

Publishing and the Open Web Platform

Ivan Herman, W3C

W3C Track, WWW 2014 Conference

2014-4-9, Seoul, Korea

These slides are available on-line:

<http://www.w3.org/2014/Talks/0409-Seoul-IH/>



20 years ago the Web created new experiences for publishing

▶ Reading

- Hyperlinks (i.e., non-linear reading)

▶ Publishing

- Global distribution
- Anyone could publish (low barriers)
- New advertising opportunities (search engines, pop-ups)

▶ But...

- impoverished style, layout of early Web no match for print
- low resolution screens, slow processors



Trends of past decade have further transformed reading, publishing

- ▶ Internet everywhere
- ▶ Mobility
- ▶ Social
- ▶ Customization
- ▶ Cloud
- ▶ Broadband
- ▶ Multi-function devices
- ▶ Much higher quality display, typesetting, speed



Many industries feeling the impact

- ▶ Mobile
- ▶ Television
- ▶ Automotive
- ▶ Health Care
- ▶ Gaming
- ▶ Digital signage
- ▶ Government



But publishing in particular

20% of all US Newspapers are digital

“After 79 years in print, Newsweek goes digital only”

Google Ad Revenue Now More Than U.S. Print Publications Combined

E-Books See Triple Digit Growth As Paper Book Sales Dive

Pew: Survey Finds Rising Reliance on Libraries as a Gateway to the Web

But publishing in particular

- ▶ Pew: “**News is becoming a shared social experience** as people exchange links and recommendations as a form of cultural currency in their social networks.”
- ▶ Global eBook report: “Major [US] trade publishers have reported a market share for **ebook revenues around the 30% mark [...]** **20% of the UK book market** was digital”
- ▶ The Bookseller: “In all of 2012, e-book **sales doubled their volume [...]** in the United Kingdom”
- ▶ Global eBook report: “**Ebooks have started to transform the entire ecosystem of publishing and reading.** By 2014, expect the entire value chain to be under scrutiny from all sides.”

That is because Publishing = Web

- ▶ Web is “intimately” tied to the intrinsic purpose of publishing
 - the Web’s impact on automotive, government, health care, etc., is secondary to their intrinsic purposes.



That is because Publishing = Web

- ▶ Publishing industry has leveraged the Web for 20 years
 - parts of industry have been early adopters
- ▶ Tomorrow they will be fully part of the Web
 - ebooks, magazines, journals picking up the technology *today*



The Web has become an Open Web Platform

- Web pages are more attractive, interactive and intelligent
- HTML5, SVG, or CSS provides cross-browser and cross-device interoperability
- Video, audio, etc., are a first-class citizens
- Data integration has been simplified
- It has tools for social networking (privacy, security, identity)
- Is the most interoperable platform in the industry

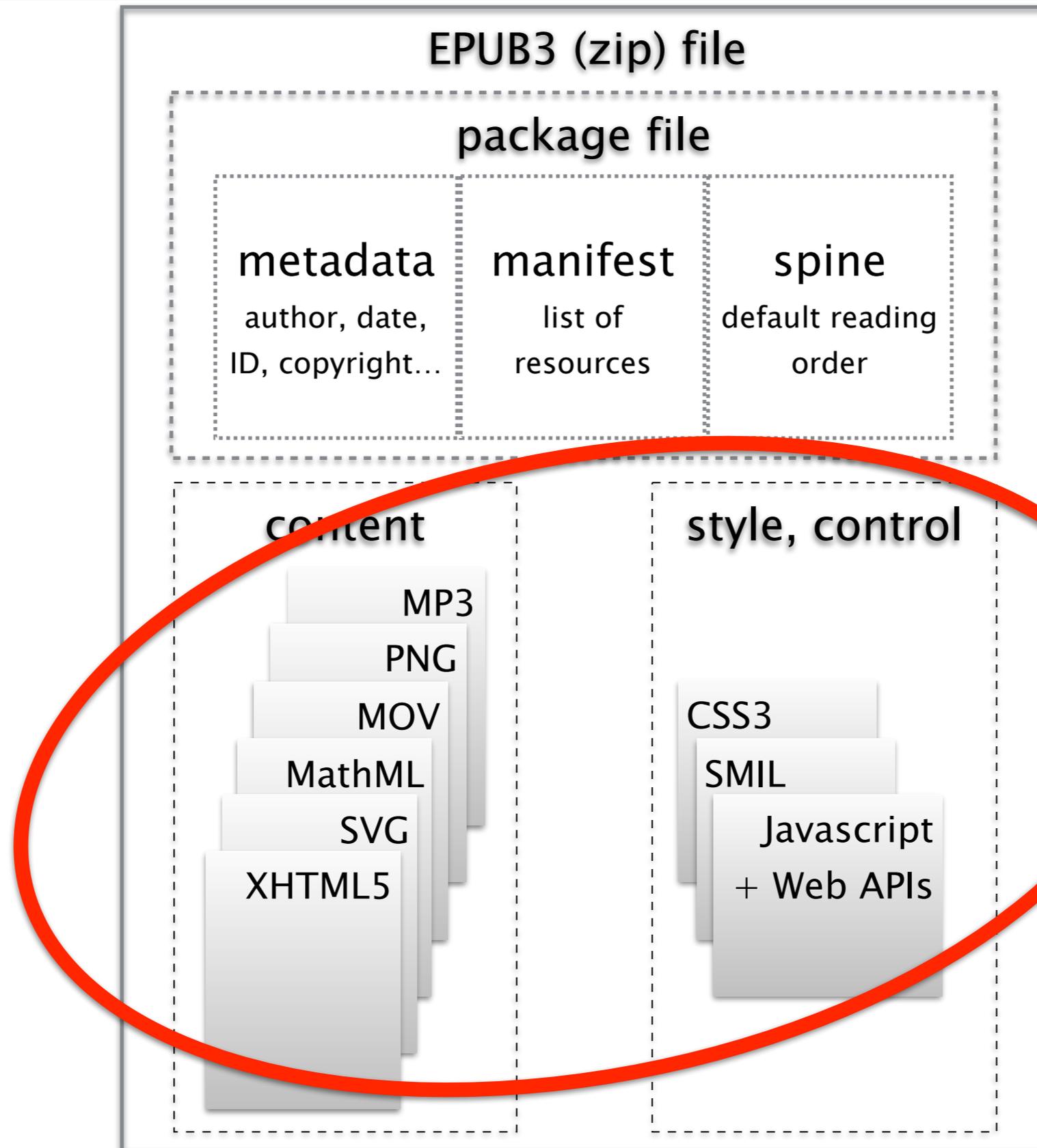


Example for what “Ebooks picking up the technology *today*” means: EPUB3



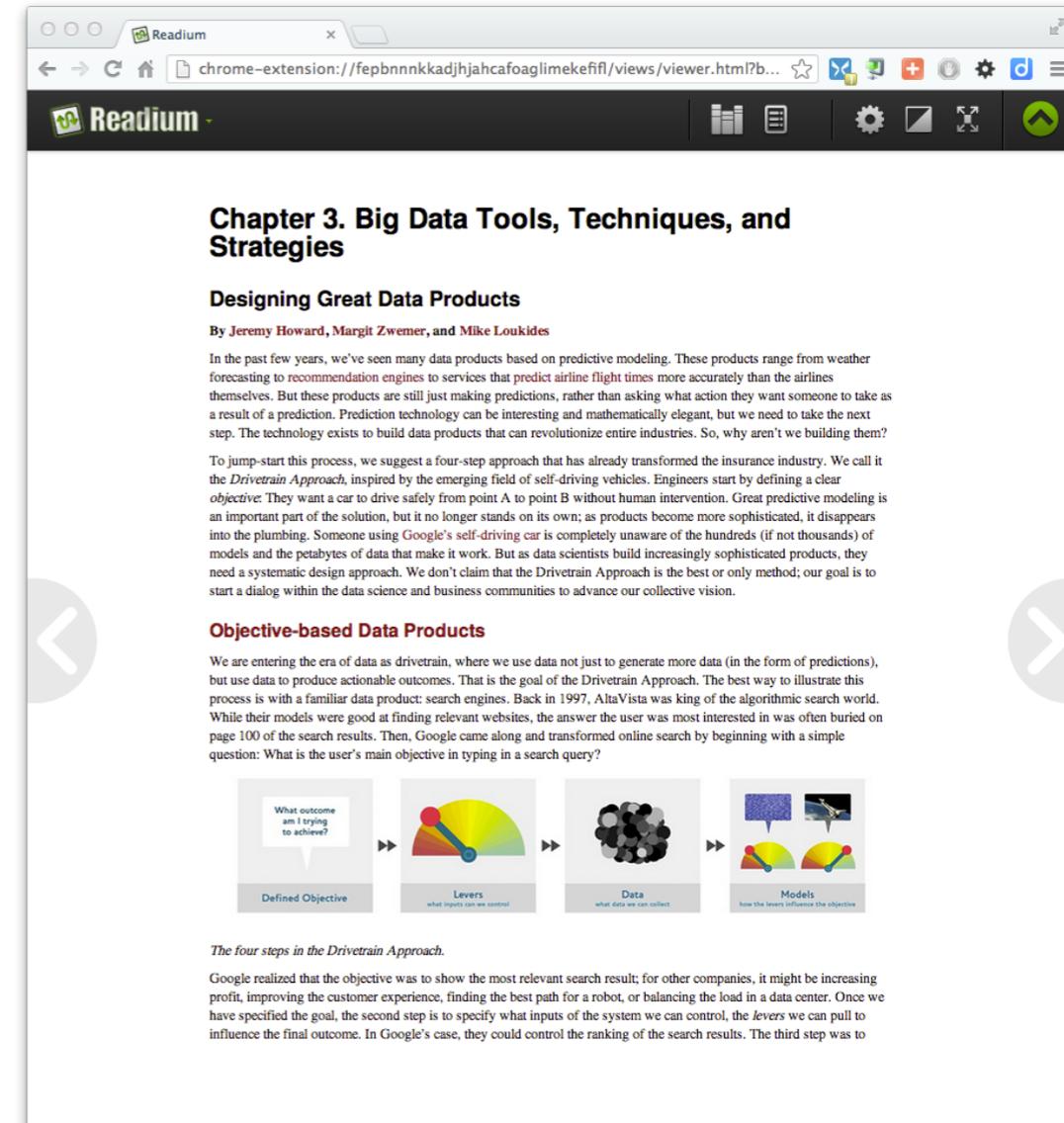
- ▶ EPUB3 is the standard for Digital Books
- ▶ Defined by the International Digital Publishing Forum (IDPF)
- ▶ These days virtually all digital books (except for Amazon's) rely on EPUB

Rough EPUB3 structure



In other words...

- ▶ *An EPUB file is a packaged Web site*
- ▶ *An EPUB reader is “just” a very specialized browser!*



Chapter 3. Big Data Tools, Techniques, and Strategies

Designing Great Data Products
By Jeremy Howard, Margit Zwemer, and Mike Loukides

In the past few years, we've seen many data products based on predictive modeling. These products range from weather forecasting to recommendation engines to services that predict airline flight times more accurately than the airlines themselves. But these products are still just making predictions, rather than asking what action they want someone to take as a result of a prediction. Prediction technology can be interesting and mathematically elegant, but we need to take the next step. The technology exists to build data products that can revolutionize entire industries. So, why aren't we building them?

To jump-start this process, we suggest a four-step approach that has already transformed the insurance industry. We call it the *Drivetrain Approach*, inspired by the emerging field of self-driving vehicles. Engineers start by defining a clear objective: They want a car to drive safely from point A to point B without human intervention. Great predictive modeling is an important part of the solution, but it no longer stands on its own; as products become more sophisticated, it disappears into the plumbing. Someone using Google's self-driving car is completely unaware of the hundreds (if not thousands) of models and the petabytes of data that make it work. But as data scientists build increasingly sophisticated products, they need a systematic design approach. We don't claim that the Drivetrain Approach is the best or only method; our goal is to start a dialog within the data science and business communities to advance our collective vision.

Objective-based Data Products

We are entering the era of data as drivetrain, where we use data not just to generate more data (in the form of predictions), but use data to produce actionable outcomes. That is the goal of the Drivetrain Approach. The best way to illustrate this process is with a familiar data product: search engines. Back in 1997, AltaVista was king of the algorithmic search world. While their models were good at finding relevant websites, the answer the user was most interested in was often buried on page 100 of the search results. Then, Google came along and transformed online search by beginning with a simple question: What is the user's main objective in typing in a search query?



The four steps in the Drivetrain Approach.

Google realized that the objective was to show the most relevant search result; for other companies, it might be increasing profit, improving the customer experience, finding the best path for a robot, or balancing the load in a data center. Once we have specified the goal, the second step is to specify what inputs of the system we can control, the levers we can pull to influence the final outcome. In Google's case, they could control the ranking of the search results. The third step was to

Examples for the Open Web Platform influencing publishing



- ▶ EPUB 3 has picked up on many of the OWP features
 - uses HTML5, i.e., includes audio and video as first class objects
 - SVG and Canvas comes to the fore
 - CSS 3 instead of older versions of CSS
 - (limited) scripting
 - MathML
- ▶ Magazine and journal publications on-line are at the forefront of OWP usage
- ▶ The “back-end”, production side is looking at OWP to simplify the author-to-(e)book workflow

Multimedia in News

The New York Times

1155   



Snow Fall

The Avalanche at Tunnel Creek

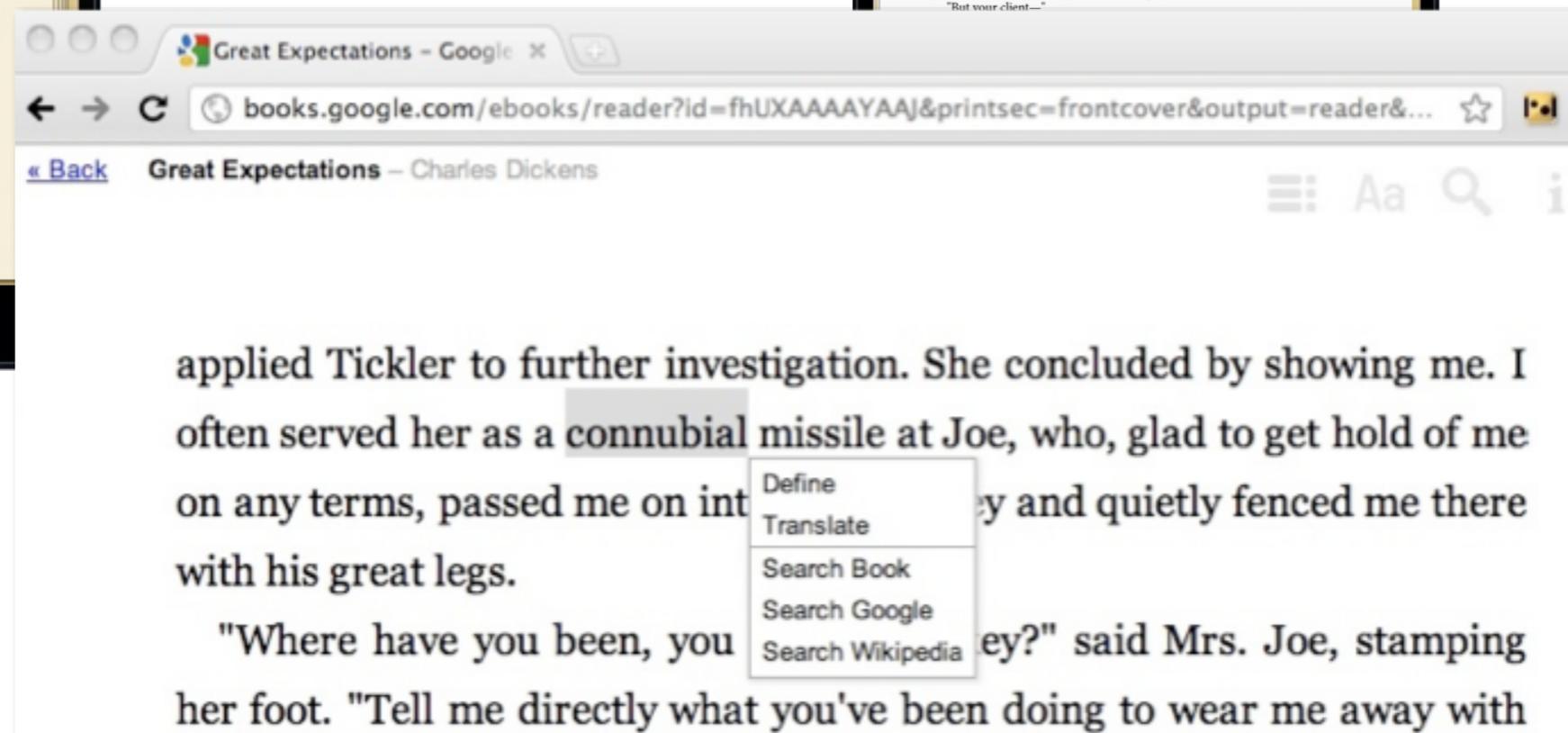
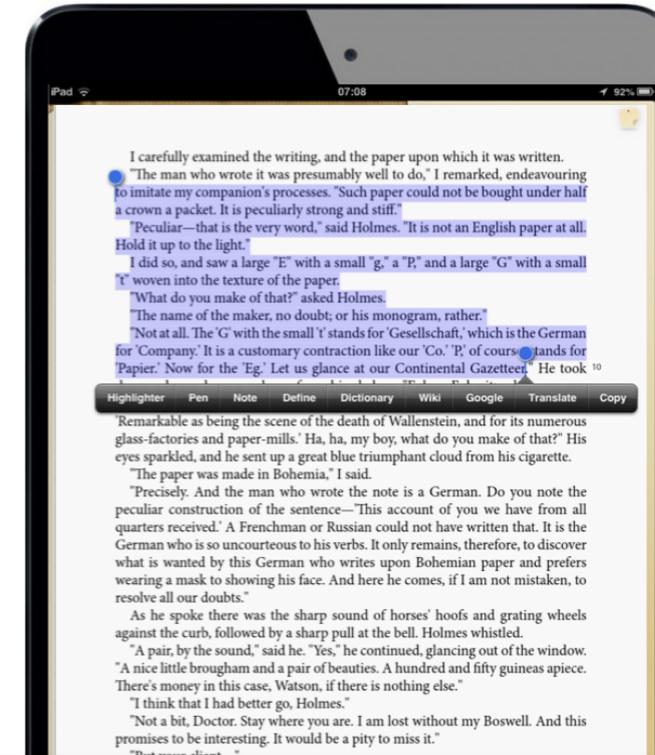
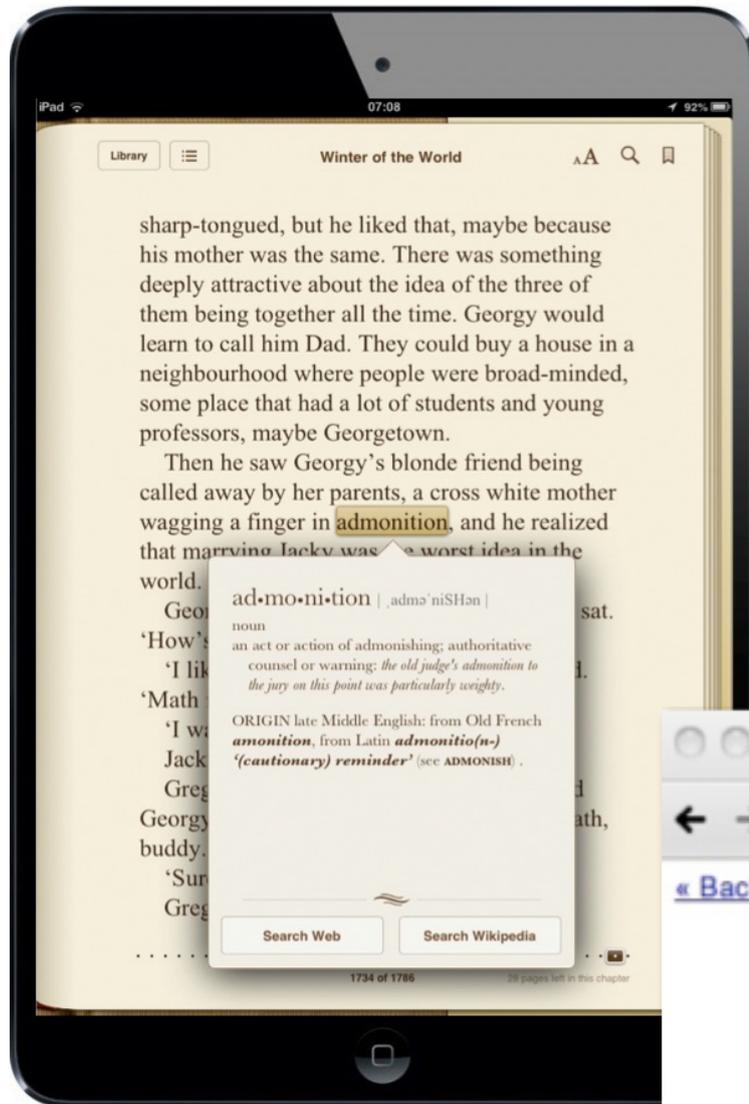
By JOHN BRANCH

The snow burst through the trees with no warning but a last-second whoosh of sound, a two-story wall of white and Chris Rudolph's piercing cry: "Avalanche! Elyse!"

