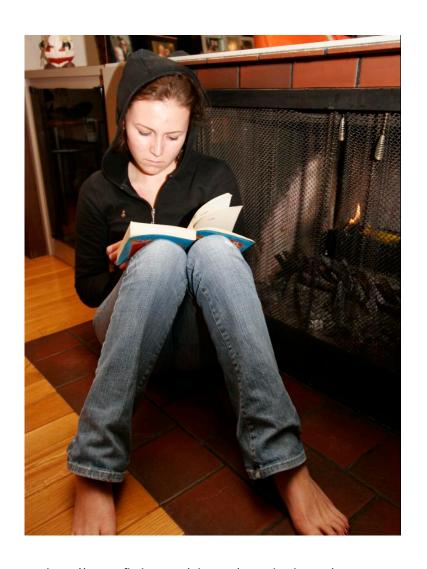


## Reading on E-Book Devices: the User Experience

Nicole Hennig, MIT Libraries

## Where we read



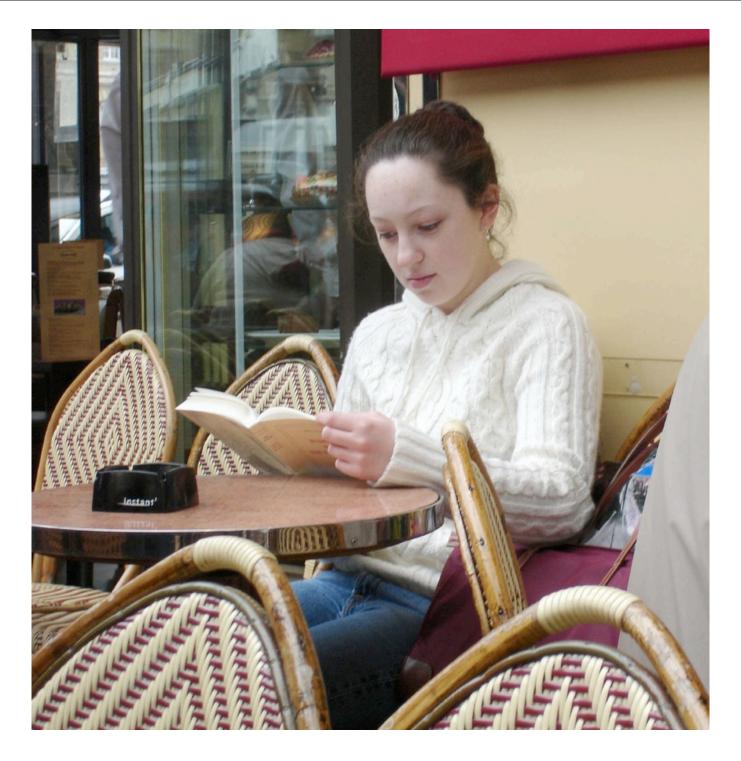
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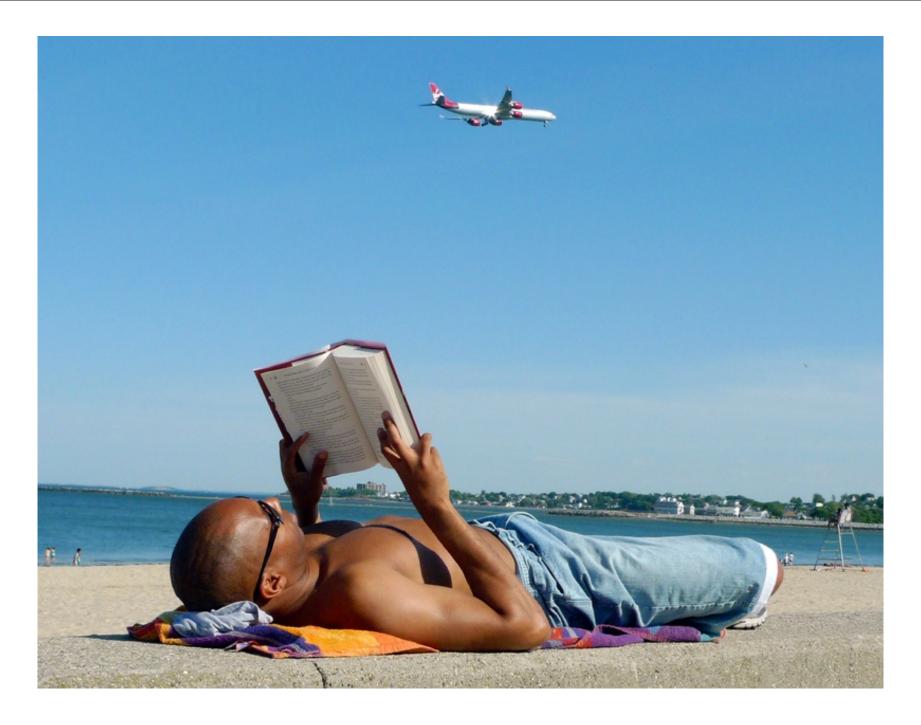
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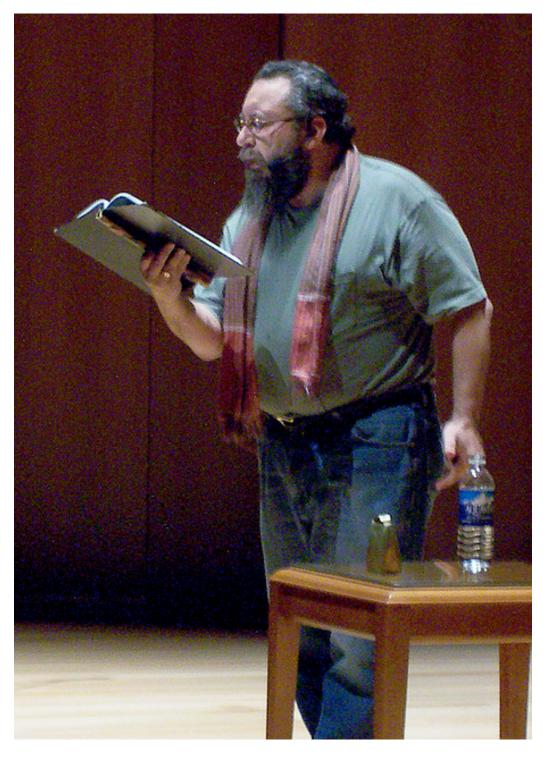
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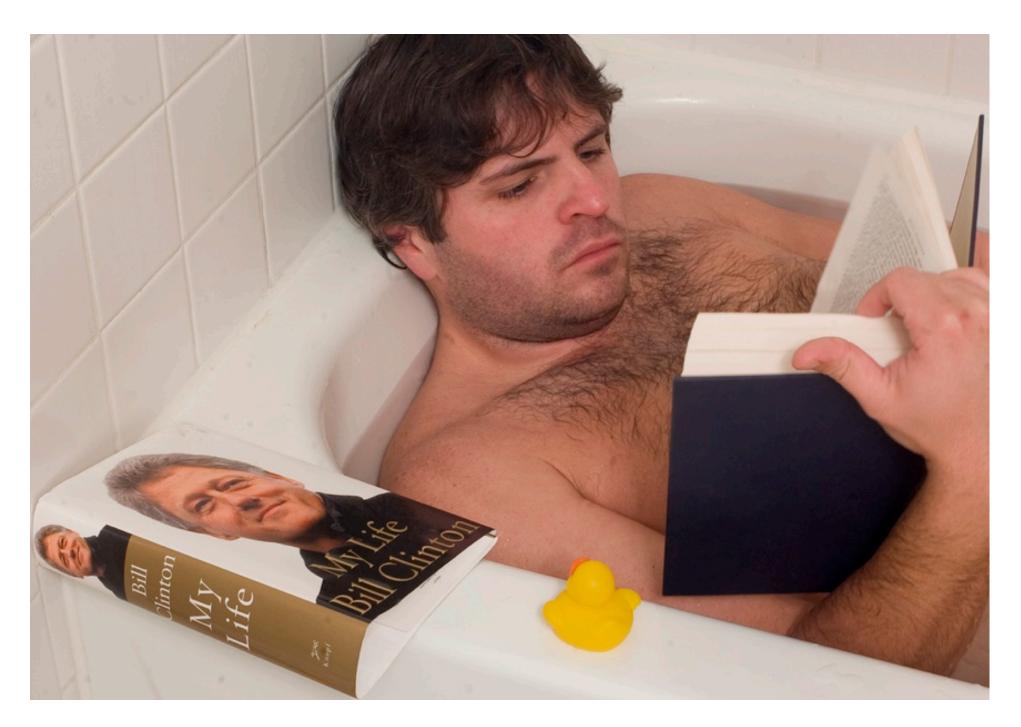
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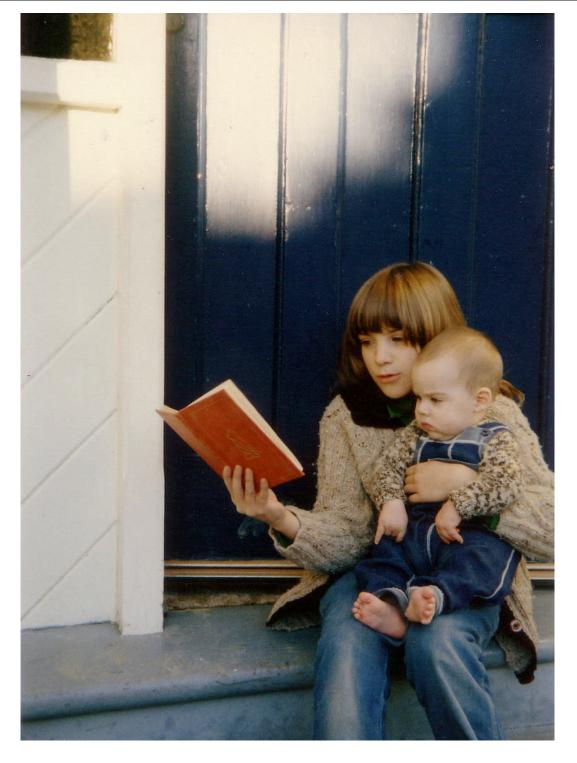
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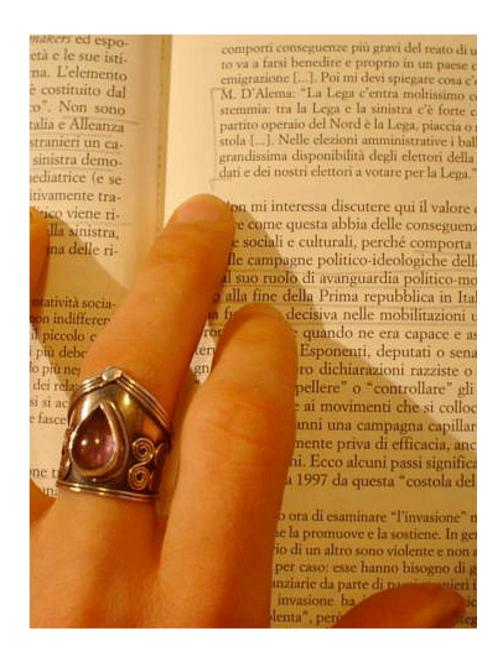


