“May the text rise up to meet you” -- New ways of reading old manuscripts

Eugene W. Lyman

Boston University

The Elwood Viewer

Imagine a text that actively returned your interest – laying open avenues of inquiry and equipping you with the means to investigate the questions that it provoked. Suppose, for example, the visual contours of a page responded to the shifting focus of your attention – not as a random distraction, but in purposeful coordination with your directed interest, both guiding and reinforcing your experience of the text that you were reading.

From its inception, the Elwood project has been shaped by the tremendous potential of electronic textuality to redefine our experience of what it means to possess and read a text. Interface design was the uppermost concern when I set out to create a suite of programs for the Society of Early English and Norse Electronic Texts (SEENET) to facilitate the display of its TEI-compliant documentary and critical editions of medieval texts. The project has been carried out as an iterative process moving between (1) identifying the broad parameters of questions that readers might be tempted to ask of a text and (2) shaping an electronic *mise en page* that will engage a reader’s inquisitive eye, promoting curiosity and thus the development of new insight and knowledge. This poster illustrates some of the resulting viewer’s major features.

Aims

- Tight coordination of text and image
- Visual cueing to guide/reinforce reader attention
- Parsimonious use of screen real estate
- Ease of navigation – especially at opportune moments
- Handy advanced tools – all within a metaphorical arm’s reach
- Simple, no-cost programming environment, open to enhancement

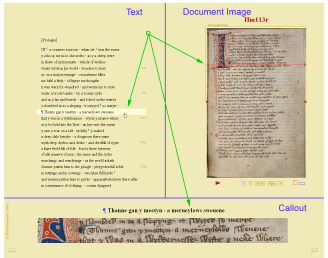
Design Principles

- One visual space for text and image (no windows)
- No scrolling
- Minimal decoration: No chrome. Don’t frame the view
- Provide information as needed – avoid data overload
- Initiate quiet visual cueing
- Build on web-developed “intuition”
- Simplify, simplify, simplify
- Slow display = no display. It won’t be used.

Programming Methods

- Written almost entirely in JavaScript (Jscript) with a bit of XSLT
- Ancillary (non-text) data in JSON (JavaScript Object Notation)
- Write hooks to AJAX for eventual web-based distribution of content
  - Avoid Loading multiple HTML pages. Use DOM and TOM to refresh/change screen, DHTML for effects
- Flatten/recast XML trees as needed to achieve processing efficiency

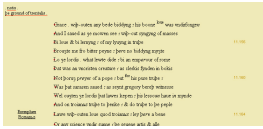
Dynamic Layout



The Elwood Viewer's distinctive display of image and text is arranged in three panels. Interaction initiated by mousing over the text or image causes a dynamic highlighting of corresponding lines in the text and image panels as well as the presentation of a callout panel containing an enlarged image of each line as it becomes the focus of attention. Continued movement of the mouse over the text or the document image brings about a coordinated change in the highlighting of lines in the text and image panels as well as in the enlarged line image presented in the callout panel.

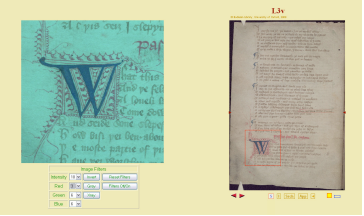
In addition to rendering of scribal ornamentation (rubricated capitals, underlining, letters touched with red ink etc.) the display of the text is dynamically sized to its content. Long lines are folded as needed and marginalia are accommodated, as the examples to the left and below illustrate.

Editorial notes and full XML markup for every element on a page are immediately accessible when needed, as below – and just as immediately dismissed from view.

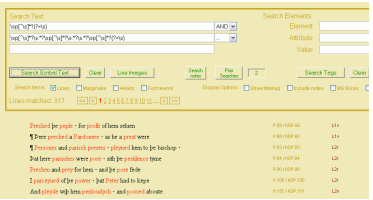


Analytical Tools

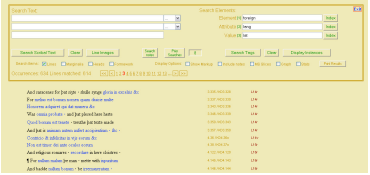
In addition to the enlargements of sections of the document image provided in the call out panel, Elwood provides two tools to assist in the examination of document images. The first is a rectangular magnifier that provides enlargements spanning the horizontal dimension of the document page. The second is a rectangular magnifier equipped with variable magnification levels and a series of electronic filters that permit a reader to view the document under a variety of simulated light sources.

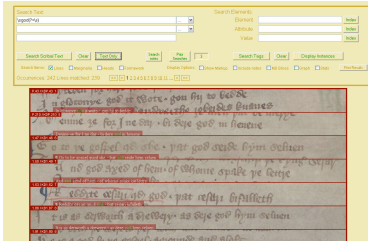


Elwood’s advanced text search capabilities support Boolean logic and the use of regular expressions. The search below uses both to pick out lines alliterating on “p.”



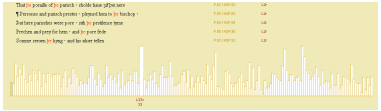
Searches on XML markup are also available. Elwood dynamically indexes XML elements and presents readers with indications of the range of elements, attributes, and values present in a text. The following search identifies all Latin words in *Piers Plowman.*

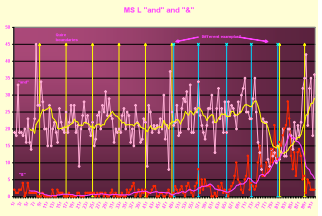




In addition to presenting on-the-fly concordances of text, the Elwood viewer is capable of presenting readers with “line image” concordances consisting of inset text (with searched words and phrases highlighted) and corresponding manuscript images as illustrated above.

Readers may also request a visualization of the spread of returned search results summarized by folio leaves. The example below shows the distribution of the occurrence of “the/þe” in one manuscript of *Piers Plowman.*





Distribution data can also be exported for further analysis as in the above example.

For further information

Contact Eugene Lyman at eugene.lyman@gmail.com

Thanks are due to Professor Hoyt Duggan of the University of Virginia and to the **Piers Plowman Electronic Archive** for permission to use published and unpublished archive materials in this poster and demonstration.