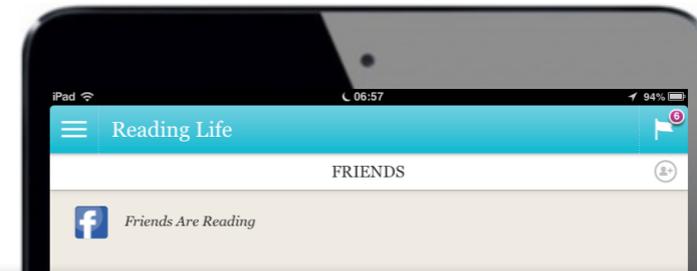
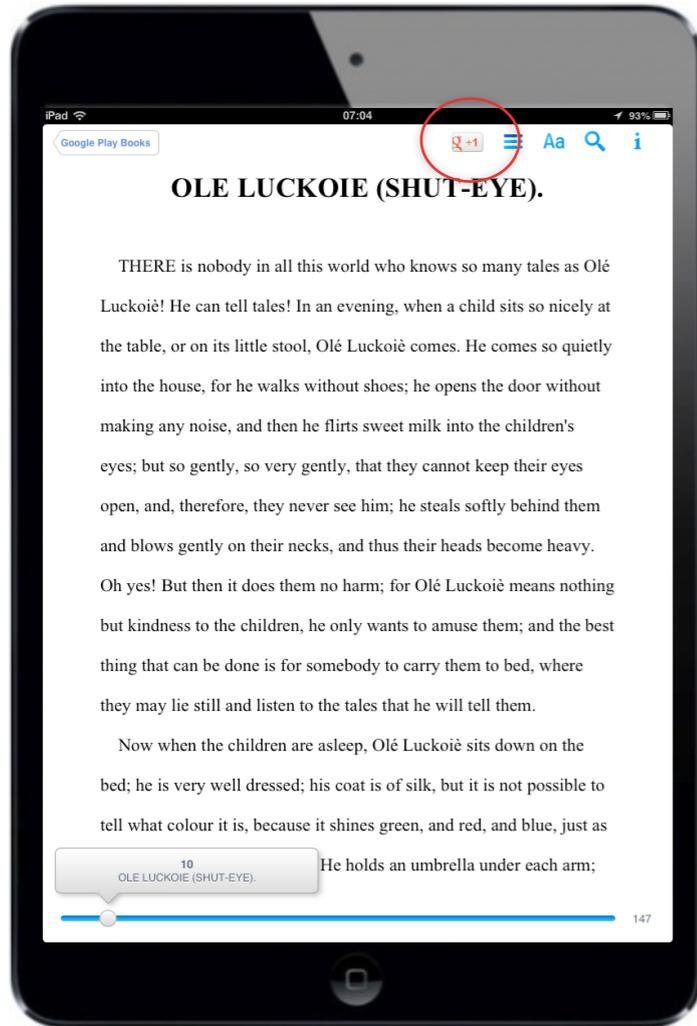
The very thing the 16 skiers and snowboarders had sought — fresh, soft snow — instantly became the enemy. Somewhere above, a pristine meadow cracked in the shape of a lightning bolt, slicing a slab nearly 200 feet across and 3 feet deep. Gravity did the rest.

Snow shattered and spilled down the slope. Within seconds, the avalanche was the size of

Third-party service integration



Social becoming part of reading



goodreads

Email address Password Sign in

Remember me Forgot it?

New here? Create a free account!

Name

Email Address

Password

Sign up

By clicking "Sign up" I agree to the Goodreads Terms of Service and confirm that I am at least 13 years old.

or sign in using facebook Twitter Google

Deciding what to read next?
You're in the right place. Tell us what titles or genres you've enjoyed in the past, and we'll give you surprisingly insightful recommendations.

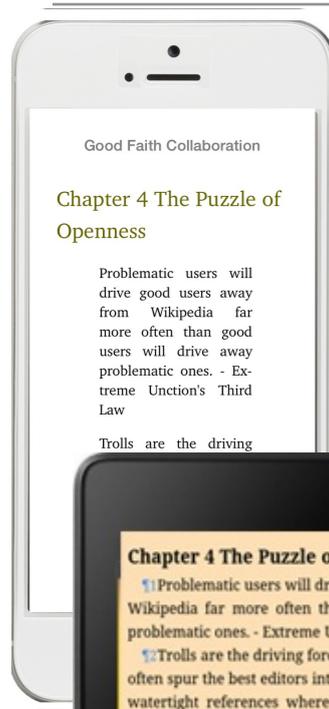
What are your friends reading?
Chances are your friends are discussing their favorite (and least favorite) books on Goodreads. Want to learn more? Take the tour.

Readers online now

Love lists?
Best Books of the 20th Century
4,920 books | 33,199 voters
Best for Book Clubs
2,821 books | 7,755 voters
Best Crime & Mystery Books

What will you discover?
Because Shomeret liked...
Animals in Translation, Temple Grandin, Some We Love, Some We Hate, Some We Eat
She discovered:
Next of Kin
Psychology, Animals, Science, Nature

And run on different devices...

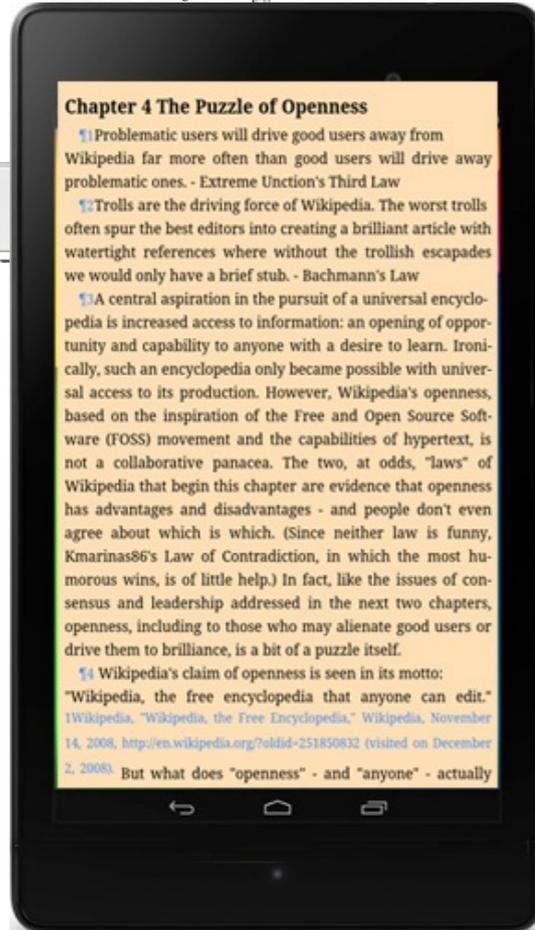


Good Faith Collaboration

Chapter 4 The Puzzle of Openness

Problematic users will drive good users away from Wikipedia far more often than good users will drive away problematic ones. - Extreme Unction's Third Law

Trolls are the driving



Chapter 4 The Puzzle of Openness

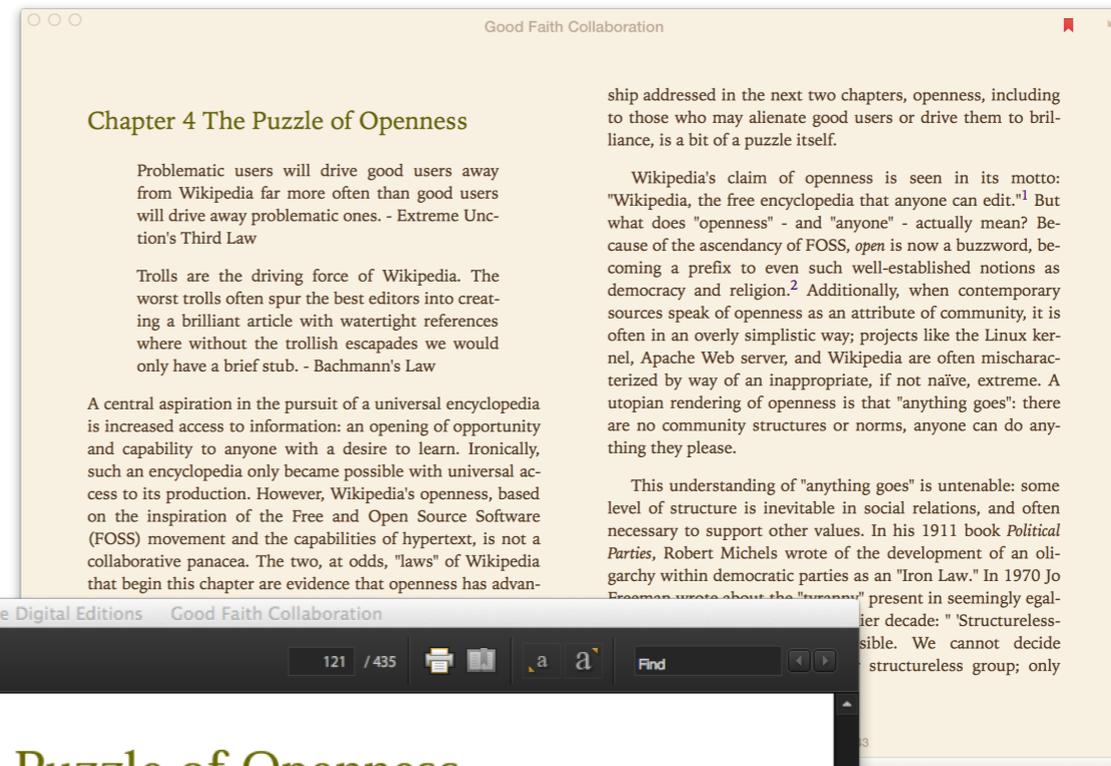
1 Problematic users will drive good users away from Wikipedia far more often than good users will drive away problematic ones. - Extreme Unction's Third Law

2 Trolls are the driving force of Wikipedia. The worst trolls often spur the best editors into creating a brilliant article with watertight references where without the trollish escapades we would only have a brief stub. - Bachmann's Law

3 A central aspiration in the pursuit of a universal encyclopedia is increased access to information: an opening of opportunity and capability to anyone with a desire to learn. Ironically, such an encyclopedia only became possible with universal access to its production. However, Wikipedia's openness, based on the inspiration of the Free and Open Source Software (FOSS) movement and the capabilities of hypertext, is not a collaborative panacea. The two, at odds, "laws" of Wikipedia that begin this chapter are evidence that openness has advantages and disadvantages - and people don't even agree about which is which. (Since neither law is funny, Kmarinas86's Law of Contradiction, in which the most humorous wins, is of little help.) In fact, like the issues of consensus and leadership addressed in the next two chapters, openness, including to those who may alienate good users or drive them to brilliance, is a bit of a puzzle itself.

4 Wikipedia's claim of openness is seen in its motto: "Wikipedia, the free encyclopedia that anyone can edit."

1 Wikipedia, "Wikipedia, the Free Encyclopedia," Wikipedia, November 14, 2008, <http://en.wikipedia.org/?oldid=251850832> (visited on December 2, 2008). But what does "openness" - and "anyone" - actually



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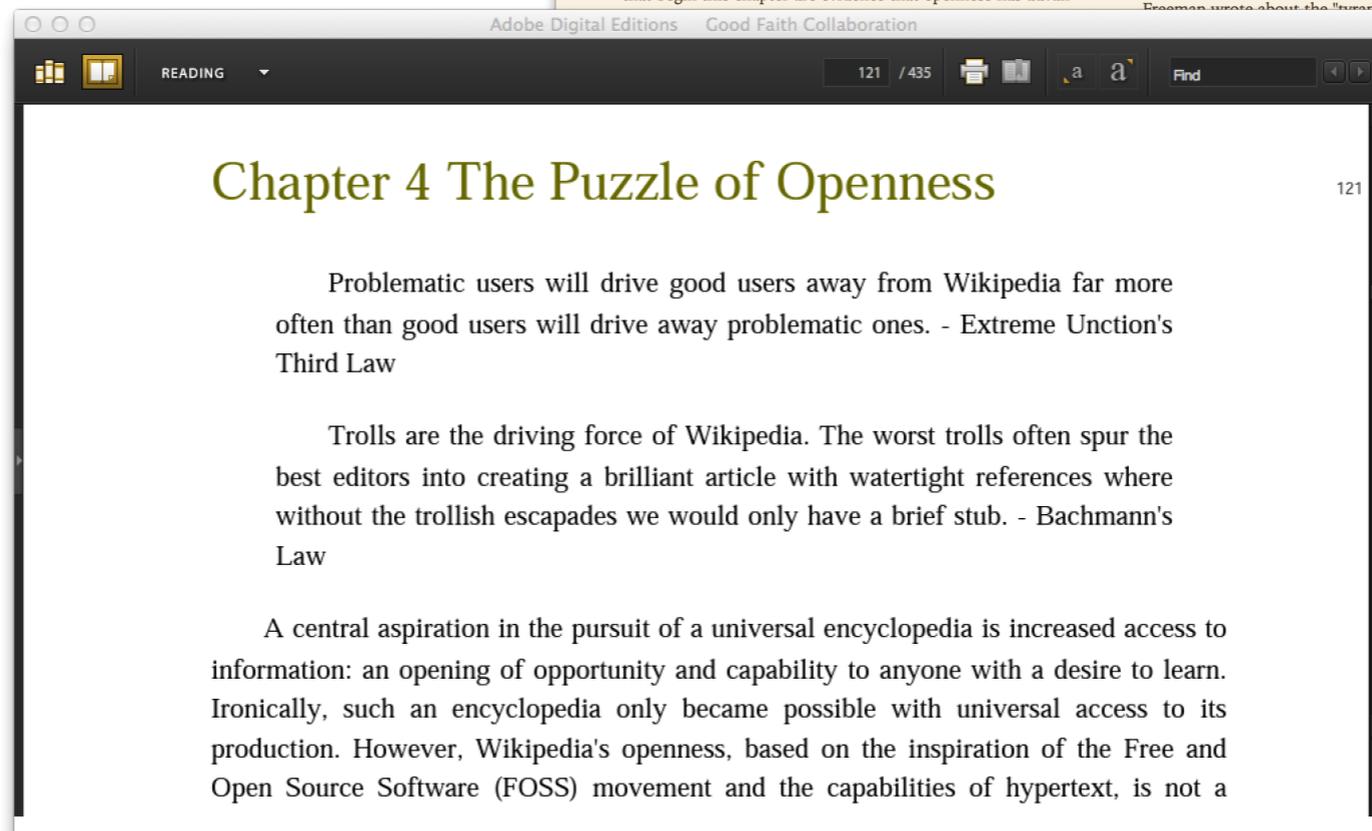
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Wikipedia's claim of openness is seen in its motto: "Wikipedia, the free encyclopedia that anyone can edit."¹ But what does "openness" - and "anyone" - actually mean? Because of the ascendancy of FOSS, *open* is now a buzzword, becoming a prefix to even such well-established notions as democracy and religion.² Additionally, when contemporary sources speak of openness as an attribute of community, it is often in an overly simplistic way; projects like the Linux kernel, Apache Web server, and Wikipedia are often mischaracterized by way of an inappropriate, if not naïve, extreme. A utopian rendering of openness is that "anything goes": there are no community structures or norms, anyone can do anything they please.

This understanding of "anything goes" is untenable: some level of structure is inevitable in social relations, and often necessary to support other values. In his 1911 book *Political Parties*, Robert Michels wrote of the development of an oligarchy within democratic parties as an "Iron Law." In 1970 Jo Freeman wrote about the "tyranny" present in seemingly egalitarian feminist groups of the earlier decade: "Structurelessness is organisationally impossible. We cannot decide whether to have a structured or structureless group; only