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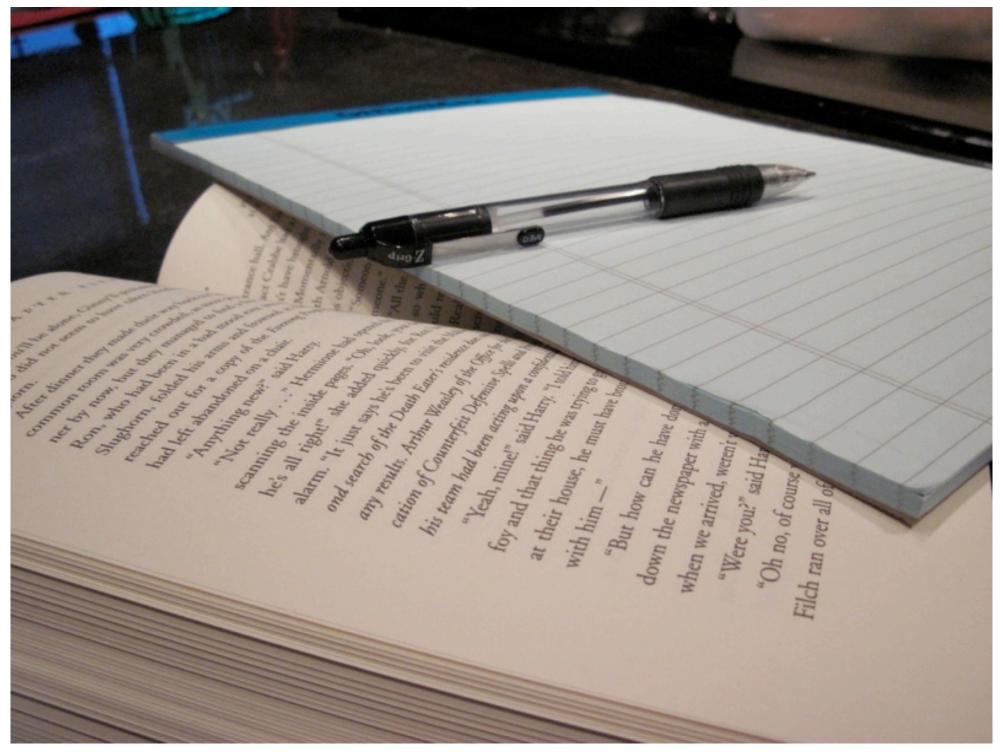


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### How we read



pondering thinking taking notes bookmarking copying quoting defining words underlining highlighting, comparing with other text skipping around skimming looking at photos examining charts/graphs



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Manufacturers have been able to dramatically increase the transfer rate or speed of improvements in telephone lines and how to correct common telephone lines and how to correct common telephone line intermation over the telephone lines and how to invented a telegraph teleprinter code in speed of moderns. A modern measurement, bits a term often used to define the speed of moderns. A modern measurement, bits a term of speed baud as a measurement of speed for moderns. A bit is a second, or bps, has replaced baud as a measurement of speed for moderns. A bit is a binary digit having a value of 0 or 1. The more bits a modern can process per second, the binary digit having a value of the speed between characters; it takes about 10 bits bits define each character and the spaces between characters; it takes about 10 bits

Bits define each character of information. A 1200bps modem can transmit or receive a single character of information. A 1200bps modem can transmit or receive about 120 characters per second. This sentence, which is 107 characters long counting spaces), would require about 0.8 seconds to transmit.

