Using TEI XSLT stylesheets

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TEI Stylesheets

A library of stylesheets for transforming TEI documents to

- HTML
- XHTML
- XSL Formatting Objects
- LaTeX

at http://www.tei-c.org/Stylesheets, with a form-filling interface for the HTML at http://www.tei-c.org/tei-bin/stylebear (also on your CD)

TEI Stylesheets (example)

An example of an importing stylesheet:

```
<xsl:stylesheet version="1.0">
 <xsl:import href="/usr/share/xml/tei/stylesheet/html/tei.xsl"/
 <xsl:param name="splitLevel">1</xsl:param>
 <xsl:param name="numberHeadings"/>
 <xsl:param name="topNavigationPanel">true</xsl:param>
 <xsl:param name="bottomNavigationPanel">true</xsl:param>

</xsl:stylesheet>
```

A more complex example (the TEI site)


```
 <xsl:param name="oddmode">html</xsl:param>
 <xsl:variable name="top" select="/"/>
 <xsl:param name="STDOUT">true</xsl:param>
 <xsl:param name="alignNavigationPanel">left</xsl:param>
 <xsl:param name="authorWord"/>
 <xsl:param name="autoToc"/>
 <xsl:param name="bottomNavigationPanel">true</xsl:param>
 <xsl:param name="cssFile">Stylesheets/tei.css</xsl:param>
 <xsl:param name="feedbackURL">http://www.tei-c.org/Consortium/T
 <xsl:param name="feedbackWords">Contact</xsl:param>
 <xsl:param name="homeURL">http://www.tei-c.org/</xsl:param>
 <xsl:param name="homeWords">TEI Home</xsl:param>
 <xsl:param name="institution">Text Encoding
Initiative</xsl:param>
 <xsl:param name="leftLinks">true</xsl:param>
 <xsl:param name="searchURL">http://search.ox.ac.uk/web/related/
 <xsl:param name="searchWords">Search this site</xsl:param>
 <xsl:param name="showTitleAuthor">1</xsl:param>
 <xsl:param name="subTocDepth">-1</xsl:param>
 <xsl:param name="topNavigationPanel"/>
 <xsl:param name="numberHeadings">true</xsl:param>
 <xsl:template name="copyrightStatement">Copyright TEI
```

Result on TEI web site

The Text Encoding Initiative

TEI: Yesterday's information tomorrow

Home | Guidelines | Projects | Tutorials | Software | History | FAQs | P5 | Consortium | Activities | SIGs | Wiki | Join in/Contact | Members area

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The Text Encoding Initiative (TEI) Guidelines are an international and interdisciplinary standard that facilitates libraries, museums, publishers, and individual scholars represent a variety of literary and linguistic texts for online research, teaching, and preservation.

The TEI standard is maintained by a Consortium of leading Institutions and Projects worldwide. Information on projects which use the TEI, who is a member, and how to join, can all be found via the links above. Consortium members contribute to its financial stability and elect members to its Council and Board.

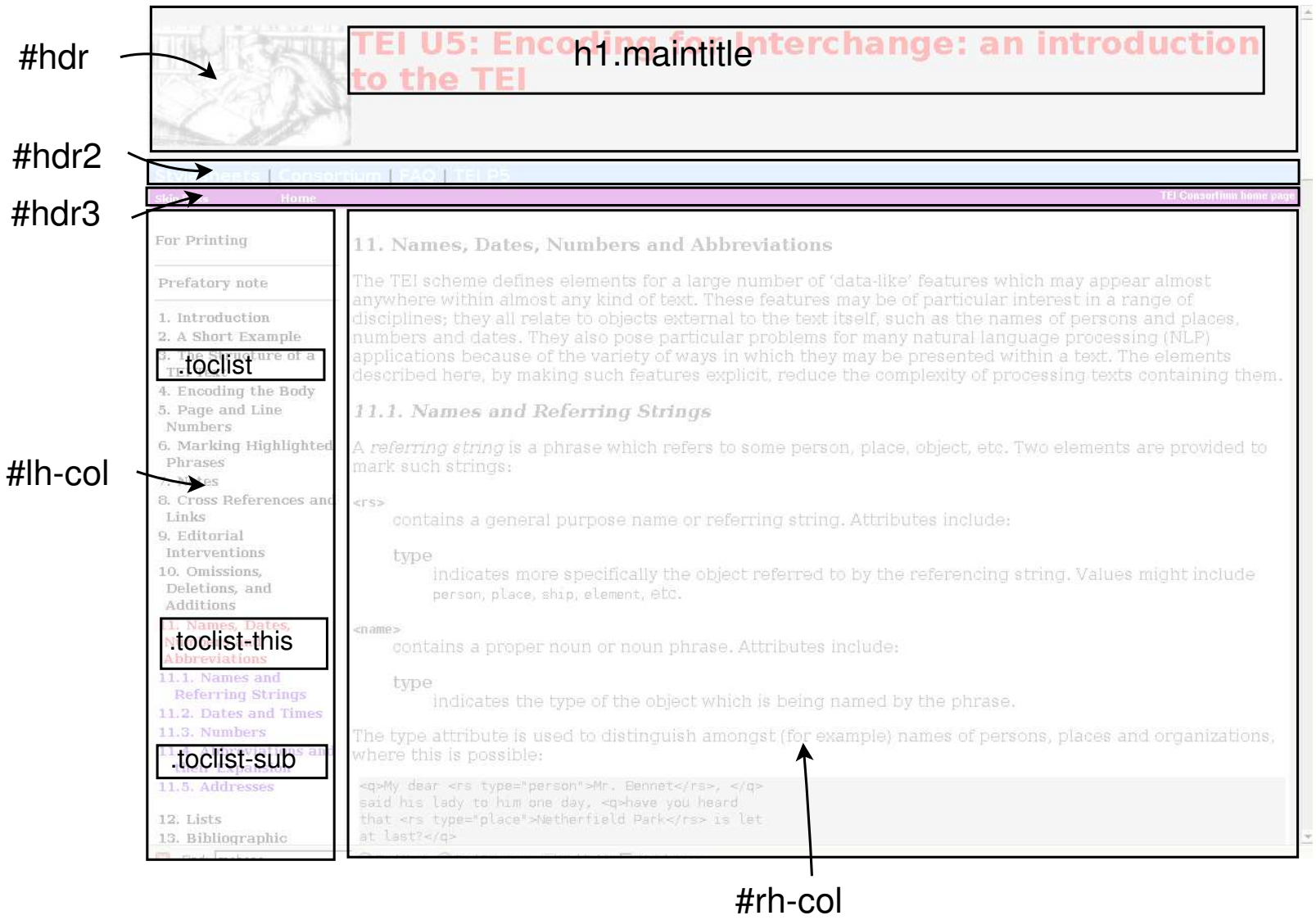
The Guidelines are the chief deliverable of the TEI Consortium, along with a range of tutorials, case studies, presentations, and software developed for or adapted to the TEI. The latest release of the Guidelines under development is P5.