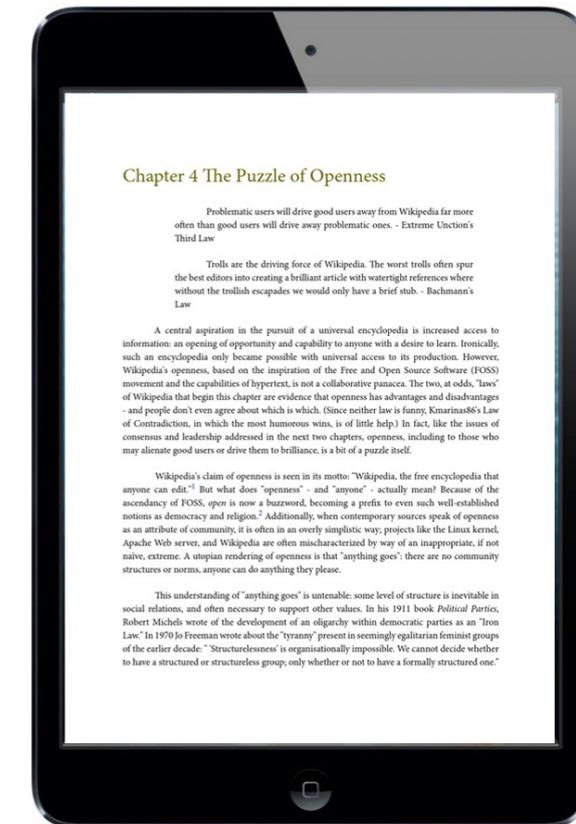


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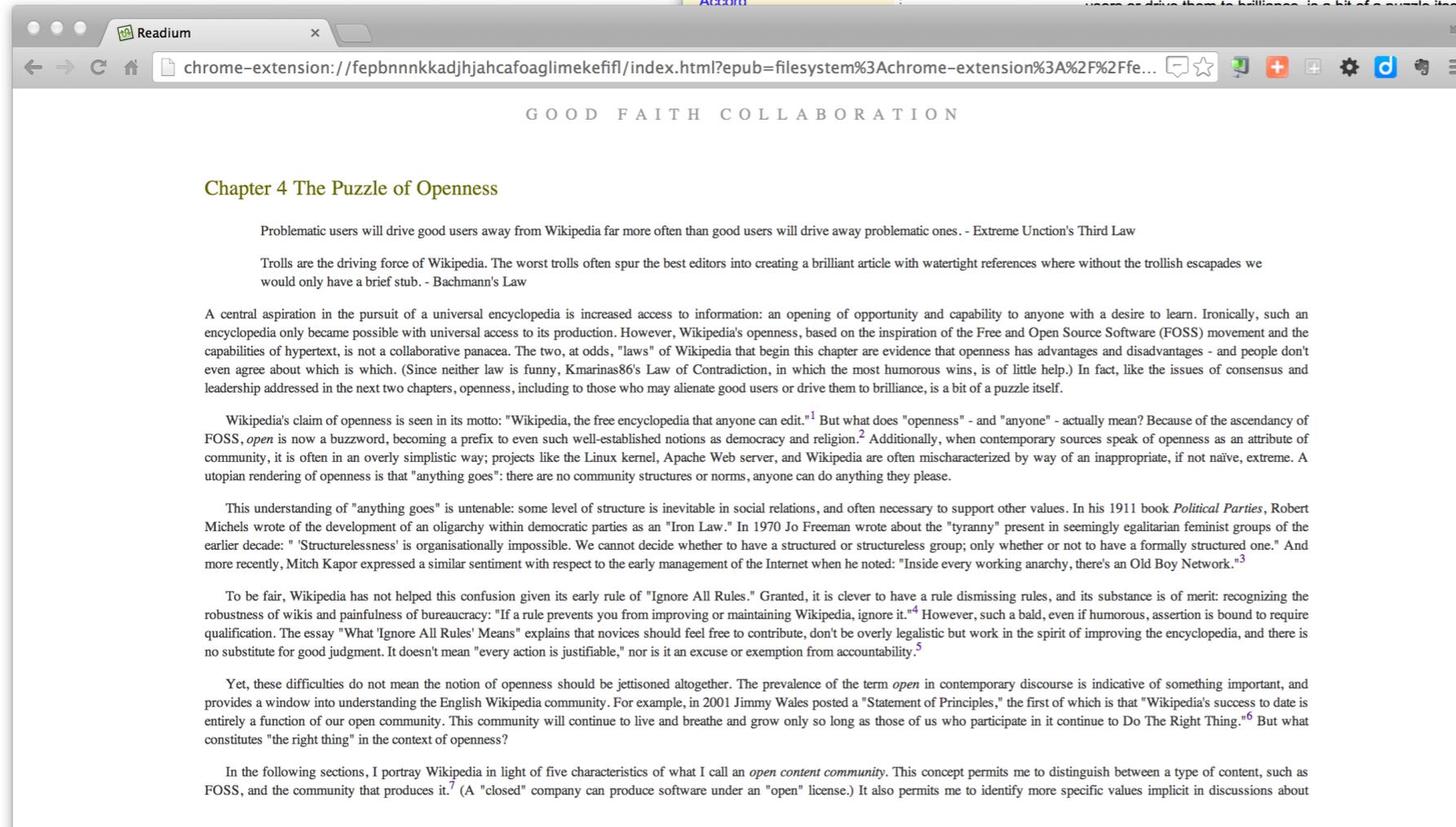
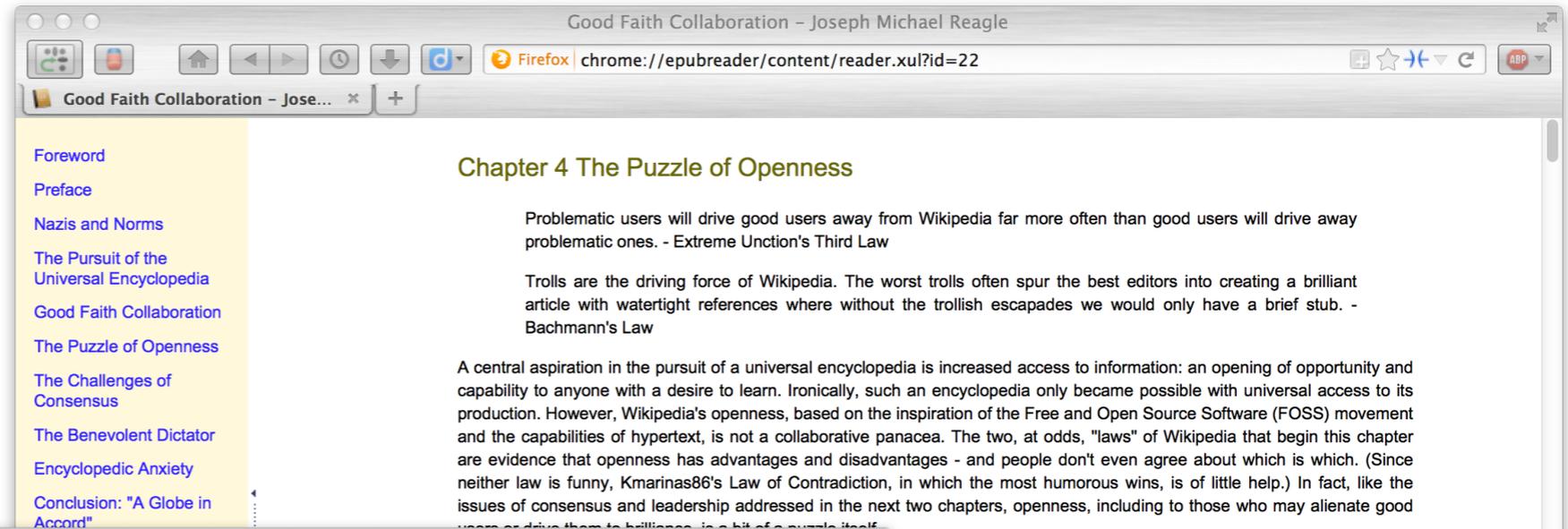
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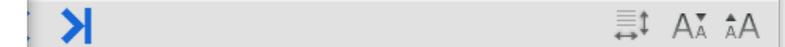
... or browser extensions



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Even its early rule of "Ignore All Rules." Granted, it is clever to have a rule dismissing rules, and its substance is of merit: recognizing the robustness of wikis and painfulness of bureaucracy: "If a rule prevents you from improving or maintaining Wikipedia, ignore it."⁴ However, such a bald, even if humorous, assertion is bound to require qualification. The essay "What 'Ignore All Rules' Means" explains that novices should feel free to contribute, don't be overly legalistic but work in the spirit of improving the encyclopedia, and there is no substitute for good judgment. It doesn't mean "every action is justifiable," nor is it an excuse or exemption from accountability.⁵



With high quality graphics



Webb will be the largest telescope ever placed in orbit. To get this huge telescope into space, it will have to be folded up inside the rocket that carries it from Earth. It will unfurl as it nears its destination, the mirror unfolding and the sunshield spreading like wings.

With its infrared vision, Webb will be able to see light from vast distances that has been stretched as it travels across the expanding fabric of space – a process known as “redshifting.”

This will enable scientists to see the light from the first galaxies to form in the early universe – the first flicker of stars that formed after the Big Bang.

Hubble has seen the adult, teenage and child galaxies of the universe, but Webb will see the cosmos’ toddlers and infants.

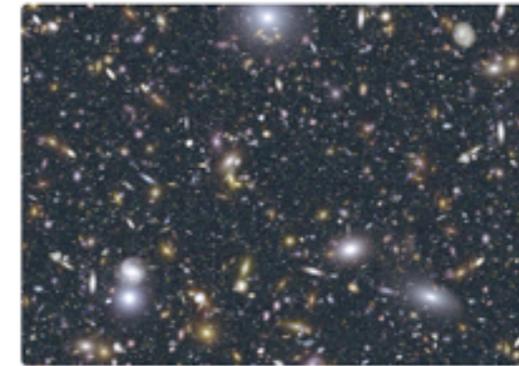


Webb’s infrared view will allow us to see through opaque clouds of gas and dust in our own galaxy to objects within, like newborn stars and dusty disks forming new solar systems, expanding and deepening our knowledge about how stars and planets develop.

And Webb’s instruments will be able to analyze the light from planets around other stars, allowing us to search for traces of water vapor that could indicate the presence of life-giving oceans. Webb’s vision will be able to detect features in the atmosphere of a planet that could show biological activity.

Webb’s launch is scheduled for 2018. And despite the high expectations for the telescope, the true excitement will come from the discoveries Webb makes that no one planned. When Webb takes its place among the stars, it will give astronomers an unprecedented tool to explore the cosmos. The greatest science it reveals may – as with Hubble – open avenues to questions astronomers have not yet thought to ask. The true power of Webb may be its potential for unbounded, unexpected discovery.

Gallery 5.7 Webb Science Targets



A simulated image gives a hint of what deep-field images will look like with Webb. Far-distant galaxies reveal new galactic populations.



Is everything perfect and fine?



No... ☹️

- ▶ Most of the publishing industry players have just been “users” of Web technologies
- ▶ Technology evolution has been driven by “traditional” Web browsing

The specific needs and priorities of the publishing industry may not be reflected in the evolution of the Web!

Some examples of the publishers' needs

- ▶ Should match current publishing practices
- ▶ Should leverage the Web at large
- ▶ Should provide more than just text in a file
- ▶ Should support diverse business and distribution models
- ▶ Should satisfy diverse usage communities and patterns

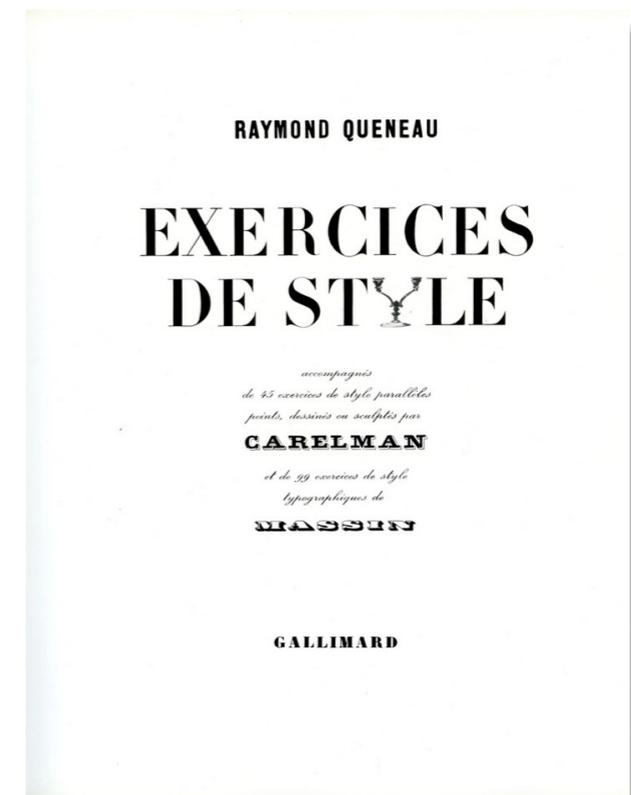


Screen shot: premiumfreebies.eu

Achieving these may still raise technical challenges!

“Should match current publishing practices”

- ▶ Screens, typography, high quality fonts, colors
- ▶ Advanced layout
 - multi-column
 - pagination, headers, footers
 - formatting in the world’s scripts
 - hyphenation
 - ...



Photos from “Iliazd”, Flickr

Example: controlled hyphenation

Chapter 47

WASHINGTON, D.C.

That same afternoon, Senator John Tyler Morgan, Democrat of Alabama, stood in the lobby of the Willard Hotel, yelling at the general manager.

"I have never been refused service in my life! That insufferable man in the elevator had the nerve to tell me he was holding the car for an *important personage*. He told me to get off that car and wait for another car!"

Senator Morgan was so angry that specks of saliva were speckling the lapels of the general manager's morning coat.

"Senator, I am so sorry for the inconvenience—"

"Not an *inconvenience*! It's a goddamned *insult*! Who the hell was he holding the elevator for, the goddamned president of the United States?"

As he roared this question, the great glass doors of the lobby flew open at the hands of two uniformed guards. In walked Theodore Roosevelt.

He took one look at John Tyler Morgan in mid rampage and the poor little cowering manager. Then Roosevelt thundered, "Unless my eyes de-

(bb) (pe)

Comp: pe

Merriam
Webster,

Cannot
break word

as above.

Must be broken

as:

in-con-ve-nience
can't break
this part.

Example: Missing CSS features

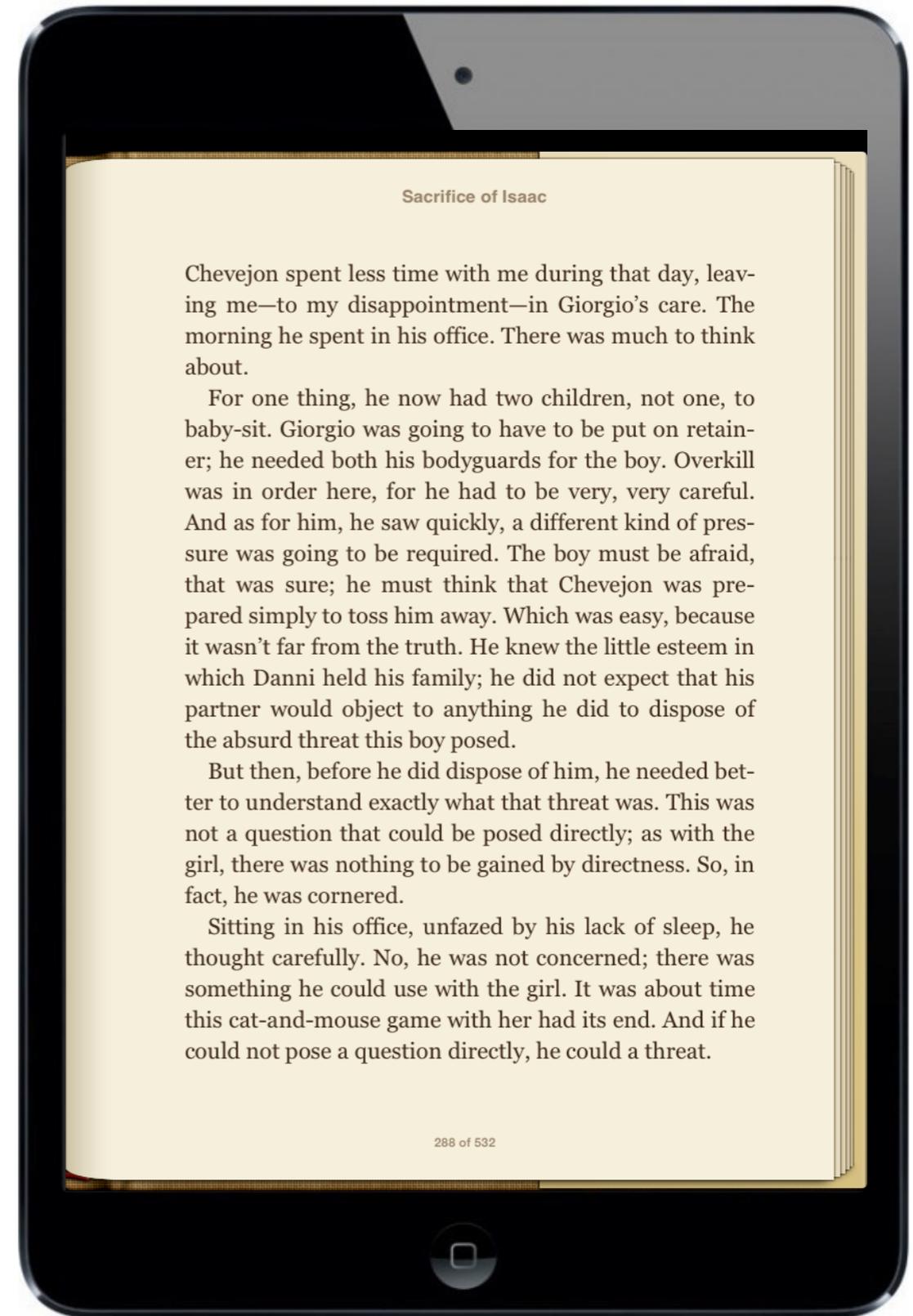
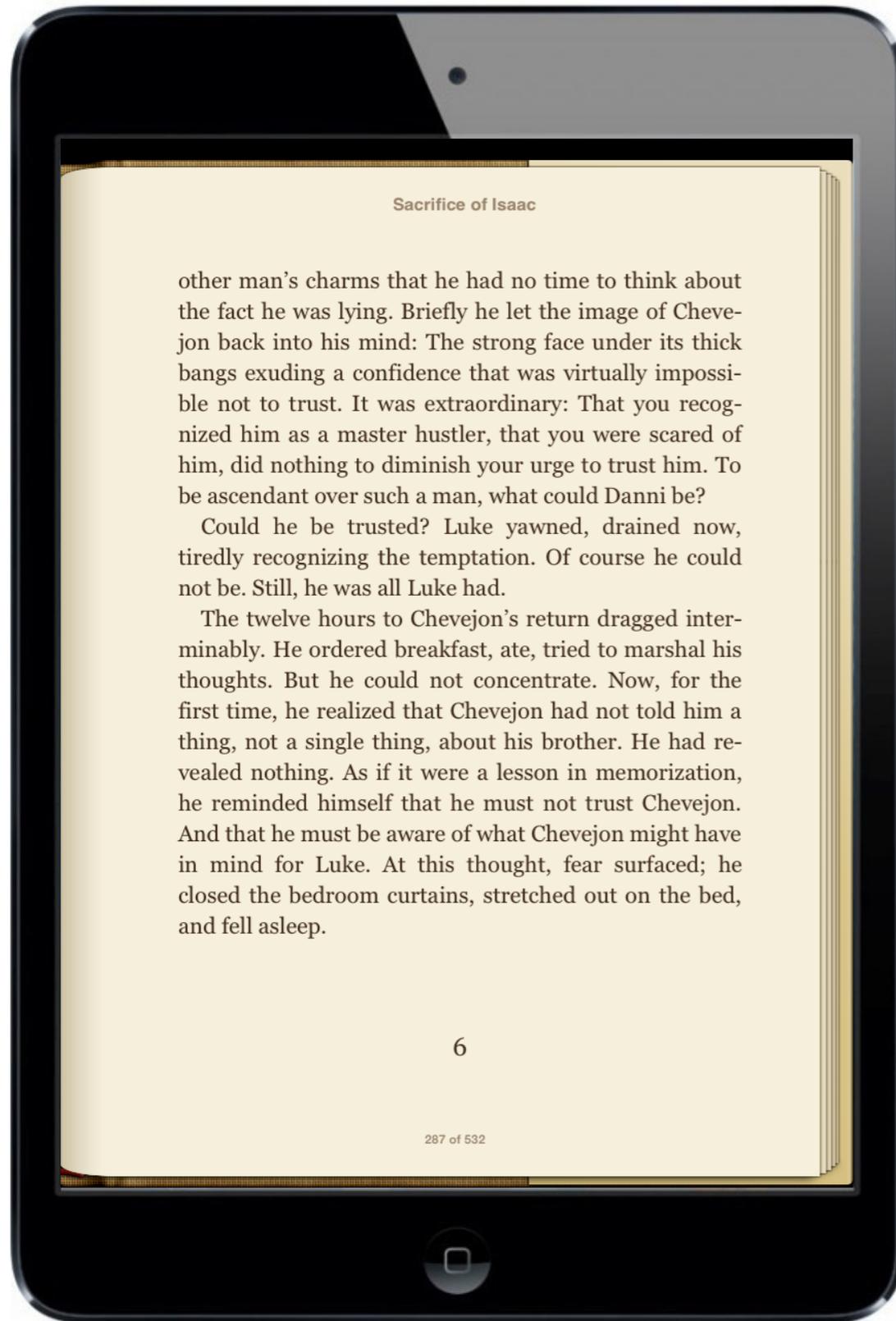
January 4

Pennsylvania city, each of her days could easily resemble the next—she has a lot of time, having been laid off from her job busing tables at a fast food restaurant. She has enough money to live on, as a recipient of government assistance for people with disabilities.

