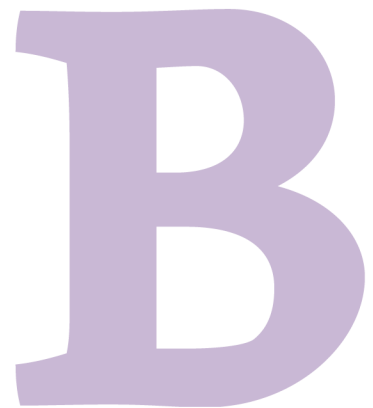


# How To Produce An eBook

Using Apple Pages

A large, stylized, light purple letter 'B' that serves as a background element for the bottom right portion of the cover. The background of the entire cover is a deep purple with a network of white lines and circles, and several overlapping light purple circles.

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# Imprint

Published on September 8, 2011

Smashing Media GmbH, Freiburg, Germany

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Proofreading: Brian Goessling

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Founded in September 2006, [Smashing Magazine](#) delivers useful and innovative information to Web designers and developers. Smashing Magazine is a well-respected international online publication for professional Web designers and developers. Our main goal is to support the Web design community with useful and valuable articles and resources, written and created by experienced designers and developers.

ISBN: 978-3-943075-17-5

Version: December 20, 2011

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# How To Produce an eBook

*By Thomas Burkert*

When Smashing Magazine started as a professional English-language online magazine for Web designers in September 2006, there were initially no plans to also publish eBooks. The idea of publishing Smashing eBooks came up the first time in February 2010 during the production of our printed *Smashing Book*. We realized that the production and distribution costs of a printed book are high. We thought, “Wouldn't it be a good idea to also publish eBooks in addition to our printed book?”

We didn't wait long to make this idea happen. The production of *Smashing eBook #1* began immediately in February 2010 and was published soon thereafter in March 2010 as a PDF version. It contained the best articles about professional Web design that had been published on Smashing Magazine in 2009 and 2010.

## There are three eBook Formats

The EPUB format currently is supported by a wide variety of eBook readers. As the industry standard, eBooks you buy today in EPUB format without DRM are most likely to be supported on the widest variety of readers in the future. E-Book readers that cannot read EPUB format usually read the Mobipocket format.

If you own a Kindle, the PDF and Mobipocket formats are your only choices. A PDF will almost certainly be more difficult to read on almost every eBook reader than one of the other formats. A PDF is designed to preserve layout and font size across devices. It was neither designed to re-flow text to fit the

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screen of a variety of different eBook readers nor to scale fonts for easier reading.

The PDF format is usually best for printing out paper copies of a book, because the original layout will be preserved the best. A PDF can also be easy to read on a sufficiently large laptop or computer screen.

## **EPUB**

EPUB (electronic publication) is a relatively new open eBook standard that was introduced by the Open eBook Forum of the [International Digital Publishing Forum \(IDPF\)](#) in late 2007. The EPUB specification is a distribution and interchange format standard for digital publications and documents. EPUB defines a means of representing, packaging and encoding structured and semantically enhanced Web content — including HTML5, CSS, SVG, images, and other resources — for distribution in a single-file format. The standard is supported by over 150 major companies, including Adobe, Apple, Google, Microsoft, Nokia, Hewlett-Packard and Sony.

At the time of writing, the IDPF EPUB Working Group has published the [Proposed Specification for final member and public review for EPUB 3](#). These new specifications will increase the format's capabilities in order to better support a wider range of publication requirements, including complex layouts, rich media and interactivity, and global typography features. The expectation is that EPUB 3 will be utilized for a broad range of content, including books, magazines and educational, professional and scientific publications.

## **MOBIPOCKET**

The Mobipocket eBook format is based on the older [Open eBook Publication Standard \(OEBPS\)](#), which was superseded by EPUB in 2007. It uses XML and XHTML to store and represent book content. The name

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comes from the company Mobipocket SA, which produces Mobipocket Reader, a free eBook reader for PDAs, smartphones and mobile operating systems such as Symbian, Windows, Mobile, Palm OS, webOS, Java ME, BlackBerry, Psion and Amazon Kindle. There are also readers for desktop computers running Microsoft Windows and Mac OS X. At the time of writing, Amazon Kindle cannot read EPUB eBooks unless some intermediary software converts the books into a format that the Kindle can understand.

## **PDF (PORTABLE DOCUMENT FORMAT)**

PDF was originally a proprietary standard but since 2008 has been an open standard. Developed by Adobe, it was initially created as a standard for storing and editing printable publishable documents. PDF documents can be displayed by many eBook readers too.

Because the format was originally designed to reproduce fixed page layouts, the text generally cannot be reflowed to fit the screen. As a result, PDF files that are designed to be printed on a standard paper size are less comfortable to read on eBook readers, especially ones that are small or low in resolution, such as mobile phones.

Most publishers offer their eBooks in one or more of the formats covered above. Finding current statistics on the market share of these three formats is difficult. [O'Reilly tracks](#) which of these formats customers download after buying a book, and the company has broken it down over 16 months, from July 2007 to November 2009. According to these statistics, PDF continues to be the most popular format, but EPUB is becoming more popular.

