

# Effective ePubs Today

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**Opportunity**

# Navigate

- Reader-defined navigation
- Publisher-defined navigation
- Machine-driven navigation

# Search

ePub Search

I'm Feeling Lucky

# Reread

Reuse

# Features

# CSS

Your key to success

# Most Important

- Generic font choices, **weights**, size
  - Margins
- Borders, rules
- Spacing, padding
- Alignment, “block” or “inline”

# Nice to Have

- Color
- Page breaking
- Float
- Lists and tables

# In the Wild

background-color: 24	font-family: 29	margin-right: 36	page-break-before: 33
border-bottom: 6	font-size: 142	margin-top: 135	position: 1
border-color: 2	font-style: 45	margin: 19	right: 48
border-left: 4	font-variant: 1	max-height: 1	src: 4
border-right: 4	font-weight: 117	max-width: 2	text-align: 140
border-spacing: 6	height: 13	oeb-column-number: 9	text-decoration: 16
border-top: 4	letter-spacing: 3	padding-bottom: 6	text-indent: 151
border: 13	line-height: 7	padding-left: 14	text-transform: 6
clear: 4	list-style-type: 6	padding-right: 7	vertical-align: 3
color: 46	list-style: 2	padding-top: 51	visibility: 1
display: 208	margin-bottom: 177	padding: 43	width: 5
float: 14	margin-left: 59	page-break-after: 3	

# Fonts

and how they are a pain

# Embedding Benefits

- Highest quality typography
- Big differentiation from the current norm
- Ensure all of your crazy glyphs appear

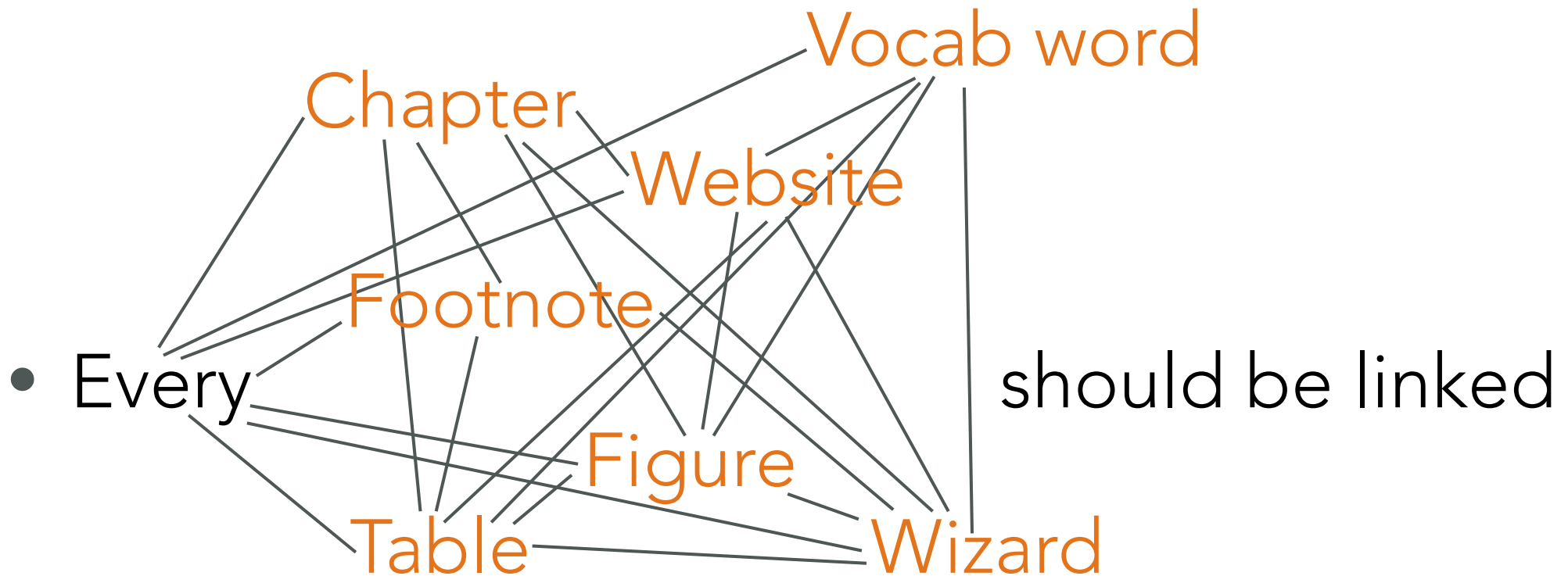
# Embedding Downsides

- Limited reader support
- Licensing headaches
- No assurance all of your crazy glyphs appear

# Linking

for goodness sake, do it!

# Internal & External



# Media

"ooh, the pretty pictures!"