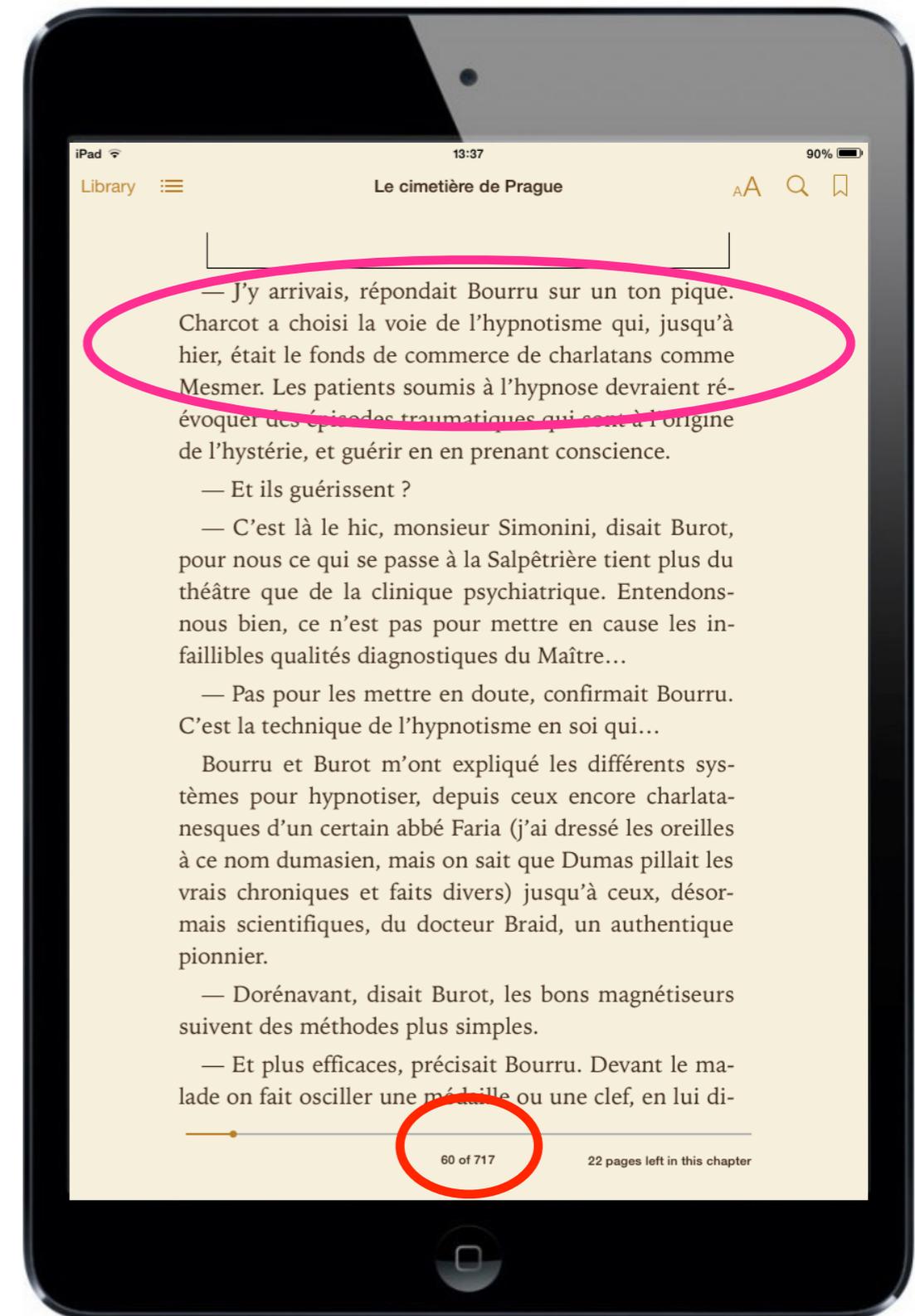
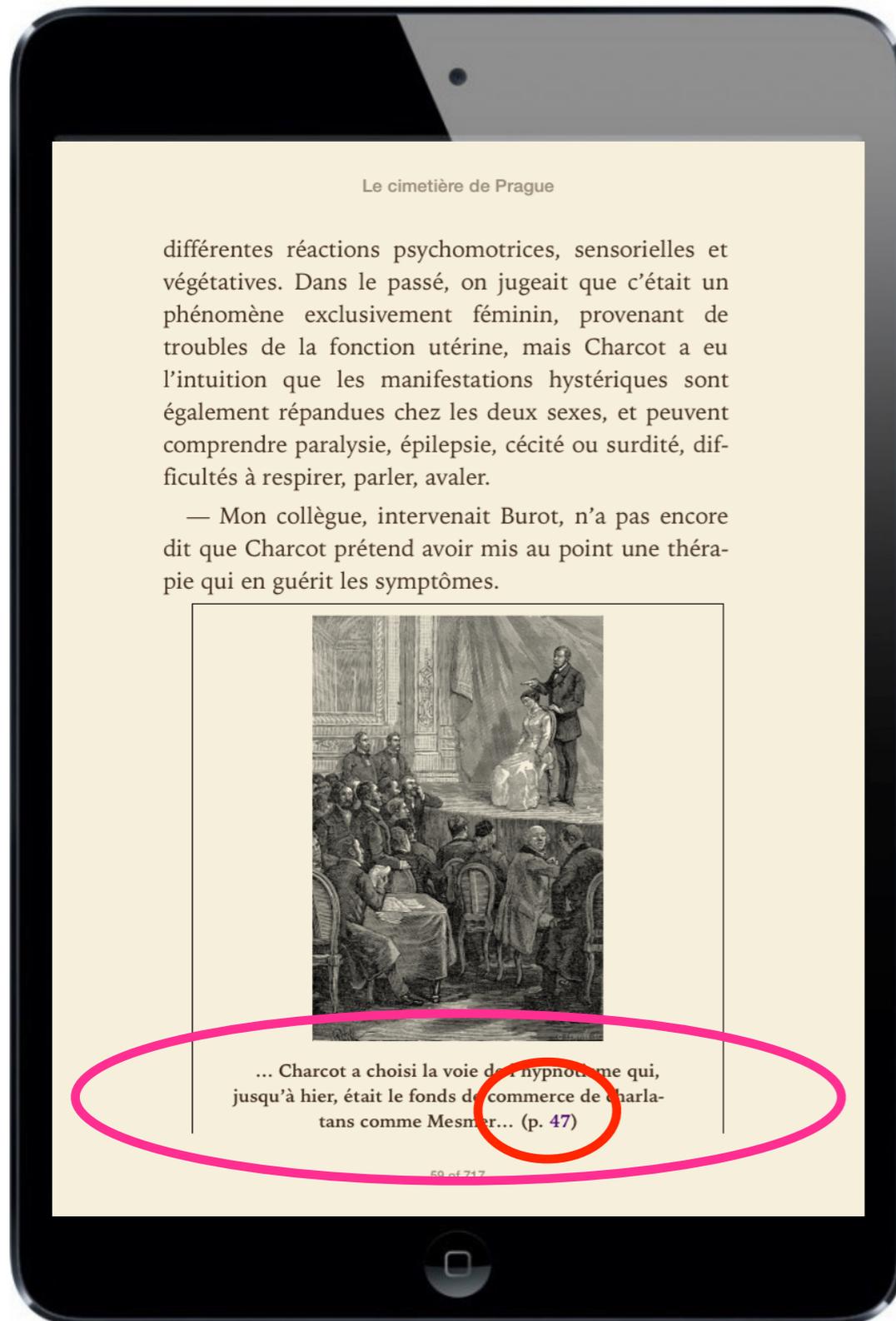
But Beth also has something else: ingenuity.

This trait isn't generally ascribed to people

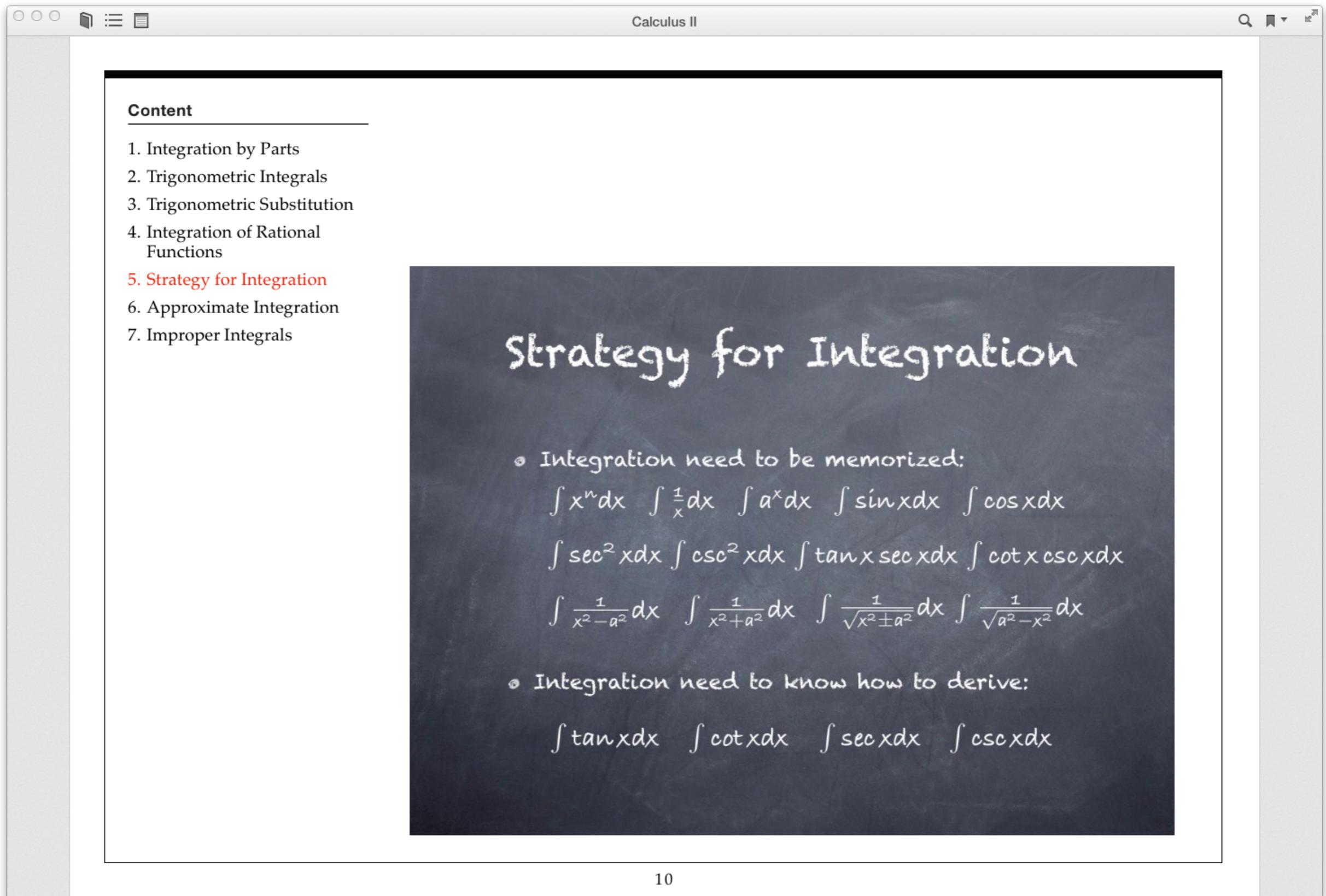
Example: better widow control



Example: internal references



Example: different fonts, mathematics, images, fixed layout



Calculus II

Content

1. Integration by Parts
2. Trigonometric Integrals
3. Trigonometric Substitution
4. Integration of Rational Functions
5. Strategy for Integration
6. Approximate Integration
7. Improper Integrals

Strategy for Integration

- Integration need to be memorized:
 $\int x^n dx$ $\int \frac{1}{x} dx$ $\int a^x dx$ $\int \sin x dx$ $\int \cos x dx$
 $\int \sec^2 x dx$ $\int \csc^2 x dx$ $\int \tan x \sec x dx$ $\int \cot x \csc x dx$
 $\int \frac{1}{x^2 - a^2} dx$ $\int \frac{1}{x^2 + a^2} dx$ $\int \frac{1}{\sqrt{x^2 \pm a^2}} dx$ $\int \frac{1}{\sqrt{a^2 - x^2}} dx$
- Integration need to know how to derive:
 $\int \tan x dx$ $\int \cot x dx$ $\int \sec x dx$ $\int \csc x dx$

10

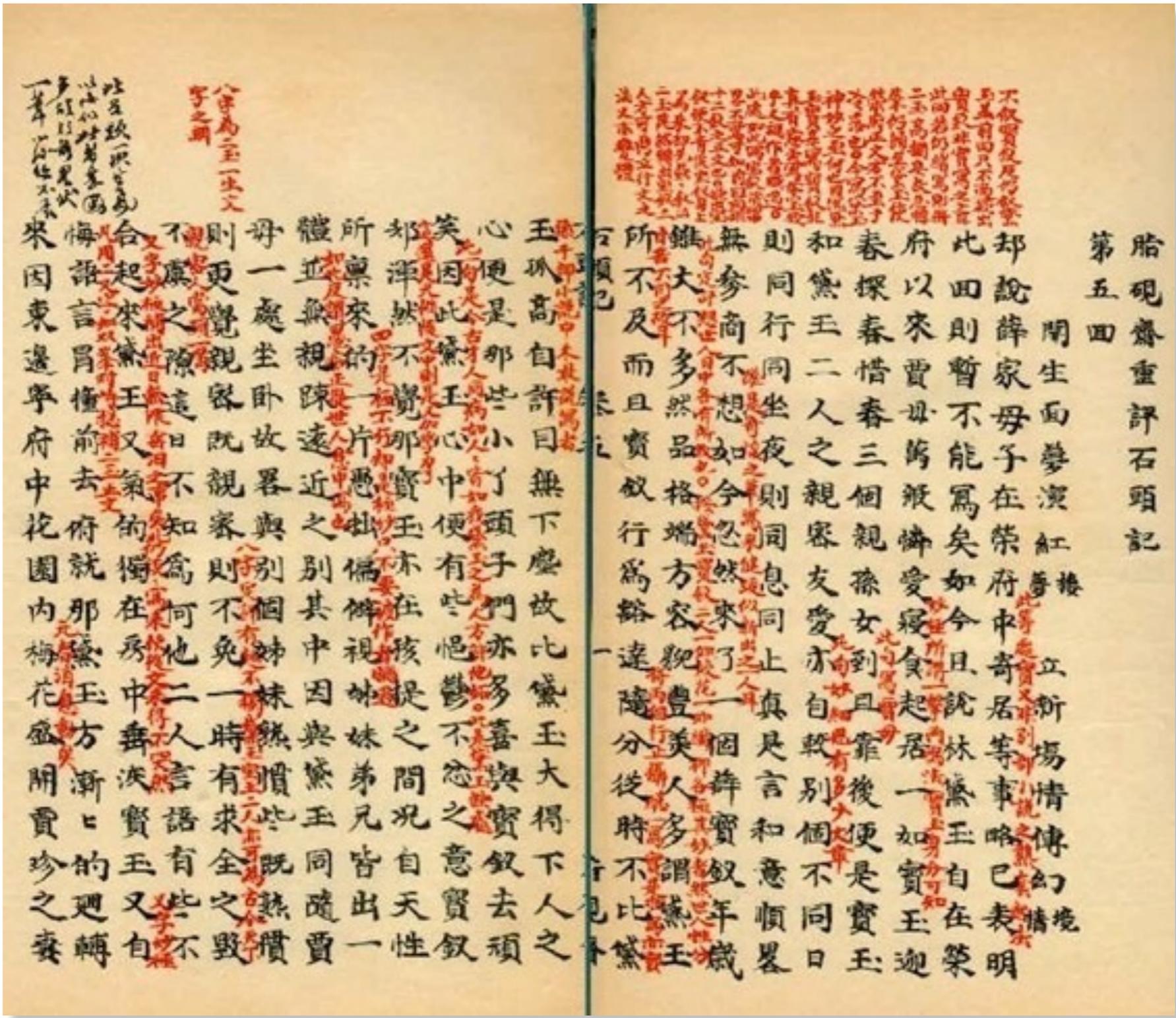
“Should leverage the Web at large”

- ▶ Foster sharing, bookmarks, annotations
- ▶ Data integration, book ids, catalogs, specialized search, discovery
- ▶ Connect to external services
- ▶ Facilitate document development (e.g., on-line reviewing, cooperation with editors, on-demand printing...)



From blog.infotrends.com

Annotation is an old tradition...



