

The background of the slide is a photograph of a traditional Korean palace building, likely the Gyeongbokgung Palace. The building features a large, multi-tiered, dark grey tiled roof with curved eaves. The main structure is supported by numerous white pillars and has a wooden balcony with a dark railing. The building is situated on a raised platform overlooking a body of water, with green trees and a stone wall visible in the background.

# Web and Publishing

Ivan Herman, W3C

HTML5-CG Forum Satellite Conference

2014-4-11, Seoul, Korea

These slides are available on-line:

<http://www.w3.org/2014/Talks/0411-Seoul-IH/>



# 20 years ago the Web created new experiences for publishing

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## ▶ 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

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



# Many industries feeling the impact

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



# But publishing in particular

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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

# That is because Publishing = Web

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- ▶ 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

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- ▶ 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

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- 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



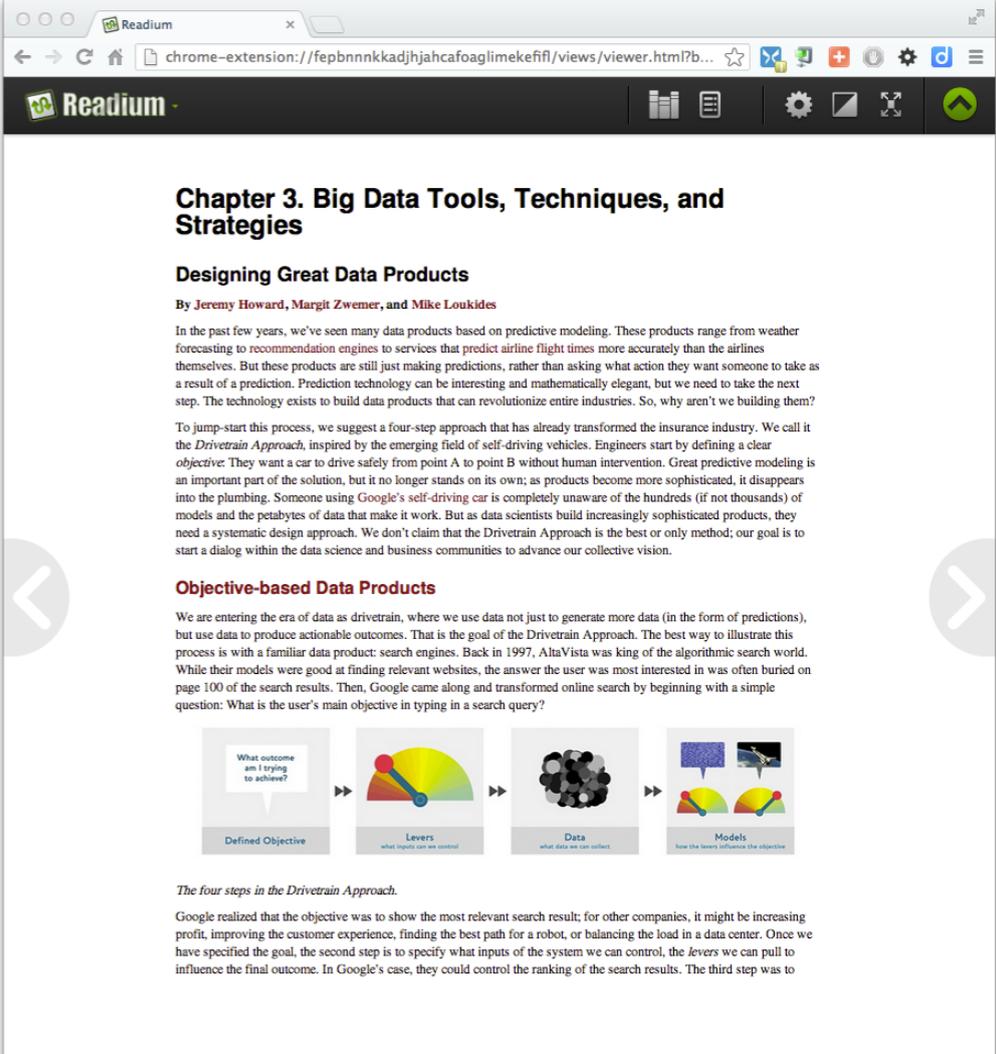
# Example for what “Ebooks picking up the technology *today*” means: EPUB3

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- ▶ 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 (EPUB2 or EPUB3)

# What “Ebooks picking up the technology *today*” means

- ▶ An EPUB file is, technically, a packaged Web site
  - XHTML 1.1 for EPUB 2
  - XHTML 5 for EPUB 3
- ▶ *An EPUB reader is “just” a very specialized browser!*



The screenshot shows a browser window displaying an EPUB document. The page title is "Chapter 3. Big Data Tools, Techniques, and Strategies". The section title is "Designing Great Data Products" by Jeremy Howard, Margit Zwemer, and Mike Loukides. The text discusses predictive modeling and the Drivetrain Approach. A diagram illustrates the four steps of the Drivetrain Approach: Defined Objective, Levers, Data, and Models.

**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 diagram shows four steps in a sequence: 1. Defined Objective: A speech bubble asking "What outcome am I trying to achieve?". 2. Levers: A dial with a needle, labeled "what inputs can we control?". 3. Data: A cluster of black dots, labeled "what data we can collect?". 4. Models: A pie chart with a needle, labeled "how the levers influence the objective".

*The four steps in the Drivetrain Approach.*

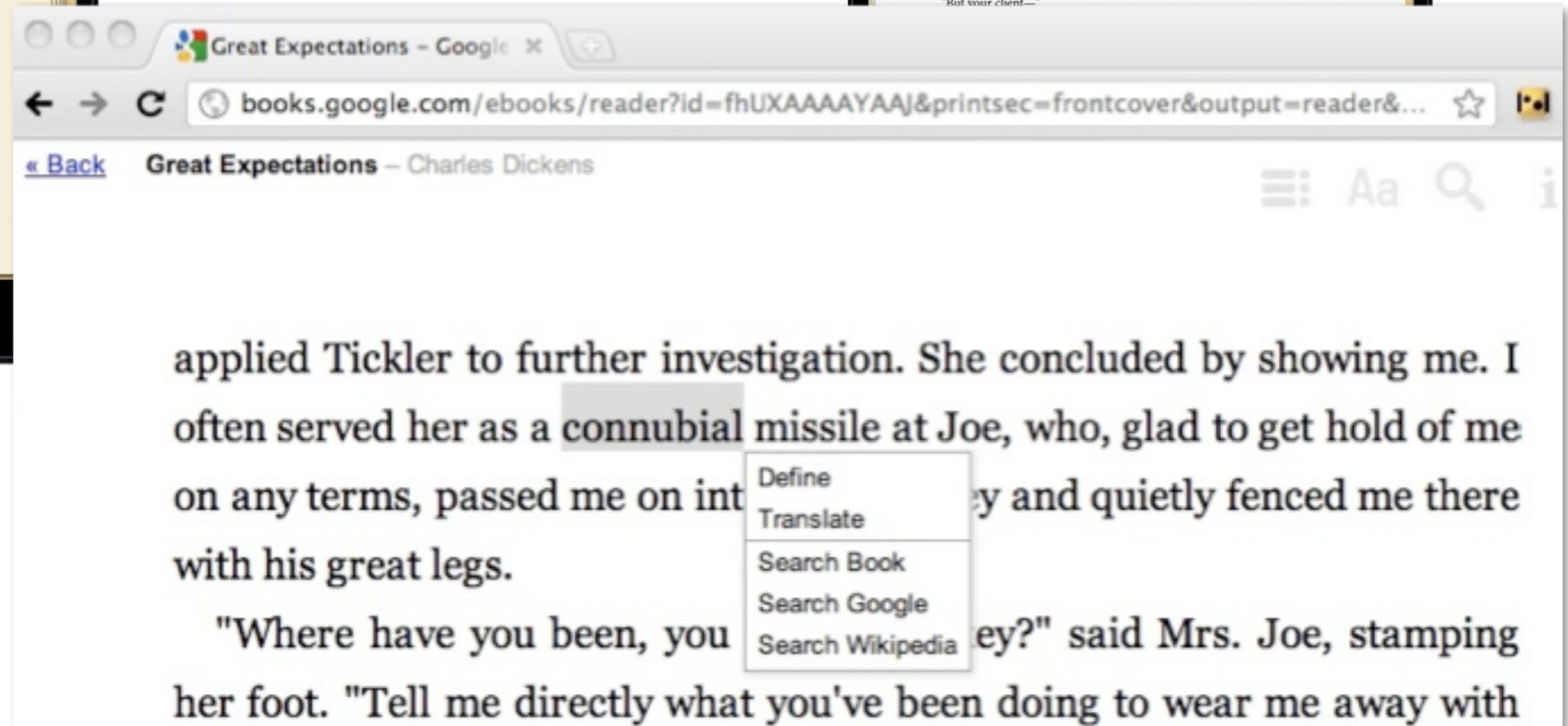
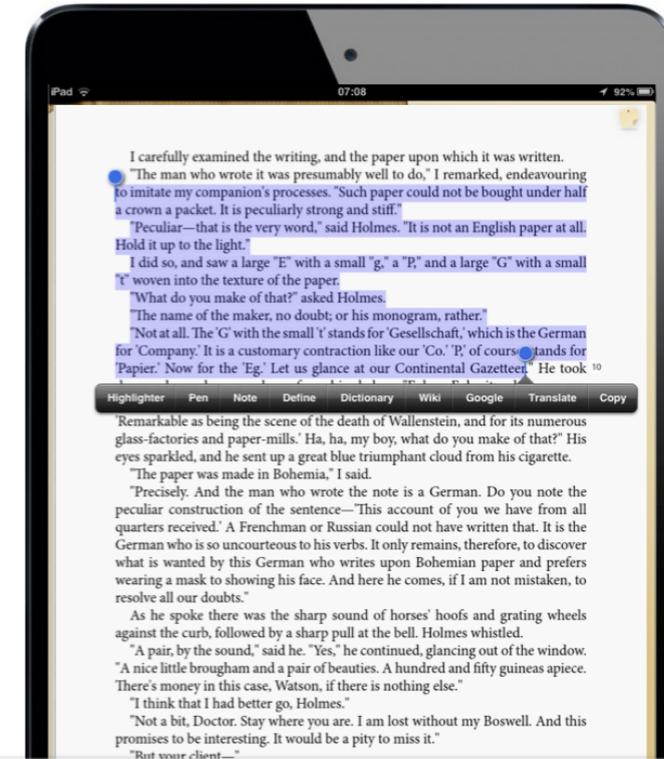
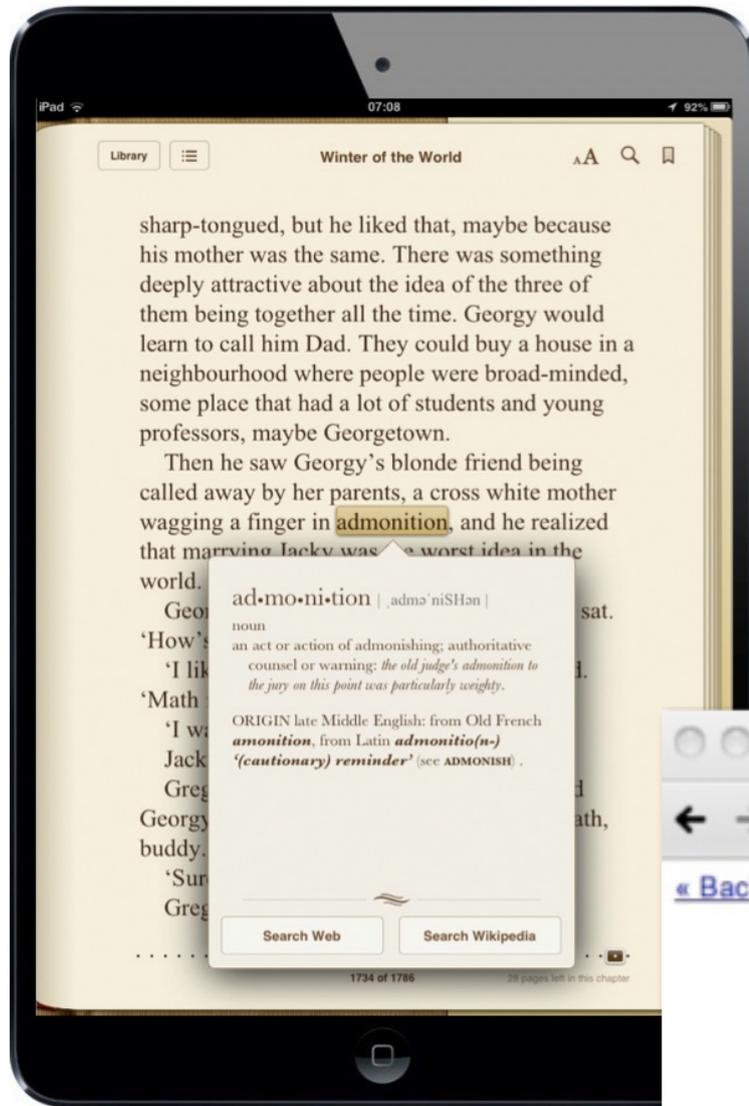
Google realized that the objective was to show the most relevant search result; for other companies, it might be increasing profit, improving the customer experience, finding the best path for a robot, or balancing the load in a data center. Once we have specified the goal, the second step is to specify 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