Until recently, a modem that operated at 2,400bps was considered fast. The first sopular modems that were used with microcomputers operated at only 300bps. Now, owever, 14,400bps modems are very common, and 28,800bps or faster modems will on dominate the market. Faster modems mean less time connected to a telephone orter telephone connection times result in lower charges for long-distance calls and here connection fees for many services that charge by the hour.

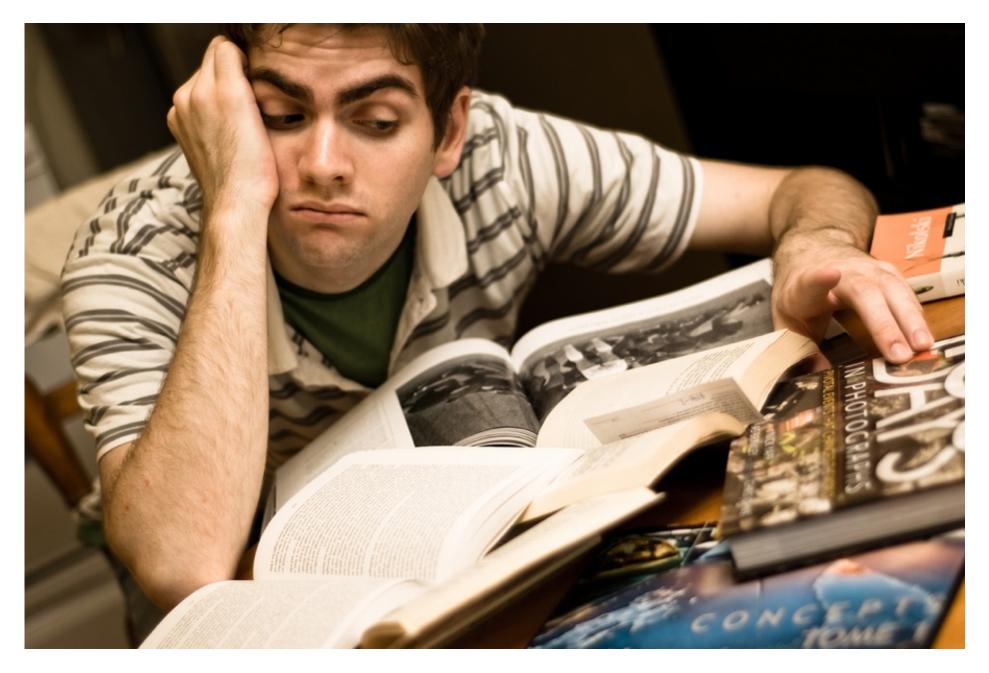
#### Handshaking Protocols

as two computer modems exchange information, a series of rapidly changing tone through the telephone lines. The modems convert these tones into binary 0s and through the telephone lines.

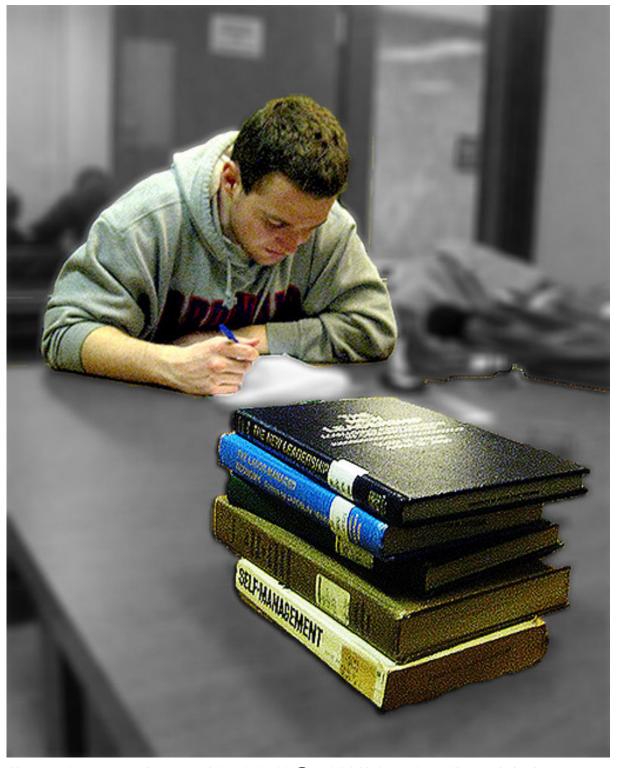
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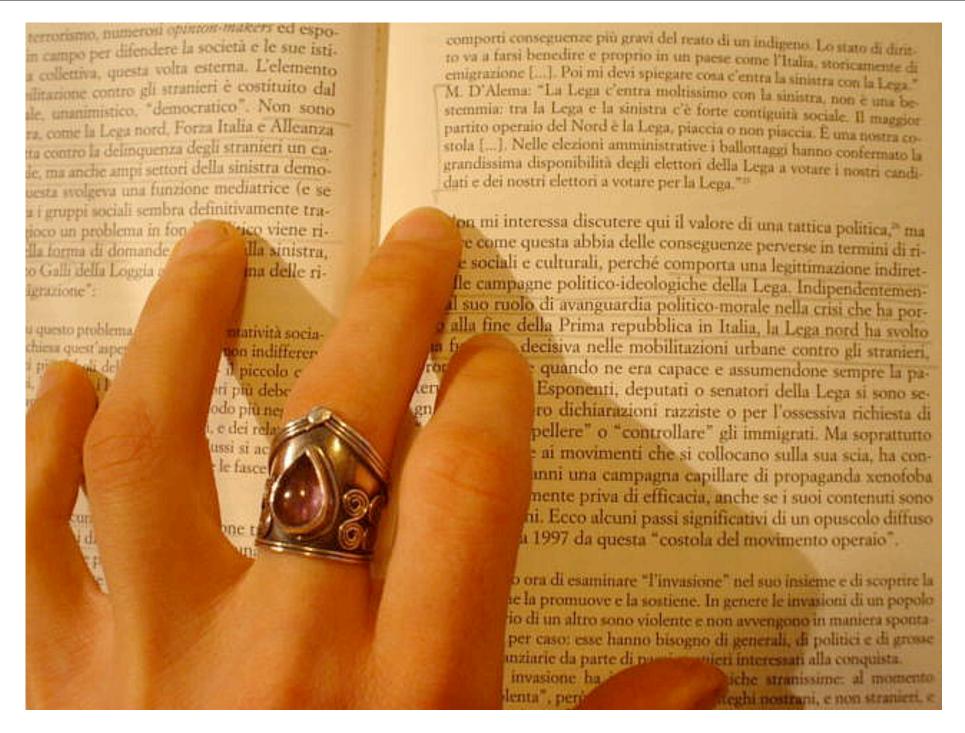
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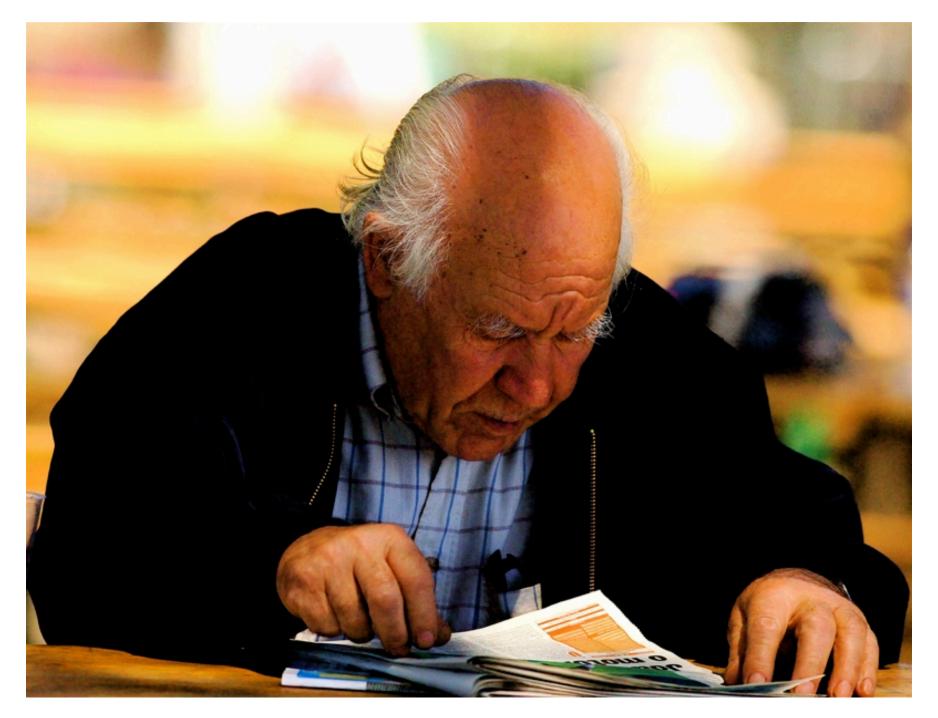
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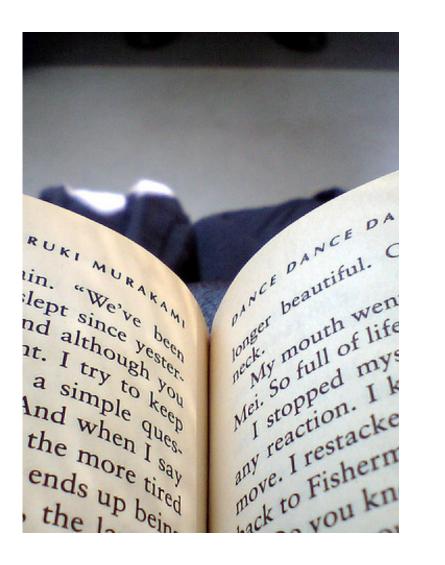


