Introduction to TEI and XML Encoding:

What are we doing and why are we doing it?

Why do we encode texts?

- Preservation
- Publication
- Analysis
- Synthesis
- ???

Good and bad encoding systems



Meanings (pronunciations):

- life (sei, shō)
- live (i[kiru])
- be born (u[mu], u[mareru])
- yield (u[su])
- grow (ha[eru], ha[yasu])
- bear fruit (na[ru])
- raw, uncooked (nama)
- ...and more...



Good and bad encoding systems



buku



buku-buku



buku²

Computer encoding

Well-known quote:

ASCII encoding

- \bullet 01010100 = 84 = T
- 01101111 = 111 = 0
- 00100000 = 32 = [space]
- 01100010 = 98 = b
- 01100101 = 101 = e

Encoding through punctuation and style

Bradley, J. "Thinking about interpretation: Pliny and scholarship in the humanities." *Literary and Linguistic Computing* 23:3 (2008), 263–279.

- We know stuff that is not explicit; we can decode this encoding.
- Find encoded pieces of extratextual information.
- What other meanings do these signals have?

Problems with style-based encoding

- ambiguity: difficult for novices or machines to interpret.
- limitations: how many features can you encode?
- conflict: actual style vs. style-as-encoding. (What does a handwriting font look like in italics?)



Problems of encoding style itself

```
{\rtf1\ansi\deff3\adeflang1025
.
{\fonttbl{\f0\froman\fprq2\fcharset0 Times New Roman;\f\f1\froman\fprq2\fcharset2 Symbol;\f2\fswiss\fprq2\fcharset0 Arial;\f3\froman\fprq2\fcharset128 Times
New Roman; \\f4\fswiss\fprg2\fcharset128 Arial; \\f5\fnil\fprg2\fcharset128 Droid Sans; \\f6\fnil\fprg2\fcharset128 Lohit Hindi; \\f7\fnil\fprg0\fcharset128 Lohit
Hindi:}}
{\colortbl;\red0\green0\blue0;\red128\green128\blue128;}
{\stylesheet{\s0\snext0\nowidct|par{\*\hyphen2\hyphlead2\hyphtrail2\hyphmax0}\cf0\kerning1\hich\af5\langfe2052\dbch\af6\afs24\alang1081\loch\f3\fs24\lang1033
\s15\sbasedon0\snext16\sb240\sa120\keepn\hich\af5\dbch\af6\afs28\loch\f4\fs28 Heading:}
{\s16\sbasedon0\snext16\sb0\sa120 Text body;}
{\s17\sbasedon16\snext17\sb0\sa120\dbch\af7 List;}
{\s18\sbasedon0\snext18\sb120\sa120\noline\i\dbch\af7\afs24\ai\fs24 Caption;}
{\s19\sbasedon0\snext19\noline\dbch\af7 Index;}
\\info{\author mholmes \f\creatim\yr2012\mo10\dy2\hr13\min58\f\revtim\yr0\mo0\dy0\hr0\min0\f\printim\yr0\mo0\dy0\hr0\min0\f\comment LibreOffice}
{\vern3500}}\deftab709
{\*\pqdsctbl
{\pgdsc0\pgdscuse195\pgwsxn12240\pghsxn15840\marglsxn1134\margrsxn1134\margtsxn1134\margbsxn1134\pgdscnxt0 Default;}}
formshade\paperh15840\paperw12240\margl1134\margr1134\margt1134\margb1134\sectd\sbknone\sectunlocked1\pgndec\pgwsxn12240\pghsxn15840\marglsxn1
134\margrsxn1134\margtsxn1134\margbsxn1134\ftnstart1\ftnrstcont\ftnnar\aenddoc\aftnrstcont\aftnstart1\aftnnrlc
\pandec\pard\plain
mundus}{\i0\ai0\rtlch \ltrch\loch
means \uc3 \u8220\'e2\'80\'9cworld\u8221\'e2\'80\'9d.\uc1 }
\par }
```

The Latin word mundus means "world".

What makes a good encoding system?

- intelligible
- precise
- nice (fine distinctions)
- concise
- comprehensive
- unambiguous
- systematic
- open, standardized, documented, maintained...

And so...

```
<lang>Latin</lang>
word
<term xml:id="mundus" xml:lang="lat">
  mundus
</term>
means
<gloss target="#mundus">
  world
</gloss>
```



Encoding texts: where TEI fits