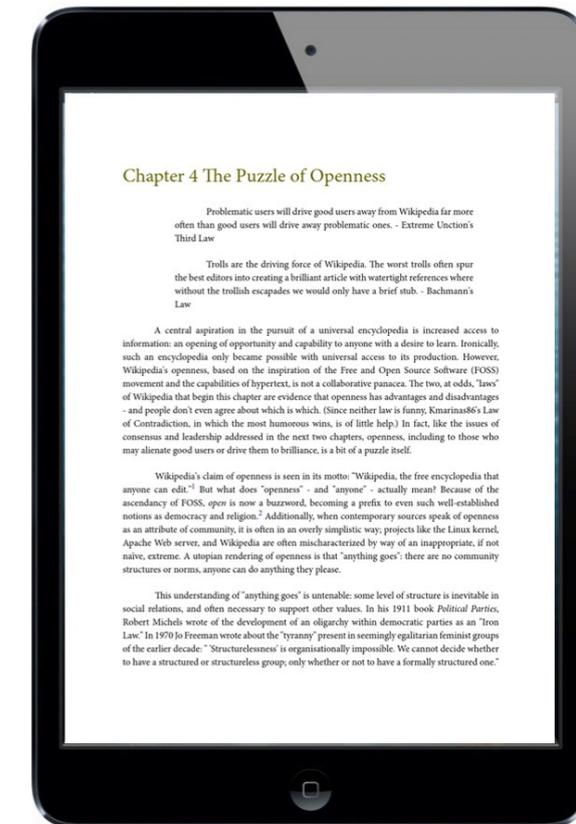
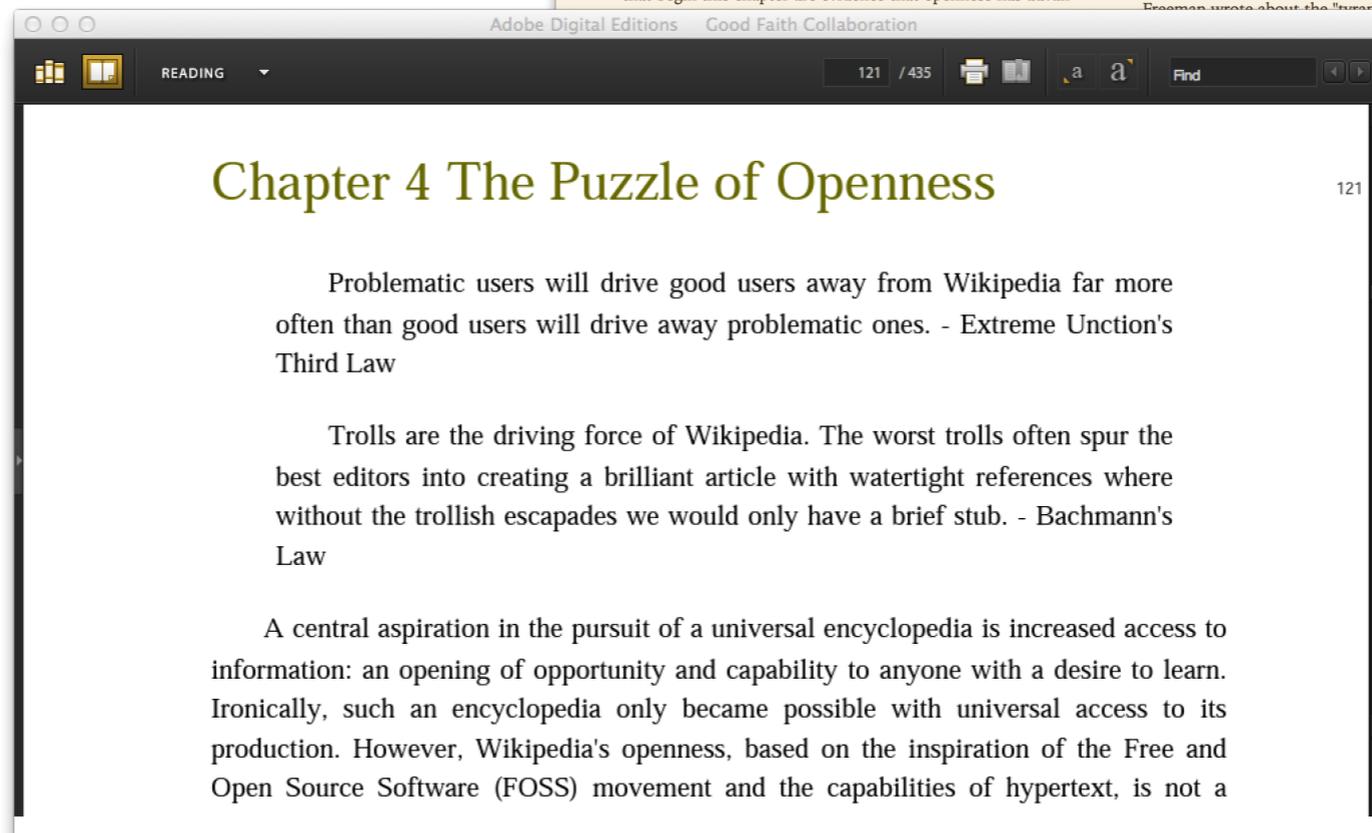
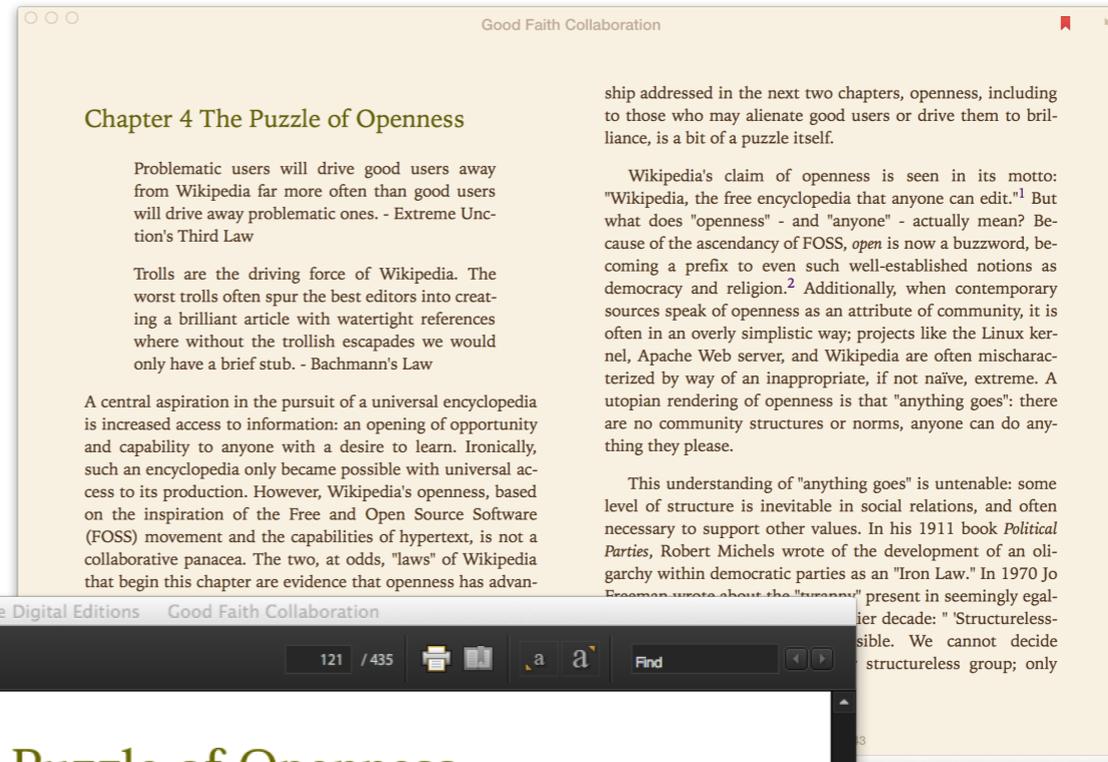
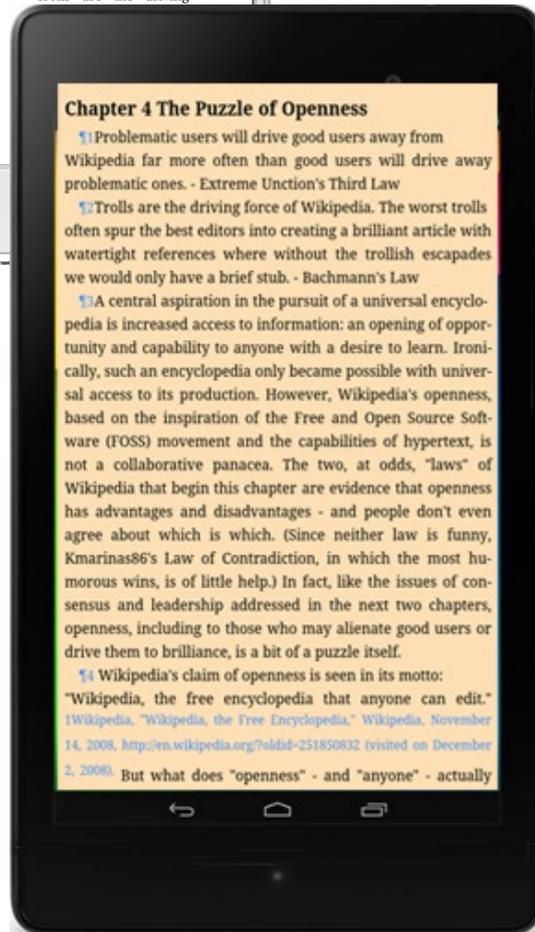
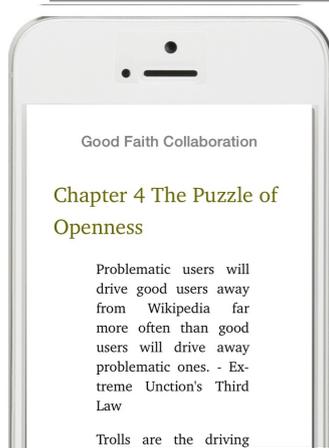
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- ▶ EPUB 3 has picked up on many of the OWP features
  - uses HTML5, i.e., includes audio and video as first class objects
  - SVG and Canvas comes to the fore
  - CSS 3 instead of older versions of CSS
  - (limited) scripting
  - MathML
- ▶ Magazine 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