## **Creating eBooks with Apple Pages**

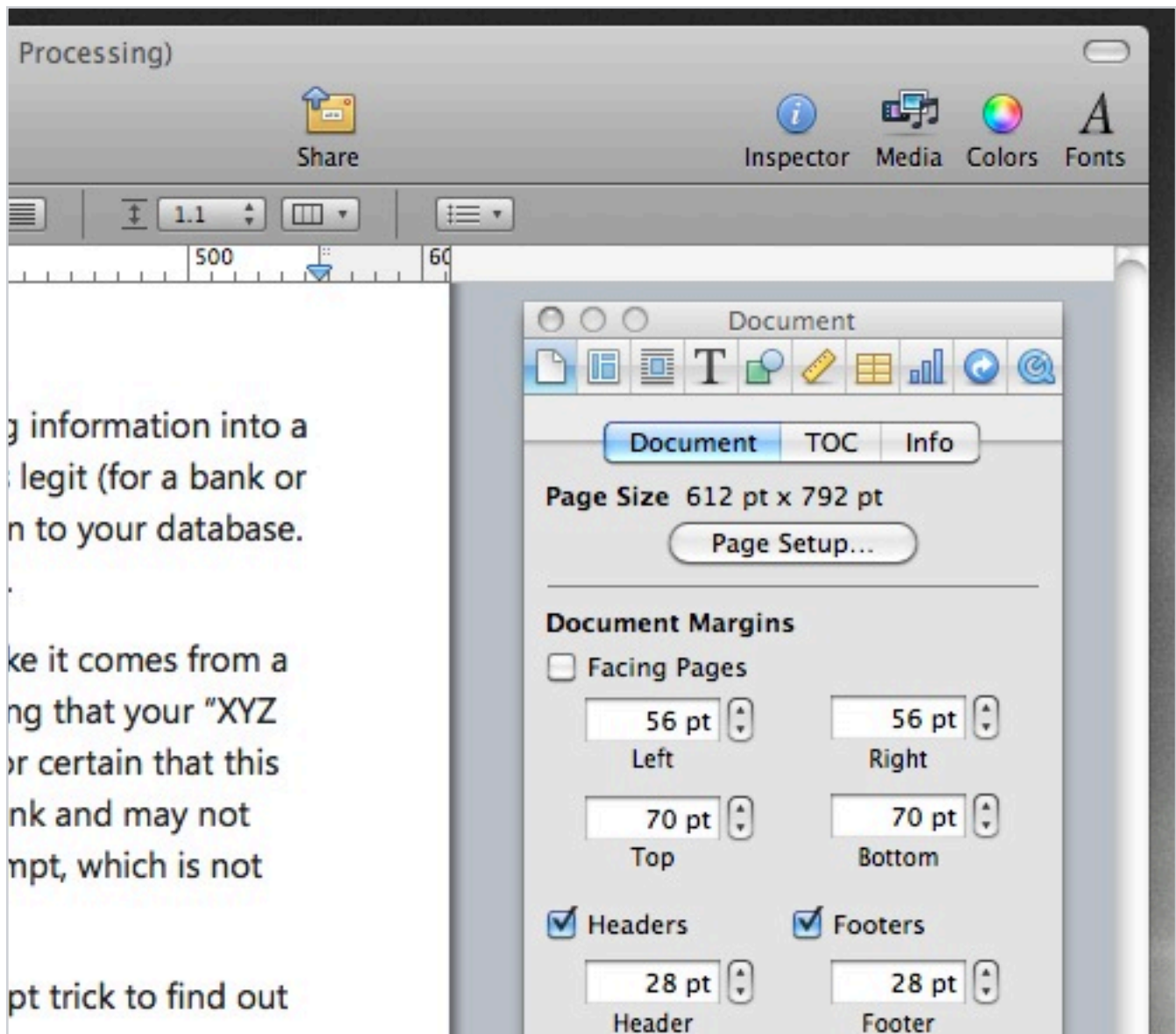
As we continued to produce more Smashing eBooks, we have been always looking for better authoring tools. After experimenting with various tools, we have decided to use [Apple Pages](#) as our preferred authoring tool.

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Apple Pages allows us to generate all three major eBook formats (PDF, EPUB, Mobipocket) within minutes from one single source document. EPUB export functionality was added to Apple Pages with version 9.0.4. Based on the EPUB file, the Mobipocket version of our eBooks can be easily generated with [KindleGen](#).

## PAGE SIZE AND DOCUMENT MARGINS

When you start your eBook project you should first define the page size and document margins. The document page size and margins are primarily needed for the layout of your PDF eBook. EPUB and Mobipocket do not make use of these parameters. *US Letter* (612 pt x 792 pt) is a good paper size format to start with, because it makes best use of the 4:3 screen ratio that is most common for tablet computers. The following screenshot of Apple Pages *Inspector Window* shows the parameters that are used for the Smashing eBooks. Open the Inspector by clicking on its icon on the toolbar or choose *View > Show Inspector*.



