



etcl Electronic Textual
Cultures Lab



University
of Victoria

Codex Redux: Books and New Knowledge Environments



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Representing aspects of the work of the
INKE Research Team and the
Electronic Textual Cultures Lab

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RESEARCH PARTNERSHIPS

Textual Studies: Canadian Research Knowledge Network (CRKN), Early English Books Online - Text Creation Partnership (EEBO-TCP), Electronic Literature Organization (ELO), Internet Shakespeare Editions (ISE), Oxford Text Archive (OTA), Proquest, Public Knowledge Project (PKP), Text Encoding Initiative (TEI), Transliterations, and the Versioning Machine.

Reader Studies: Canadian Research Knowledge Network (CRKN), ebrary, Incaa Designs, Electronic Literature Organization (ELO), Internet Shakespeare Editions (ISE), NT2, Public Knowledge Project (PKP), Synergies, and Transliterations.

Interface Design: ebrary, Electronic Literature Organization (ELO), Internet Shakespeare Editions (ISE), NT2, Public Knowledge Project (PKP), Incaa Designs, and Transliterations.

Information Management: Canadian Association of Research Libraries (CARL), Canadian Research Knowledge Network (CRKN), ebrary, Early English Books Online - Text Creation Partnership (EEBO-TCP), Electronic Literature Organization (ELO), Internet Shakespeare Editions (ISE), Oxford Text Archive (OTA), Proquest, Public Knowledge Project (PKP), Synergies, Text Encoding Initiative (TEI), Transliterations, the Versioning Machine, Service BC (BC Provincial Government), and the Canadian Century Research Infrastructure project.



A Problem 'Finding' Us

❖ Convergence of

- Hardware developers making an increasing variety of devices intended for reading functions of various kinds
- Content providers increasing their delivery of electronic materials
- Readers who are technologically sophisticated and computationally empowered

❖ **Few involved – those like the people in this room excepted – in these areas really understand the theories and pragmatics associated with traditions of knowledge conveyance with respect to medium, broadly construed . . . but there are academic disciplines that have this as their central focus: areas like bibliography and textual studies, to name two.**



‘Knowledge Machine’ Consultations

- “Implementing the New Knowledge Machine: Human Computer Interaction and the Electronic Book” (2005-6; SSHRC Strategic Research Cluster Developmental Grant program).**
- Drew together researchers and representative stakeholding research partners based initially in ‘textual’ subdisciplines, ultimately comprising interdisciplinary expertise from over 90 fields and sub-fields ranging from philosophy and cultural studies to visual communication design and robotics.**



‘Knowledge Machine’ Conclusions

- ❖ **“ . . . chief among the reasons for the limitations currently found in electronic books and documents is the fact that they are still predominantly modeled on print-based textual forms, with research and development of such electronic materials chiefly focusing on mimicking the look and feel of print – an approach founded on a reliance on importing critical and textual models from print without understanding those models fully.”**
- ❖ **“Hence, such works’ conceptual limitations lead to a failure to capitalize fully on the technical possibilities of cybernetic simulation.”**



‘Knowledge Machine’ Recommendations

¶ To achieve all the benefits of computation in electronic books and documents, our work suggested that research in this area must begin with a (re)conception of core critical and textual models from the following perspectives:

- the evolution of reading and writing technologies from antiquity to the present;
- the mechanics and pragmatics associated with written forms of knowledge;
- strategies of reading and organization within those forms; and
- the computational possibilities latent in written forms and manifest in emerging technology.



'Knowledge Machine': Suggested Interdisciplinary Approaches

❖ **Consultation suggested that the key areas of disciplinary convergence necessary for this program of research are found in**

- **Textual Studies:** responding to the need for further understanding of what components of existing print media that are essential to represent in electronic books and reading devices;
- **Reader Studies:** identifying characteristics of effective reading in electronic environments;
- **Interface Design:** extending continuous reading and scholarship involving digital texts through interface and environment; and
- **Information Management:** building prototypical electronic reading interfaces that promote active reading patterns and draw on dynamically-integrated collections of supporting reading materials.



Research Questions

1. Has the way that we read, and experience information changed since the rise of the Internet and, if so, how?
2. How do new knowledge environments, such as online collaboration resources and distributed knowledge networks, influence the way we engage and use information?
3. What new features can we design to improve digital information environments, and their interfaces, based on our knowledge of user needs, behaviours, and cultural contexts?
4. How can we better design, or process, the data that underlies and serves the needs of those using such digital information environments?



Objectives

- ❖ **1. To document the features of previous textual forms as the essential context for implementing new knowledge environments**
- ❖ **2. To advance understanding of how reading texts and using information is affected by digital, multimedia delivery**
- ❖ **3. To conceptualize new knowledge environments, and develop tools**
 - 3.1 to produce accessible, flexible information architecture;
 - 3.2 to extend user control and/or affordances; and
 - 3.3 to implement new visual metaphors and integrate social networking functionality.
- ❖ **4. To create a series of dynamic and functional reading interfaces and prototypes for new knowledge environments**



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