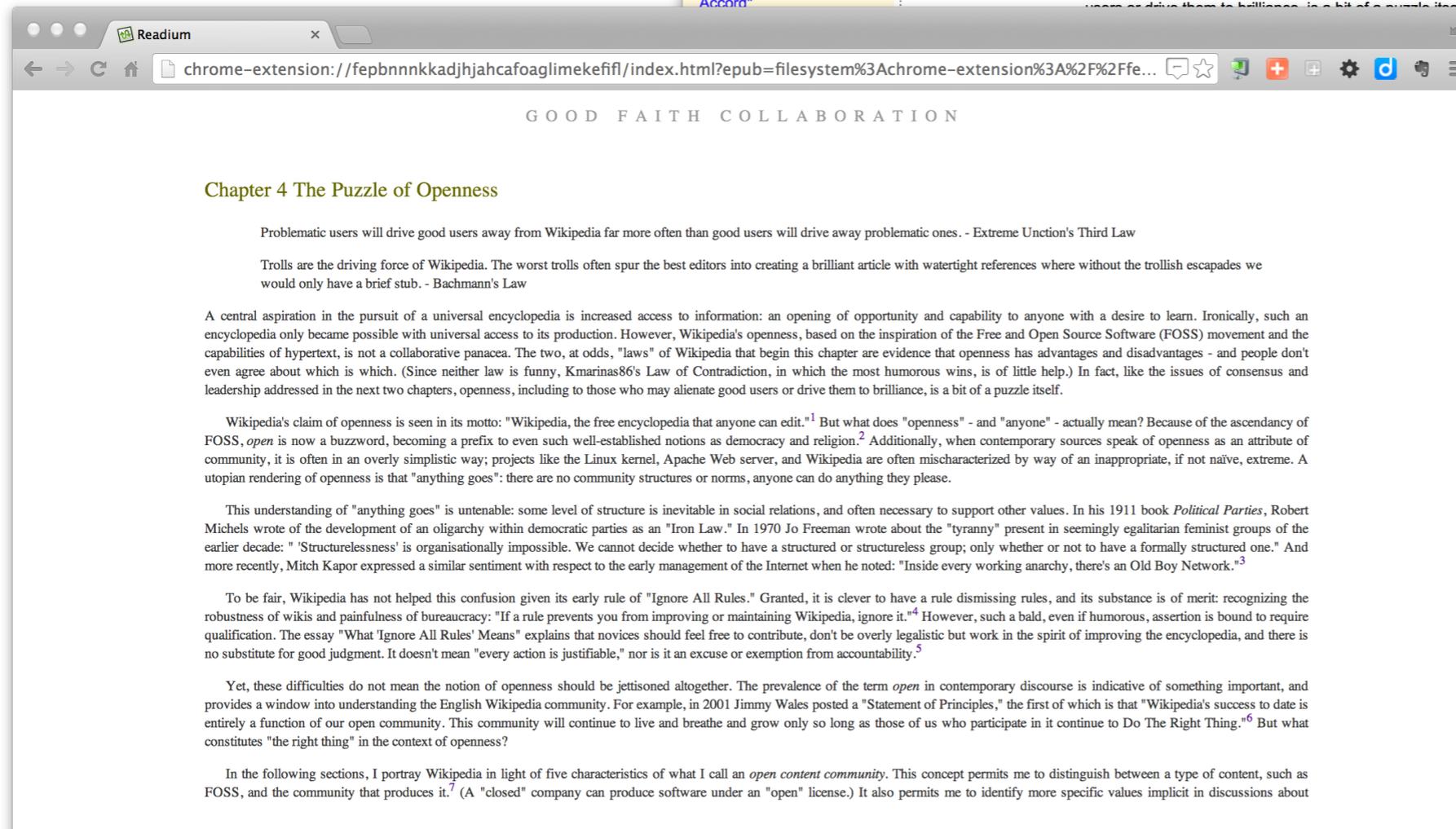
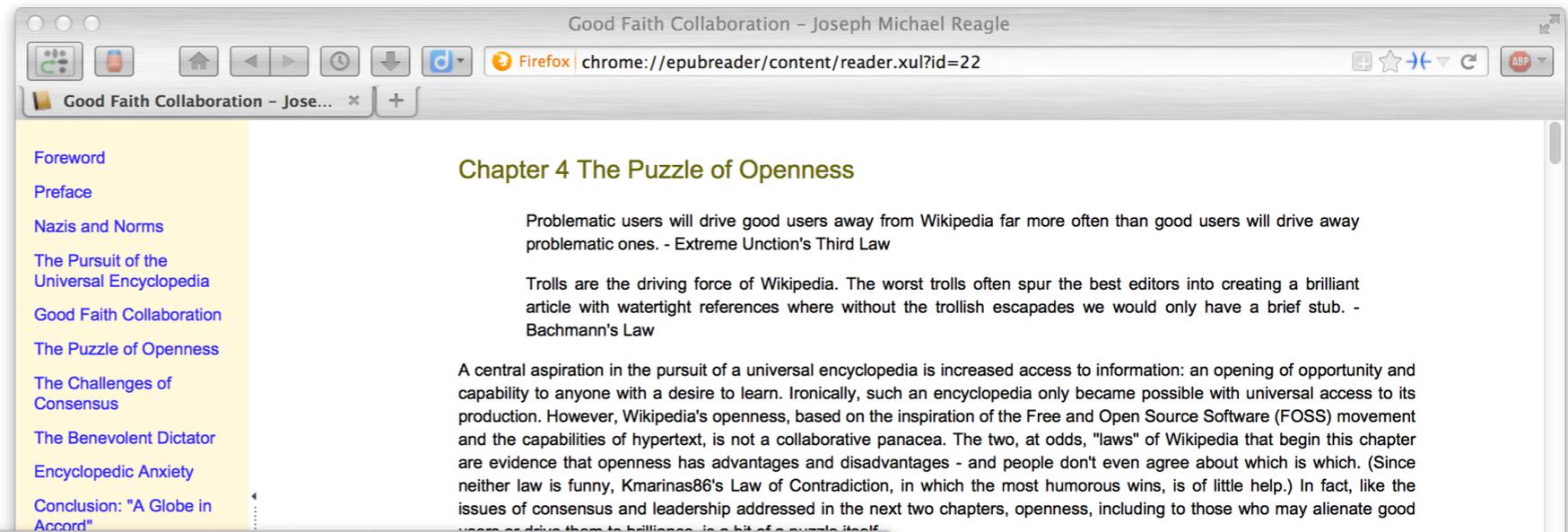
# Third-party service integration



# And run on different devices...



# ... or browser extensions



Wikipedia, the free encyclopedia that anyone can edit."<sup>1</sup> But what does the ascendancy of FOSS, *open* is now a buzzword, becoming a prefix religion.<sup>2</sup> Additionally, when contemporary sources speak of openness in a simplistic way; projects like the Linux kernel, Apache Web server, and appropriate, if not naive, extreme. A utopian rendering of openness is that anyone can do anything they please.

some level of structure is inevitable in social relations, and often *Political Parties*, Robert Michels wrote of the development of an oligarchy Freeman wrote about the "tyranny" present in seemingly egalitarian groups is organisationally impossible. We cannot decide whether to have a formally structured one." And more recently, Mitch Kapor management of the Internet when he noted: "Inside every working

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."<sup>4</sup> However, such a bald, even if humorous, assertion is bound



# With high quality graphics





Is everything perfect and fine?

a.k.a. are publishers and the  
Web coexisting perfectly?

No... ☹️

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

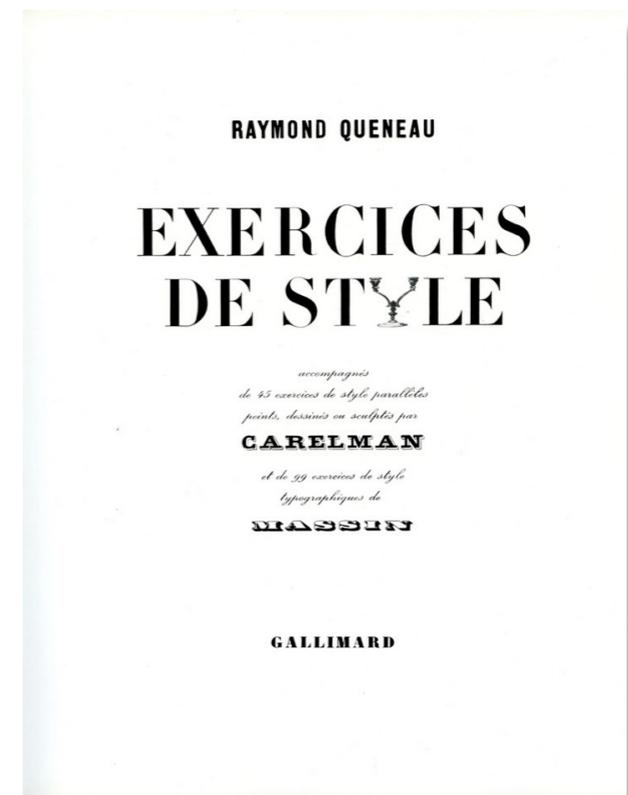
*The specific needs and priorities of the publishing industry may not be reflected in the evolution of the Web!*

What are the problems?

