Markup, TEI, Digital Libraries and Humanities Scholarship

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Humanities Scholarship in the Future

- Electronic with the Web as its focus
- Use of electronic sources
- Production and "publication" of new material in electronic form
- Web becomes the digital library

Conventional Library and the Digital Library

- Major difference
 - In the conventional library content is fixed
 - In the digital library content can be dynamic

Digital Library Initiatives: Digital Images

- Cheaper
- Easier
- Mimics non-electronic mode of working
- Fits better into conventional methods for handling material

Digital Library Initiatives: Encoded Text

- Real digital library
- Search it
- Select subsets
- "Mix and match" bits of text

XML makes all of this possible

Humanities Source Material

- Same source used for different purposes
 - literary, linguistic, historical, cultural etc
- Same source used by different types of users
 - academic, high schools, lifelong learners, "the citizen"

Humanities Source Material: Uses of Textual Sources

- Conventional retrieval systems
 - Retrieval of complete documents user finds all documents about a certain topic, then reads them. Often secondary sources – or perhaps historical sources
- Analysis
 - User studies content of source. Often primary sources. Literary and linguistic analyses

Humanities Source Material: Nontextual

- Photographs
- Audio
- Video and other multimedia
- Also numeric formats
- Part of the library, but less likely to be found in conventional libraries

What Does the TEI Offer for Digital Libraries?

- A framework for encoding text
- A multi-purpose encoding scheme
- A better encoding system for text than any other previous one
- But how does this really work?
- And what else do we need to do?

TEI and Libraries: Encoding

- Not a mechanical process
- Who does the encoding?
- What level of markup do they use?
- Encoding is interpretation
- Encoding drives what can be done with the document
- To what extent is this the role of a library?

Libraries and Standardization

- In the library, some standardization is essential
- But at what level?

 Is TEllite the answer here – but does it really work?

- Few people will get an electronic text from a digital library and use their own software on it
- Most will want to use an existing delivery system
- But with what functionality?

- Retrieval look up words and phrases
- Determined by the encoding, but also by the indexing
- Who decides what to index?

- Browsing
- Random movement from one piece of information to another

- Can be done by linking
- But who decides what the links are?

- Can automate some of the searching and linking
- But it does not always make sense
 - Same name appearing several times in one document
 - Importance of links intellectual decision

TEI and Scholars

- Interested in their own thing
- May want to add markup with their own interpretations
- Can this be done on top of a generalized version of the document?

TEI and Scholars

- Layering of markup
- Is this different layers with different levels of complexity or importance?
- What is important to one scholar is not for another
- Is it necessary to differentiate the importance of layers?

Layered Markup – in the Digital Library

- For interpretation linguistic, literary, historical, cultural etc
- Whose interpretation?
- How is the interpretation justified and explained?

Layered Markup – in the Digital Library

- How will another scholar use somebody else's interpretation embedded in a document?
- Do they agree with all of it?
 - Probably not
- Do they agree with some of it?
 - Possibly

TEI and Scholars

- "Chunking" of documents
- Identify and isolate portions of documents
- Can link these together in different ways

Chunking of Documents

- Generate new "publications" automatically
- Produces something which is more database-like
- Does not read well

Chunking of Documents

- Automatic linking
- Does not always make sense
- May not want to link to every instance of something
- Some links are important for some people, other links for other people

Chunking of Documents

- "Floating annotations"
- Could be useful for some applications
 - Historical editions
 - Language learning
 - Metrical structures
- But do you link to them every time?

Markup and Users

- Can use the markup to target different types of users
 - Dictionaries from pocket size to large
- Perhaps also for different types of annotations

Markup and Users

- How to determine categories of users
- What is obvious to some users may need to be specified in detail for others
- Internet reaches a very wide audience
 - Much more difficult to determine audience

TEI and Other Markup Schemes / Standards

- TEI is only one of many XML-based systems used in humanities information
 - EAD very widely used in archives
 - METS metadata structures
 - Various DTDs, schemas used in publishing

TEI and Other Markup Schemes / Standards

- What is the relationship of TEI to these?
- Can all of these co-exist
- Overlap in some areas, particularly metadata structures

TEI and Other Markup Schemes / Standards

- Making different schemes co-exist
- Technical structures need to be resolved
- But content is more important for the user
- Need agreement over the meaning of the content

Future of the TEI: Usability

- Reach out to new communities
- Need to make it easy for them to understand what this is about
- Easy to do the markup

Future of the TEI: Tools

- Windows-based
- Easy to use
- Tools to do the markup
- Tools for delivery and analysis
 - Need much more research on functionality

Future of the TEI: Tools

- Concentrate on new applications, not mimicking print or only retrievals
- Moving to a world of multimedia
- Convergence of TV and Internet
- Encoded text will be the wrapper for all of this

TEI and Digital Scholarship in the Future

- Research
 - on the uses and users of digital resources
 - who are the users?
 - what functionality do they need?
 - towards reducing the cost of markup
 - can markup be done cheaper?
 - where is the trade-off between, quality, cost and getting a project finished?

TEI and Digital Scholarship in the Future

- Co-existence with other standards
 - Work on harmonization
- Education of information professionals, users, publishers in order to
 - see each other's perspectives
 - recognize each other's viewpoint