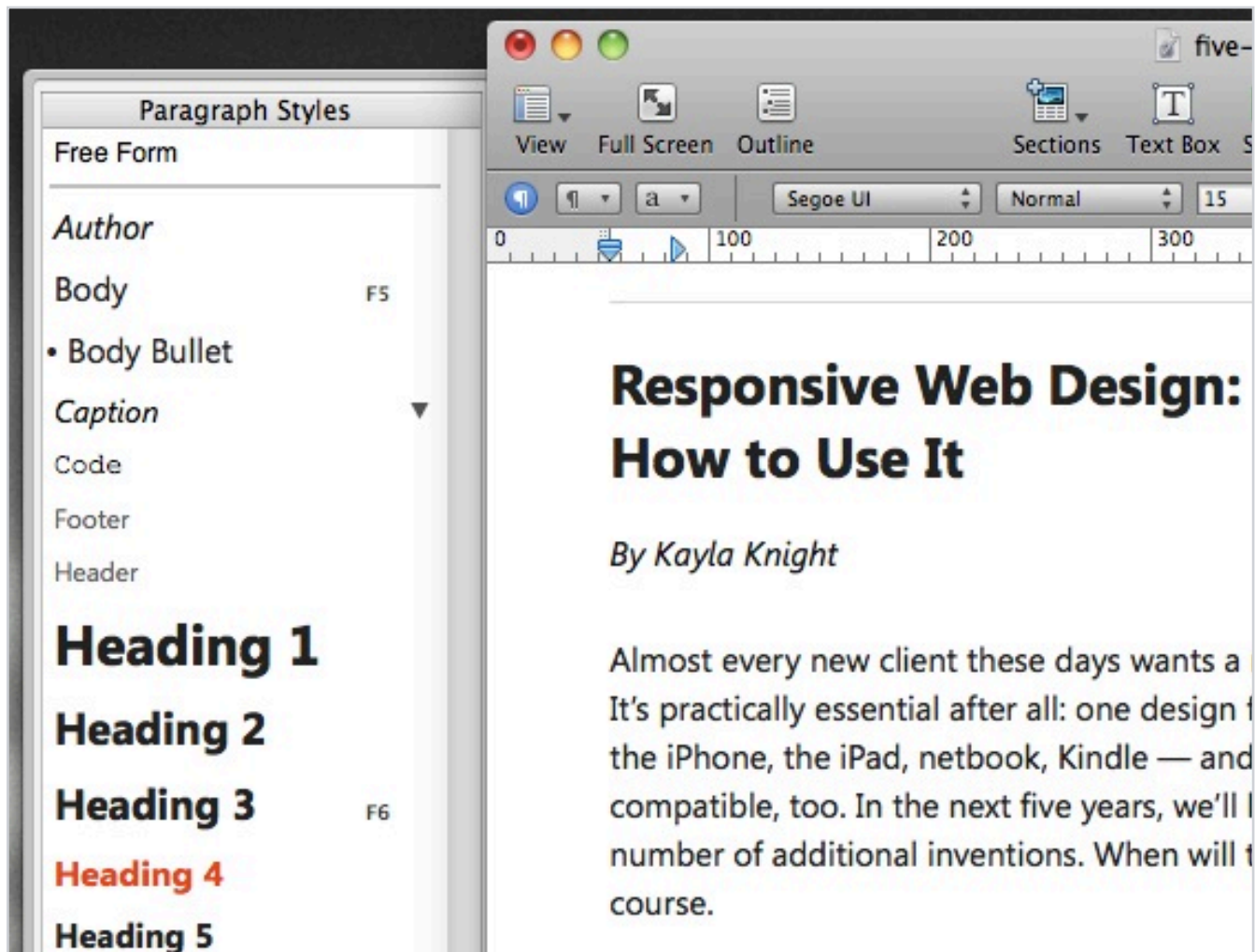
*Inspector Window: Document*

## USE PARAGRAPH STYLES

The best document consistency between PDF and EPUB format can be obtained by strictly using paragraph styles. [A sample document](#) which can be used as a template is provided on the Apple Support site. It features styles and guidelines to help you create a Pages document that's optimized for exporting to the EPUB file format. To learn more about using paragraph



styles in Pages, see the topics under the heading “Working with Styles” in the Pages built-in help.

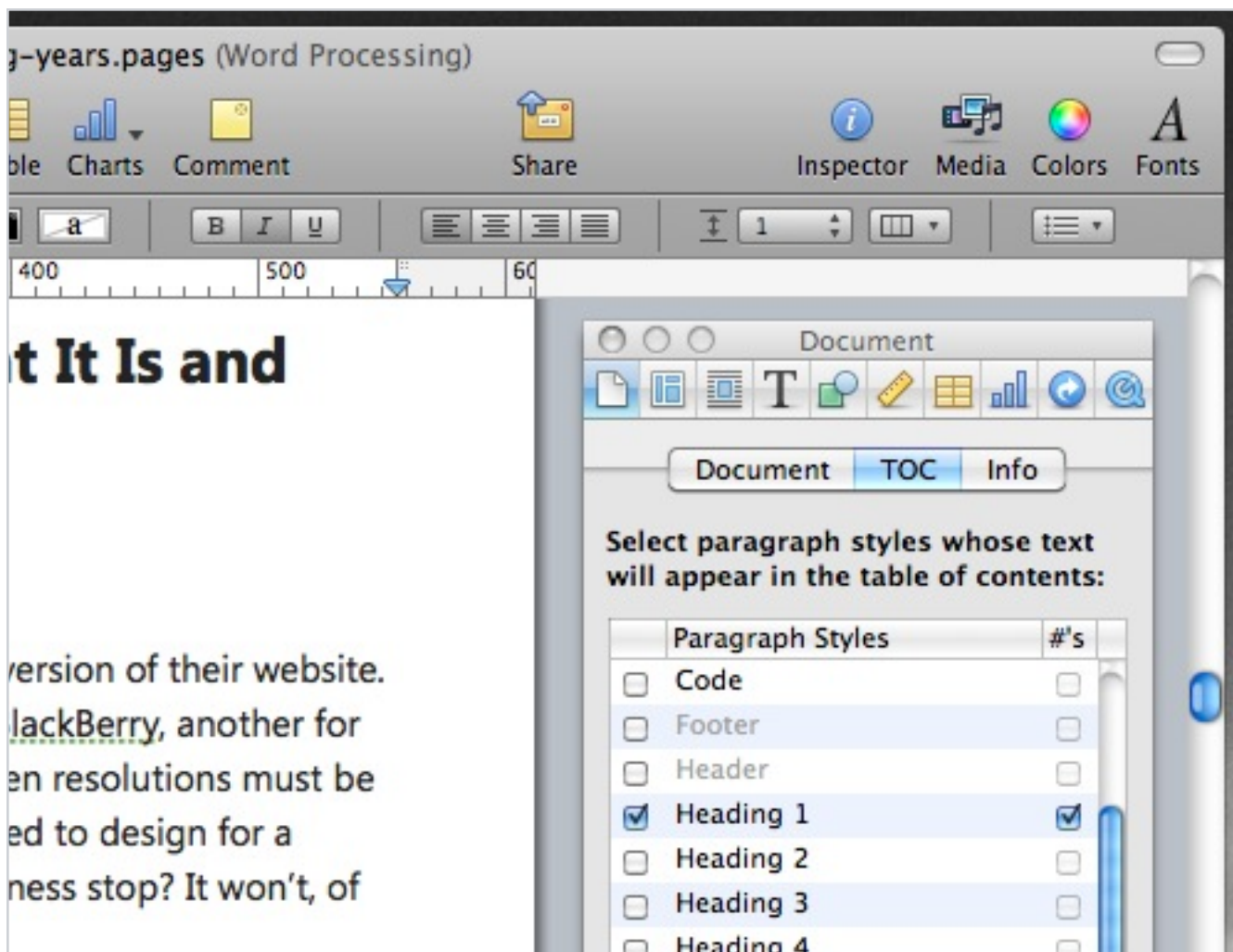


*Paragraph Styles in Apple Pages*

## TABLE OF CONTENTS (TOC)

Apple Pages can automatically generate a table of contents for your eBook. To create a *Table of Contents (TOC)* in Apple Pages, you need to consistently use paragraph styles for headings in your document. In the *Inspector Window*, select the paragraph styles whose text should appear in the table of contents as shown in the screenshot below.