# “It should match current publishing practices”

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- ▶ 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,

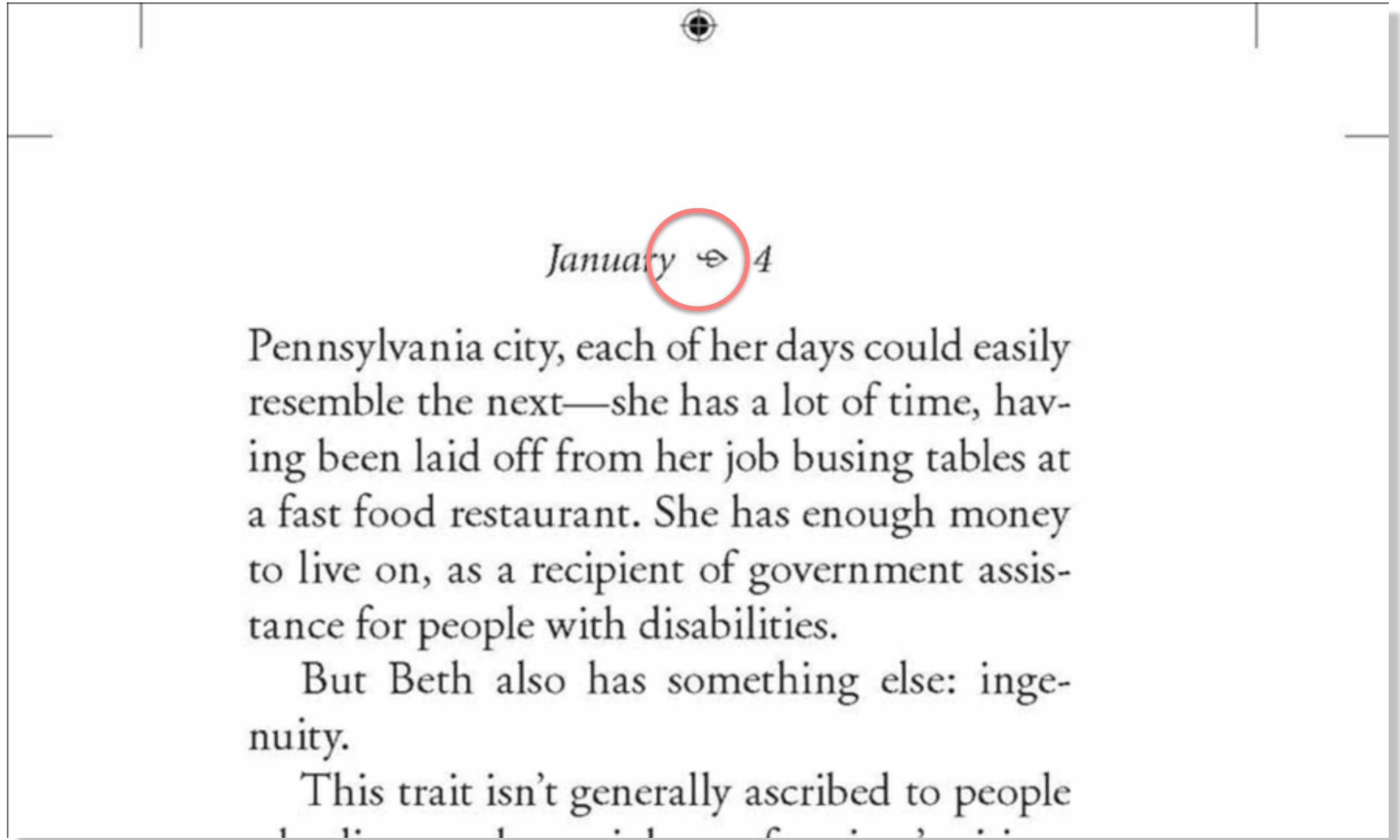
Cannot  
break word

as above.

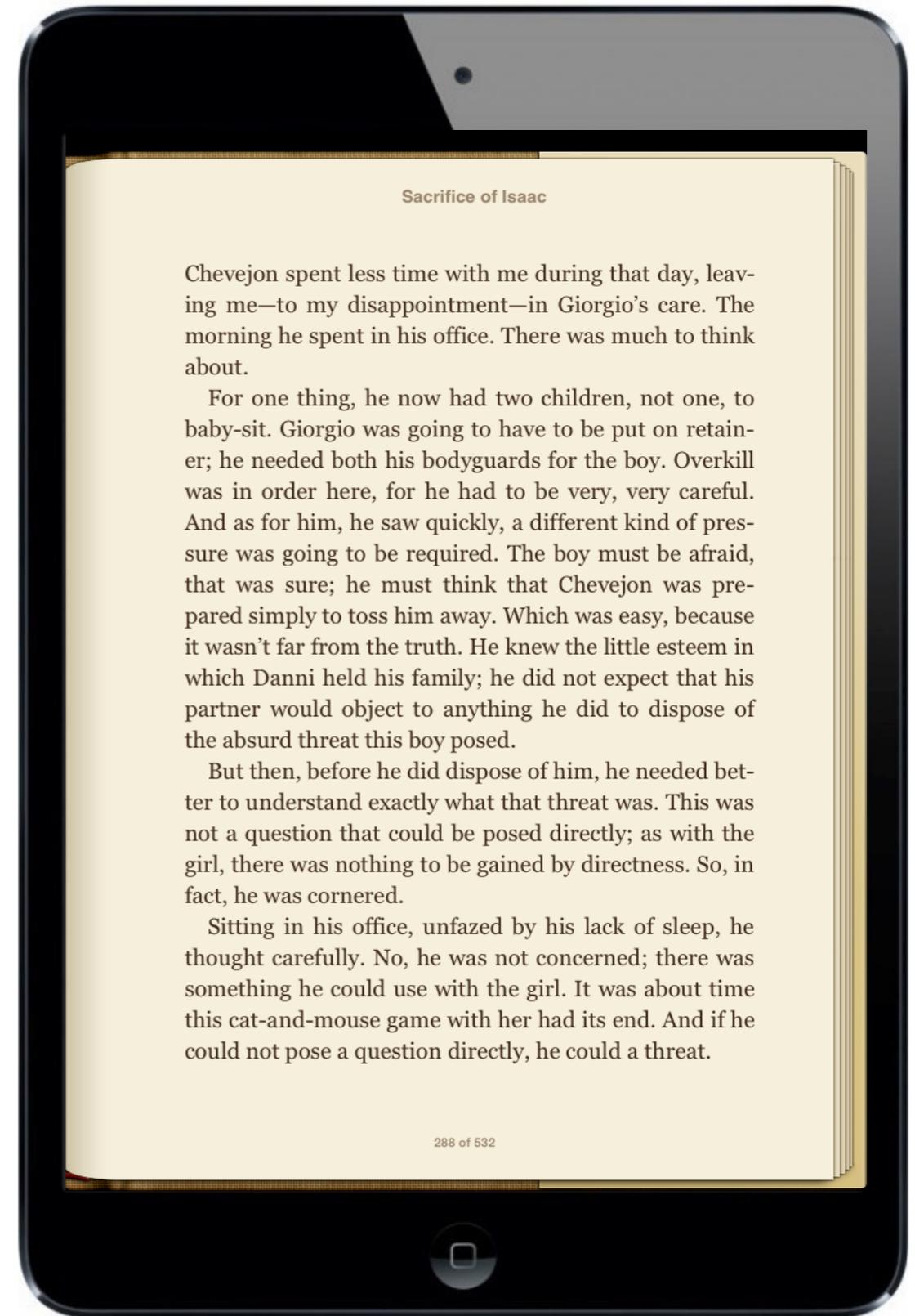
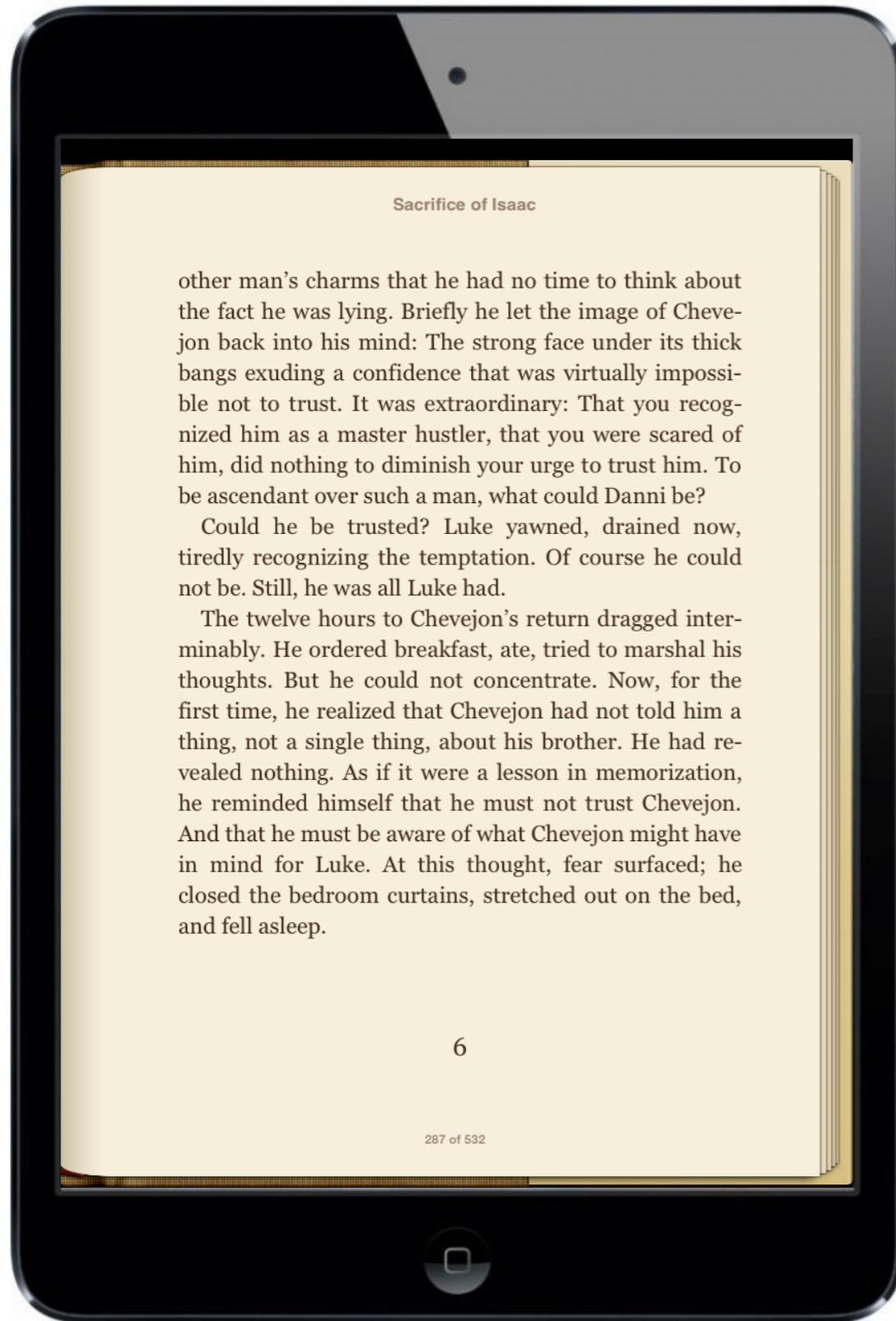
Must be broken