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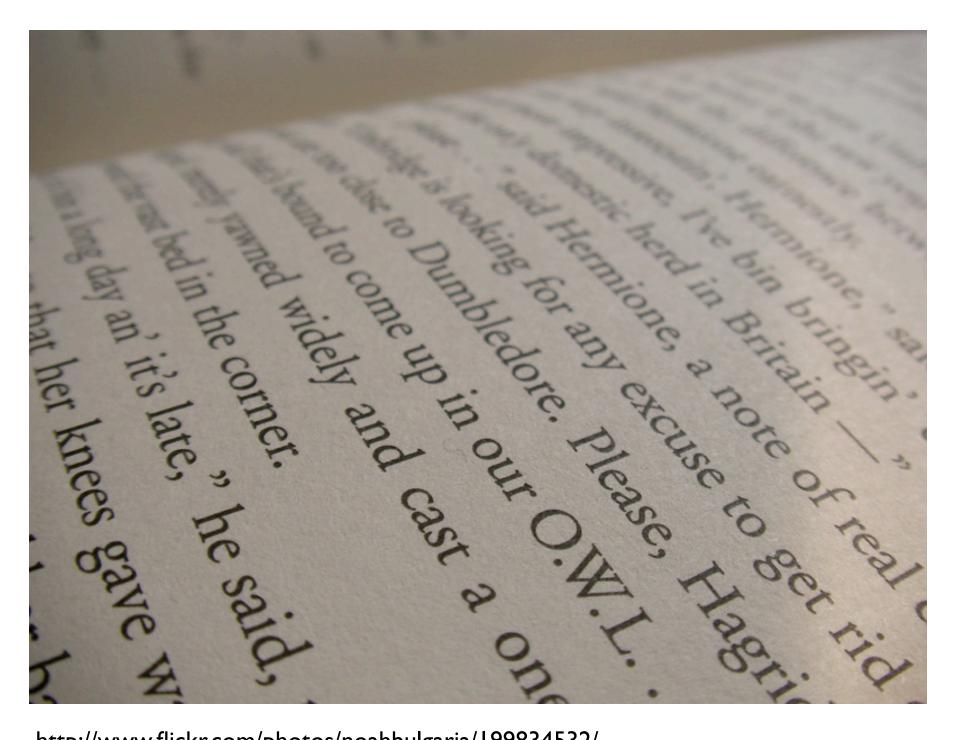


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# A book is not one thing



novels non-fiction reference books comics graphic novels essays short stories instruction how-to cookbooks art & design books



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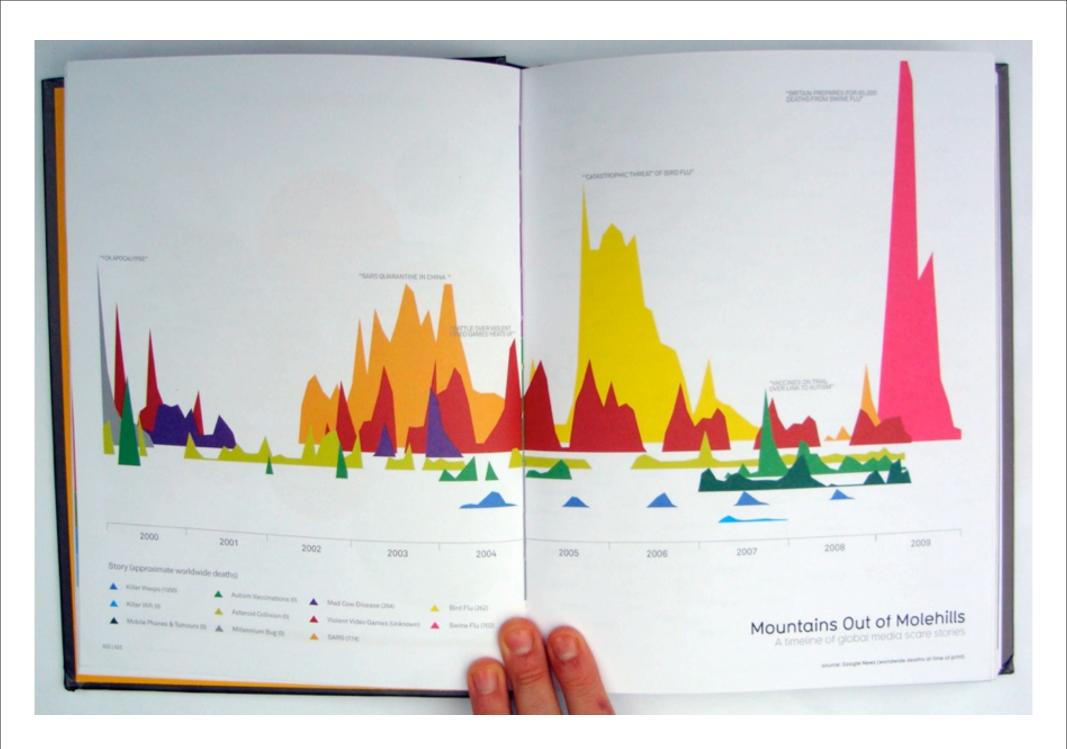
century, and they result in the development e main function will now be public hygiene, with dinate medical care, centralize power, and nor. And which also takes the form of campaigns to o medicalize the population. So, problems of reh rate, and the problem of the mortality rate too. eld of intervention will be a set of phenomena aniversal, and some of which are accidental but completely eradicated, even if they are accidental ffects in that they incapacitate individuals, put lit or neutralize them. This is the problem, and important in the early nineteenth century (the ion), of old age, of individuals who, because of the field of capacity, of activity. The field of les accidents, infirmities, and various anomalies deal with these phenomena that this biopolitics ly charitable institutions (which had been in no time), but also much more subtle mecha-

