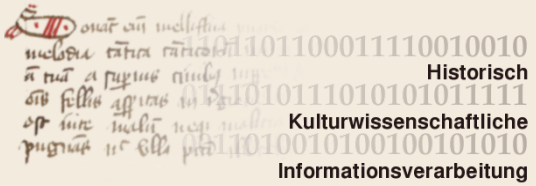

Beyond Embedded Markup

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Digital Humanities 2012, July 20th 2012

Approaches so far …

LMNL Wendell Piez

Extended Strings Manfred Thaller

CATMA, CLÉA Jan Christof Meister

Standoff properties Desmond Schmidt

LMNL

❖ Use an coding language, which is independent of XML.

Example:

[p}The Hatter shook his head mournfully. [q [sp}Hatter{]}Not I!{q] he replied. [q [cont}Hatter{]}We quarrelled last March--just before HE went mad, you know--{q] (pointing with his tea spoon at the March Hare,) [q [cont}Hatter{]}-- it was at the great concert given by the Queen of Hearts, and I had to sing{p] [song} [lg [n}1{]}

LMNL

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LMNL

- **Data object model** supporting
  - Overlapping structures
  - Including arbitrary overlap (“self-overlap”)
  - Structured annotations
  - (richer than XML attributes)
    - Presenting arbitrary structures (markup) of their own
    - May be ordered wrt one another
  - A data object model or API, not an abstract (mathematical) model
  - Analogous to XML DOM, not DAG

Source: http://www.piez.org/wendell/LMNL/Amsterdam2008/presentation-slides.html

LMNL

- Use an coding language, which is independent of XML.
- Translate it for processing into XML as internal representation.
- Allow embedded markup.
- (Object) data model.

„Handling text“

- Use an coding language, which is independent of XML.
- Translate it for processing into XML as internal representation.
- Allow embedded markup.
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„Handling text“

- There has to be an *external* representation, which is visible to the user.
- Translate it for processing into XML as internal representation.
- Allow embedded markup.
- (Object) data model.

„Handling text“

- There has to be an *external* representation, which is visible to the user.
- There has to be an *internal* representation which is completely independent of the external one.
- Embedded and standoff markup *do not exclude* each other.
- There has to an *abstract model*, making the implementation of the internal representation provably consistent.

LMNL

- *External* representation: Self contained markup language.
- *Internal* representation: XML.
- Embedded / standoff markup: Mixed.
- *Abstract model:* functional

Extended strings

- *External* representation: API within Higher Programming Language.
- *Internal* representation: binary.
- Embedded / standoff markup: Mixed.
- *Abstract model:* functional

CATMA, CLÉA

- *External* representation: GUI.
- *Internal* representation: XML / TEI.
- Embedded / standoff markup: Mixed.
- *Abstract model:* parallel XML hierarchies.

Standoff properties

- *External* representation: Self contained markup language.
- *Internal* representation: XML.
- Embedded / standoff markup: Standoff only.
- *Abstract model:* formal / variant graph.

Thank you!

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