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

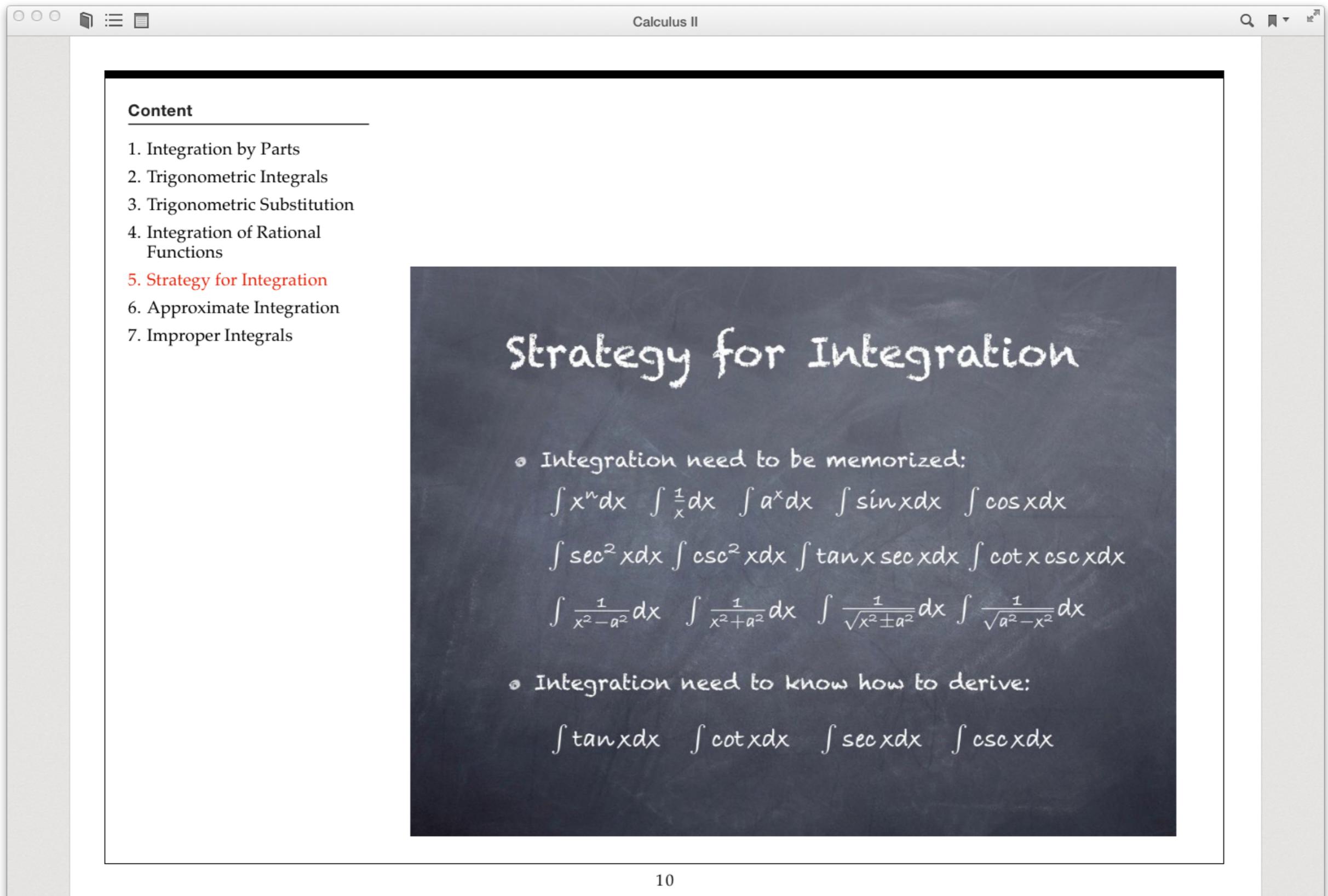
# Example: Missing CSS features



# Example: better widow control



# Example: different fonts, mathematics, images, fixed layout



The screenshot shows a web browser window titled "Calculus II". On the left, there is a "Content" table of contents with seven items. Item 5, "Strategy for Integration", is highlighted in red. To the right of the table of contents is a large image of a chalkboard. The chalkboard has the title "Strategy for Integration" written in white chalk. Below the title, there are two bullet points. The first bullet point is "Integration need to be memorized:" followed by four rows of integrals:  $\int x^n dx$ ,  $\int \frac{1}{x} dx$ ,  $\int a^x dx$ ,  $\int \sin x dx$ ,  $\int \cos x dx$ ;  $\int \sec^2 x dx$ ,  $\int \csc^2 x dx$ ,  $\int \tan x \sec x dx$ ,  $\int \cot x \csc x dx$ ;  $\int \frac{1}{x^2 - a^2} dx$ ,  $\int \frac{1}{x^2 + a^2} dx$ ,  $\int \frac{1}{\sqrt{x^2 \pm a^2}} dx$ , and  $\int \frac{1}{\sqrt{a^2 - x^2}} dx$ . The second bullet point is "Integration need to know how to derive:" followed by  $\int \tan x dx$ ,  $\int \cot x dx$ ,  $\int \sec x dx$ , and  $\int \csc x dx$ .

**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:  
 $\int \tan x dx$   $\int \cot x dx$   $\int \sec x dx$   $\int \csc x dx$

# “It should leverage the Web at large”

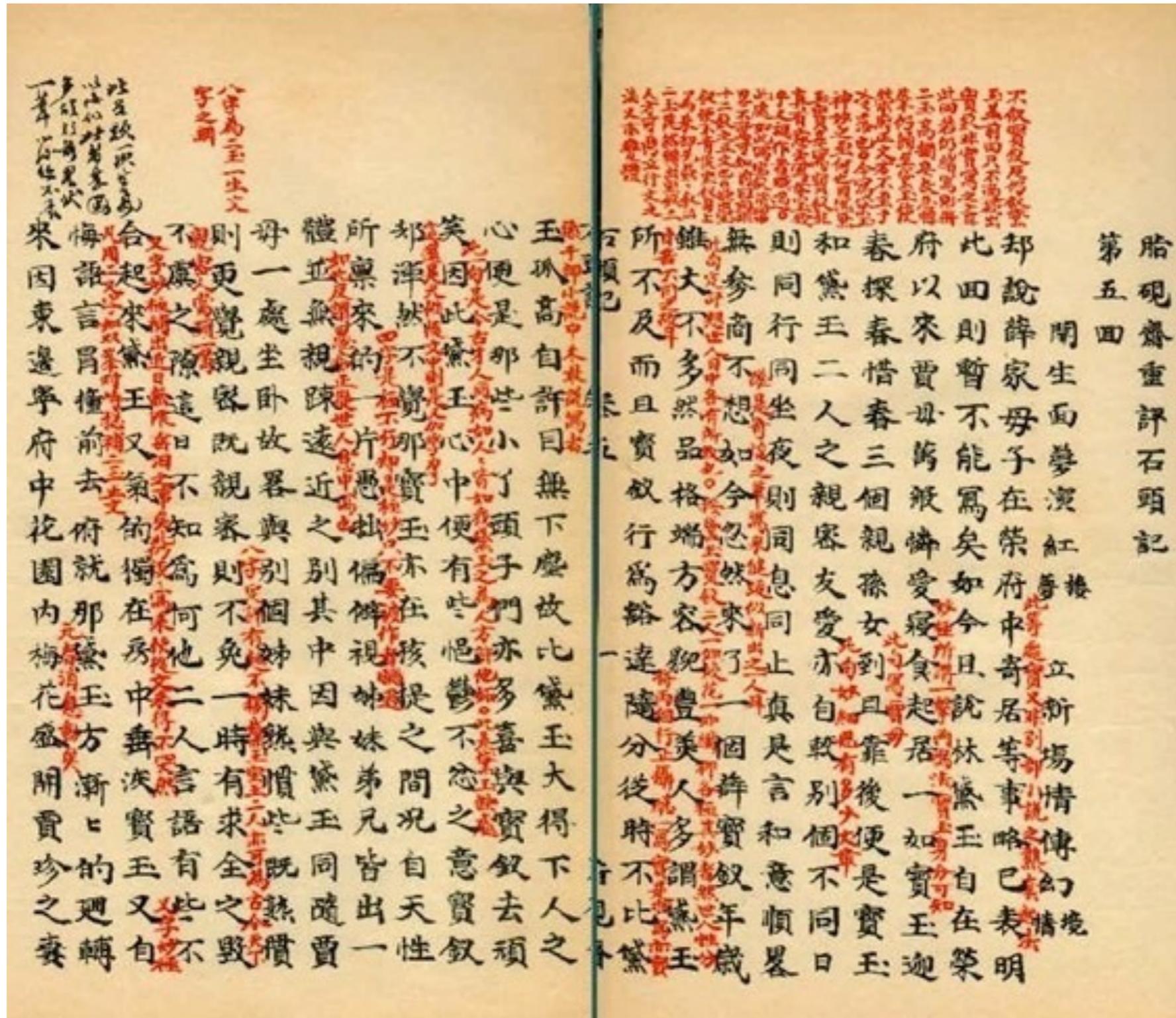
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- ▶ Foster sharing, bookmarks, annotations
- ▶ Data integration, book ids, catalogs, specialized search, discovery
- ▶ Connect to external services
- ▶ Facilitate document development (e.g., on-line reviewing, cooperation with editors, on-demand printing...)