simply pointing out some of biopolitic ment, that it has c actices, and the first of its domains of it ower: biopolitics will derive its knowle r's field of intervention in terms of, the various biological disabilities, and the e all this, a number of things are, I th ears to be this: the appearance of a nev character-of which both the theory ctice knew nothing. The theory of rig lividual and society: the contracting inc nstituted by the voluntary or implicit sciplines, for their part, dealt with in practical terms. What we are dealing w power is not exactly society (or at least by the jurists), nor is it the individua multiple body, a body with so many he be infinite in number, cannot necessar with the population, with the popul problem that is at once scientific and and as power's problem. And I think

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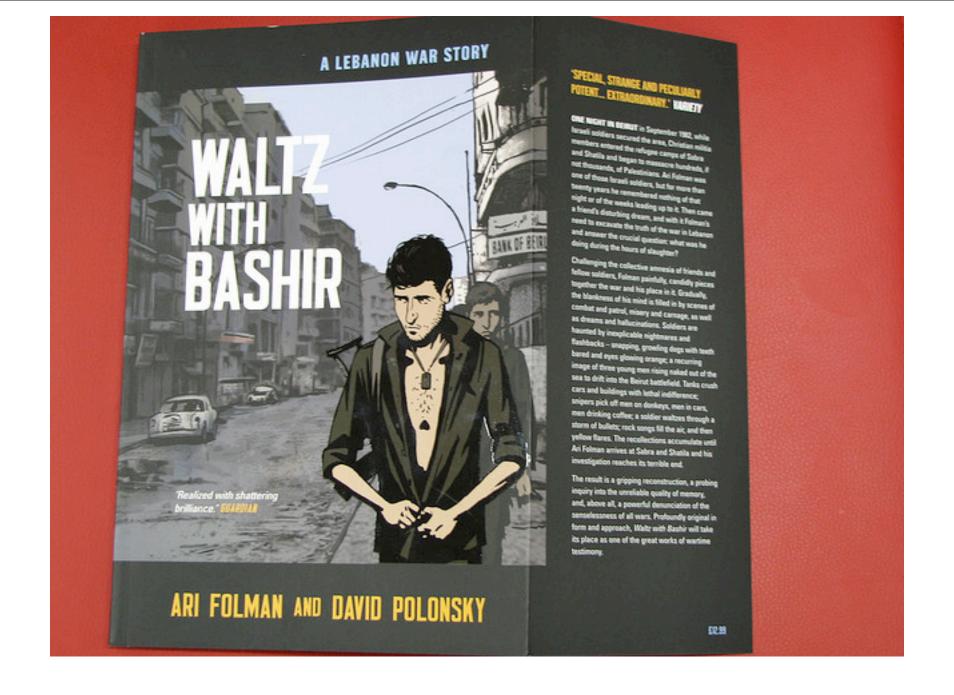
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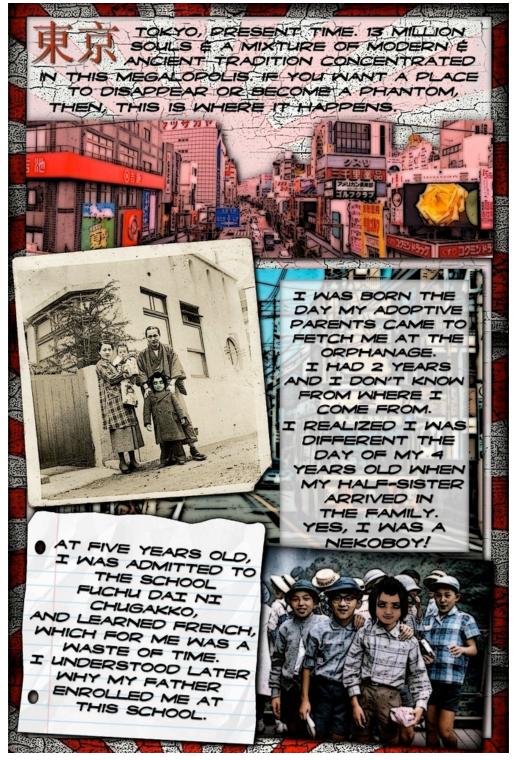
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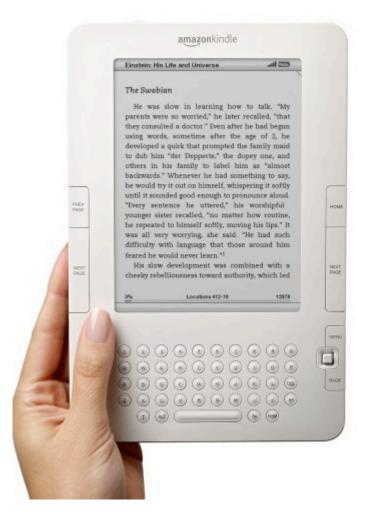


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## E-readers today



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#### Audience poll #1

Have you read at least one entire book (start to finish) on a mobile ereader? (not on a desktop or laptop)

YesNo

For those who have read an entire book, how many books have you read this way?

- 1 10
- 11 50
- over 50 ebooks

## Audience poll #2

What ebook devices do you own or have you owned in the past: (check all)

- Amazon Kindle
- Sony Reader
- Nook
- iPad
- iPhone
- other smartphone, such as Android
- other

# Selected devices

### E-ink displays

- Amazon Kindle and Kindle DX
- Sony Reader
- Barnes & Noble Nook (many other e-ink based ereaders exist)

Tablets & smartphones (LCD screens)

- iPhone and other smartphones
- iPad and other tablets

# Selected software

- Amazon Kindle
- Barnes & Noble
- Stanza
- Apple iBooks
- GoodReader

## coming soon:

- Blio
- Copia

# Audience poll #3

# What do you like **most** about your ebook reading experience?

- Convenience of having so many books with you in one small device (easy for travel, etc.)
- free samples to help decide on purchases
- ease of reading because of features such as increased font size, screen color and brightness
- immediate purchase & downloads of new books
- other

# Audience poll #4

# What do you like **least** about your ebook reading experience?

- the content I want is often not available
- lack of ability to lend books to my friends and family
- not so easy to annotate, take notes, compare texts
- the illustrations, charts, diagrams, are not big enough or clear enough
- other

# What works

- small lightweight, carry many books with you
- easy to get new books immediately
- many free books available
- many books are cheaper than print
- easy to customize views: larger font sizes,
   different background colors/fonts
- very long free samples available for most books
- quick dictionary lookups
- read same content on different devices for different situations & sync between devices