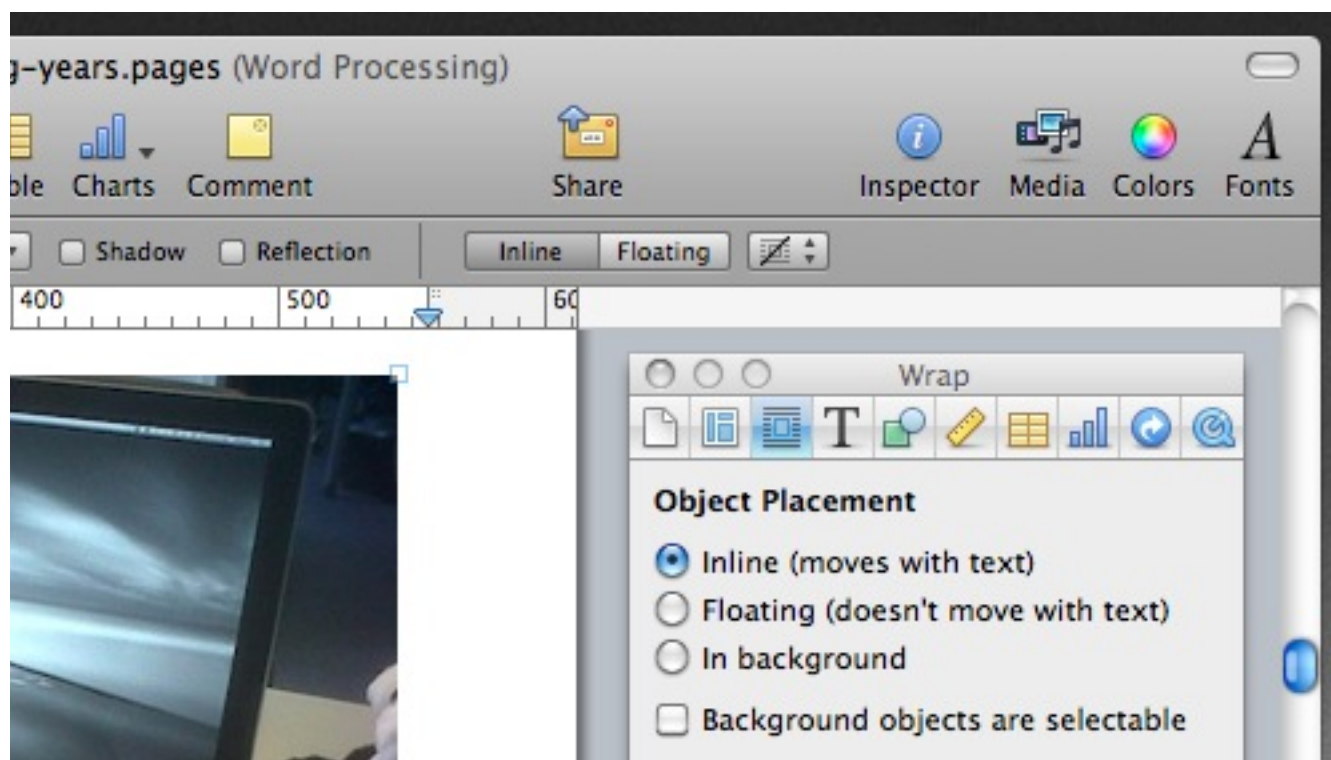
*Heading 1 selected for TOC (Inspector Window > Table of Contents)*

The selected paragraph styles will then be automatically added to the Table of Contents section in your EPUB eBook. If you want to add a Table of Content to your PDF eBook, choose *Insert > Table of Contents*.

**Note:** Manually inserted Table of Contents (*Insert>Table of Contents*) will work in PDF only and not in your EPUB eBook. You should temporarily delete this Table of Contents before you export your document to the EPUB format.

## EMBEDDING IMAGES

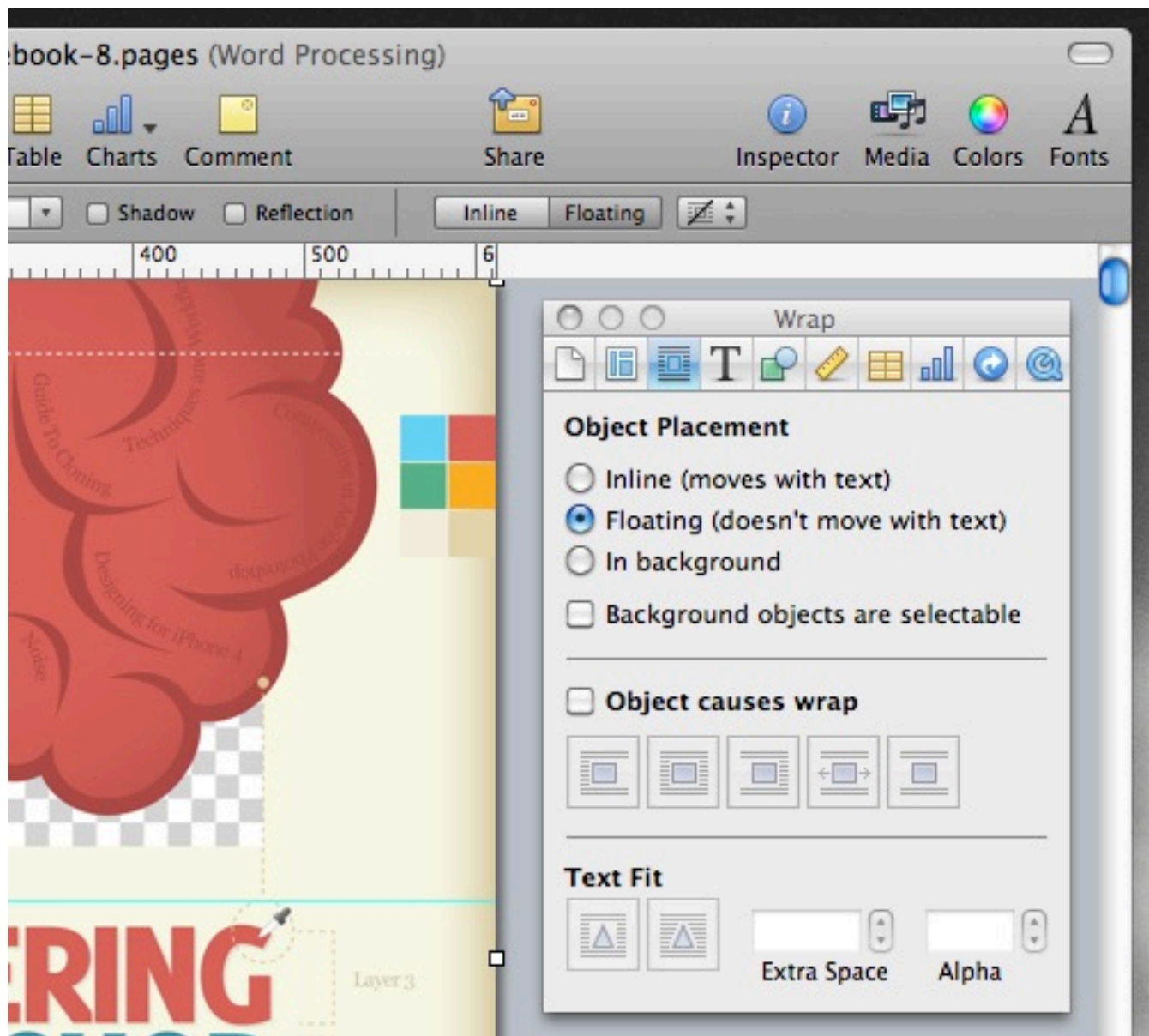
Reformat any images in your document to make them *Inline Objects*. Do not make them *Floating Objects*, because floating objects will not be exported to the EPUB eBooks. To learn more about inline objects, see “What Are Floating and Inline Objects?” in the Pages Help.