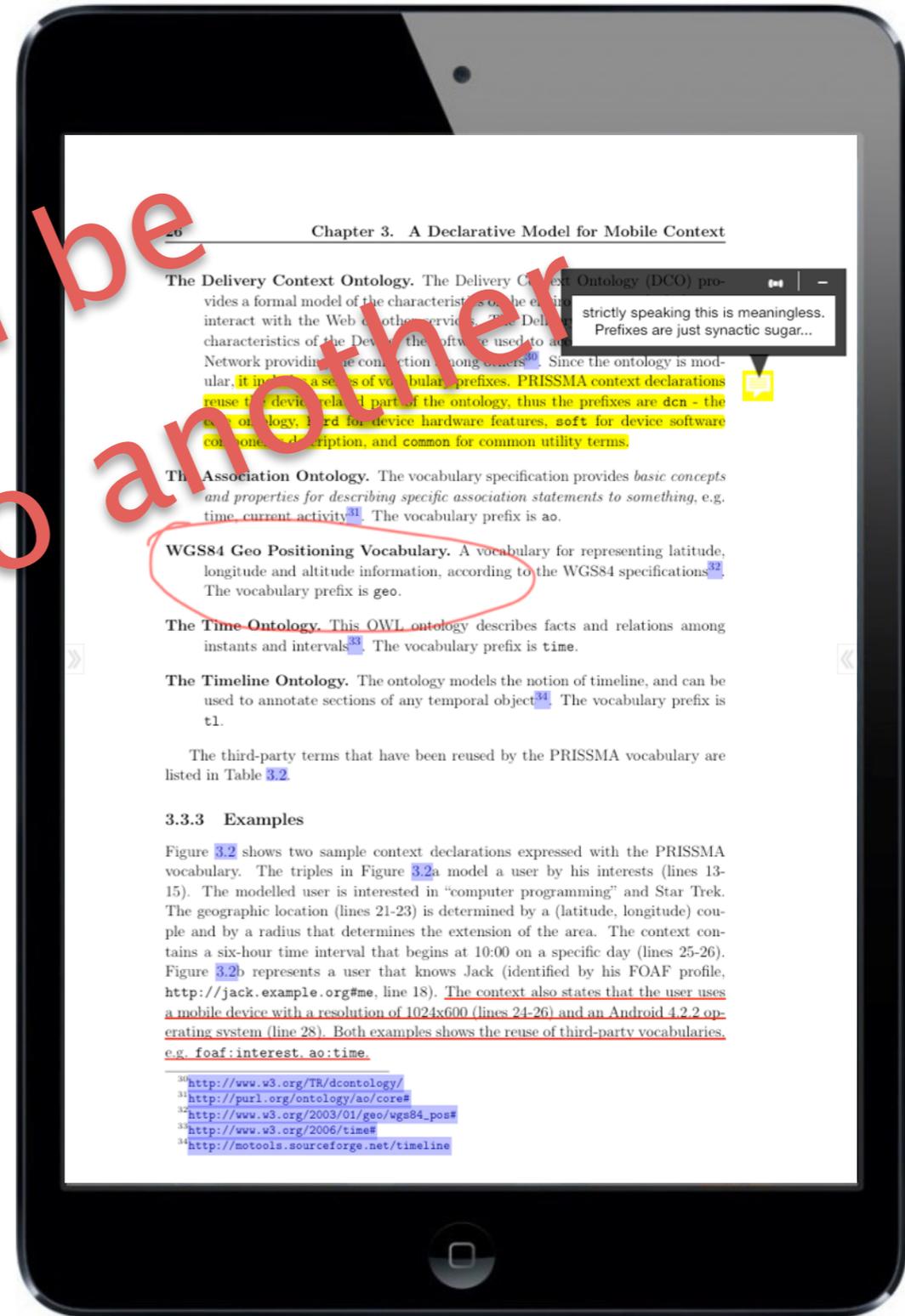
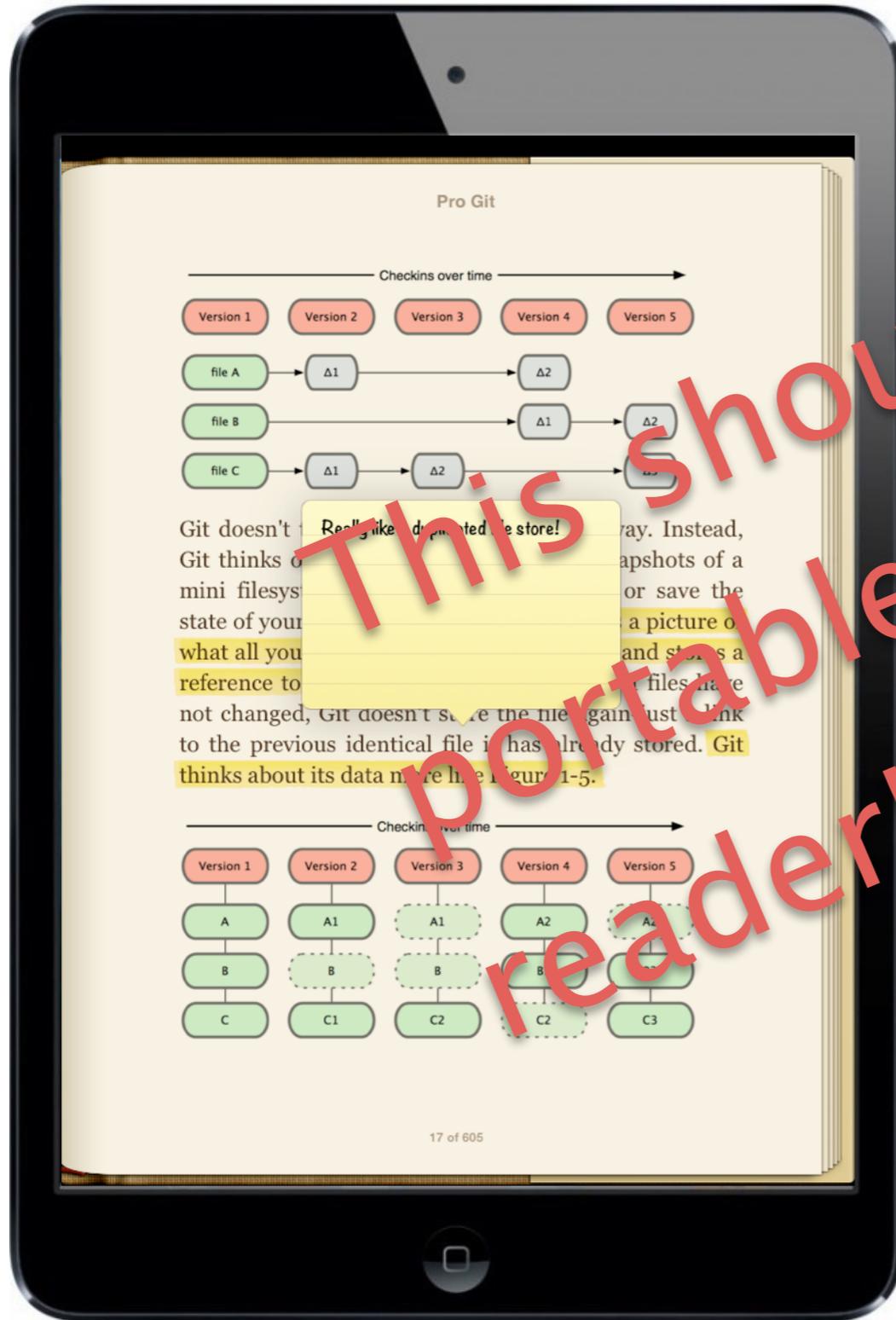


From [blog.infotrends.com](http://blog.infotrends.com)

# Annotation is an old tradition...



# Example: user annotation



# “It 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.

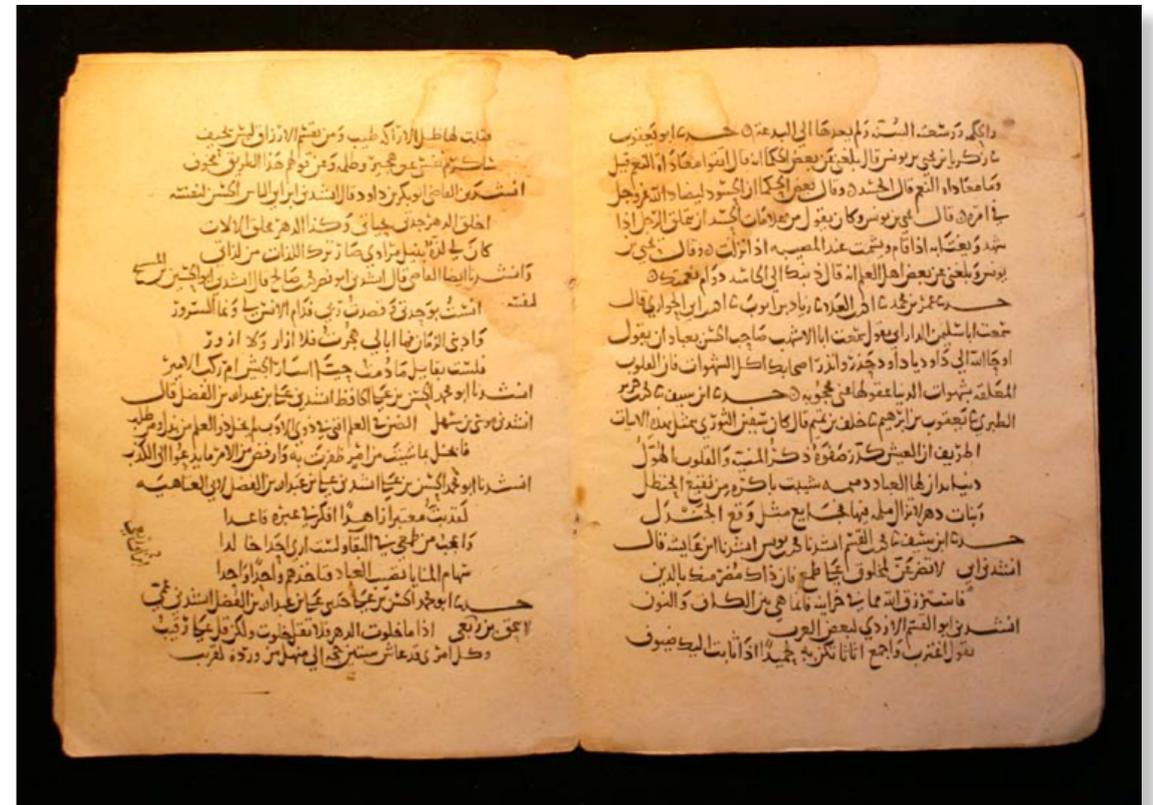
75

# Example: “Our Choice”



# “It Should satisfy diverse usage communities and patterns”

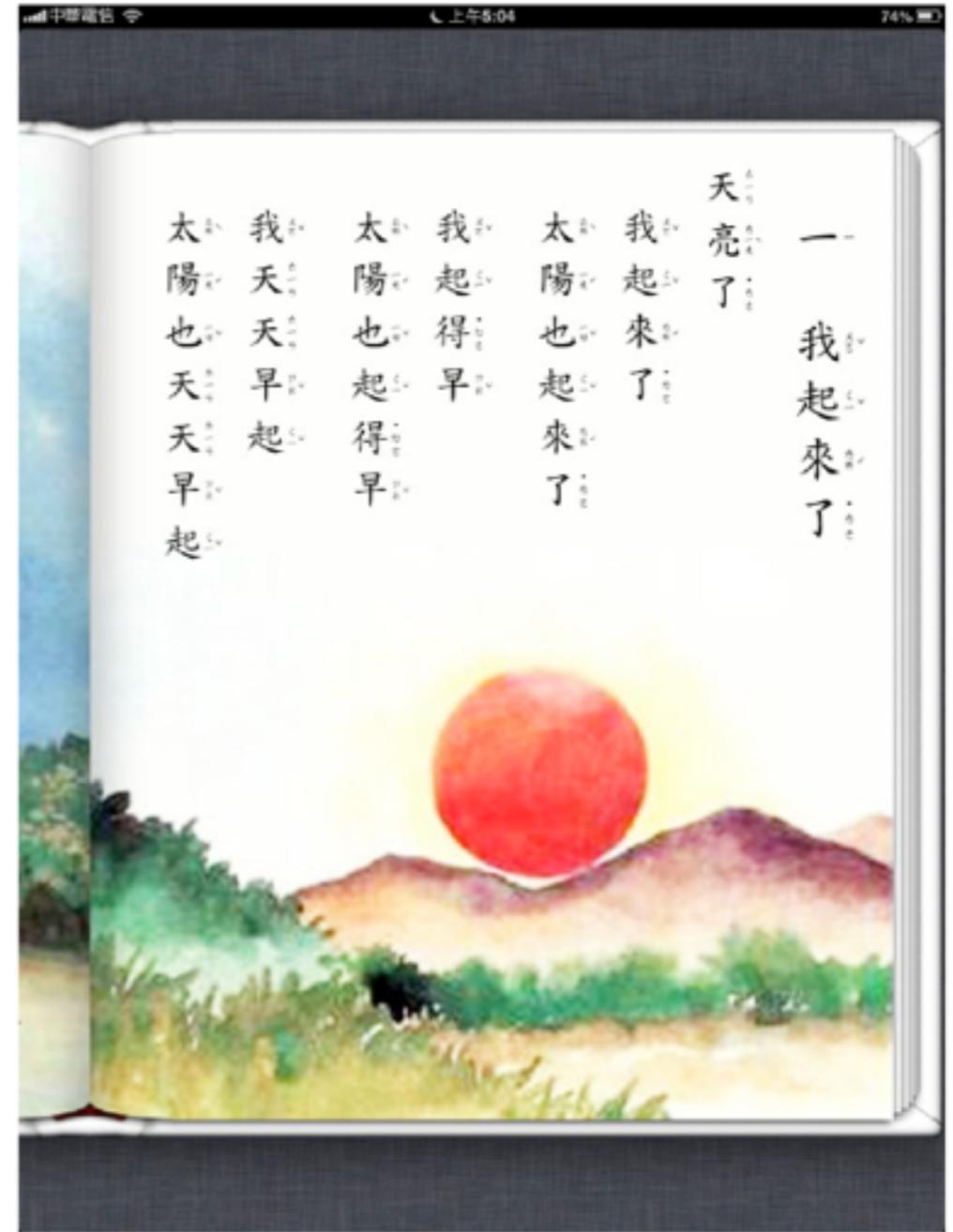
- ▶ Rich content anywhere, anytime, across multiple devices
  - content portability
  - internationalization, accessibility
- ▶ Personalization
- ▶ Inclusion of social features