## What the trends mean, economically

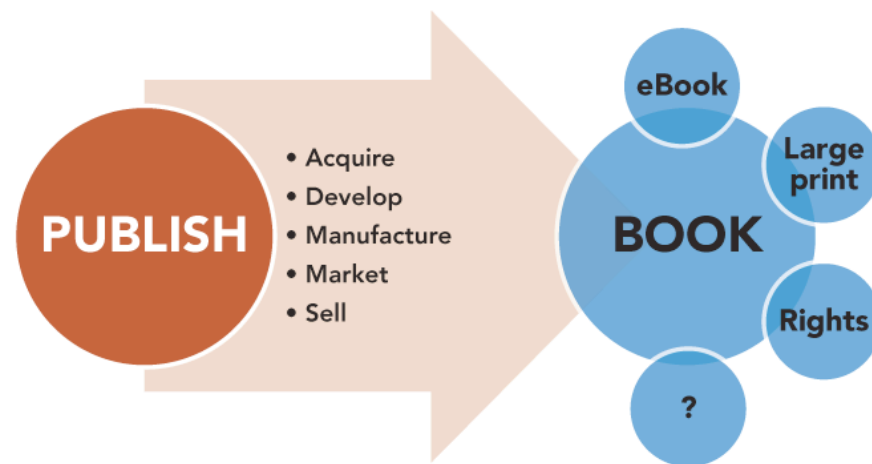


Figure 1-1. The traditional publishing model

There are enormous shifts in the book publisher's sales channels. Book clubs were a mainstay well over half a century; in most places, they're just about gone. Retail bookselling has continually consolidated, reducing the number of free-standing independents and creating bigger chains. And of those chains are suffering. The net result will be a reduced number of brick-and-mortar bookst

# Figures

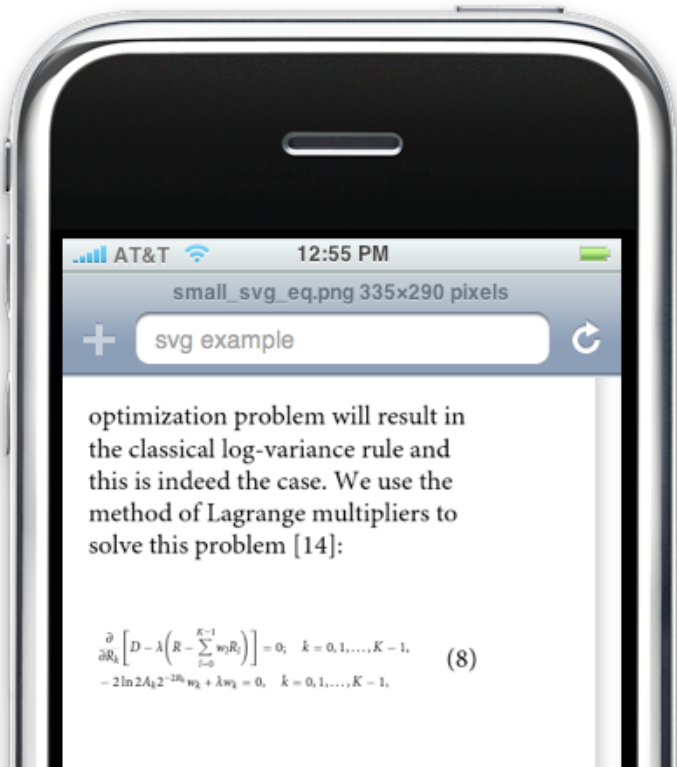
# Image Size?

- “Imagine your book through a straw”
- How much disk space does your cell phone have again? And how slow is the Edge network?
- Scalable images win for many (SVG)

observe that the resulting distortion for the whole block (4) is similar to the distortion function in the output of a single quantizer (1) with the difference that  $R_k$  represents the average number of bits per sample for blocks from class  $k$ . One can expect that the optimization problem will result in the classical log-variance rule and this is indeed the case. We use the method of Lagrange multipliers to solve this problem [14]:

$$\frac{\partial}{\partial R_k} \left[ D - \lambda \left( R - \sum_{l=0}^{K-1} w_l R_l \right) \right] = 0; \quad k = 0, 1, \dots, K - 1, \tag{8}$$

$$- 2 \ln 2 A_k 2^{-2R_k} w_k + \lambda w_k = 0, \quad k = 0, 1, \dots, K - 1,$$



# SVG FTW



# Navigation

NCX is your friend

```
<guide>
```

```
  <reference type="toc" title="Table of Contents"  
    href="toc.html" />
```

```
  <reference type="loi" title="List Of Illustrations"  
    href="toc.html#figures" />
```

```
  <reference type="other.intro" title="Introduction"  
    href="intro.html" />
```

```
</guide>
```

**Pitfalls**

# Conformance

- Lack of a public, testable conformance suite hurts everyone
- Software people\* are lazy
- Tiny (mobile) devices really cannot handle everything

