

eBook Production, Platforms and Workflow

书籍制作，平
台和 workflows

The choices for Publishers
Flowable or Fixed, Platforms and Ecosystems

出版商的选择

可流动或固定平台和生态系统

Chris Jennings 2017

Introduction

- **The eBook formats and devices**
- **Making eBooks**

Break

- **Looking at some examples**

eBook Production Decisions

- **Re-flowable or Fixed layout?**
- **Reading direction (Chinese)**
- **Which platform? or**
- **Multi-platform?**
- **Backlist or fresh build?**
- **Print first? / Digital First?**

The *form* of an eBook can be:

- **re-flowable** and *fluid* to fit the size, shape and font-size of the eReader device
- **fixed** to a particular viewport (*like on paper*)

Re-flowable eBooks are:

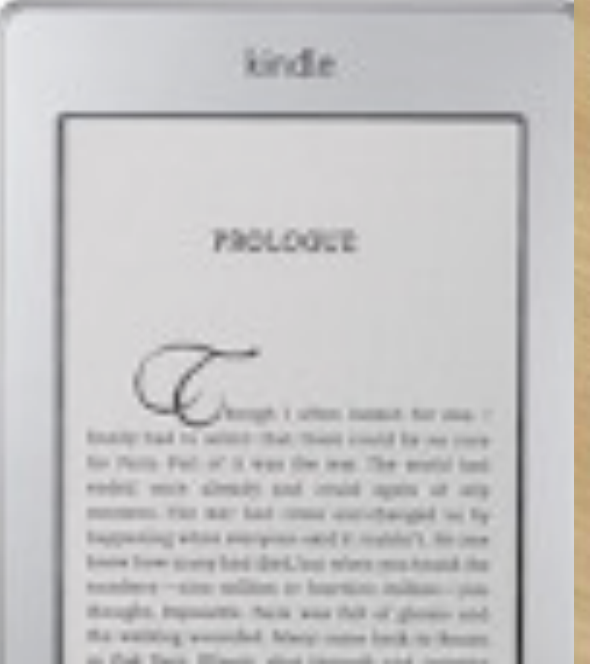
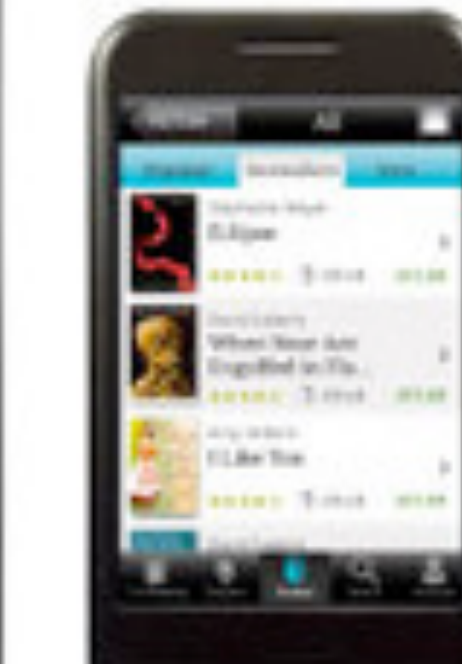
- **user friendly and accessible**
- **suitable for books that are *mostly text***
- **easier to make**
- **make use of the eReader user *interface***

eBook formats

- **ePub** - for most portable devices
- **Mobi** - for Amazon Kindle
- **PDF** - still used to distribute digital documents
- **Comics / Graphic Novels**
Not really a format but some apps for special features

eBook reading devices

- **e-ink readers (Kindle)**
- **tablets (iPad)**
- **smartphones (iPhone)**
- **any computer (with software or browser plug-ins)**