*Images must be Inline Objects*

## COVER IMAGE

Apple Pages can use the first page as the cover image for the eBook. Place an image on the first page and make it a *Floating Object*. This is the only exception where you can use an image as a *Floating Object*. In the *Inspector Window*, go to *Metrics* and set the image size to 612 x 792 pt and the positions to 0.



*Exception: Make the cover image a floating object*

## HOW TO USE TABLES

Although EPUB and Mobipocket reader can handle tables that are larger than the screen, the user experience becomes worse as the table size increases. You should avoid large tables. A table with up to 3 columns will work well on most screens, even on smartphones. But you should avoid any tables that have more than 3 columns.

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## NOT SUPPORTED BY EPUB

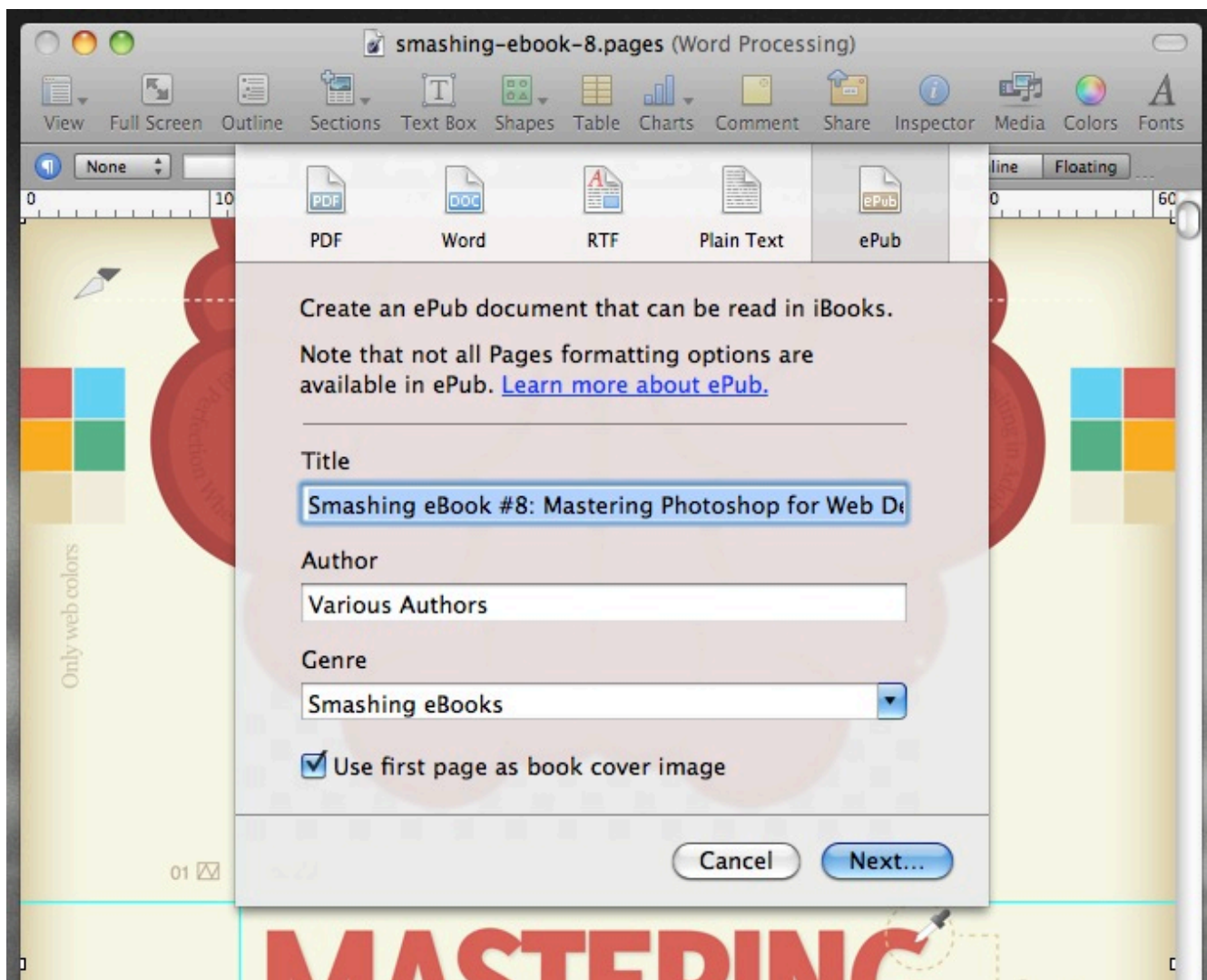
Note that some content is currently not supported by the EPUB file format standard and will be removed from your document when exporting as an EPUB file with Apple Pages:

- Smart-fields
- Master/Background objects
- Headers and footers
- Floating graphics
- Footnotes (converted to endnotes)
- Columns
- Comments
- Some image effects such as shadows
- Images beyond the 11MB of unencoded image data allocated per chapter

## EXPORT PDF AND EPUB

You can export any Apple Pages word processing document to PDF and EPUB file formats. Choose *File > Export*.

The EPUB export screen asks you to type in metadata about your eBook such as *Title*, *Author* and *Genre*. You can also choose if the first page should be used as cover image.



*EPUB export with Apple Pages*

Your document will then be exported as an EPUB file to your hard drive. The EPUB file is automatically compliant with [EpubCheck](#), a tool that can detect many types of errors in EPUB.