...sometimes a bit overdone

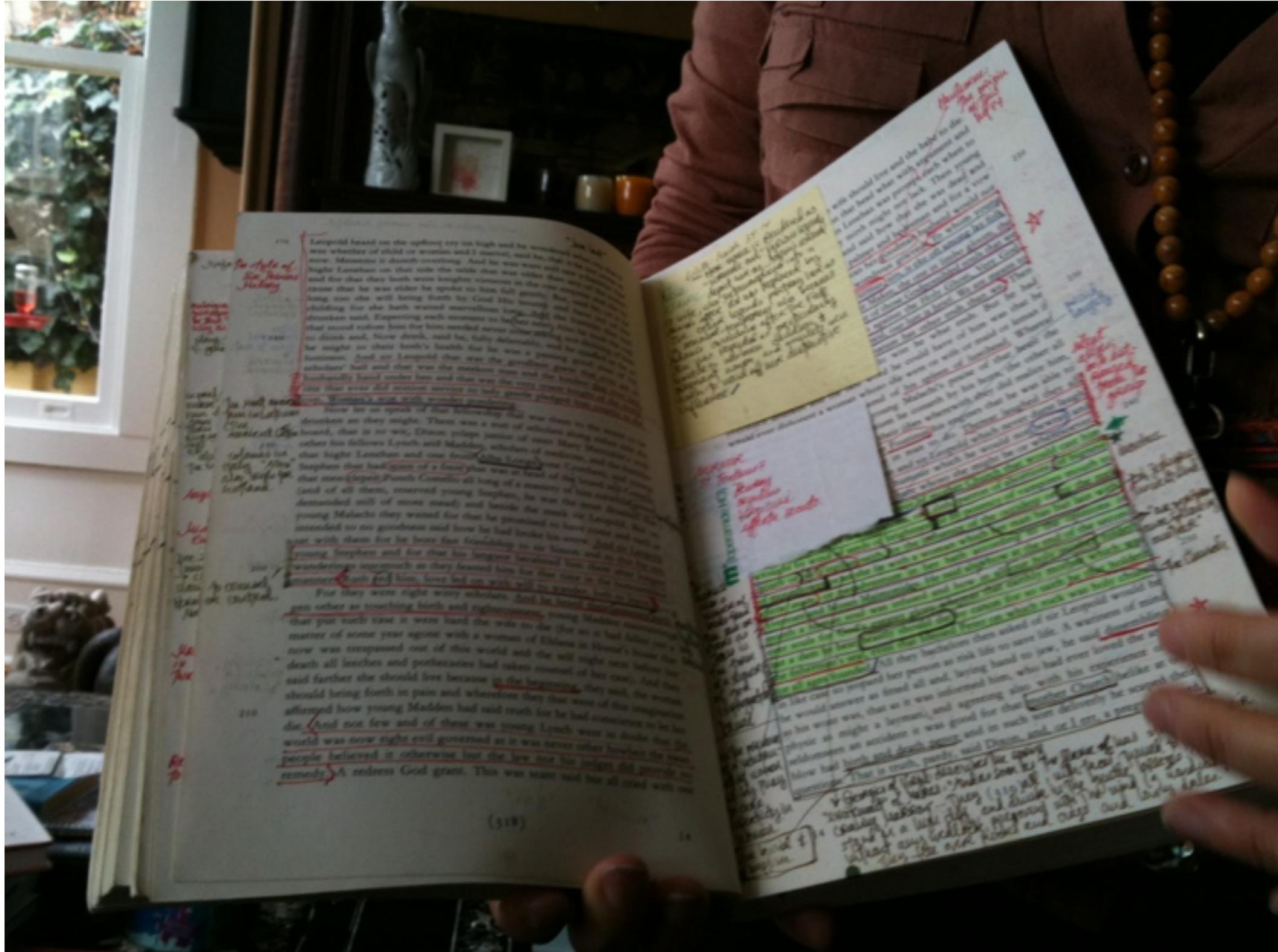
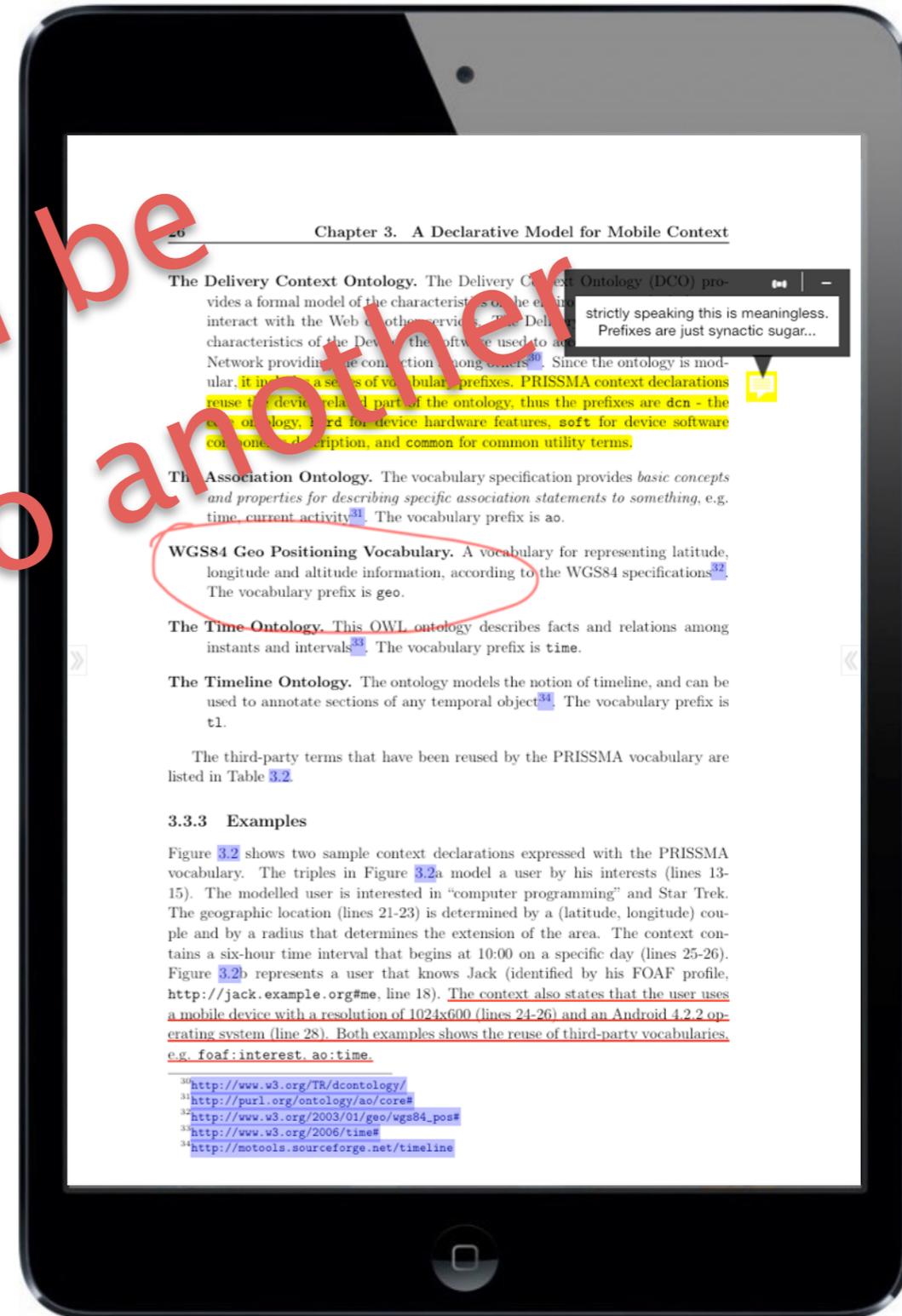
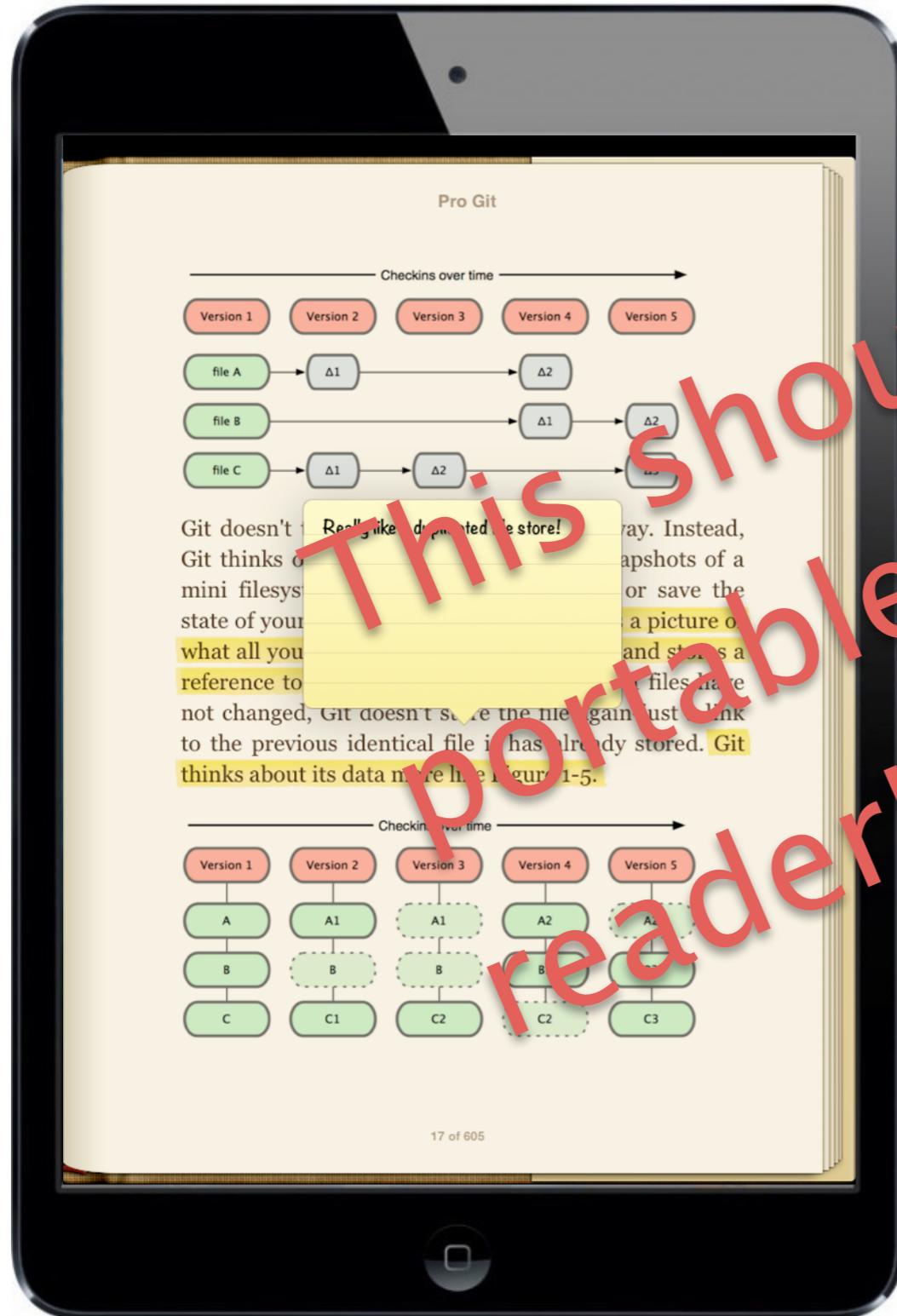


Photo from "Henrik Berggren" flickr

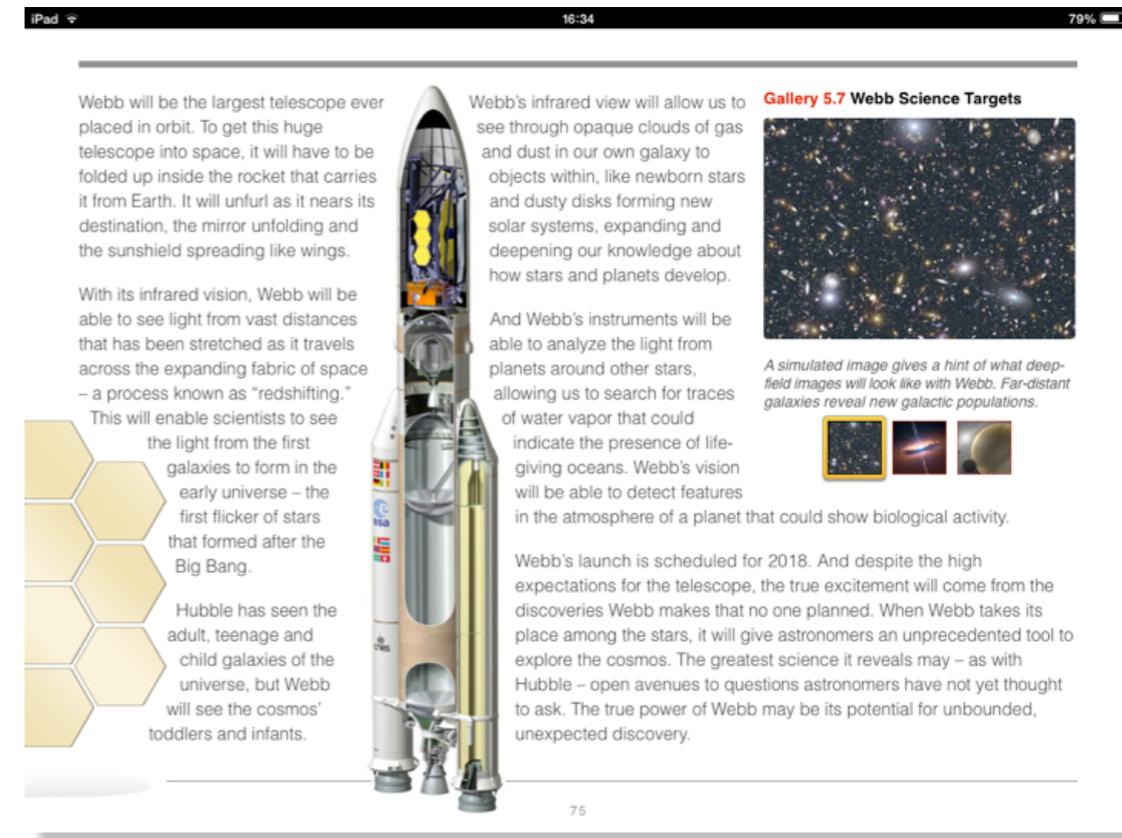
Example: user annotation



“Should provide more than just text in a file”

► Make use of new possibilities

- interaction
- various media
- cross-linking of internal content (indices, lists of tables, etc.)
- high quality graphics
- ...



Webb will be the largest telescope ever placed in orbit. To get this huge telescope into space, it will have to be folded up inside the rocket that carries it from Earth. It will unfurl as it nears its destination, the mirror unfolding and the sunshield spreading like wings.

With its infrared vision, Webb will be able to see light from vast distances that has been stretched as it travels across the expanding fabric of space – a process known as “redshifting.”

This will enable scientists to see the light from the first galaxies to form in the early universe – the first flicker of stars that formed after the Big Bang.

Hubble has seen the adult, teenage and child galaxies of the universe, but Webb will see the cosmos’ toddlers and infants.

Webb’s infrared view will allow us to see through opaque clouds of gas and dust in our own galaxy to objects within, like newborn stars and dusty disks forming new solar systems, expanding and deepening our knowledge about how stars and planets develop.

And Webb’s instruments will be able to analyze the light from planets around other stars, allowing us to search for traces of water vapor that could indicate the presence of life-giving oceans. Webb’s vision will be able to detect features in the atmosphere of a planet that could show biological activity.

Webb’s launch is scheduled for 2018. And despite the high expectations for the telescope, the true excitement will come from the discoveries Webb makes that no one planned. When Webb takes its place among the stars, it will give astronomers an unprecedented tool to explore the cosmos. The greatest science it reveals may – as with Hubble – open avenues to questions astronomers have not yet thought to ask. The true power of Webb may be its potential for unbounded, unexpected discovery.

Gallery 5.7 Webb Science Targets

A simulated image gives a hint of what deep-field images will look like with Webb. Far-distant galaxies reveal new galactic populations.

75

Example: “Our Choice”

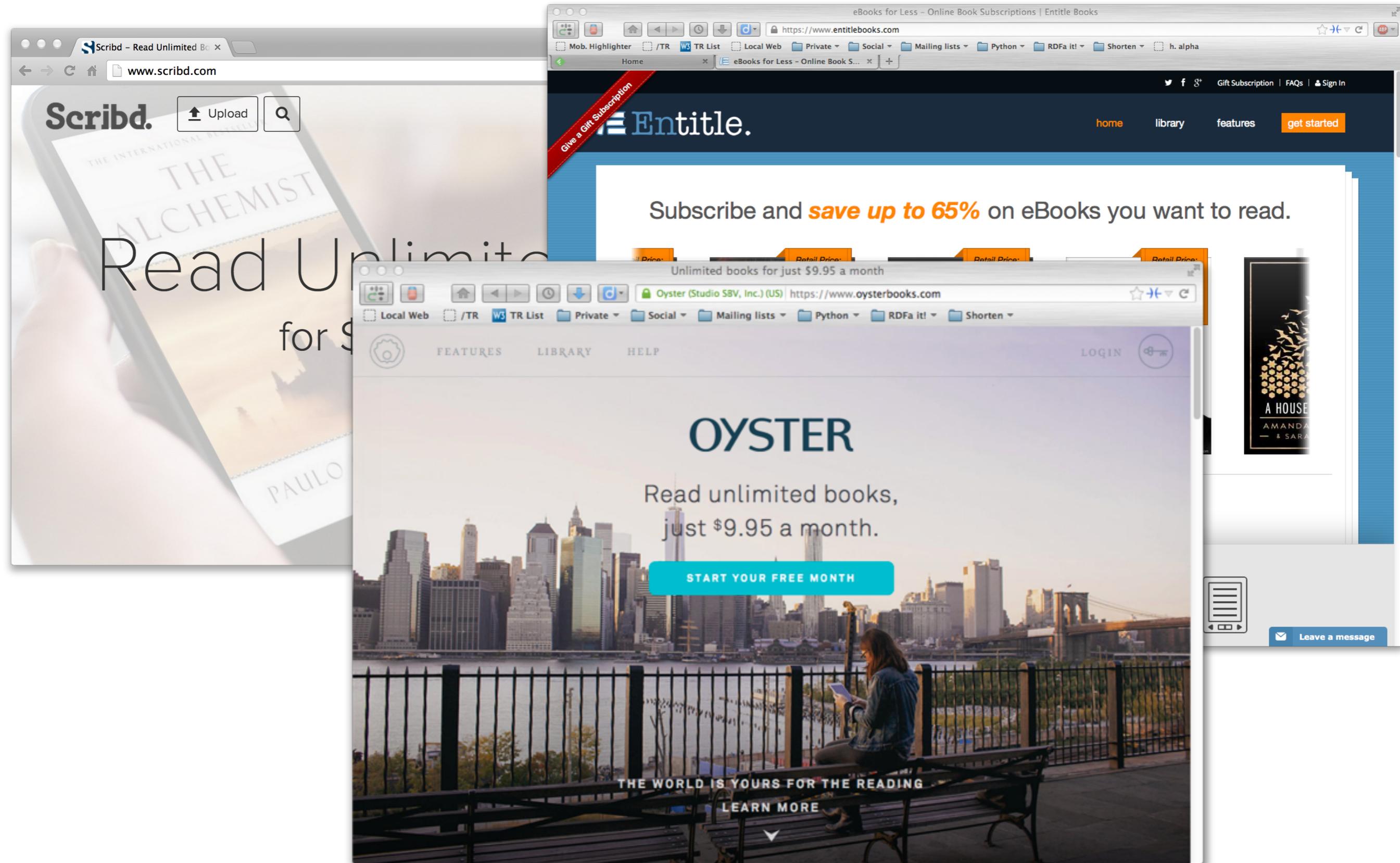


“Support diverse business and distribution models”

- ▶ Revenue generation
 - subscription
 - ad insertion in eBook apps
 - social sharing
 - product placement
- ▶ Web Payments
- ▶ Content protection
 - one device?
 - one user?
 - none?



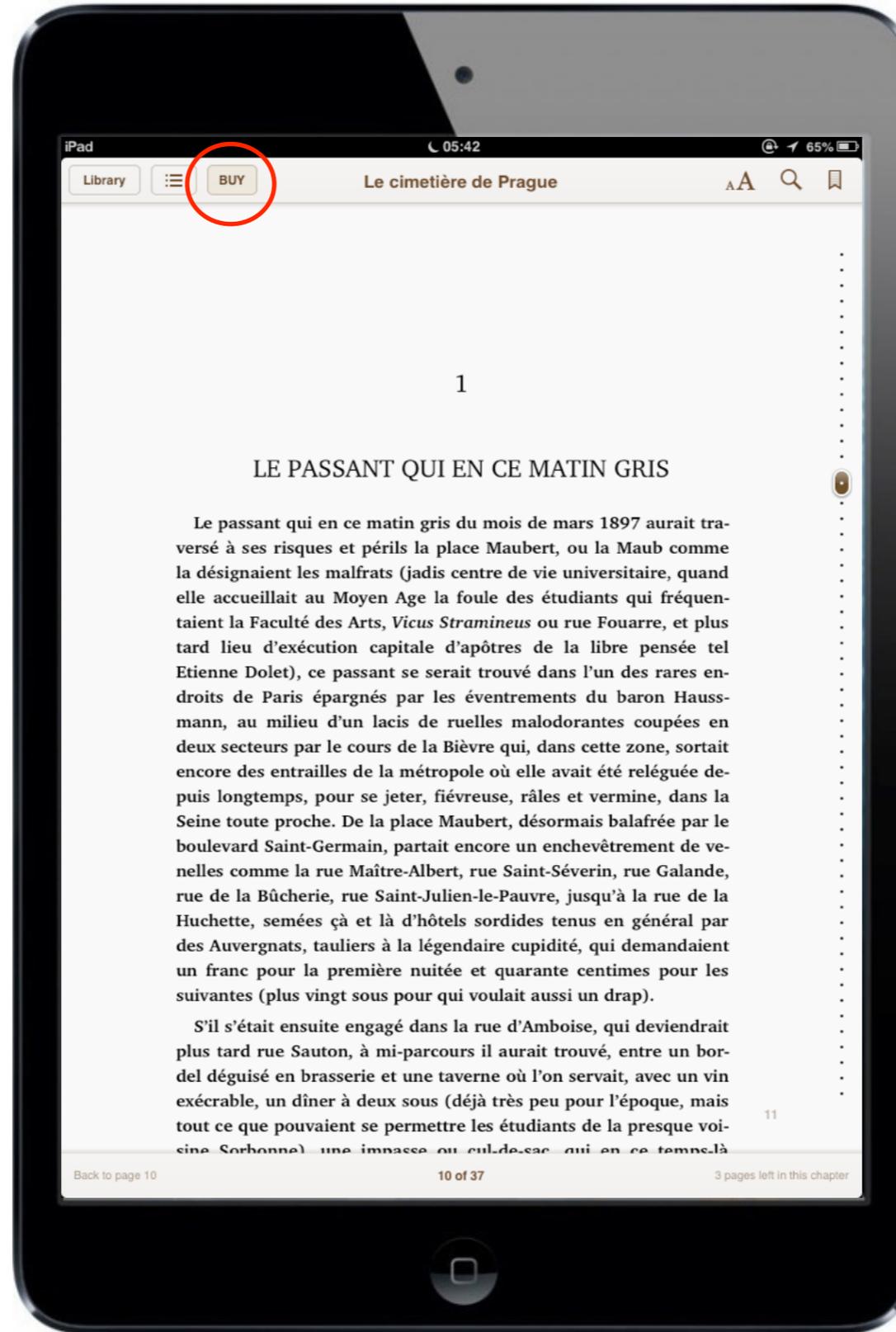
Example: book subscriptions



The image displays three overlapping browser windows showcasing different book subscription services:

