Implementing New Knowledge Environments: Collaboration, Creation, and Culture in the Digital Humanities

2012 International Conference of Digital Archives and Digital Humanities
Taipei, Taiwan
Keynote Lecture

Ray Siemens
And the INKE Research Group
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siemens@uvic.ca
My talk: Considers an extended example of what happens when we bring a number of Digital Humanities enterprises together, toward exploring a well-defined common research interest.
Implementing New Knowledge Environments, Focus

INKE has been described, in brief, as

- an interdisciplinary initiative spawned in the methodological commons of the digital humanities that works
  - to understand the human record as it intersects with the computer,
  - to view the future of reading through reading’s past, and
  - to explore the future of the book from the perspective of its history.
Implementing New Knowledge Environments, Community

The project is directed by Ray Siemens (U Victoria) and its work in 2012/13 is led by Siemens, Stan Ruecker (IIT Institute of Design), Lynne Siemens (U Victoria), Jon Bath (U Saskatchewan), and Jon Saklofske (Acadia U).

- Past research leaders have also included Richard Cunningham (Acadia U), Teresa Dobson (U British Columbia), Alan Galey (U Toronto), and Claire Warwick (University College, London).

The international INKE Research Group consists of some 35 researchers across 20 institutions and 21 partner agencies, with work involving some 19 postdoctoral research fellows and 53 graduate research assistants over the life of the project.

From 2009, the project is funded by a $2.5 million, 7-year Major Collaborative Research Initiative (MCRI) grant from the Social Sciences and Humanities Research Council (SSHRC), plus an additional $10.4 million in contributions from institutional and research partners.
Visit our Website: inke.ca

Implementing New Knowledge Environments

About
News
Ray Siemens presents paper at 2012 TRUTH Symposium
Ray Siemens participates in panel discussion at "Culture and Technology" European Summer School in Digital Humanities
Lynne Siemens teaches course at "Culture and Technology" European Summer School in Digital Humanities
Ray Siemens presents paper at "Culture and Technology" European Summer School in Digital Humanities

Archive

Sponsors
My Talk’s Overview:

- What’s All the Fuss About?
- Reading Devices Considered, 7 Years Ago
- A View to Reading Devices Today
- A Problem Finding the Humanities?
- Understanding Reading, & Its Prostheses
- Next Steps
The Best Tactile Books

Few things feel better than having a beloved book in your hand... and you agree. We asked about your favorite 'tactile' books - the ones you love to touch the most - and received a wide range of recommendations.

Discover the children's picture books, pop-up books, leather-bound books, heavy books and paperbacks falling to pieces that you cannot bear to put down.

› Learn more
WEDNESDAY, MAY 11

SHEESH! WE JUST GOT OVER THE DEATH OF BOOKS; NOW IT’S THE DEATH OF E-READERS?

“The e-reader’s days are numbered,” writes HuffPo’s Amy Lee. Despite millions of e-book readers sold in the last couple of years, Lee foresees obsolescence for Kindles and Nooks as tablets take grip and ultimately take charge.
Is the Enhanced Ebook Really Dead?

Posted: May 18, 2011 at 2:04 pm | By: Suzanne Schram | Tags: ebook, enhanced ebook

According to Evan Schnittman, Bloomsbury's managing director of sales and marketing, enhanced content for narrative-based ebooks is dead. He announced at last month’s book fair: "Enhanced [ebooks] will have an incredibly big future in education, but the idea of innovation in the narrative reading process is just a non-starter." Faber and Faber’s head of digital, Henry Volans, disagreed: "Apps are a phenomenon of our age and are here to stay." So are enhanced ebooks an already-dying phenomenon or not?

The difficulties of enhanced ebooks

Carolyn Reidy, President and CEO of Simon & Schuster, points out that they’re difficult to sell: "The enhanced ebook market is not very strong and some of the biggest sellers still are less than 2,000 copies. It doesn’t appear that public is enthused by the concept. Apps [...] are very expensive to make and get lost in the App Store." Agent and E-Reads publisher Richard Curtis stresses that copyright is another difficulty: "The challenge of clearing rights for enhanced e-books is so dauntingly complex that nothing less than an overhaul of the current antiquated system is necessary if enhanced e-books are not to die aborning."

Confidence in enhanced ebooks
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A Full Range of ‘Textual’ Devices
(very few of which are dedicated e-reading devices)
Phone-like: B’berry, iPhone/iTouch

Chapter 1
Out to Sea

I had this story from one who had no business to tell it to me, or to any other. I may credit the seductive influence of an old vintage upon the narrator for the beginning of it, and my own skeptical incredulity during the days that followed for the balance of the strange tale.