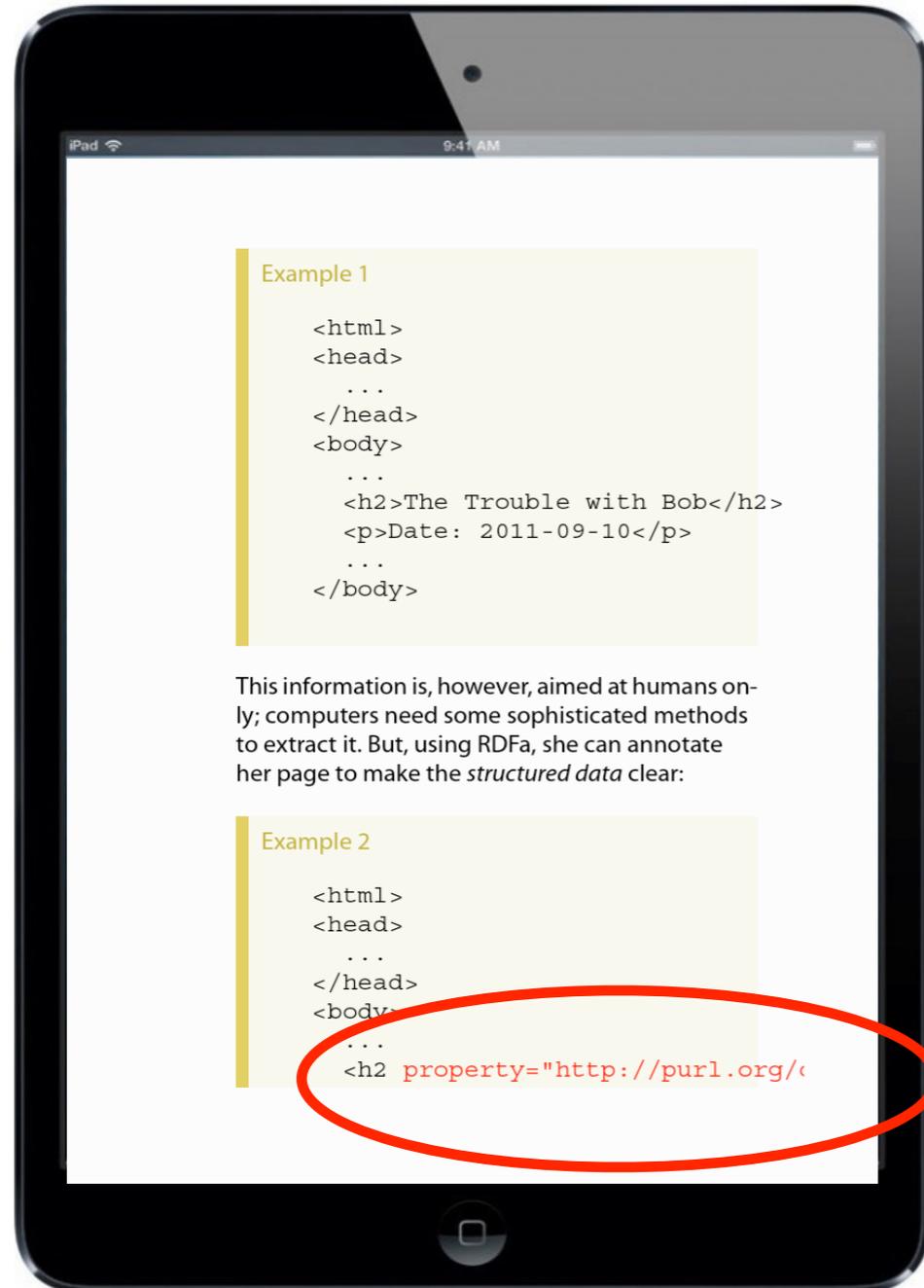


# Example: Ruby, Bopomofo

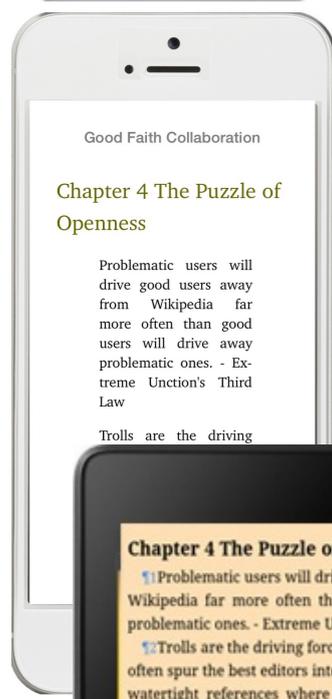
太陽也天天早起  
 我天天早起  
 太陽也起得早  
 我起得早  
 太陽也起來了  
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 天亮了  
 一  
 我起來了