## CONVERTING TO MOBIPOCKET

[KindleGen](#) is a command line tool used to build eBooks that can be sold through Amazon's Kindle platform. This tool is best for publishers who want to convert their existing EPUB eBook into a Kindle Book. After you have downloaded the KindleGen tool, you then need to open the *Terminal* on



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Mac OS X and submit the command `./kindlegen` followed by the filename of your EPUB file. Assuming the KindleGen tool and your EPUB file are in the same folder, the complete command would be:

```
./kindlegen five-smashing-years.epub
```

After submitting this command, KindleGen will compile a Mobipocket file based on your existing EPUB file. During the compilation KindleGen will display information such as that shown below:

```
thomass-imac:desktop thomas$ ./kindlegen five-smashing-years.epub

*****
* Amazon.com kindlegen(MAC OSX) V1.2 build 33307 *
* A command line e-book compiler                  *
* Copyright Amazon.com 2011                      *
*****

Info(prcgen): Added metadata dc:Title           "Five Smashing Years"
Info(prcgen): Added metadata dc>Date            "2011-04-29"
Info(prcgen): Added metadata dc:Creator         "Various Authors"
Info(prcgen): Added metadata dc:Subject         "Smashing eBooks"
Info(prcgen): Added metadata dc:Contributor     "Pages v4.0.5"
Info(prcgen): Parsing files 0000036
Info(prcgen): Resolving hyperlinks
Info(prcgen): Resolving start reading location
```

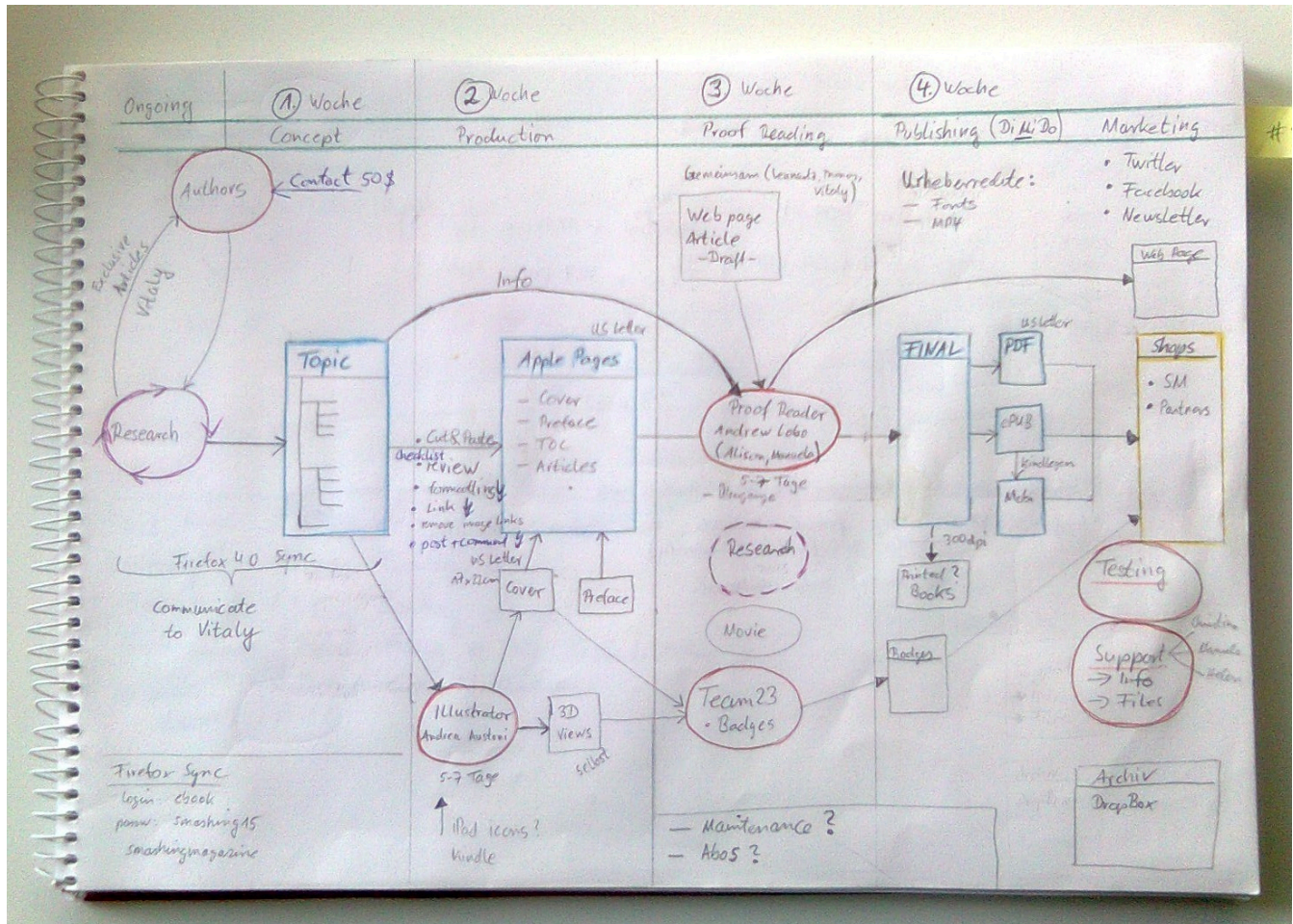
*KindleGen output during compilation*

## Workflow: 15 Steps To A New Smashing eBook

Planning, producing and publishing a Smashing eBook with 15 articles from various authors and usually more than 300 pages is a complex task. From the first idea to a finished Smashing eBook, we have to go through many steps each time. People with different skills need to work hand in hand in order to ensure high quality and to meet deadlines.

Since we have produced our first Smashing eBooks in Spring 2010, we have learned a lot. We have studied different eBook formats. We have explored

different authoring tools that are available and evaluated which tools fit our individual requirements best. And we have optimized our production workflow.



Workflow Planning for Smashing eBook #4 (September 2010)

The following section will give you an overview of our 15 step workflow, that we have implemented for the production of our Smashing eBook Series.

## PLANNING (WEEK 1)

### Step 1: Define eBook Title

- Find a crisp and short eBook title that will attract people's attention.



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## Step 2: Define Table of Contents

- Bookmark all articles that relate to the topic using Firefox Bookmark Manager.
- Prioritize and select the articles based on the quality and on the communities feedback.
- Order chapters and articles in a way that make sense.

