



XSLT Publishing Exercises 1

Sebastian Rahtz

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Our exercises will be based on formatting the sample TEI XML file of which you have a separate printout. We have provided a simple stylesheet which does some basic work to turn it into HTML, and we want you to make it better.

1 First look at using XSLT

We need to see how the tools work. Firstly, a command-line XSLT processor, making an HTML file.

1. Open a web browser and visit <http://www.tei-c.org.uk/Talks/OUCS/2004-02/samples3.zip>; save the zip file to disk and unpack it in your working directory (ie H:\)
2. Run the `xsltproc` processor, to make `sample.html` from `sample.xml` using `sample.xsl` as your stylesheet:

```
xsltproc -o sample.html sample.xsl sample.xml
```

You can type in a command line using the Tools/Shell Command menu in Emacs.

3. Load `sample.html` into your Web browser and see what the result looks like.

Now look at the transformation happening in the web browser itself. For this you *must* use Internet Explorer 5.5 or later

1. You have seen the file called `sample.xml`; open this in your editor and you will see a line

```
<?xml-stylesheet type="text/xsl" href="sample.xsl"?>
```

This is an instruction to the browser to process the file using `sample.xsl`

2. Open `sample.xml` in IE5 or IE6. You should see the same display as you got with the `sample.html` you made earlier.
3. Edit `sample.xsl` a little, and reload `sample.xml` in the browser. Did your changes take effect?
4. Use the View Source option in the browser, and compare `sample.xml` with `sample.html`
5. Take out the `xml-stylesheet` line from `sample.xml` and reload it. You should see the default behaviour of IE5 when confronted with an XML file.

You should now be confident that you can control the display of an XML file using the XSLT stylesheet. Now we can move on to refine the stylesheet.

2 Developing the stylesheet

Below are a series of suggestions for ways in which you can enhance the stylesheet. We will give worked solutions for the first two, then leave you on your own to try the rest.

You can use either the command-line method, or Internet Explorer, to do this work. While the browser route is more fun, be warned that you do not get very much feedback if you make a mistake in the XSL.

1. Turn TEI `<emph>` elements into HTML italics. Load `sample.xsl` into the editor and add a new template at the end before `</xsl:stylesheet>` as follows:

```
<xsl:template match="emph">
  <i><xsl:apply-templates/></i>
</xsl:template>
```

2. Make the `<signed>` element come out in bold as a separate paragraph. Add a template as follows:

```
<xsl:template match="signed">
  <p><b><xsl:apply-templates/></b></p>
</xsl:template>
```

3. Remove the headings for front and body matter
4. Put the front matter at the end
5. Only show the `<teiHeader>` elements
6. Put each speech (`<sp>`) in the play fragment into its own paragraph
7. If you know CSS, try adding some colour or spacing with style attributes eg `<p style="color:red">`

3 Starting a new XSLT stylesheet

Do you have an XML file of your own? Can you construct an XSLT specification to render that to HTML? Experiment with `punch.xml` as an example text.