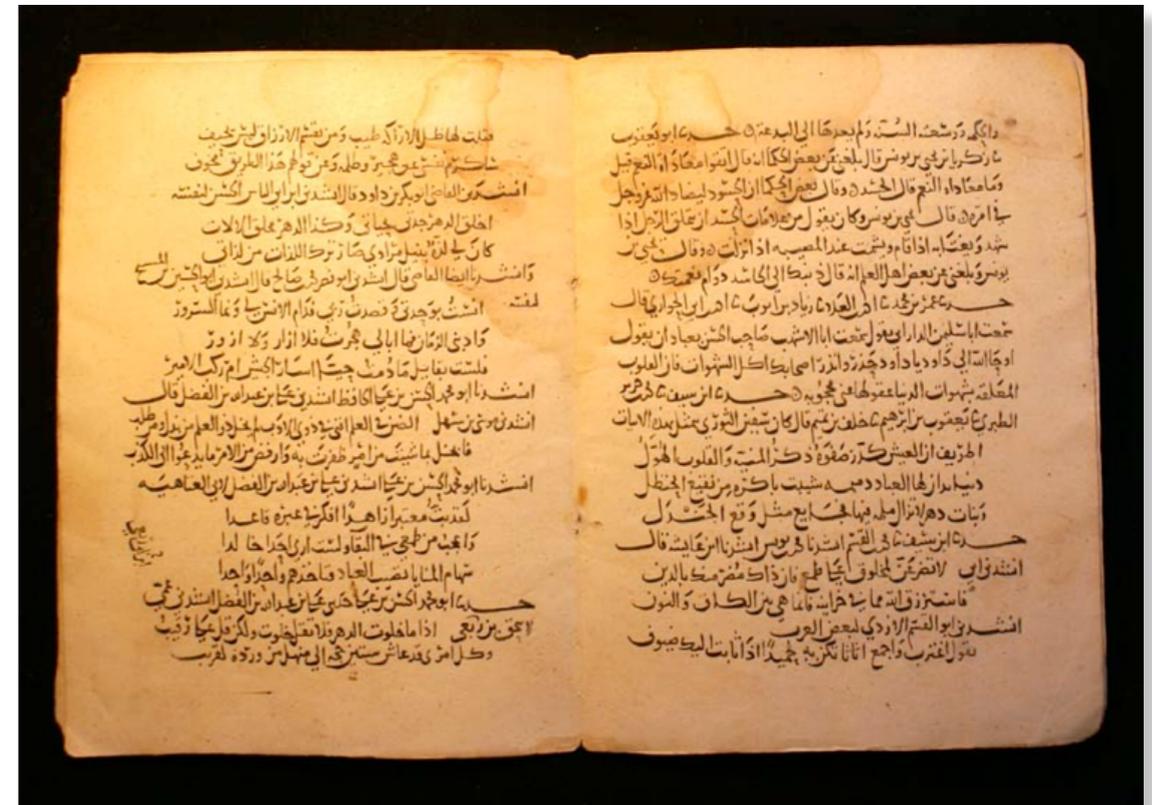
- Scribd (www.scribd.com):** The top-left window shows the Scribd homepage with the text "Read Unlimited for \$" and a background image of a hand holding a tablet displaying the book cover of "The Alchemist" by Paulo Coelho. The Scribd logo and an "Upload" button are visible.
- Entitle (www.entitlebooks.com):** The top-right window shows the Entitle homepage with the headline "Subscribe and **save up to 65%** on eBooks you want to read." The navigation menu includes "home", "library", "features", and a "get started" button.
- Oyster (www.oysterbooks.com):** The bottom window shows the Oyster homepage with the headline "Unlimited books for just \$9.95 a month." The main text reads "OYSTER Read unlimited books, just \$9.95 a month." and features a prominent "START YOUR FREE MONTH" button. The background image shows a person sitting on a bench reading a book, with a city skyline in the background. The slogan "THE WORLD IS YOURS FOR THE READING" and a "LEARN MORE" button are at the bottom.

Example: buying through the reader



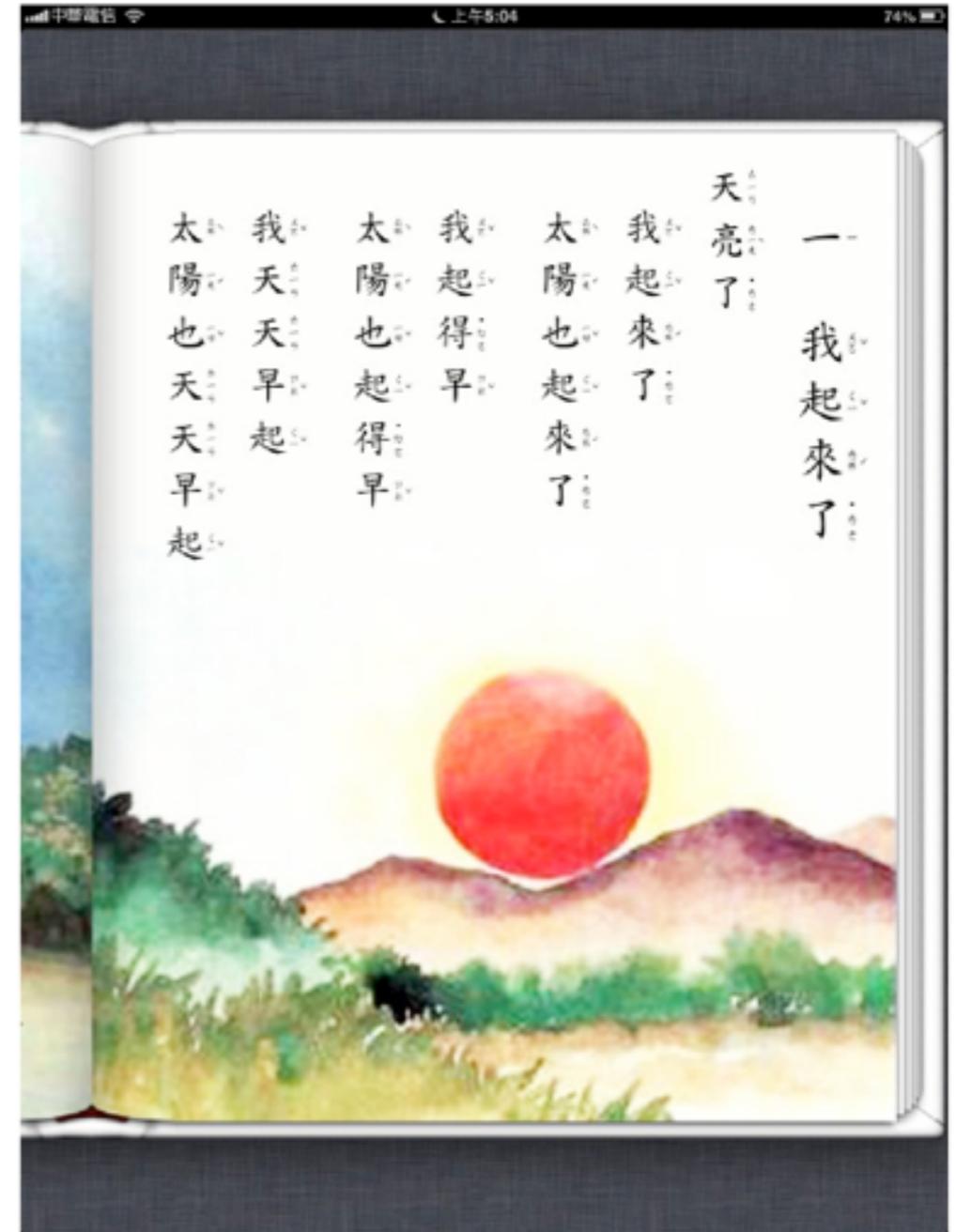
“Should satisfy diverse usage communities and patterns”

- ▶ Rich content anywhere, anytime, across multiple devices
 - content portability
 - internationalization, accessibility
- ▶ Personalization
- ▶ Inclusion of social features

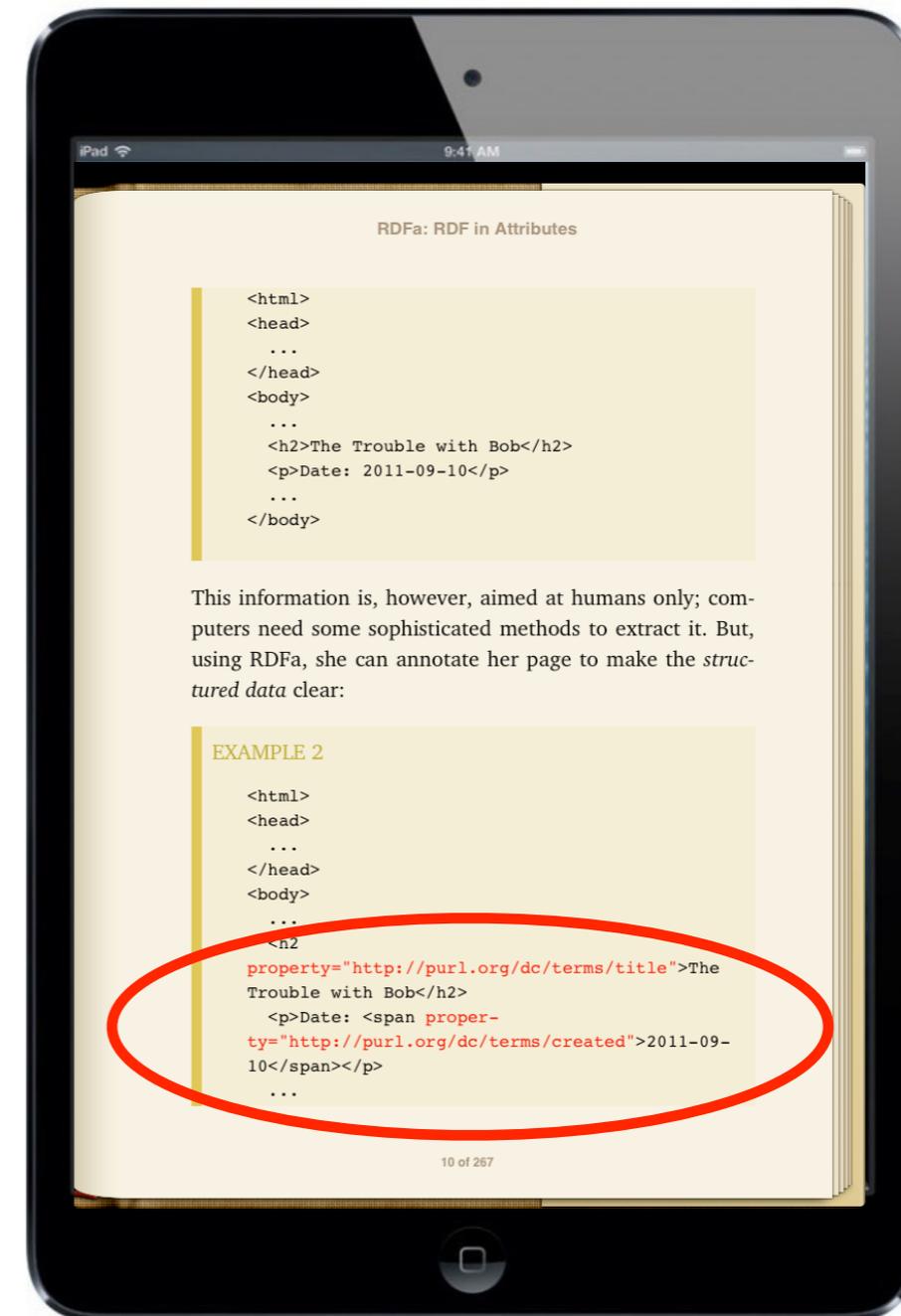
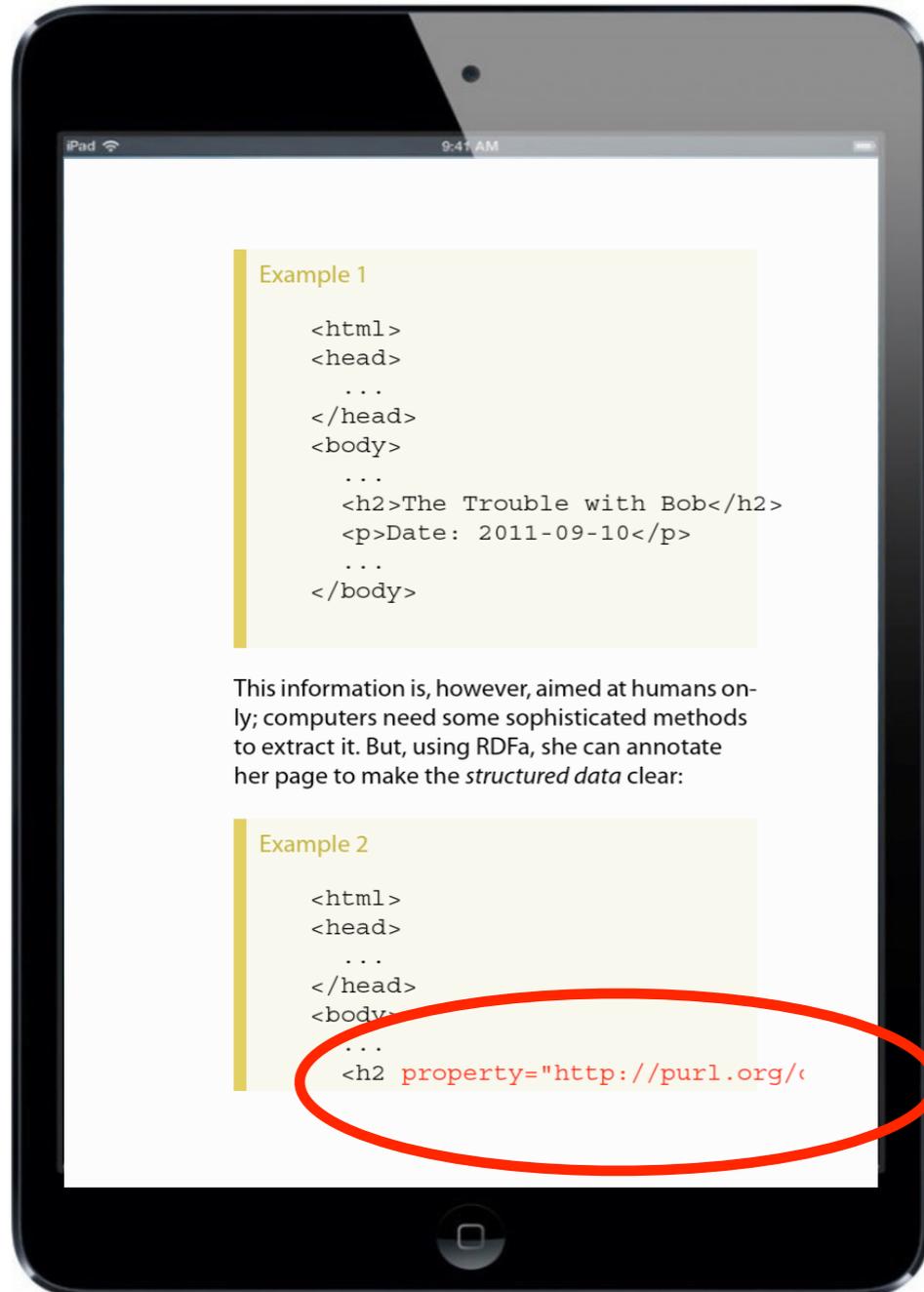


Example: Ruby, Bopomofo

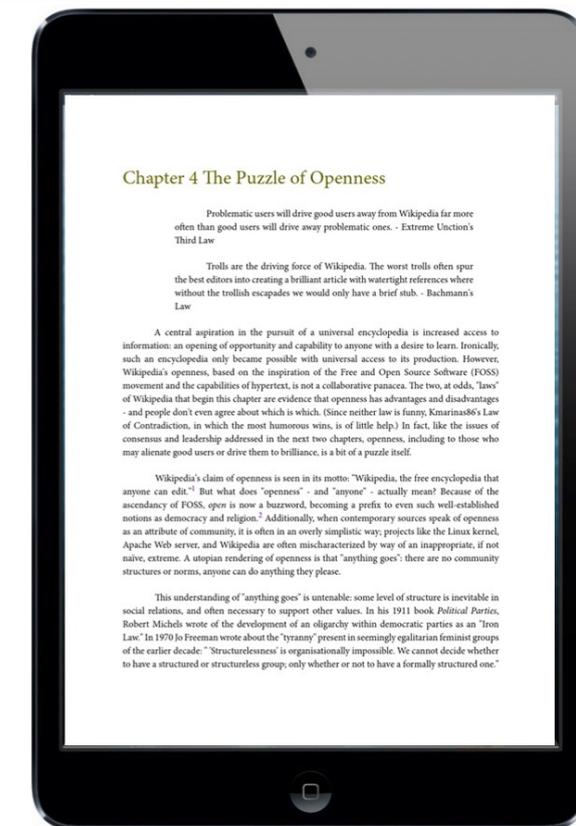
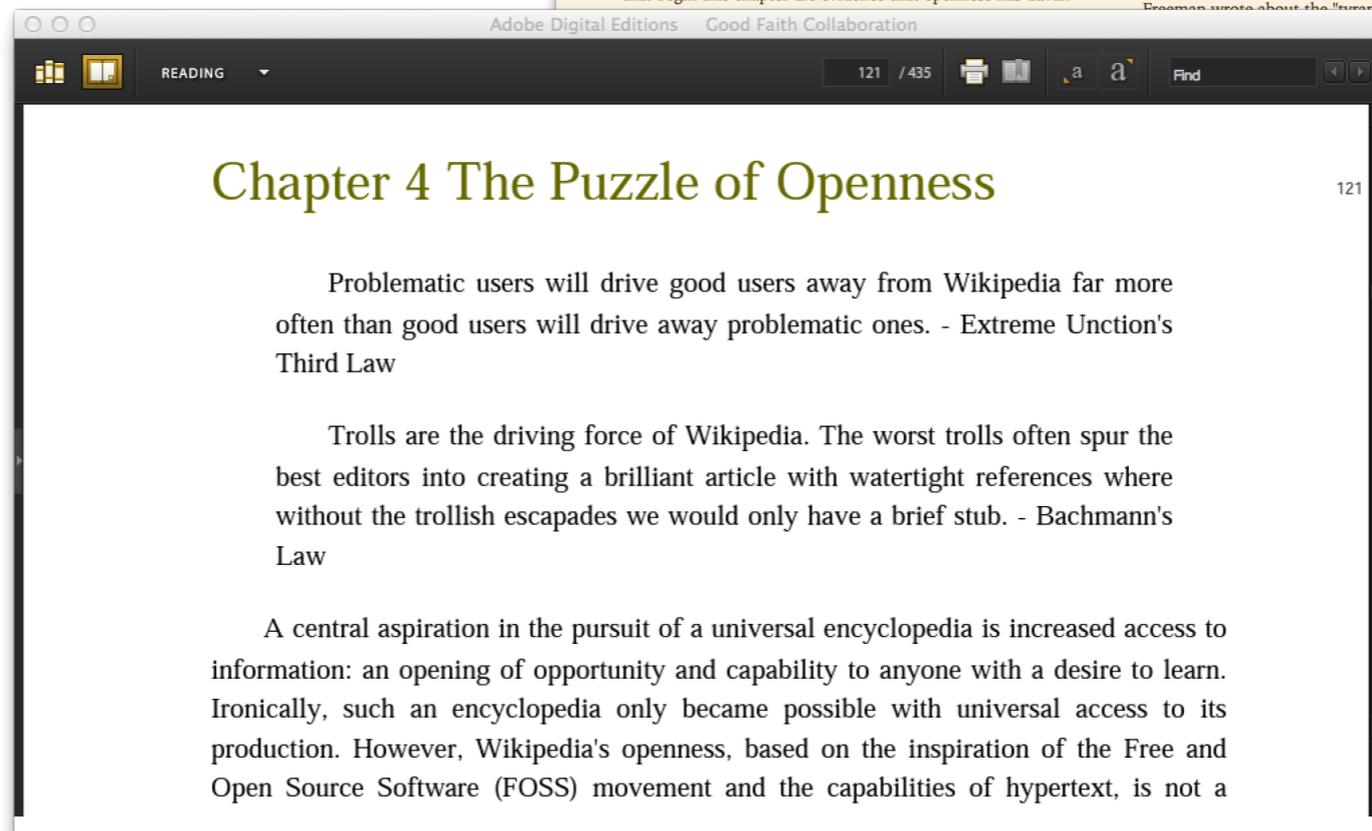
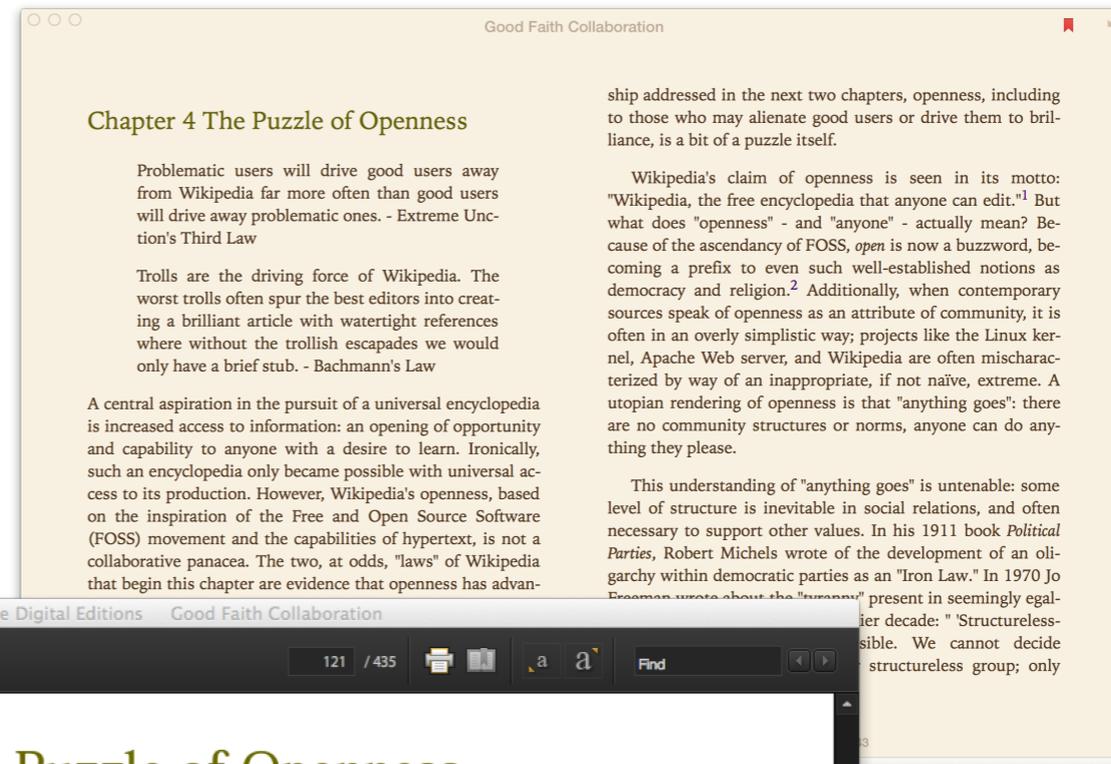
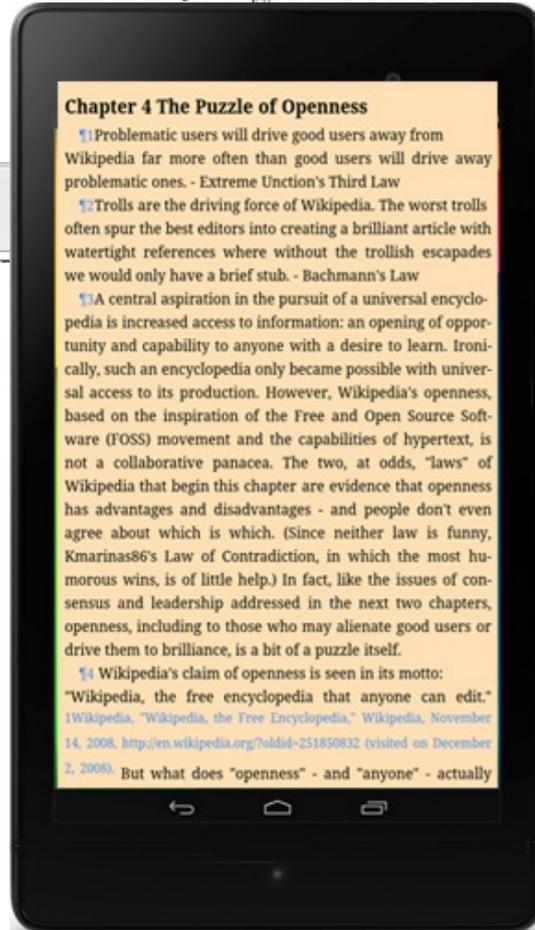
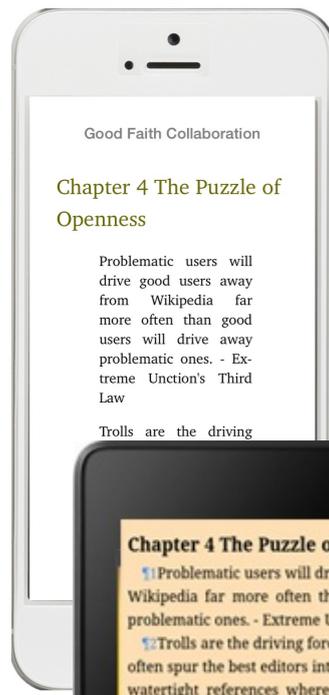
太陽也天天早起
 我天天早起
 太陽也起得早
 我起得早
 太陽也起來了
 我起來了
 天亮了
 一
 我起來了