# Not so great in current e-readers

- not every book you want is available
- annotating is awkward
- not easy to compare multiple books side by side
- limited by battery time
- lending to friends almost impossible (limited exceptions)

# Not so great in current e-readers

- detailed or color illustrations not always easy to view (except with iPad & some smartphones)
- hard to have a good feel for how far you are into the book, even with indicators or progress bar visible
- skipping around in the book may cancel out ability to synchronize where you left off between devices
- fragmentation of content between different vendors, i.e., much content only readable in one vendor's software (DRM)

# The E-reader pilot at Princeton

Fall semester, 2009

www.princeton.edu/ereaderpilot

Their **favorite** features of the Kindle DX were

- The battery life, the wireless connection, and the portability of the Kindle.
- The fact that all the course reading was on one device
- The ability to search for content
- The legibility of the screen, and the fact it could be read in full sunlight

The areas in which they felt the Kindle could be best improved were:

- The ability to highlight and annotate PDF files
- Improving the annotation tools
- Providing a folder structure to keep similar readings together
- Improving the highlighting function
- Improving the navigation within and between Kindle documents



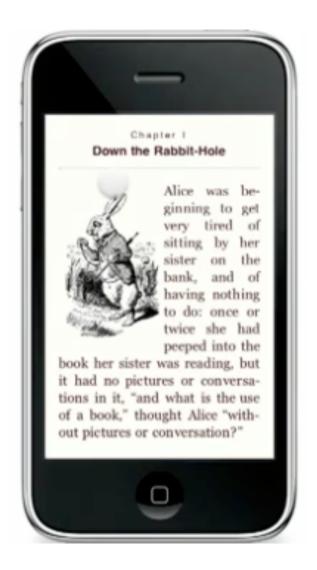
# Reading on Barnes & Noble Nook



Video:

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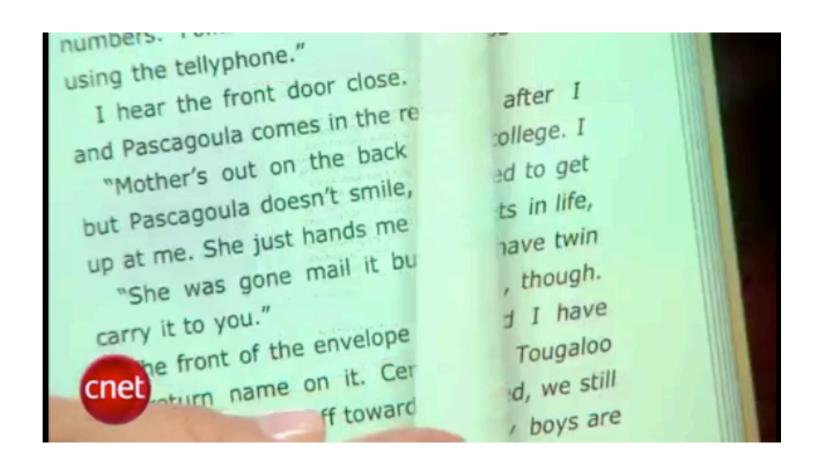
# Reading on iPhone with Stanza



Video:

http://youtu.be/SZmm8-8n3Tw

# Reading on iPad with Apple iBooks and Amazon Kindle app



Video:

http://youtu.be/\_x80sfCpwlY

# Reading on iPad with specialized apps



# Video:

http://youtu.be/nHiEqf5wb3g

start at 2:56, end at 5:00

# Comics on iPad are wonderful

Video
<a href="http://youtu.be/uzCMDU10Hbg">http://youtu.be/uzCMDU10Hbg</a>
start at :42, end at 1:16



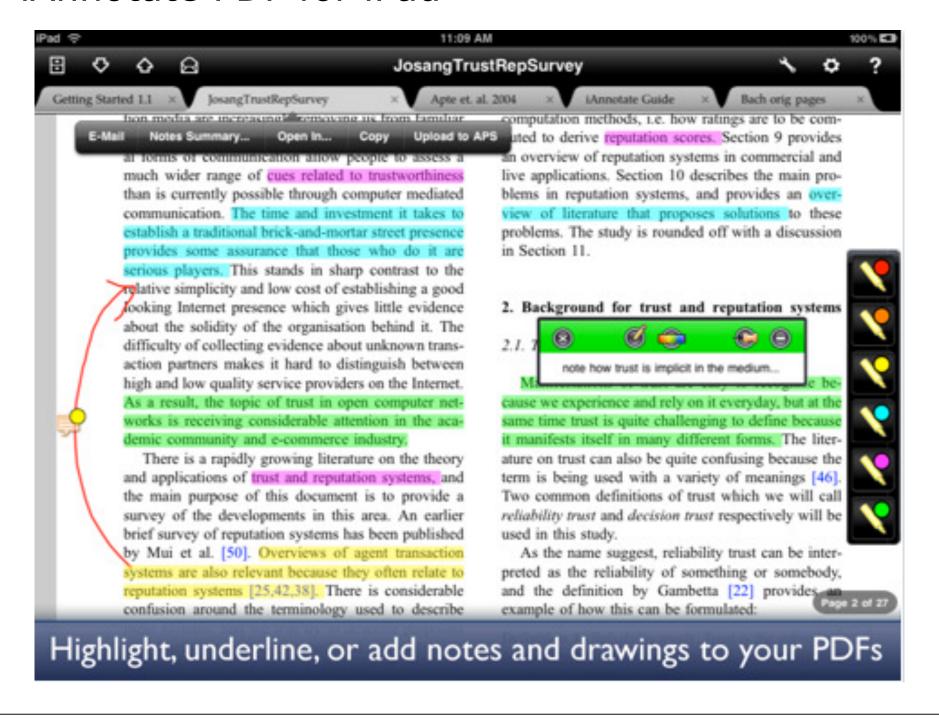
# GoodReader iPhone and iPad







### iAnnotate PDF for iPad





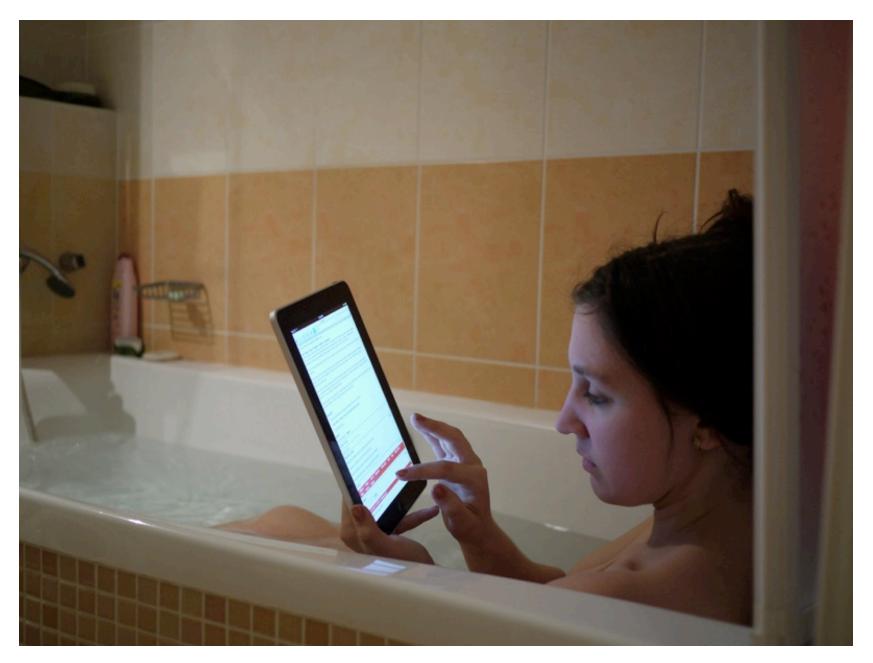
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the "i-generation"