The TEI was originally sponsored by the Association of Computers in the Humanities (ACH), the Association for Computational Linguistics (ACL), and the Association of Literary and Linguistic Computing (ALLC). Major support has been received from the U.S. National Endowment for the Humanities (NEH), the European Community, the Mellon Foundation, and the Social Science and Humanities Research Council of Canada.

Want to become active in the TEI Community? Join a Special Interest Group, sign up for the mailing list, and come to our annual meetings.

The fifth Annual Members Meeting will be held 28-29 October 2005, at the Bulgarian Academy of Sciences, Sofia, Bulgaria and is open to members and non-members alike. (see announcement for program and registration details.)

Skeleton of result



Skeleton of result (2)


```
<div id="hdr">
  <xsl:call-template name="hdr"/>
</div>
```

```
<div id="hdr2"> <xsl:call-template name="hdr2"/> </div>
```

```
<div id="hdr3"> <xsl:call-template name="hdr3"/> </div>
```

```
<div id="lh-col">
<div id="lh-col-top">
<xsl:call-template
name="lh-col-top"/>
</div>
<div id="lh-col-bottom">
<xsl:call-template
name="lh-col-bottom">
<xsl:with-param
name="currentID"
select="$currentID"/>
</xsl:call-template>
</div>
</div>
```

```
<div id="rh-col">
  <div id="rh-col-top">
    <xsl:call-template name="rh-col-top"/>
  </div>
  <div id="rh-col-bottom">
    <xsl:call-template name="rh-col-bottom">
      <xsl:with-param name="currentID" select="$currentID"/>
    </xsl:call-template>
  </div>
</div>
<div id="lh-col">
  <div id="lh-col-top">
    <xsl:call-template name="lh-col-top"/>
  </div>
  <div id="lh-col-bottom">
    <xsl:call-template name="lh-col-bottom">
      <xsl:with-param name="currentID" select="$currentID"/>
    </xsl:call-template>
  </div>
</div>
```

What is XSLT good for?

Yes, it is useful for making web pages from TEI texts, but it is also a good tool for

- Selecting subsets of our texts for further processing
- Summarizing aspects of our texts
- Checking our text in ways that DTDs and schemas cannot
- Converting text into formats other than HTML or XSL FO

we can solve many of the problems with a small range of techniques.

Finding any occurrence of an element

Very often, we will sit on the root element and process all the occurrences of a specific element by using the descendant axis:

```
<xsl:template match="/">
 <html>
  <body>
   Pages:
   <xsl:value-of select="count(descendant::tei:pb)"/>
  </body>
 </html>
</xsl:template>
```

here we use the count function. We continue to generate an HTML document to provide a convenient reporting format.

Converting to other formats

We can write a template to list the size of paragraphs:

```
<xsl:template match="tei:p">
 <xsl:variable name="contents">
  <xsl:apply-templates select=".//text()"/>
 </xsl:variable>
 <xsl:number level="any"/>:
<xsl:value-of select="string-length($contents)"/>

</xsl:template>
```

Adding `<xsl:output method="text"/>` will produce pure text output which could be loaded into a spreadsheet or database.

XSLT extensions

Although we will not be covering them here, most XSLT processors support various extensions, which will be formalized in version 2.0:

- The ability to create *multiple* output files from one input
- The ability to 'escape' to another language (eg Java) for special purposes
- The ability to turn results into input trees for further processing