Re-flowable eBooks



ePUB format on iPad



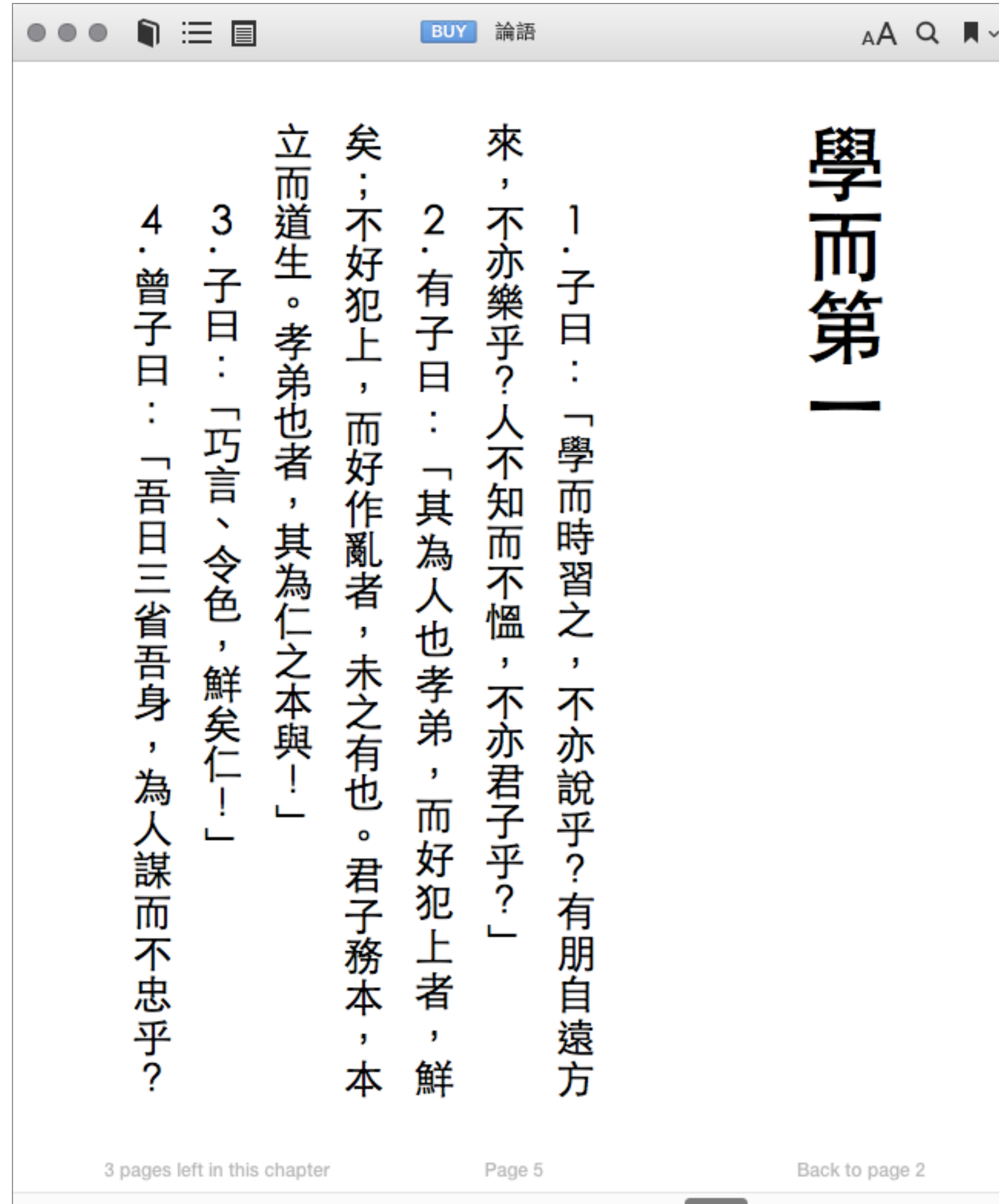