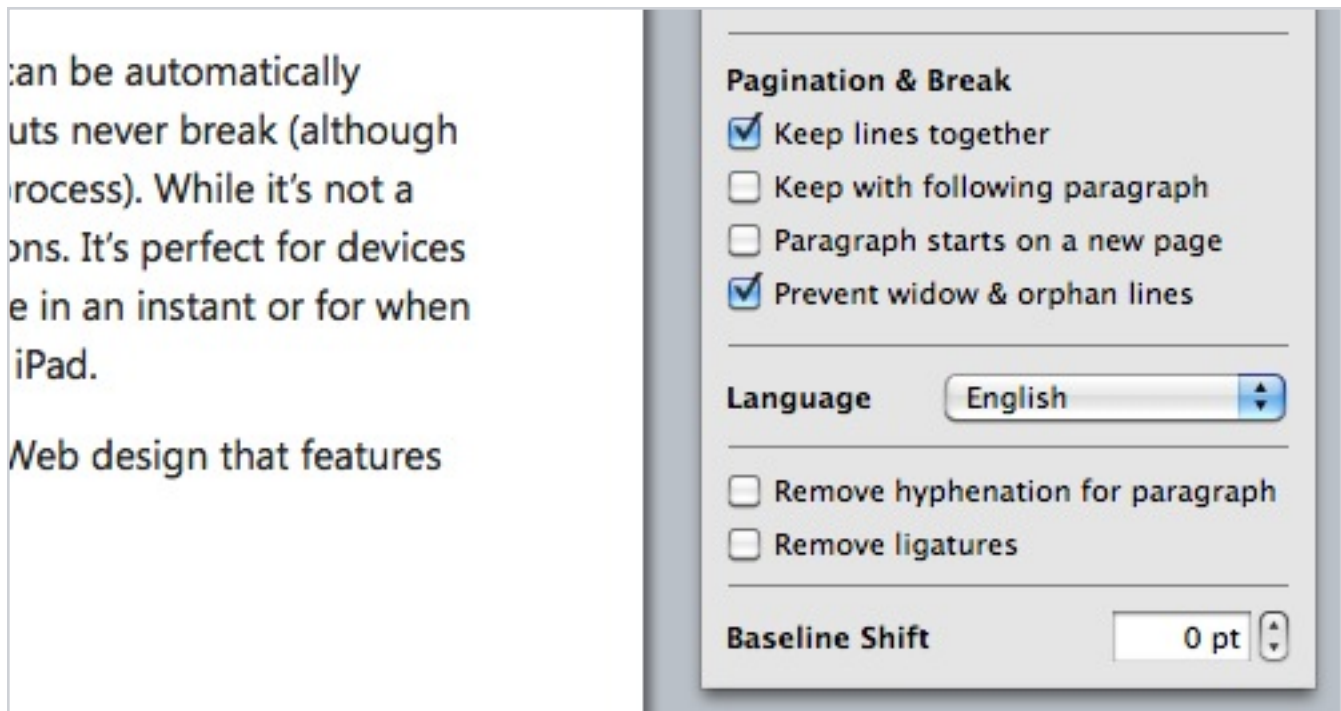
## PRODUCTION (WEEK 2-4)

### Step 3: Paste Articles into Apple Pages

- Copy and paste articles from [www.smashingmagazine.com](http://www.smashingmagazine.com) into Apple Pages using Apple Safari.

### Step 4: Format Headings, Paragraphs, Lists

- Improve productivity by using paragraph styles and keyboard shortcuts for most often used paragraph styles.
- Use Apple Pages *Pagination & Break* options for formatting. Do not use empty lines or manual line breaks for formatting. This could cause unwanted formatting results, especially in EPUB and Mobipocket files.



*Pagination & Break options using Apple Pages Inspector*

## Step 5: Optimize Screenshots

- Make screenshots with the keyboard shortcut SHIFT-CTRL-CMD-4 and paste it in Apple Pages with CMD-V. Use GIF for screenshots with text, logos, line drawings and icons. Use JPG for photographs.
- Change the Mac OS X default format (PNG) by executing one of the following commands in the *Mac OS X Terminal*. (Logout and login again to activate the changes)

```
defaults write com.apple.screencapture type jpg
```

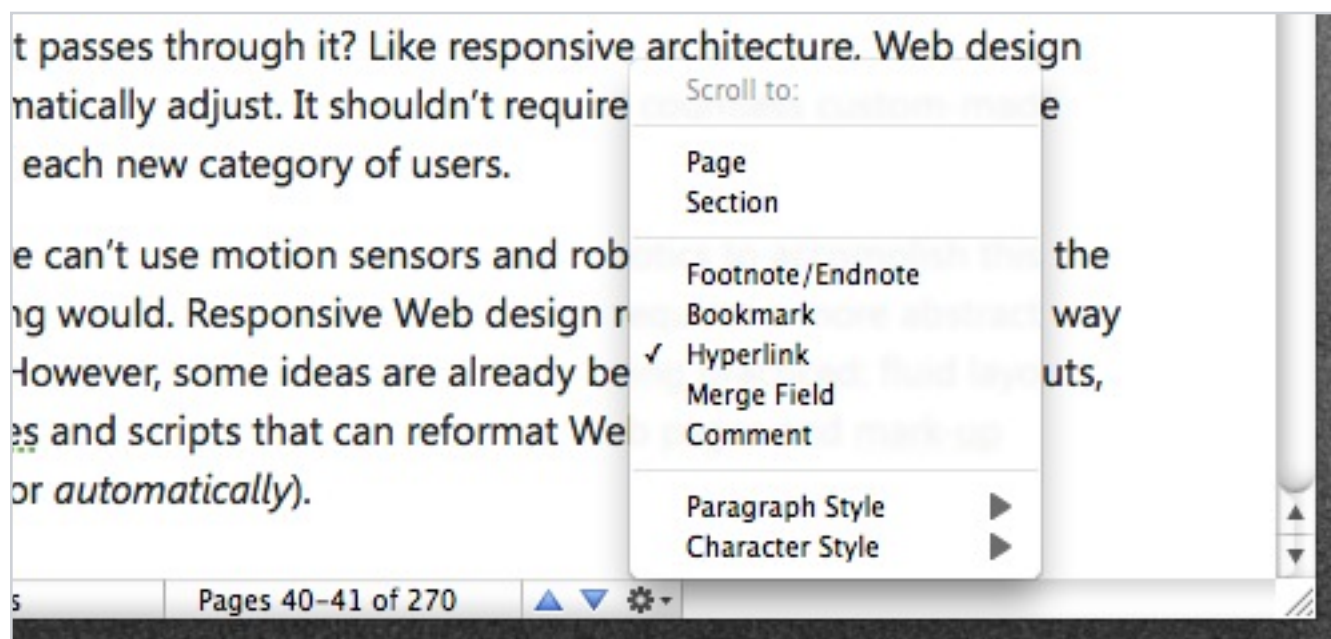
```
defaults write com.apple.screencapture type gif
```

## Step 6: Update Biographies of Authors

- Give the authors the possibility to update their biography and the links to their Web pages, Facebook Pages and Twitter accounts.

## Step 7: Validate Hypertext Links

- Check if all hypertext links in the eBook are valid. Click on *Action menu* at the bottom of the window and select *Hyperlink* and then click the blue scroll arrows.



*Action menu and scroll arrows*

## Step 8: Export eBooks

- Export your PDF eBook with Image Quality “*Best*” (compression level 100%) or “*Better*” (compression level 90%).
- Export your EPUB eBook with the option *Use first page as book cover image* selected.

