

Information Design and User Experience in Premodern Manuscript and Printed Books

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The aim of this project is to undertake some exploratory work around the potential of computational methods to analyse the material, visual, and informational forms of medieval and early modern book-objects in both physical and electronic media, and the reading practices (both historical and contemporary) which are afforded by these design choices. In particular, I would like to explore the information design and reader navigation of: a) manuscript and/or printed books which combine a number of visual and textual elements on the page (e.g. literary texts with rich paratextual commentary and illustrations), and b) books which contain bilingual and/or multilingual texts (e.g. dictionaries, language manuals, and parallel-text reading editions.)

The work will be carried out on 15th- and 16th-century physical books held in the University's Special Collections, and on later re-productions of these (e.g. 19th- and 20th-century photographic facsimile editions; microfilms; digital 'surrogates' held in digital libraries such as UoM's Luna platform; commercially-supplied digital images themselves made from older microfilm images (Proquest's Early English Books Online), etc. Questions to ask include: What do we *see* when we read medieval books? What are the functions of the various areas of the page, and how do they relate to each other? How is our reading conditioned by the media containers through which we encounter these texts? How are the text's functions encoded into analogue media forms, and re-encoded in their later reproductions? Can we reconstruct historic practices of reading through new computational methods, and are there experiential commonalities with our contemporary media ecosystem?

While early modern textual scholars are increasingly using digital tools in their investigations of reading practices (e.g. the Mellon-funded 'Archaeology of Reading in Early Modern Europe' project, studying readers' marginal notes), to the best of my knowledge no one has yet used formal HCI principles and methods such as eye-tracking to interrogate the information design of the premodern page. This project will therefore make a valuable contribution to our knowledge of historic book design, and may even potentially open up a whole new interdisciplinary field of study.

Outcomes:

I envisage developing the outcomes in discussion at the workshop, as I'm not yet sure of the computational possibilities as yet. In the broadest terms, however, I could see the student devising (in discussion with the supervisors), an experimental model with which to interrogate the two separate kinds of books specified above (commented literary texts and bilingual/multilingual texts), with the participation of other reading subjects who are able to access the foreign language texts (e.g. modern languages UGs/PGs).

It may also be necessary (and desirable) to find a way of first programmatically analysing, defining and segmenting the elements found in the layout of the premodern page. The Shared Canvas viewer (based on principles of linked data), might offer a viable conceptual and practical model here: although designed for the specific complexities of manuscripts, it is 'applicable to any layout-oriented presentation of images of text' (Sanderson 2011: 175). There may also be potential machine vision and AI angles to explore.

Next steps:

This mini-project forms part of a new research project on the information design of the premodern book, which seeks to integrate practice-based perspectives from fields such as graphic design, HCI, and UX with more traditional approaches from literary/textual studies, book and art history. I hope that the findings from this initial proof-of-concept investigation will form the basis for a major research bid in this area.

Bibliography

Guyda Armstrong, 'Coding Continental: Information Design in Sixteenth-Century English Vernacular Language Manuals and Translations', *Renaissance Studies*, 29 (2015), 78-102

Robert Sanderson and others, 'Shared Canvas: A Collaborative Model for Medieval Manuscript Layout Dissemination', in *JCDL: Proceedings of the 11th Annual International ACM/IEEE Joint Conference on Digital Libraries*, pp. 175-84 (New York: ACM, 2011), doi>[10.1145/1998076.1998111](https://doi.org/10.1145/1998076.1998111)

The Archaeology of Reading in Early Modern Europe:

<http://www.livesandletters.ac.uk/projects/archaeology-reading-early-modern-europe>