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# Where we read



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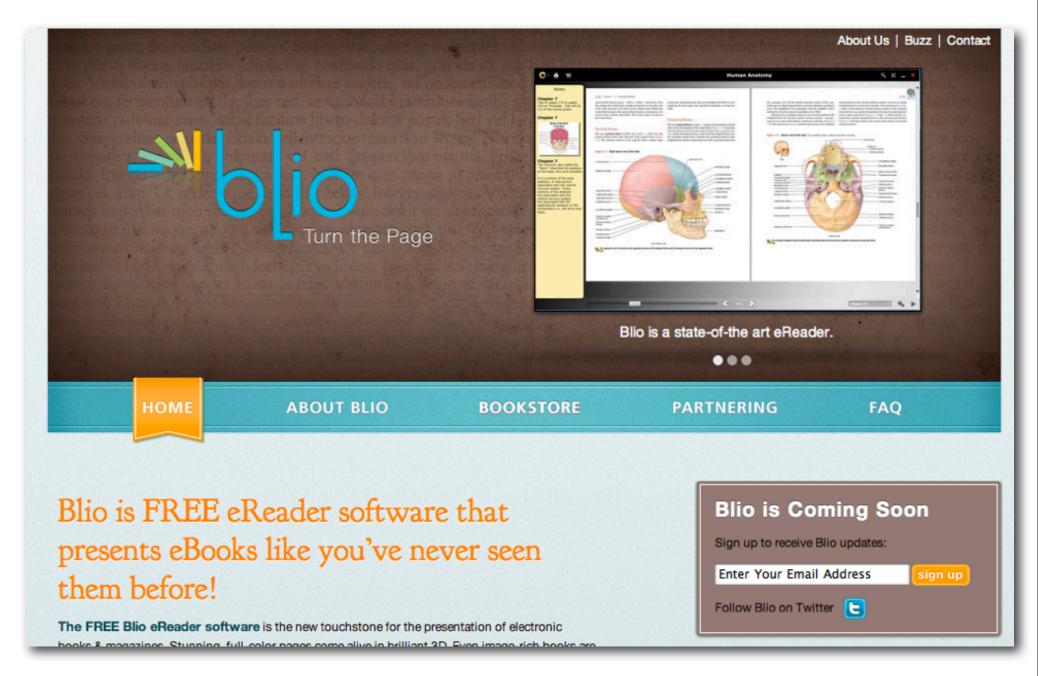
# Improvements on the horizon

- better ways to show detailed color illustrations
- more social features, more ways to discuss and collaborate
- more efforts made towards being able to buy once, read anywhere
- innovative ways to interact with books, taking better advantage of new media

examples

### "Ray Kurzweil Vows to Right E-Reader Wrongs"

- New York Times, June 18, 2010



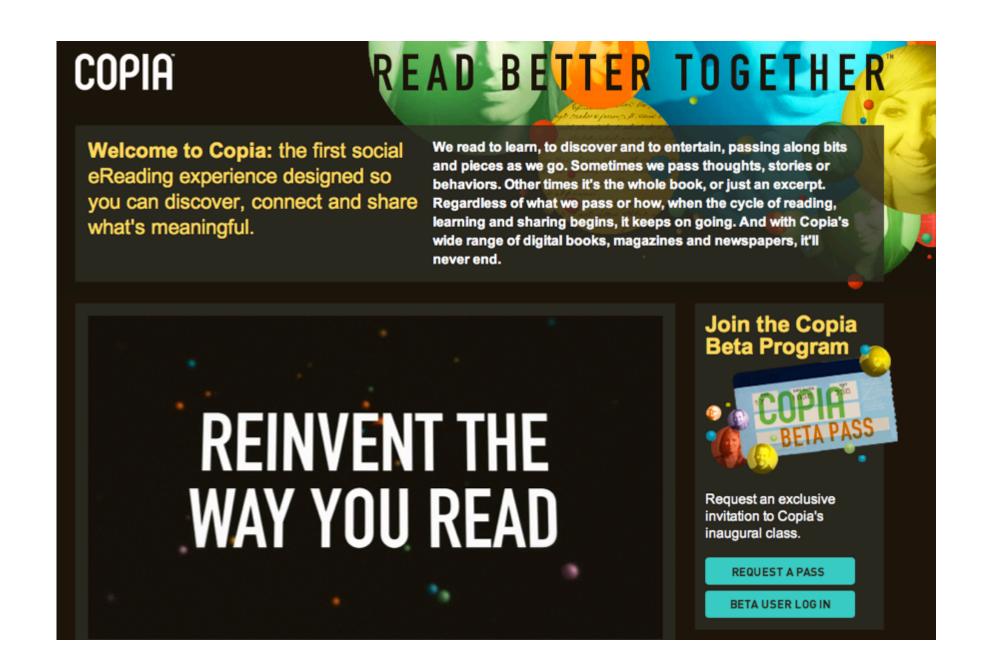
meld the reading experience with media

audio, video, and web content

# device-agnostic

buy once, view anywhere

# Copia - focusing on social aspects









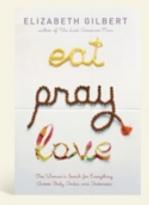
Eric Peters

"The F

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Eat, Pray, Love: One Woman's Search for Everything Across Italy, India & Indonesia

Author: Elizabeth Gilbert



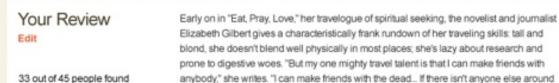


"So good, I read it twice."

to talk to, I could probably make friends with a four-foot-tall pile of Sheetrock." (more)







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Your Friends (10)

Your Rating

this review helpful

Most Helpful (5)

Recent (56)

#### Share



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Groups



Facebook



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### Brent Jenkins

133 Books | 23 Friends | 2 Groups

Was this review helpful?
Yes | No

#### Jasmine Clark 133 Books | 23 Friends | 2 Groups

#### Eat Pray Awesome



"If a more likable writer than Gilbert is currently in print, I haven't found him or her...Gilbert's prose is fueled by a mix of intelligence, wit and colloquial exuberance that is close to irresistible, and makes the reader only too glad to join the posse of friends and devotees who (more)

#### Fantastic



40 Mins ago

20 Mins Ago

"Gilbert's journey is full of mystical dreams, visions and uncanny coincidences...Yet for every ounce of self-absorption her classical







"The Road is such an ominous book but so compelling."

Update status

At a glance:

255 Total items: 55 Read: 75 Unread: Reading: 15 Reviews: 65 5-Stars:

Manage My People





Dashboard Catalog Library People Groups

Search by title, author, tag, ISBN, etc.