When my convivial host discovered that he had told me so much, and that I was prone to doubtfulness, his foolish pride assumed the task the old vintage had commenced, and so he unearthed written evidence in the form of musty manuscript, and dry official records of the British Colonial Office to support many of the salient features of his remarkable narrative.
Mini-PCs: Toshiba Concept, ASUS EEE, OLPC

2012
Dedicated Book-like: Cybook, Franklyn, Kindle, Rocket, Softbook, Sony e-Book
Pocket PCs, PDAs, and Tablets – HP
Pocket PC, Newton, Nokia Inet
Tablet, iSlate

2012
Considering Tomorrow: Infinite Page Turnover Device

Timothy Yeoh, “Turnover is two pages with infinite possibilities . . . “
Yanko designs: ROEM is a multi-function design that centers around rollable electronic paper providing access to digital eBook content, photos, music and learning content.
Considering Tomorrow: Polymer Vision's Readius

Considering Tomorrow: Projector Phone

Stefano Casanova: a thin handset, with a rotating screen and a built-in projector.
Overview:

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A Problem Finding the Humanities?

Understanding Reading, & Its Prostheses

Next Steps
Objects Distinct from But Aligned with Books?

2012
Or, One Mimicking the Look & Feel of the Other?
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The Larger Argument: An Exciting Future for E-books . . . but an Inconvenient Present

- The very best eReaders and eReading materials
  - do not yet meet the standards of quality, content, and functionality that have evolved over half a millennium of print publication.
  - are but pale reflections of their print models, and the majority offer much less than a reflection might.

- The electronic ‘document’ – the webpage mainstay populating the internet – does not yet afford the same basic functionality, versatility, and utility of the printed page.
A Problem Finding the Humanities?

Convergence of

- Hardware developers making an increasing variety of devices intended for reading functions of various kinds (dedicated eReaders among them, as well as other devices on which reading takes place)
- Content providers increasing delivery of electronic materials
- Readers who are technologically sophisticated and computationally empowered

Few involved in these areas really understand the theories and pragmatics associated with traditions of knowledge conveyance with respect to medium, broadly construed . .

- . . . but, as we know, there are areas of inquiry that have this as their central focus: bibliography and textual studies, to name two.
- The field of bibliography has had a ‘device specific’ approach to that component of reading and communication for centuries. Recent work by people like Matt Kirschenbaum (Maryland) and Alan Galey (Toronto) and others is exemplary in this regard.
- One thing we can learn readily here, is that the device is only a small part of a much larger ecosystem related to reading and communication
‘Knowledge Machine’ Consultations


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

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.”

Reiterated

• Modeling the book (typical of the dedicated eReader) and the page as imitative ‘device’ is an approach which was doomed to fail from the start, and will continue to fail.

• Each must be modeled with reference to function and use, with reference to the ecosystem in which they work, and the readers who use them

• The ‘enhanced’ ebook is a key forward-looking example of this approach
‘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/User Experience**: 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.
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Addressing the System
Larger eReader 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 collaborative 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: E-Reading in Context

1. Document the features of previous textual forms as the essential context for implementing new knowledge environments

2. Advance understanding of how reading texts and using information is affected by digital, multimedia delivery

3. Conceptualize new knowledge environments, and develop tools
   - that produce accessible, flexible information architecture;
   - that extend user control and/or affordances; and
   - that implement new visual metaphors and integrate social networking functionality.

4. Create a series of dynamic and functional reading interfaces and prototypes for new knowledge environments
Project: Social Edition

The scholarly edition munged with notions of social knowledge construction ...

Project: ArchBook

ArchBook is a collection of illustrated essays concerning design features of books. It is an open-access, and all essays are peer-reviewed. In a typical entry, a textual feature is analyzed throughout its historical development. It also includes an image repository and a blog.
Project: Table of Contexts

- A traditional table of contents + tools that allow inclusive indexing, toward navigating documents more accurately, on the fly, while reading.
Project: NewRadial Viewer

- Browse visually, organise, comment on, and participate with others; uses digital facsimile.
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"The page cannot be displayed."

"If you are looking for a currently unavailable page, you might be experiencing technical difficulties, or you may need to adjust your browser settings."
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Implementing New Knowledge Environments
Thank you ....

Very best wishes for an insightful, engaging, and stimulating time together at conference!