

Listen Reader: An Electronically Augmented Paper-based Book. Back, et al. CHI. 2001.

What are the core research questions addressed by the work?

- How to simultaneously preserve and extend the experience of reading from a paper-based book

What motivates the work?

- Current approaches to digitizing the experience of reading each have their own failings
 - Embedded audio buttons: Disruptive to the reader's involvement in the story
 - CD-ROM books: Requirement of reading on the computer
 - PDA-style electronic readers: poor resolution, present interface requires too much attention

How does the work understand the usage, capabilities, and limitations of paper?

- Electronic books yet to supplant traditional paper-based books

What is the target application domain of the work?

- Museum display
- Reading

What are some proposed extensions to paper proposed by the work?

- Combining an interactive multi-track audio environment with text and images printed on the book: Enhancement more so as a peripheral layer, instead of added information
- Use of ambient audio to heighten the drama of the story
- Enabling reading to be multimodal
 - Sound as an additional stylized symbol system, to be read along with the graphics and text
 - Enhancing the feeling of communing with a private world, one that gently acknowledges one's own presence - produce a more immersive experience

How are the proposed extensions implemented?

- Combines two technologies: Embedding RFID tagging for page identification, and electric field sensing to read proximity data from the hands of the person(s) reading the book - use of two input streams to control audio output

What findings have been obtained from either the implementation process or an evaluation of the proposed system?

- Form affects meaning, and in fact is inextricable from it
- System got people to read deeply in a museum setting and to read socially, in groups, often aloud to each other