## Step 9: Create Zip-File

- Create a Zip-File that includes all three formats. Use Mac OS X built-in compression functionality. Select all three files, then click on Menu *Files > Compress 3 Items*.

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## Step 10: Design eBook Cover

- Find a good designer for your eBook cover. A well designed eBook cover will help to sell the eBook.
- Starting the design of the eBook cover as early as possible can help to meet deadlines. Designing a cover is a creative process that can take some time until the final version is available.
- An eBook cover with a short title and big letters is good for thumbnails.

## Step 11: Test on Different Devices

- Test PDF, ePub and Mobipocket formats after the first chapter has been finished. Early testing can give valuable feedback on how formatting will look like on different devices. This will save time during the production of the other chapters.
- Free software eBook readers such as [Adobe Digital Editions](#) (ePub) or [Kindle for Mac](#) (Mobi) can be also used for testing.

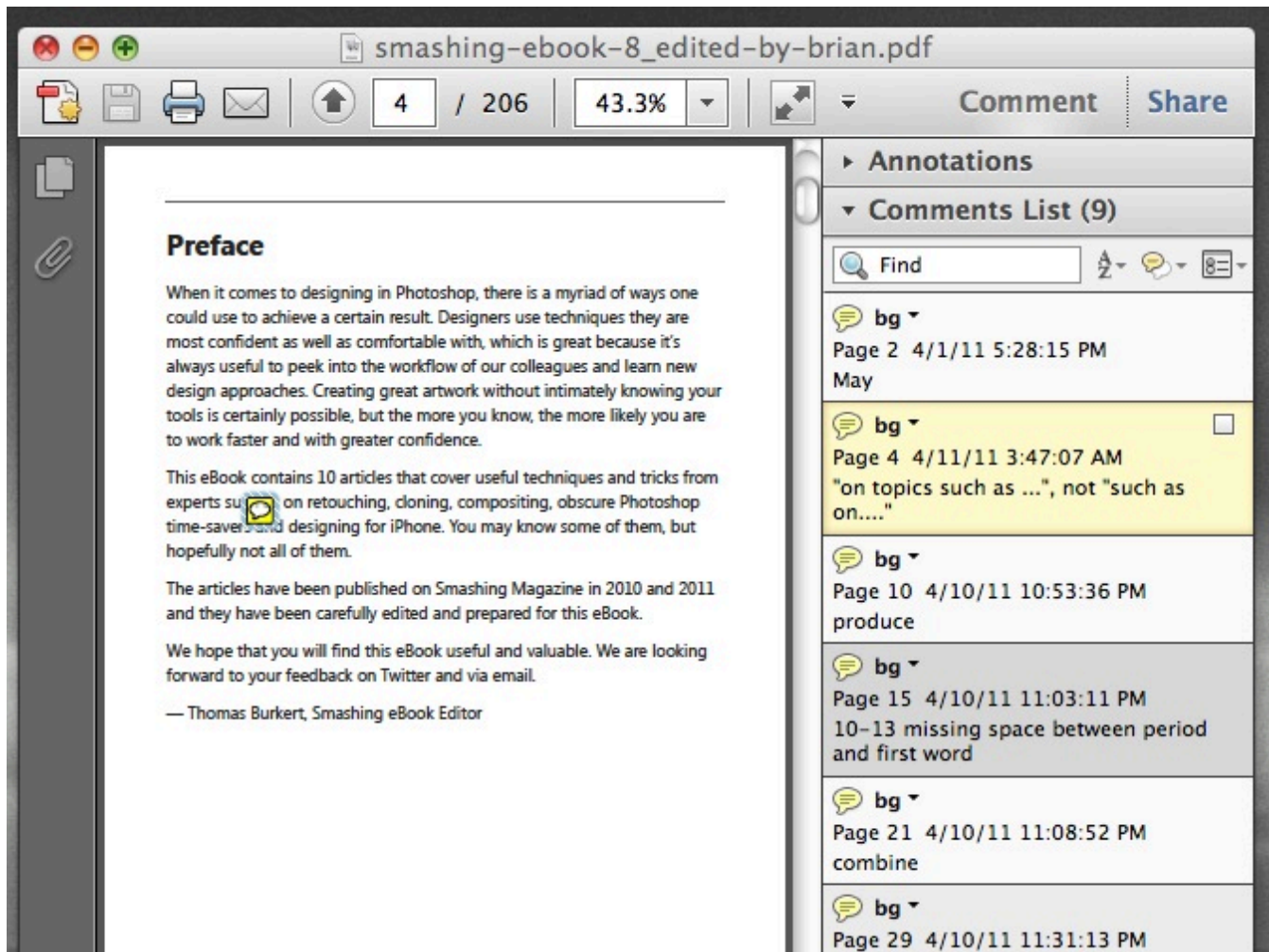


*Testing Smashing eBooks on various eBook readers*

## **Step 12: Spell checking and Proofreading**

- Use Apple Pages Spell checking feature.
- Ask the proofreader to do his corrections in the PDF version using Adobe Reader X comments functionality. Adobe Reader is available on Windows and Mac OS.





*Commenting feature in Adobe Reader X*

## PUBLISHING (WEEK 5)

### Step 13: Inform Support Team

- Inform support team about the new Smashing eBook and send them a copy of the ebook. The support team can then help customers who have problems downloading the eBook.

### Step 14: Publish Product

- Upload eBook as .zip file to the Smashing Shop

- 
- Make screenshots from the eBook on an iPad and then add them to the product page.

## Step 15: Do Marketing

- Market the eBook on the Web, Facebook and Twitter or by E-Mail. Tuesday and Wednesday are usually the best days for this activity.

## Conclusion

Since the arrival of EPUB export functionality with Apple Pages 9.0.4 in August 2010, the production of our Smashing eBooks has become much easier. Now Apple Pages allows us to quickly export all three formats from one single source document and within a few minutes. We do not have to deal with HTML or CSS, and deep knowledge about EPUB and Mobipocket specification is not necessary.

We are looking forward to our Smashing eBooks further improving as the eBook technology advances. For instance the proposed EPUB 3 specification will increase the eBook's capabilities in order to better support a wider range of publication requirements, including complex layouts, rich media and interactivity. It is also likely that with this new specification EPUB will become the dominating eBook standard, meaning that the other two formats (PDF and Mobipocket) will become less and less important and can be eventually dropped. There are already some rumors that [Amazon will begin accepting digital files in the EPUB format](#) in the near future and will also allow users of its Kindle device to read EPUB files.