Example: content portability



Example: interoperability



High quality digital books need

- ▶ Advanced and interactive graphics
- ▶ Internationalization (Ruby, Bopomofo, vertical writing,...)
- ▶ Interoperable annotations and bookmarks
- ▶ MathML
- ▶ Font management
- ▶ Fixed layout
- ▶ Audio, video
- ▶ Headers, footers, ...
- ▶ Bridging on-line/off-line
- ▶ Harmonization of metadata
- ▶ Accessibility (e.g., speech/braille publications)
- ▶ ...

Most of these are being worked on at W3C, but still need extra care and clear requirements!

To repeat...

The technology evolution of the Web has been driven by “traditional” Web browsing

The specific needs and priorities of the publishing industry may not be reflected in the evolution of the Web!

W3C WORLD WIDE WEB consortium 대한민국 사무국 W3C 대한민국 사무국

웹의 모든 잠재력을 이끌어 내기 위하여... (Leading the Web to its Full Potential...)

W3C : [홈](#) | [W3C 정보](#) | [활동](#) | [기술문서](#) | [초보자를 위한 정보](#) | [연락처](#) | [사무국](#)
 W3C 대한민국 사무국 : [홈](#) | [기술문서 한글화](#) | [초보자를 위한 정보](#) | [보도자료](#) | [사무국 연락처](#)

The way forward: how can W3C help?

W3C는 마
가지고 있
한 지역 거

개발자
한다.

▶ 웹 분야 세계 최고 콘퍼런스 국내 첫 개최 (W3C)

2014년 2월 14일 : 웹 분야 세계 최고 권위의 학술행사인 2014 국제월드와이드웹 콘퍼런스(WWW 2014)가 오는 4월 7일(월)부터 11일(금)까지 5일간 우리나라에서는 처음으로 서울 코엑스에서 개최된다.

이 행사는 웹에 대한 기술, 연구결과, 표준, 서비스 등 광범위한 분야를 총 망라하는 국제 학술대회로, 1994년 스위스에서 처음 개최됐다. 북미, 유럽, 남미, 아시아를 순회하며 이 분야 연구자, 개발자, 기업 관계자 등 약 1000명의 전문가들이 모인다.

올해 23회를 맞이하는 이 행사는 국제 월드와이드웹 운영위원회가 주관하고, KAIST와 국가기술표준원이 공동으로 주최하며, 한국정보과학회와 월드와이드웹컨소시엄(The World Wide Web Consortium, W3C)이 지원한다.

이번 행사에서는 연구자, 기업, 표준단체, 사용자 등을 위한 다양한 프로그램이 개설되며 웹의 미래, 정보화 등을 심도 있게 다루는 패널 토론이 진행된다.

각 분과에서 모두 200여편의 논문 발표, 34개의 워크숍, 튜토리얼, 2개 분과 15명의 초청강연, W3C의 웹 표준에 대한 토론이 진행된다. 이와 함께 빅데이터 혁신자모임(BigData Innovators Gathering, BIG 2014)과 웹 접근성모임(Web for Access, W4A 2014)이 공동으로 개최된다.

학술대회장인 KAIST 전산학과 정진완 교수는 "한 방향 접근성인 1세대 웹에서 블로그 등 양방향 소통인 2세대 웹에 이어 최근에는 트위터, 페이스북 등 소셜 네트워크, 나아가 정확한 문서 검색을 위한 3세대 웹인 시맨틱 웹이 부상하는 등 웹 기술은 25년간 눈부신 성장을 거듭해왔다"며 "WWW2014는 한국과 세계가 웹과 정보화에 대해 활발하게 토론하고 나아가 웹의 향후 25년을 논의하는 장이 될 것"이라고 밝혔다.

사전등록은 홈페이지(<http://www2014.kr>)에서 2월 17일(월)까지 하면 된다.

([뉴스 아카이브](#))

▶ 2013 W3C HTML5 Day Conference (사무국)

- [연락처](#)
- [운영진](#)
- [메일링리스트](#)
- [차세대 웹기술 포탈](#)
- [보도자료 / W3C 보도자료](#)
- [W3C관련 국내 기사](#)

W3C 관련 정보:

- [W3C Office](#)
- [국가별 사무국](#) : [호주](#) | [베네룩스](#) | [중국](#) | [핀란드](#) | [독일&오스트리아](#) | [그리스](#) | [홍콩](#) | [헝가리](#) | [인도](#) | [이스라엘](#) | [이탈리아](#) | [모로코](#) | [스페인](#) | [스웨덴](#) | [영국&아일랜드](#) |

한국내 W3C 멤버:

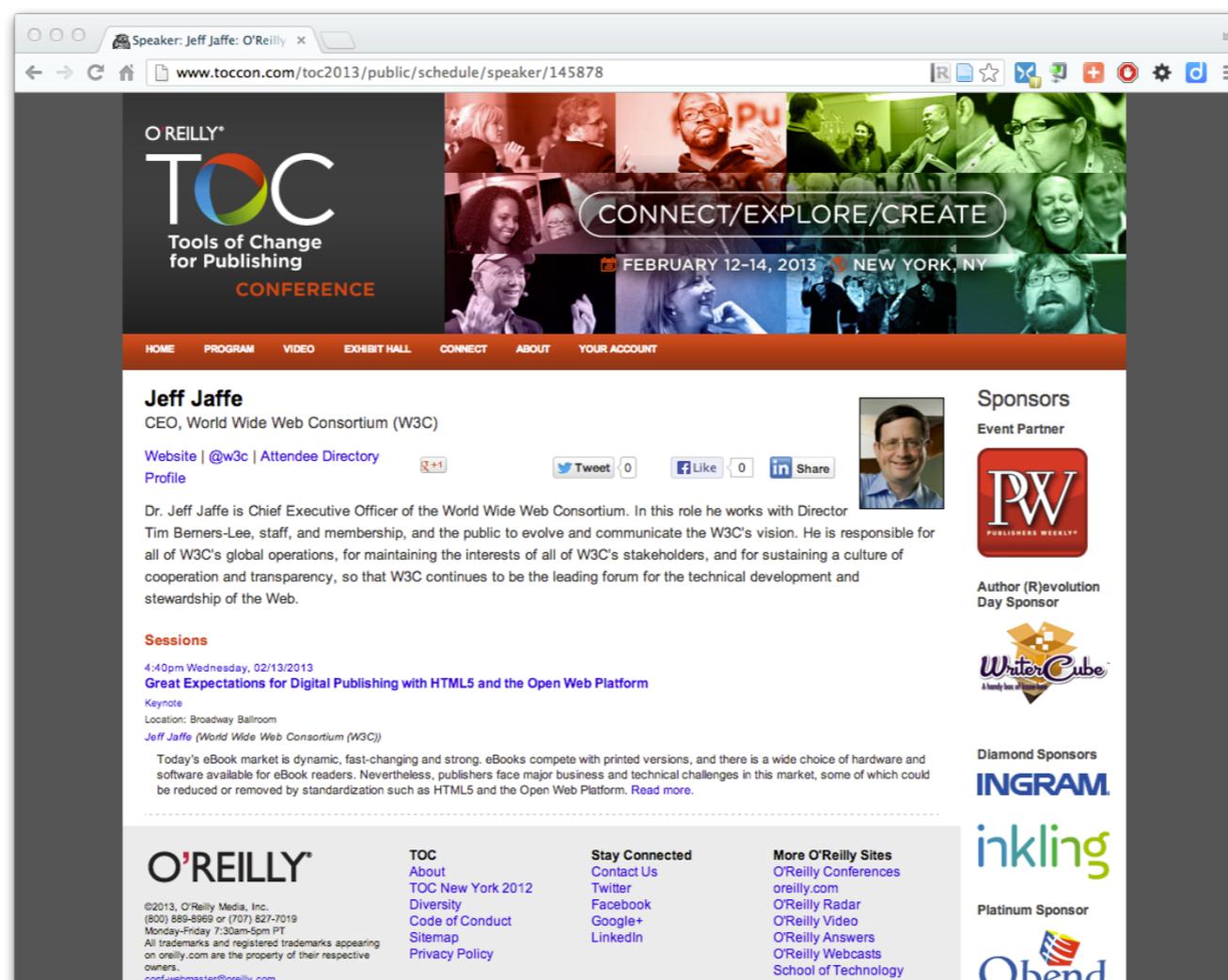
1. [한국전자통신연구원](#)
2. [SK 텔레콤](#)
3. [모바일 웹 2.0 포럼](#)
4. [삼성전자](#)
5. [LG 전자](#)
6. [인프라웨어](#)
7. [미래웹기술연구소](#)

Cooperation

- ▶ Develop cooperation with relevant organizations: IDPF, BISG, BIC, EDItEUR, ...
- ▶ Try to be on one another's events, build contacts
- ▶ Create bridges between the developers' communities and publishers
- ▶ *Ensure that the publishers' requirements are channeled to the relevant W3C groups*

Example: presence in the respective communities' events

- ▶ W3C keynotes at TOC, IDPF
- ▶ IDPF presentation at W3C's AC meeting
- ▶ Joint IDPF/W3C presence at the CONTEC event in Frankfurt, or in the EDUPUB initiative



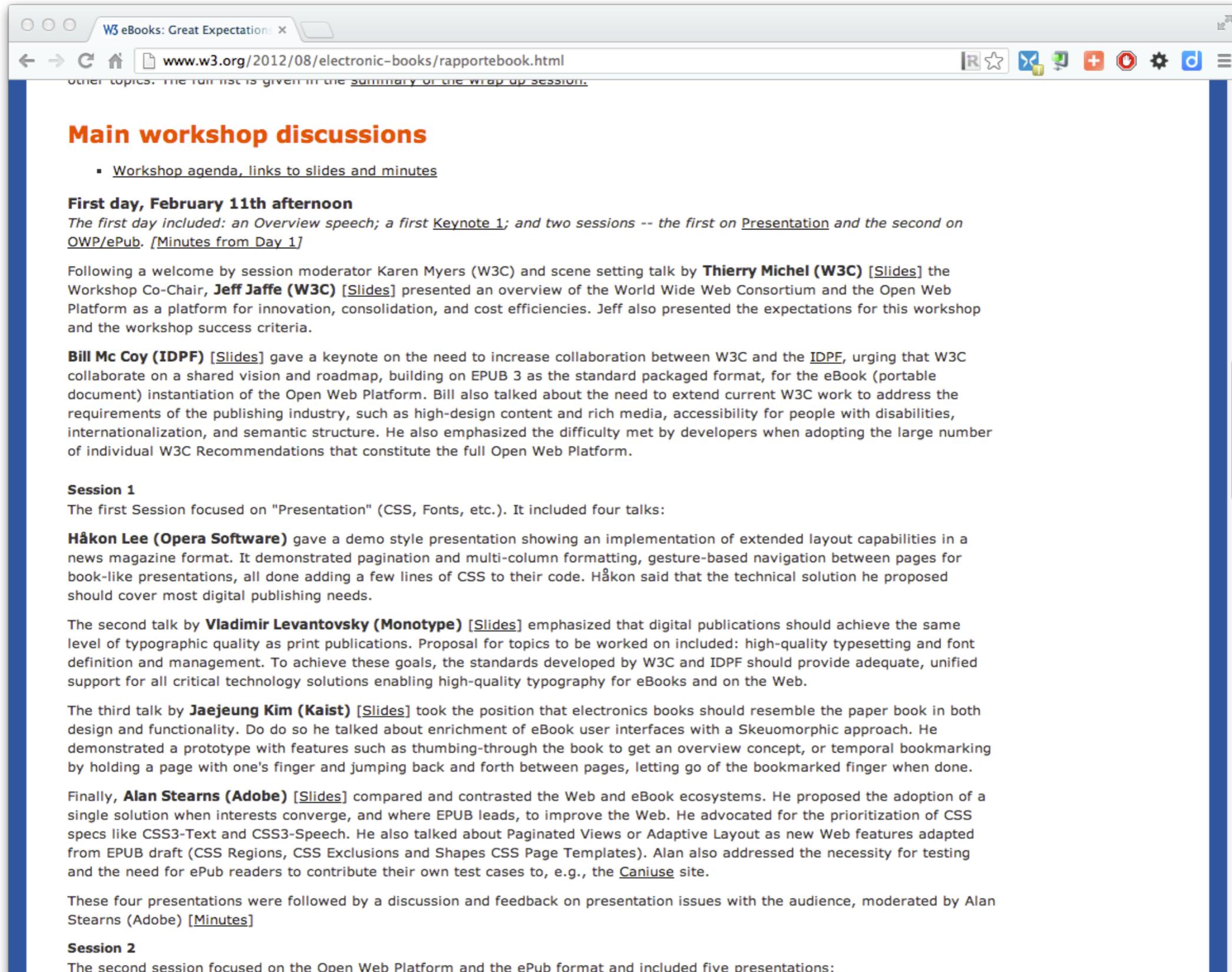
The screenshot shows a web browser window with the URL www.toccon.com/toc2013/public/schedule/speaker/145878. The page features the O'Reilly TOC (Tools of Change for Publishing) Conference logo and a navigation menu. The main content area displays the profile of Jeff Jaffe, CEO of the World Wide Web Consortium (W3C). It includes a bio, social media links, and a list of sessions. The right sidebar contains sponsor information, including PW (Publishers Weekly), Author (R)evolution Day Sponsor, and Diamond Sponsors like INGRAM and inKling. The footer includes O'Reilly contact information and links to various O'Reilly sites.

W3C's Workshop series

- ▶ “eBooks: Great Expectations”, NYC, February 2013 (co-organized with BISG and IDPF)
- ▶ “eBooks & I18N”, Tokyo, June 2013
- ▶ “Publishing and the OWP”, Paris, September 2013
- ▶ Regional events in Germany, India, ...



Example for results: public list of discussions, presentations



other topics. The full list is given in the [summary of the wrap up session](#).

Main workshop discussions

- [Workshop agenda, links to slides and minutes](#)

First day, February 11th afternoon

The first day included: an Overview speech; a first [Keynote 1](#); and two sessions -- the first on [Presentation](#) and the second on [OWP/ePub](#). [[Minutes from Day 1](#)]

Following a welcome by session moderator Karen Myers (W3C) and scene setting talk by **Thierry Michel (W3C)** [[Slides](#)] the Workshop Co-Chair, **Jeff Jaffe (W3C)** [[Slides](#)] presented an overview of the World Wide Web Consortium and the Open Web Platform as a platform for innovation, consolidation, and cost efficiencies. Jeff also presented the expectations for this workshop and the workshop success criteria.

Bill Mc Coy (IDPF) [[Slides](#)] gave a keynote on the need to increase collaboration between W3C and the [IDPF](#), urging that W3C collaborate on a shared vision and roadmap, building on EPUB 3 as the standard packaged format, for the eBook (portable document) instantiation of the Open Web Platform. Bill also talked about the need to extend current W3C work to address the requirements of the publishing industry, such as high-design content and rich media, accessibility for people with disabilities, internationalization, and semantic structure. He also emphasized the difficulty met by developers when adopting the large number of individual W3C Recommendations that constitute the full Open Web Platform.