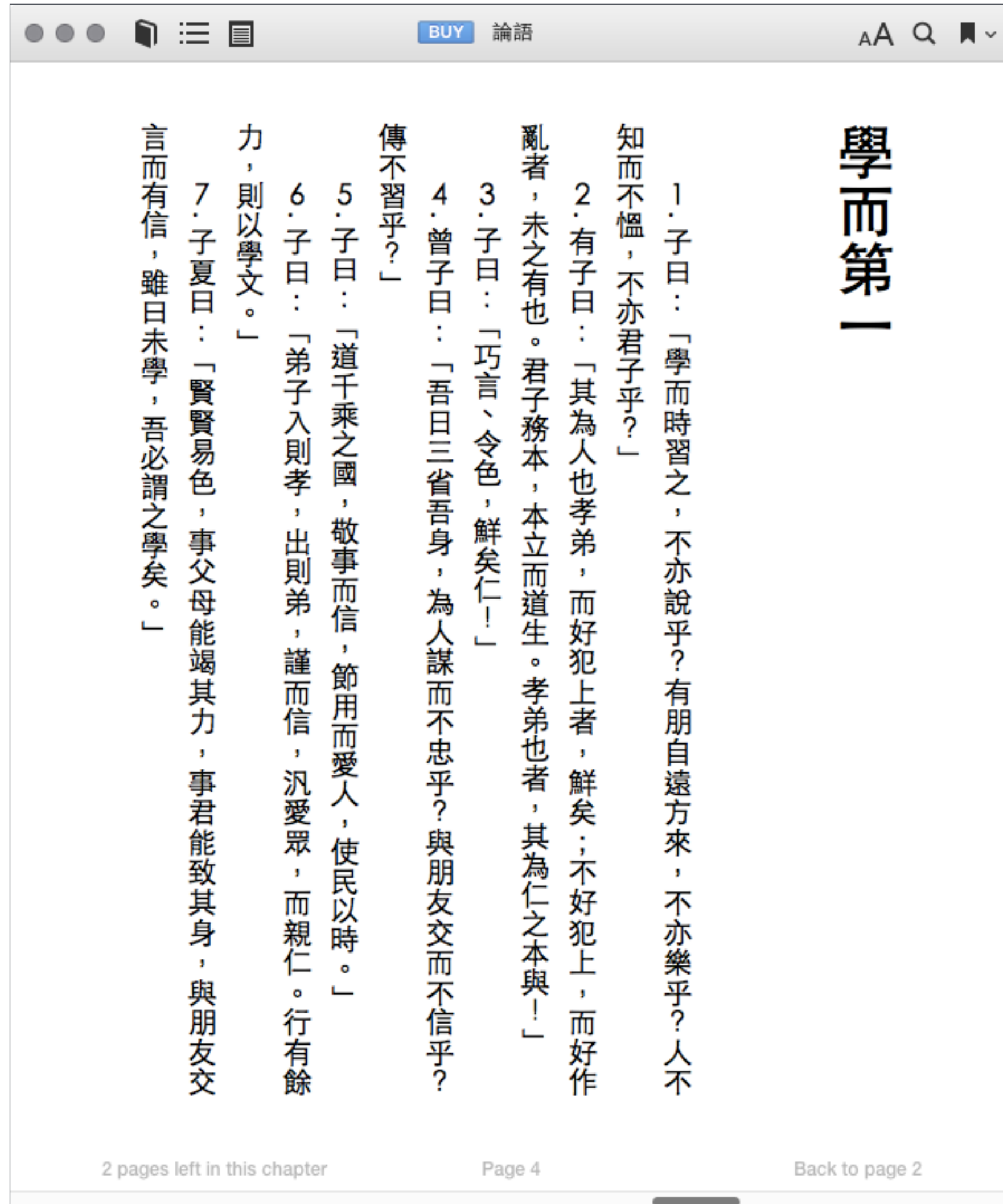
MOBI format on Kindle