# Example: content portability



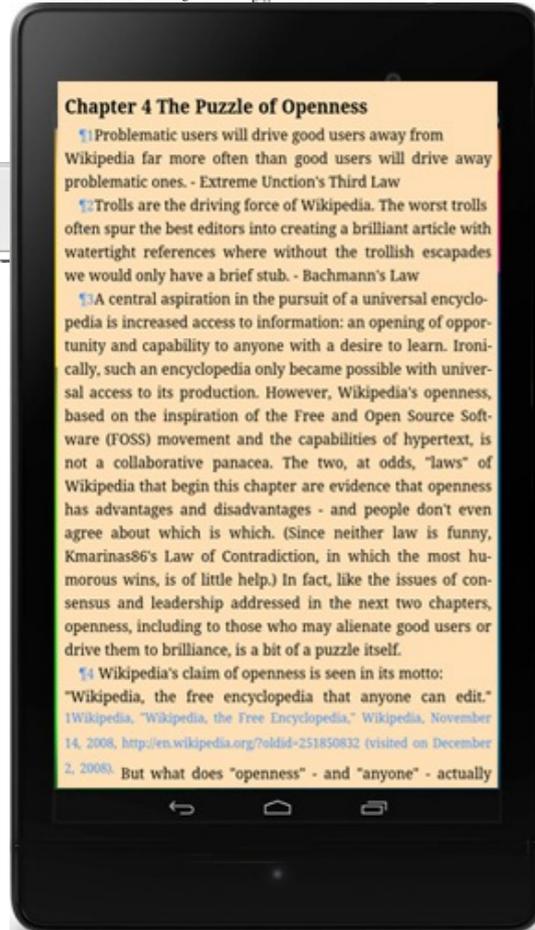
# Example: interoperability



## 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



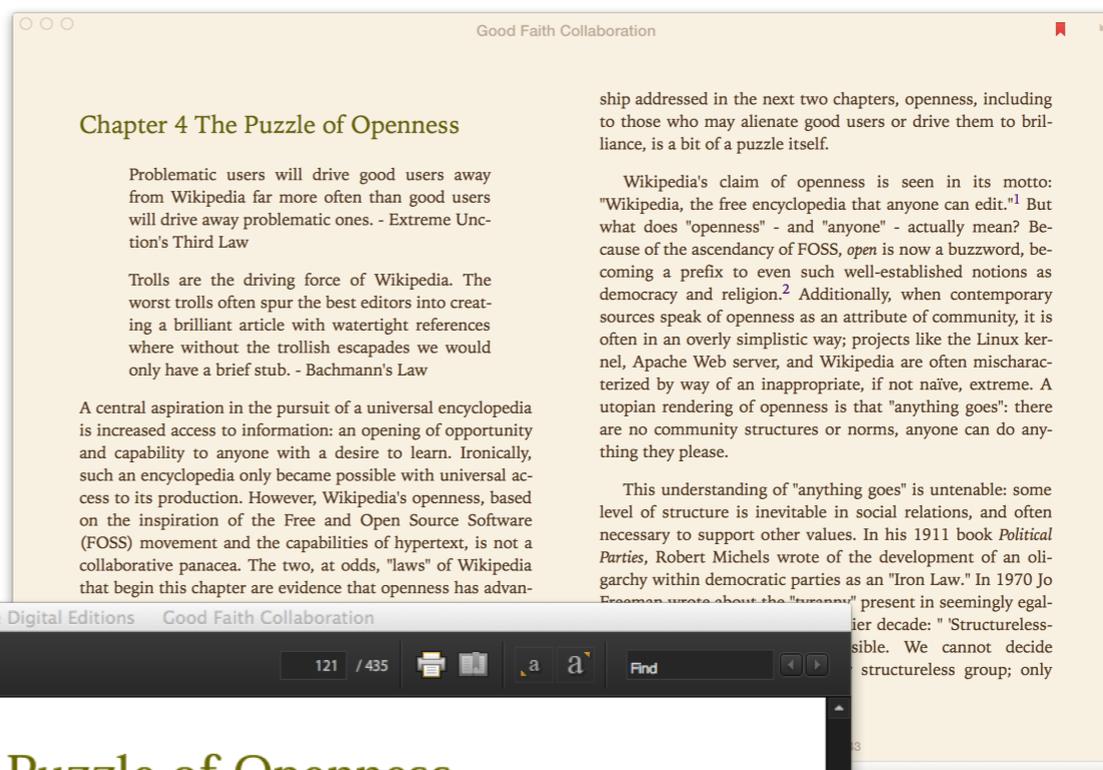
## Chapter 4 The Puzzle of Openness

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." [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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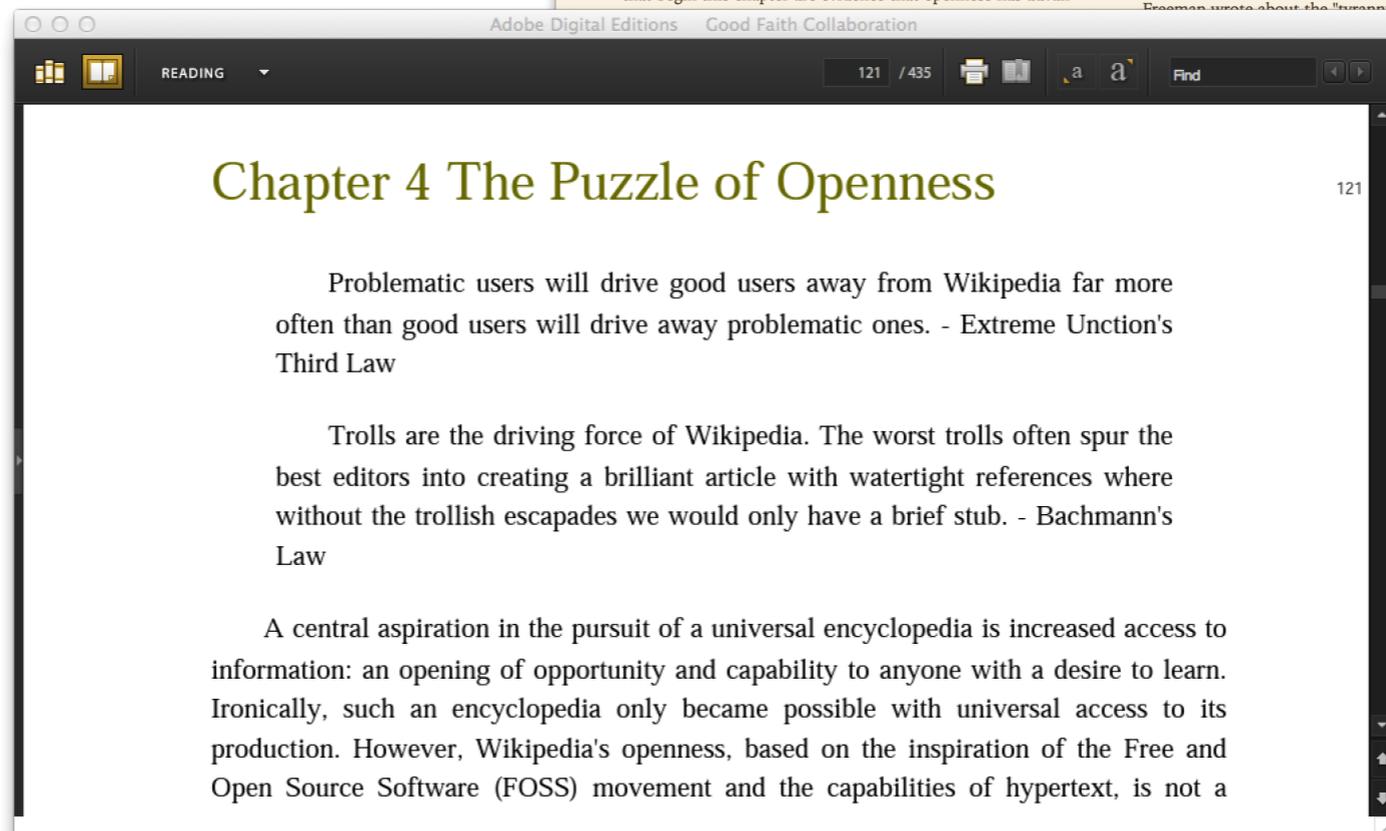
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Wikipedia's claim of openness is seen in its motto: "Wikipedia, the free encyclopedia that anyone can edit."<sup>1</sup> But what does "openness" - and "anyone" - actually mean? Because of the ascendancy of FOSS, *open* is now a buzzword, becoming a prefix to even such well-established notions as democracy and religion.<sup>2</sup> 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 groups of the earlier decade: "Structurelessness is organisationally impossible. We cannot decide whether to have a structured or structureless group; only

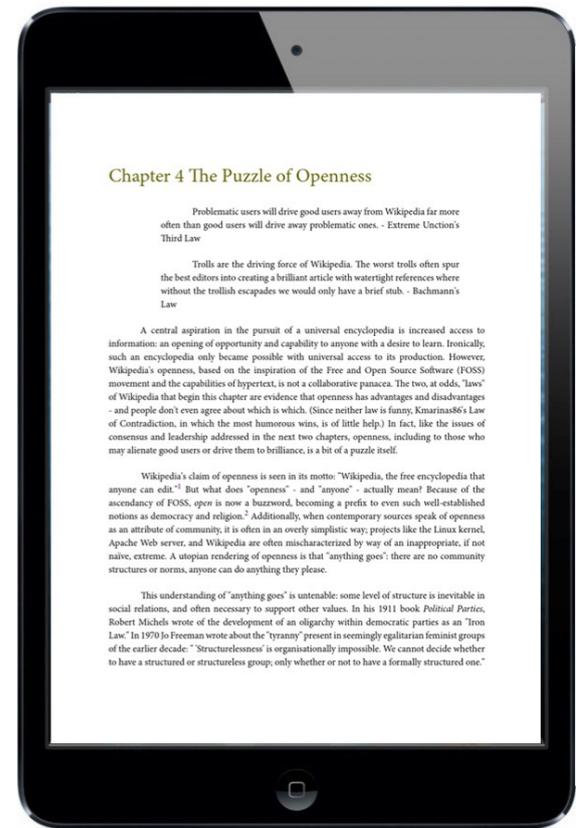


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A central aspiration in the pursuit of a universal encyclopedia is increased access to information: an opening of opportunity and capability to anyone with a desire to learn. Ironically, such an encyclopedia only became possible with universal access 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.

Wikipedia's claim of openness is seen in its motto: "Wikipedia, the free encyclopedia that anyone can edit." 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. 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 groups of the earlier decade: "Structurelessness is organisationally impossible. We cannot decide whether to have a structured or structureless group; only whether or not to have a formally structured one."

# 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!*

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](#)

## W3C 호스트와 사무국

W3C는 미국의 메사추세츠 공과대학(MIT), 유럽의 정보수학유럽연구컨소시움(ERCIM), 그리고 일본의 게이오 대학의 세곳의 대륙에 호스트를 가지고 있습니다. 또한, W3C는 각국의 W3C 사무국인 지역 조직과의 파트너 프로그램을 가지고 있습니다. W3C 사무국은 W3C와의 연락을 위한 지역 거점 역할을 수행하며, 또한 W3C의 기술 명세를 자국에 전파하게 됩니다. 사무국의 역할은 다음과 같이 요약할 수 있습니다.

개발자, 설계자, 그리고 표준 전문가 들에게 W3C 권고안을 채택을 촉진하게 하고, 향후 권고안을 만들 수 있는 지역 기관의 가입을 독려한다.

## 검색:

Google



상세검색

- w3c.or.kr
- WWW

# The way forward: how can W3C help?

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)

- [신세계 박기철 포럼](#)
- [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

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- ▶ 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*

# W3C's Workshop series

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- ▶ “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, ...



# 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*

The screenshot shows the W3C Digital Publishing Activity website. The main content area is titled "W3C DIGITAL PUBLISHING ACTIVITY" and contains the following text:

**Pressing Ahead with Publishing on the Web**  
The goal of the W3C Digital Publishing Activity is help make the Web a platform for the digital publishing industry, and to build the necessary bridges between the developers of the Open Web Platform and the publishing industry.

At the moment, work in this activity primarily takes place in the [Digital Publishing Interest Group](#).

Through the initiatives taken by this Activity (Workshops, Interest Groups, possibly other types of Groups), as well as an extensive network of contacts with relevant industry consortia and groups (IDPF, BISG, EDItEUR, IPTC, the Daisy Consortium, NISO, etc.) the Activity should ensure that the interests and requirements of the Publishing Industry are known to other groups within the W3C, that experts of commercial publishers take part in the technical work in those groups to move the Open Web Platform forward, and that the Publishing Industry at large is well aware of the latest directions, issues, and priorities at W3C.

**Questions?** Contact [Ivan Herman](mailto:ivan@w3.org) <ivan@w3.org>, W3C Digital Publishing Activity Lead.

**About Digital Publishing**  
Today, eBooks compete with printed versions, and there is a wide choice of hardware and software available for eBook readers. Journals and magazines are also made available digitally on the Web or in specialized applications and, in some cases, their printed version is even abandoned in favor of a purely digital version. The formats used by eBook readers and tablets for electronic books, magazines, journals and educational resources are largely based on W3C Technologies, such as (X)HTML, CSS, SVG, SMIL, MathML, or various Web API-s. Commercial publishers also rely on W3C technologies in their back-end processing all the way from authoring through to delivering the printed or electronic Publishing Industry and the various W3C recommendations is not perfect. Necessary features may be missing in the W3C documents, or may be in draft only; as a result, for example, EPUB3, the standard for electronic books, introduced its own extensions to cover the needs of publishing. Technical experts of commercial publishers and retailers are not present at the various Working Groups, they do not contribute to the development of the technical solutions they depend on. As a result, requirements of the publishing industry, their use cases, implementation experiences, etc., do not necessarily reach the various technical groups at the W3C in a timely manner, and do not influence the priorities taken by those groups, and the publishing

The sidebar on the left contains the following sections:

- ACTIVE GROUPS**
  - [Digital Publishing Interest Group](#)
- CALENDAR**
- W3C WORKSHOPS**
  - [Publishing and the OWP \(September 2013\)](#)
  - [eBooks & I18N \(June 2013\)](#)
  - [Great Expectations \(February 2013\)](#)
- OTHER EVENTS**
  - [IDPF EDUPUB Workshop \(October 2013\)](#)
- OTHER RESOURCES**
  - [Liam Quin's Presentation at Ballsage 2013](#)
  - [Jeff Jaffe's keynote at IDPF 2013](#)

The right sidebar contains the **News** section with the following items:

- See [Activity News](#) for details and older news
- [EDUPUB: A Workshop on Digital Publishing for Education](#)  
2013-7-31  
[Continue reading →](#)
- [W3C Workshop Report: Richer Internationalization for eBooks](#)  
2013-7-28  
[Continue reading →](#)
- [Digital Publishing Interest Group WIKI now available](#)  
2013-7-12  
[Continue reading →](#)

# New Digital Publishing Interest Group

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- ▶ 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

# 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

The image shows two overlapping browser windows. The background window displays the 'W3C Annotation Use Cases' page, and the foreground window displays the 'Requirements for Latin Text Layout and Pagination' page. Both pages are marked as 'W3C Working Draft'.

**W3C Annotation Use Cases**

W3C<sup>®</sup>

Annotation Use Cases

W3C First Public Working Draft

**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](#)

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**Abstract**

This document describes the set of use cases for the W3C Digital Publishing Interest Group.

**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](mailto: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.

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**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](mailto:dave.cramer@hbgusa.com)

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**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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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.

# Possible future work: annotation

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- ▶ 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

# Current plans

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- ▶ 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!

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- ▶ 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

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*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 LLC, ...
  - Discussions with many other publishers on-going

# Conclusions

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The future: Publishing = Web

Work with W3C work to make this a reality!

Thank you for your attention!

EASY NOT IDLE.