Session 1

The first Session focused on "Presentation" (CSS, Fonts, etc.). It included four talks:

Håkon Lee (Opera Software) gave a demo style presentation showing an implementation of extended layout capabilities in a news magazine format. It demonstrated pagination and multi-column formatting, gesture-based navigation between pages for book-like presentations, all done adding a few lines of CSS to their code. Håkon said that the technical solution he proposed should cover most digital publishing needs.

The second talk by **Vladimir Levantovsky (Monotype)** [[Slides](#)] emphasized that digital publications should achieve the same level of typographic quality as print publications. Proposal for topics to be worked on included: high-quality typesetting and font definition and management. To achieve these goals, the standards developed by W3C and IDPF should provide adequate, unified support for all critical technology solutions enabling high-quality typography for eBooks and on the Web.

The third talk by **Jaejeung Kim (Kaist)** [[Slides](#)] took the position that electronics books should resemble the paper book in both design and functionality. Do do so he talked about enrichment of eBook user interfaces with a Skeuomorphic approach. He demonstrated a prototype with features such as thumbing-through the book to get an overview concept, or temporal bookmarking by holding a page with one's finger and jumping back and forth between pages, letting go of the bookmarked finger when done.

Finally, **Alan Stearns (Adobe)** [[Slides](#)] compared and contrasted the Web and eBook ecosystems. He proposed the adoption of a single solution when interests converge, and where EPUB leads, to improve the Web. He advocated for the prioritization of CSS specs like CSS3-Text and CSS3-Speech. He also talked about Paginated Views or Adaptive Layout as new Web features adapted from EPUB draft (CSS Regions, CSS Exclusions and Shapes CSS Page Templates). Alan also addressed the necessity for testing and the need for ePub readers to contribute their own test cases to, e.g., the [CanIuse](#) site.

These four presentations were followed by a discussion and feedback on presentation issues with the audience, moderated by Alan Stearns (Adobe) [[Minutes](#)]

Session 2

The second session focused on the Open Web Platform and the ePub format and included five presentations:

Main results so far

- ▶ Creation of a separate Digital Publishing Activity at W3C (June 2013)
 - *Digital Publishing is now a major focus area at W3C*



New Digital Publishing Interest Group

- ▶ Co-chaired by Markus Gylling (IDPF) and Liza Daly (Safari Books Online)

“The **mission** of the Digital Publishing Interest Group, [...] **a forum for experts in the digital publishing ecosystem** [...] for technical discussions, gathering use cases and **to better align existing formats and technologies (e.g., EPUB) with the broader Open Web Platform.**”

In practice...

- ▶ The interest group collects use cases and requirements
 - these requirements will be channeled to the CSS, HTML, MathML, SVG, etc., Working Groups
 - members of the IG will also join these groups, if necessary, to develop the necessary technologies
- ▶ The interest group will contribute to the general OWP interoperability testing effort at W3C
 - ensuring that the special publishing issues are also properly tested by implementations

Interest Group Task Forces

Local Web /TR 2014 dpub local Temporary Private Social Mailing lists Python RDFa it! Shorten Github HTML View Todoist

Task Forces - Digital Publishing Interest Group

Reader

Ivan Talk Preferences Watchlist Contributions Log out

W3C

Page Discussion

Read Edit View history

Task Forces

List of current DIGPUB IG Task Forces [\[edit\]](#)

	Current Goals	Publications	Leader(s)	Resources, Repositories, Use Cases
Layout & Styling	Expand coverage of latinreq; more details on drop caps and footnotes	"Requirements for Latin Text Layout and Pagination" ↗	Dave Cramer 🔒	TF wiki, github repository 🔒 , github paged view ↗ , TF wiki, Use Cases 1., Use Cases 2.
Metadata	Identify problems referring to the use of metadata by publishers on the Open Web Platform, and collect use cases		Bill Kasdorf 🔒 , Madi Solomon 🔒	TF wiki, Use Cases
Content & Markup			Tzviya Siegman 🔒	TF wiki, Summary of the first Structured Semantics Call, Use Cases
Annotation	Collect community feedback, then produce updated version; feed the results to the general Annotation work at W3C	"Annotation Use Cases" ↗	Robert Anderson 🔒	TF Wiki, github repository 🔒 , github paged view ↗ , Use Cases
Accessibility	Review UAAG, EPUB 3 a11y features/guidelines ↗ (particularly media overlays ↗ , CSS Speech, Braille, and SVG)		Suzanne Taylor 🔒 , Gerardo Capiel 🔒	TF wiki, Use Cases
Security			Sharad Gharg 🔒	TF wiki, Use Cases

Other task forces considered by the group [\[edit\]](#)

These task forces are currently not existing or active; they may be subject of future work.

	Group(s) of Use Cases
Page DOM	Use Cases
MathML, STEM	Use Cases

This page was last modified on 18 March 2014, at 09:10.

This page has been accessed 2,341 times.

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[About Digital Publishing Interest Group](#)
[Disclaimers](#)
[Mobile view](#)

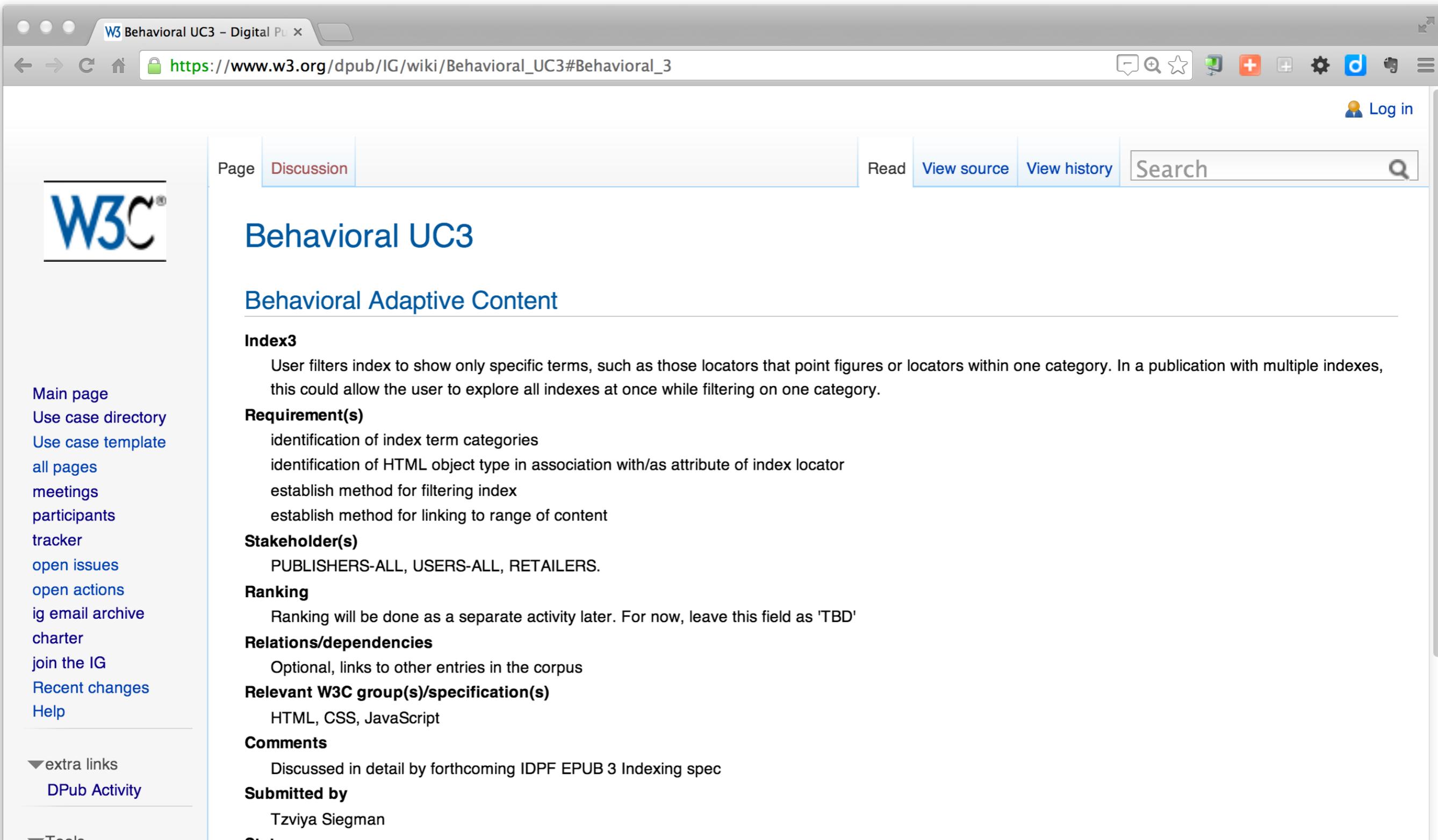


- Main page
- Use case directory
- Use case template
- all pages
- meetings
- participants
- tracker
- open issues
- open actions
- ig email archive
- charter
- join the IG
- Recent changes
- Help

- extra links
- Dpub Activity

- Tools

Use case are collected



W3 Behavioral UC3 - Digital Pub x

https://www.w3.org/dpub/IG/wiki/Behavioral_UC3#Behavioral_3

Log in

Page **Discussion** Read [View source](#) [View history](#) Search

Behavioral UC3

Behavioral Adaptive Content

Index3
User filters index to show only specific terms, such as those locators that point figures or locators within one category. In a publication with multiple indexes, this could allow the user to explore all indexes at once while filtering on one category.

Requirement(s)
 identification of index term categories
 identification of HTML object type in association with/as attribute of index locator
 establish method for filtering index
 establish method for linking to range of content

Stakeholder(s)
PUBLISHERS-ALL, USERS-ALL, RETAILERS.

Ranking
Ranking will be done as a separate activity later. For now, leave this field as 'TBD'

Relations/dependencies
Optional, links to other entries in the corpus

Relevant W3C group(s)/specification(s)
HTML, CSS, JavaScript

Comments
Discussed in detail by forthcoming IDPF EPUB 3 Indexing spec

Submitted by
Tzviya Siegman

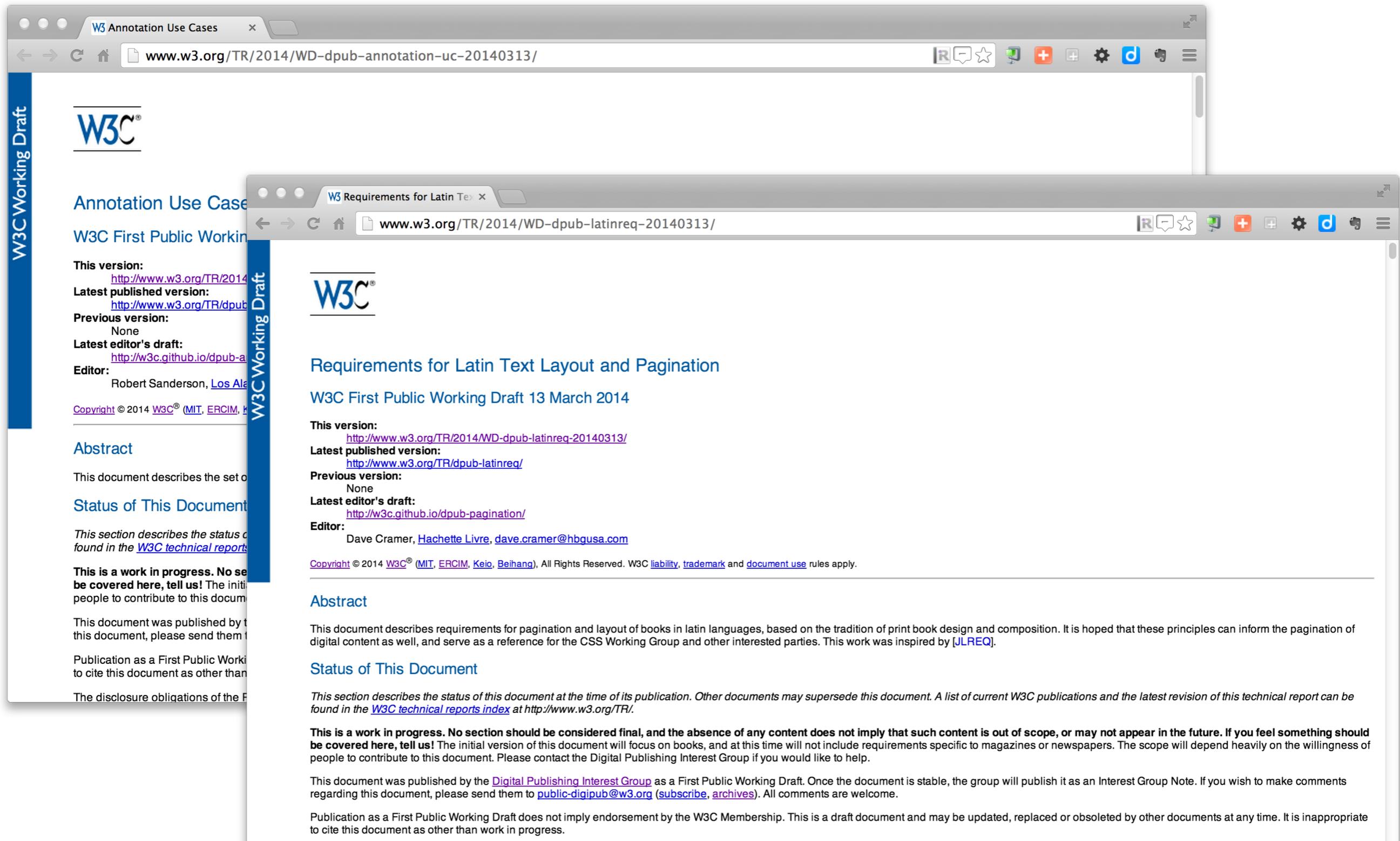
Status

Main page
 Use case directory
 Use case template
 all pages
 meetings
 participants
 tracker
 open issues
 open actions
 ig email archive
 charter
 join the IG
 Recent changes
 Help

extra links
 DPub Activity

Tools

First Publications



W3C Working Draft

W3C Annotation Use Cases
 W3C First Public Working Draft 13 March 2014

This version: <http://www.w3.org/TR/2014/WD-dpub-annotation-uc-20140313/>
Latest published version: <http://www.w3.org/TR/dpub-annotation-uc/>
Previous version: None
Latest editor's draft: <http://w3c.github.io/dpub-annotation-uc/>
Editor: Robert Sanderson, [Los Angeles](#)

Abstract

This document describes the set of use cases for digital publishing.

Status of This Document

This section describes the status of this document at the time of its publication. Other documents may supersede this document. A list of current W3C publications and the latest revision of this technical report can be found in the [W3C technical reports index](#) at <http://www.w3.org/TR/>.

This is a work in progress. No section should be considered final, and the absence of any content does not imply that such content is out of scope, or may not appear in the future. If you feel something should be covered here, tell us! The initial version of this document will focus on books, and at this time will not include requirements specific to magazines or newspapers. The scope will depend heavily on the willingness of people to contribute to this document. Please contact the Digital Publishing Interest Group if you would like to help.

This document was published by the [Digital Publishing Interest Group](#) as a First Public Working Draft. Once the document is stable, the group will publish it as an Interest Group Note. If you wish to make comments regarding this document, please send them to public-digipub@w3.org ([subscribe](#), [archives](#)). All comments are welcome.

Publication as a First Public Working Draft does not imply endorsement by the W3C Membership. This is a draft document and may be updated, replaced or obsoleted by other documents at any time. It is inappropriate to cite this document as other than work in progress.

W3C Working Draft

Requirements for Latin Text Layout and Pagination
 W3C First Public Working Draft 13 March 2014

This version: <http://www.w3.org/TR/2014/WD-dpub-latinreq-20140313/>
Latest published version: <http://www.w3.org/TR/dpub-latinreq/>
Previous version: None
Latest editor's draft: <http://w3c.github.io/dpub-pagination/>
Editor: Dave Cramer, [Hachette Livre](#), dave.cramer@hbgusa.com

Abstract

This document describes requirements for pagination and layout of books in latin languages, based on the tradition of print book design and composition. It is hoped that these principles can inform the pagination of digital content as well, and serve as a reference for the CSS Working Group and other interested parties. This work was inspired by [\[JLREQ\]](#).

Status of This Document

This section describes the status of this document at the time of its publication. Other documents may supersede this document. A list of current W3C publications and the latest revision of this technical report can be found in the [W3C technical reports index](#) at <http://www.w3.org/TR/>.

This is a work in progress. No section should be considered final, and the absence of any content does not imply that such content is out of scope, or may not appear in the future. If you feel something should be covered here, tell us! The initial version of this document will focus on books, and at this time will not include requirements specific to magazines or newspapers. The scope will depend heavily on the willingness of people to contribute to this document. Please contact the Digital Publishing Interest Group if you would like to help.

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Possible future work: annotation

- ▶ We have already seen how important annotation is
- ▶ Actually: this is not a digital publishing issue only!
 - annotation on Web pages, data, etc., would be very important, too

There has been some work at W3C



W3C Community Draft

Open Annotation Data Model x

www.openannotation.org/spec/core/

 **Open Annotation Data Model**
Community Draft, 08 February 2013

This version:
<http://www.openannotation.org/spec/core/20130208/index.html>

Latest version:
<http://www.openannotation.org/spec/core/>

Previous version:
<http://www.openannotation.org/spec/core/20130205/index.html>

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Abstract

The Open Annotation Core Data Model specifies an interoperable framework for creating associations between related resources, annotations, using a methodology that conforms to the Architecture of the World Wide Web. Open Annotations can easily be shared between platforms, with sufficient richness of expression to satisfy complex requirements while remaining simple enough to also allow for the most common use cases, such as attaching a piece of text to a single web resource.

An Annotation is considered to be a set of connected resources, typically including a body and target, where the body is somehow about the target. The full model supports additional functionality, enabling semantic annotations, embedding content, selecting segments of resources, choosing the appropriate representation of a resource and providing styling hints for consuming clients.

Status of this Document

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This specification was published by the [Open Annotation Community Group](#). It is not a W3C Standard nor is it on the W3C Standards Track. Please note that under the [W3C Community Contributor License Agreement \(CLA\)](#) there is a limited opt-out and other conditions apply. Learn more about [W3C Community and Business Groups](#).

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Please send general comments about this document to the public mailing list: public-openannotation@w3.org ([public archives](#)).

One of the Interest Group publications



W3C Working Draft

W3 Annotation Use Cases

www.w3.org/TR/2014/WD-dpub-annotation-uc-20140313/

Annotation Use Cases

W3C First Public Working Draft 13 March 2014

This version:
<http://www.w3.org/TR/2014/WD-dpub-annotation-uc-20140313/>

Latest published version:
<http://www.w3.org/TR/dpub-annotation-uc/>

Previous version:
None

Latest editor's draft:
<http://w3c.github.io/dpub-annotation/>

Editor:
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Abstract

This document describes the set of use cases generated for Annotation and Social Reading within the W3C Digital Publishing Interest Group, in coordination with the Open Annotation Community Group.

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The disclosure obligations of the Participants of this group are described in the [charter](#).

Current plans

- ▶ A draft charter has been made public in February
- ▶ Just had a Workshop in San Francisco, 2nd of April:
≈50 people
 - a number of presentations
 - the draft charter was discussed in a separate, 1½ hour session
 - A charter should be finalized in the coming weeks
- ▶ A Working Group *may* start at the end of the summer or early autumn
 - interestingly, publishing community representatives *and* “traditional” Web communities would work together!

It is important that major players join
W3C!



- ▶ Companies outside of W3C can follow what is happening in, say, the CSS Working Group
- ▶ *But nothing can replace the influence of a company being around the table!*

Industry Collaboration is Key

Nothing can replace the influence of a company being around the table!

- ▶ Publishing ecosystem players are getting involved:
 - Adobe, Canon, Hachette, Intel, Int'l Webmasters' Association, Google, Rakuten, Monotype, Nokia, Pearson, Apple,....
 - Discussions with many other publishers on-going

Conclusions

The future: Publishing = Web

Work with W3C work to make this a reality!



Thank you for your attention!

EASY NOT IDLE.