicates

Video «The Machine is us-ing Us»:
https://www.youtube.com/watch?v=NLIjGopyXT_g
4. Non Textual Scholarly Communication: Some Forms and Formats
4. Non-linear-text: Some Forms and Formats

Scientific Fotography

- High content of information
- Not verbalizable
- Details
4. Non-linear-text: Some Forms and Formats

Illustrations

- Context
- Interpretation
- Consolidation
4. Non-linear-text: Some Forms and Formats

Hypertext

- Textual knodes / Information Chunks
- Each chunk is closed in itself
- Linear text only is created when consumed by the user
- Variable links
- Change of media forms
4. Non-linear-text: Some Forms and Formats

Video

- Video Abstracts
- Video Experiments
- Video Journals

[Elsevier: Video Abstracts] [JOVE: Journal of video Experiments]
4. Non-linear-text: Some Forms and Formats

Software and Software Parts for Mashups

- Reuse of Software Parts
- Creation of Mashups
- i.e. Software visualizing statistical correlations
4. Non-linear-text: Some Forms and Formats

Fluid Documents

- Never «finished»
- Reuse of parts
- Creation of a new context
- Combination with other media
- Reflects the internal structure of Scientific thinking
4. Non-linear-text: Some Forms and Formats

Research Data and Linked (Open) Data

- Huge amount of data
- Reusability in different contexts
- Reinterpretation of results
- Repetition of scientific experiments
- Combination with other data
5. Summary: Consequences for Libraries?

- Acquisition
- Copyright
- Cataloging
- Structuring
- Give access to
- Archiving
Thank you very much for your attention!

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