Filter: Genre | Tags | Time | Rating | Status | Other

List

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255 items

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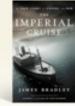
Edit this Collection See Collection as list ELIZABETH GILBERT

Expanded

Eat, Pray Love Elizabeth Gilbert



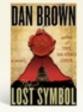
The Divine Conspiracy Dallas Willard



Sort:

Notebook Conversations eReader

The Imperial Cruise James Bradley



The Lost Symbol Dan Brown

8-12

I Want to Read



Angels & Demons Dan Brown



How to Mess Up Your Child's Life Oliva and Kurt Bruner



The Weight of Silence Heather Gundenkauf



The Werewolf's Guide to Life... Rich Duncan & Bob Powers

55-59

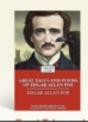
My Reading Group

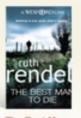
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what role for libraries?



### UPDATE: Kindles, iPads, and Other eBook Readers Available for Loan from Public and Academic Libraries

A couple of months ago we compiled our first post on ResourceShelf with libraries (both academic and public) lending iPads, Kindles, Sony eBook Readers, and other electronic devices. We've collected even more since that first post so it's time for an update.

#### **Public Libraries**

+ West Vancouver (Canada) Public Library

First library in Canada to loan Kindles. They have five available and each one is loaded with fifty titles.

+ Mentor Public Library in Ohio

Two iPads and six Nooks are available.

We first posted this item here.

+ San Diego Public Library

Sony Readers provided by Sony are available.

+ Manitiwoc, Wisconsin

Sony Reader, Amazon Kindle, Barnes & Noble Nook Loaded with approx. 75 titles.

More Additions to the Public Library Collection

+ River Forest Public Library, IL

Sony Reader and Kindles



# MIT's Lewis Music Library Begins Lending iPad (with content and apps) to Students, Faculty, Staff

MIT's Lewis Music Library began lending an iPad for faculty, students, and staff use in the past couple of weeks according to a post from MIT Libraries News.

At MIT, the iPad (they have one to lend) has a loan period of 4 hours. You can NOT renew the iPad and there is no overnight lending. All of this is done on a first come, first served basis.

What about software? Get ready and don't forget that this is a loan from the music library.

The iPad comes with more than 85 music apps. But, that's not all. It also contains a library with more than 3,000 tracks and music videos from CD's and DVD's that have been recently received by the Lewis Music Library.

That's quite a package especially if you want to see how the iPad deals with multimedia. It's also interesting that content and relevant software is included.

Although, MIT was the first library we have head of loaning iPads they are not the only ones. We've learned that North Carolina State University and Fairleigh Dickinson University are also lending iPads.



Lewis Music Library at MIT

but what about all those frustrating ebooks we have that are difficult or impossible to read on mobile devices?

#### Engineering & Science E-Books

- Knovel (engineering and science) info video
- Books 24x7 (technical books in IT and engineering) info
- O'Reilly Books / Safari Technical Books Online info
- CRCnetBASE (engineering and science) info
  - CHEMLIBnetBASE info
  - CHEMnetBase info
  - CivilENGINEERINGnetBASE info
  - CLEANTECHnetBASE info
  - ElecticalENGINEERINGnetBASE info
  - ENGnetBASE info
  - MATERIALSnetBASE info
  - MATHnetBASE info
  - MechanicalENGINEERINGnetBASE info
  - NANOnetBASE info
  - POLYMERnetBASE info
  - TELECOMMUNICATIONSnetBASE info
- Medical Books [StatRef Electronic Medical Library] info
- Online Technical Reports at MIT
- National Academies Press (Reports issued by National Academies)
- EcoSal Online info
- Food Chemical Codex
- NCBI Bookshelf info
- NetLibrary info
- MIT Theses in DSpace info
- Springer Ebooks info
  - · Biomedical and Life Sciences
  - · Chemistry and Materials
  - Computer Science
  - Earth and Environmental Science
  - Engineering
  - Mathematics and Statistics
  - Medicine
  - Physics and Astronomy
  - · Professional and Applied Computing

#### **Humanities E-Books**

- Past Masters info
- Early English Books Online (EEBO) info
- Early English Books Online (EEBO) Text Creation Partnership info
- Literature Online (LION) info
- Gallica info
- Oxford Reference Online info
- Brown University Women Writers Project info
- College Blue Book -- 33rd edition -- 33rd edition info
- Women Writers Project info
- NetLibrary info
- MIT Theses in DSpace info
- Springer Ebooks info
  - Behavioral Science
  - · Humanities, Social Sciences and Law

#### Management & Social sciences E-Books

- SourceOECD info
- · RAND Corporation reports
- NetLibrary info
- MIT Theses in DSpace info
- Springer Ebooks info
  - Business and Economics
  - · Humanities, Social Sciences and Law
- World Bank E-Library

#### Architecture & Planning

- NetLibrary info
- MIT Theses in DSpace info
- Springer Ebooks info
  - Architecture and Design
- World Bank E-Library

#### General collections/mega-sites

- Online Books Page
- Internet Public Library Books
- · Metronet E-Book Project
- Universal Library



Publishers still must be convinced that econtent in libraries is not a threat.

## Publisher suggestion

"I personally would like to see a vibrant rental channel for ebooks. And I'd like to see both libraries and booksellers participating, perhaps with release dates delayed just as DVDs today follow cinematic release."

# Libraries and ebooks: tough issues that it's time to debate

- Martin Taylor, New Zealand Digital Pubishing Forum

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knowing about this

Skin Caro Socrati

#### ANDY IHNATKO







### A movement toward reasonable DRM management?

Comments :

July 25, 2010

#### By ANDY IHNATKO ai@andyi.com

"Why do I have to buy three copies of this movie, just to make sure I can watch it wherever I want?" I complain (to my goldfish).

Click and Drag have heard this before. I buy a movie on Bluray and it includes a digital copy via iTunes. So: I can watch it on my Blu-ray player and I can watch it on my iPad, but I can't put it on my Android phone and I can't stream it to the PC I've got in the living room that's plugged into an HDTV and runs Boxee.

#### » Click to enlarge image



Getting a movie you've purchased at the iTunes Store to play on all of your media devices might get a

"At some point," I continue, "a computer at the iTunes Store verified that I've already paid for this movie once, and allowed me to download this second copy. Couldn't that computer talk to the computers that all of my other media devices trust, and tell them 'It's cool ... Andy already bought this. Just let him have another copy'!?!"

Historically, the digital content



## a new standard for DRM and content-encoding

UltraViolet would allow users to amass a personal, online virtual library, where they can both share it with others, and view it on any device that supports the format.

"A movement toward reasonable DRM management?

- Andy Ihnatko, Chicago Sun-Times, July 25, 2010

## What libraries can do

- Get ereaders for your staff to experiment with.
- Continue to experiment with loaning ebooks and ereaders to your users.
- Become experts who can advise your readers about reading hardware and software.
- Negotiate with publishers to make borrowing viable in this new world.
- Keep current with developments in this area.

#### TeleRead: Bring the E-Books Home News & views on e-books, libraries, publishing and related topics Catalog of Free e-books Home Info and FAQ 1992-2005 TeleRead info Advertise Share news tips PDA, cell, blind, etc. July 26th, 2010 Contact info and FAOs TeleRead's DRM primer Write for us DMCA court case optimism may be premature, but fair use is Follow Editor Paul Biba via Twitter still very important RSS for Bloglines, others Subscribe by e-mail By Chris Meadows Indie book bloggers In a follow-up to last night's story on the court case with

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implications for the DMCA, lawyer Nilay Patel takes a look at the

Tonice

# Resources and Readings

http://hennigweb.com/presentations/hhl3/resources.html



Nicole Hennig @nic221

hennig@mit.edu