\* like me

# Typography & Layout

- Embedding fonts only gets you so far
- Abandon the page, sorry
- Re-evaluate what is most important to readers

```

1 [?xml version="1.0" encoding="utf-8" standalone="no"?]
2 <ncx version="2005-1" xmlns="http://www.daisy.org/z3986/2005/ncx/">
3   <head>
4     <meta name="cover" content="cover"/>
5     <meta name="dtb:uid" content="isbn:9780596156923"/>
6     <meta name="dtb:depth" content="-1"/>
7     <meta name="dtb:totalPageCount" content="0"/>
8     <meta name="dtb:maxPageNumber" content="0"/>
9   </head>
10  <docTitle>
11    <text>Real World Haskell</text>
12  </docTitle>
13  <navMap>
14    <navPoint xmlns="http://www.daisy.org/z3986/2005/ncx/" id="id644349" playOrder="1">
15      <navLabel>
16        <text>Real World Haskell</text>
17      </navLabel>
18      <content src="index.html"/>
19      <navPoint xmlns="http://www.daisy.org/z3986/2005/ncx/" id="id746419" playOrder="2">
20        <navLabel>
21          <text>Preface</text>
22        </navLabel>
23        <content src="pr01.html"/>
24      </navPoint xmlns="http://www.daisy.org/z3986/2005/ncx/" id="id746424" playOrder="3">
25        <navLabel>

```

```

toc.ncx
1 [?xml version="1.0" encoding="utf-8" standalone="no"?]
2 <package xmlns="http://www.idpf.org/2007/opf" version="2.0" unique-identifier="bookid">
3   <metadata>
4     <dc:identifier xmlns:dc="http://purl.org/dc/elements/1.1/" id="bookid">urn:isbn:9780596156923</dc:identifier>
5     <dc:title xmlns:dc="http://purl.org/dc/elements/1.1/">Real World Haskell</dc:title>
6     <dc:date xmlns:dc="http://purl.org/dc/elements/1.1/">2008</dc:date>
7     <dc:rights xmlns:dc="http://purl.org/dc/elements/1.1/">Copyright © 2008 Bryan O'Sullivan, Donald Stewart and John Goerzen</dc:rights>
8     <dc:publisher xmlns:dc="http://purl.org/dc/elements/1.1/">O'Reilly Media, Inc.</dc:publisher>
9     <dc:creator xmlns:dc="http://purl.org/dc/elements/1.1/">Bryan O'Sullivan</dc:creator>
10    <dc:creator xmlns:dc="http://purl.org/dc/elements/1.1/">John Goerzen</dc:creator>
11    <dc:creator xmlns:dc="http://purl.org/dc/elements/1.1/">Donald Bruce Stewart</dc:creator>
12    <dc:language xmlns:dc="http://purl.org/dc/elements/1.1/">en</dc:language>
13    <meta name="cover" content="cover-image"/>
14  </metadata>
15  <manifest xmlns="http://www.idpf.org/2007/opf">
16    <item id="ncxtoc" media-type="application/x-dtbncx+xml" href="toc.ncx"/>
17    <item id="htmltoc" media-type="application/xhtml+xml" href="bk01-toc.html"/>
18    <item xmlns="http://www.idpf.org/2007/opf" media-type="text/css" id="css" href="core.css"/>
19    <item xmlns="http://www.idpf.org/2007/opf" id="cover" href="cover.html" media-type="application/xhtml+xml"/>
20    <item xmlns="http://www.idpf.org/2007/opf" id="epub.embedded.font" href="DejaVuSerif.otf" media-type="font/opentype"/>
21    <item xmlns="http://www.idpf.org/2007/opf" id="id644349" href="index.html" media-type="application/xhtml+xml"/>

```

# Complexity?

# Nothing Too Rich

- No Flash, animations
- No video at (link to it, though, and the iPhone will make you look cool)
- No interactivity



# Logo, Hello?

Red logo by Travis Alber, blue by Liza Daly

**GOTCHAS!**

- CSS wasn't *really* created for this stuff
- Invalidity hurts
- XHTML is restrictive
- Big tables are hard everywhere
- Device, software support all over the map

# Physical Devices

# Sony Reader

- Beautiful +
- Adobe Digital Editions-backed ±
- No connectivity?! ☹ –
- Limited capabilities, file size restrictions –

# iPhone

- Tiny ±
- Lots of new software +
- Apple -
- Flexible, expanding +

**Software**

# Digital Editions

- Adobe ±
- Updated +
- Supports embedded fonts +
- ...but requires them for  $\text{t}^{\circ}\text{o} \pi\mu\phi\text{h}$  -
- Non-conformant -

**Online**

# Bookworm

- Beautiful +
- Very high level of conformance, support +
- Online-only –
- Saves your place +
- Multi-platform +
- Mobile friendly +

**Future**

- Inter-ePub linking
- Rich experiences
- Web-enabled content
- Digital Signing
- Support for crazy navigation
- Plastic Logic, Android, Palm?