ePUB format on iPhone



Re-flowable eBooks



Same book but text enlarged

Re-flowable eBooks

BUY 論語

AA Q

為政第二

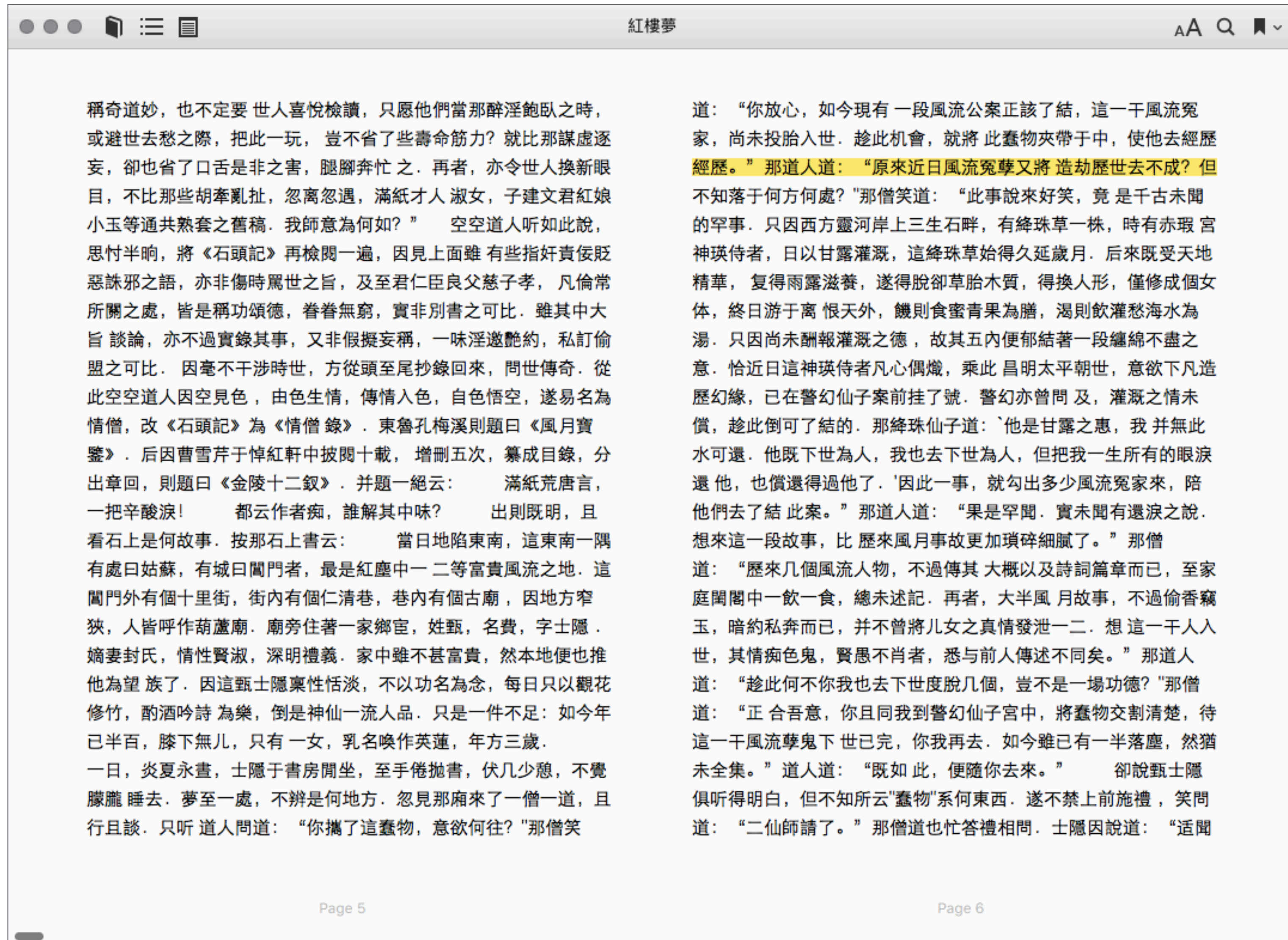
1. 子曰：「為政以德，譬如北辰，居其所而眾星共之。」
2. 子曰：「詩三百，一言以蔽之，曰：思無邪。」
3. 子曰：「道之以政，齊之以刑，民免而無恥；道之以德，齊之以禮，有恥且格。」
4. 子曰：「吾十有五而志於學，三十而立，四十而不惑，五十而知天命，六十而耳順，七十而從心所欲，不踰矩。」
5. 孟懿子問孝。子曰：「無違。」樊遲御，子告之曰：「孟孫問孝於我，我對曰，『無違。』」樊遲曰：「何謂也？」子曰：「生，事之以禮；死，葬之以禮，祭之以禮。」
6. 孟武伯問孝。子曰：「父母唯其疾之憂。」
7. 子游問孝。子曰：「今之孝者，是謂能養。至於犬馬，皆能有養；不敬，何以別乎？」
8. 子夏問孝。子曰：「色難。有事，弟子服其勞；有酒食，先生饌，曾是以為孝乎？」
9. 子曰：「吾與回言終日，不違如愚。退而省其私，亦足以發，回也不愚。」
10. 子曰：「視其所以，觀其所由，察其所安。人焉廋哉？人焉廋哉？」
11. 子曰：「溫故而知新，可以為師矣。」
12. 子曰：「君子不器。」
13. 子貢問君子。子曰：「先行其言，而後從之。」
14. 子曰：「君子周而不比，小人比而不周。」
15. 子曰：「學而不思則罔，思而不學則殆。」
16. 子曰：「攻乎異端，斯害也已。」
17. 子曰：「由！誨女知之乎！知之為知之，不知為不知，是知也。」
18. 子張學干祿。子曰：「多聞闕疑，慎言其餘，則寡尤。多見闕殆，慎行其餘，則寡悔。言寡尤，行寡悔，祿在其中矣。」
19. 哀公問曰：「何為則民服？」孔子對曰：「舉直錯諸枉，則民服；舉枉錯諸直，則民不服。」
20. 季康子問：「使民敬忠以勸，如之何？」子曰：「臨之以莊則敬，孝慈則忠，舉善而教不能則勸。」
21. 或謂孔子曰：「子奚不為政？」子曰：「書云：『孝乎惟孝，友於兄弟，施於有政。』是亦為政，奚其為為政？」
22. 子曰：「人而無信，不知其可也。大車無輅，小車無軌，其何以行之哉？」
23. 子張問：「十世可知也？」子曰：「殷因於夏禮，所損益可知也；周因於殷禮，所損益可知也。其或繼周者，雖百世，可知也。」
24. 子曰：「非其鬼而祭之，諂也。見義不為，無勇也。」

No pages left in this chapter Page 7

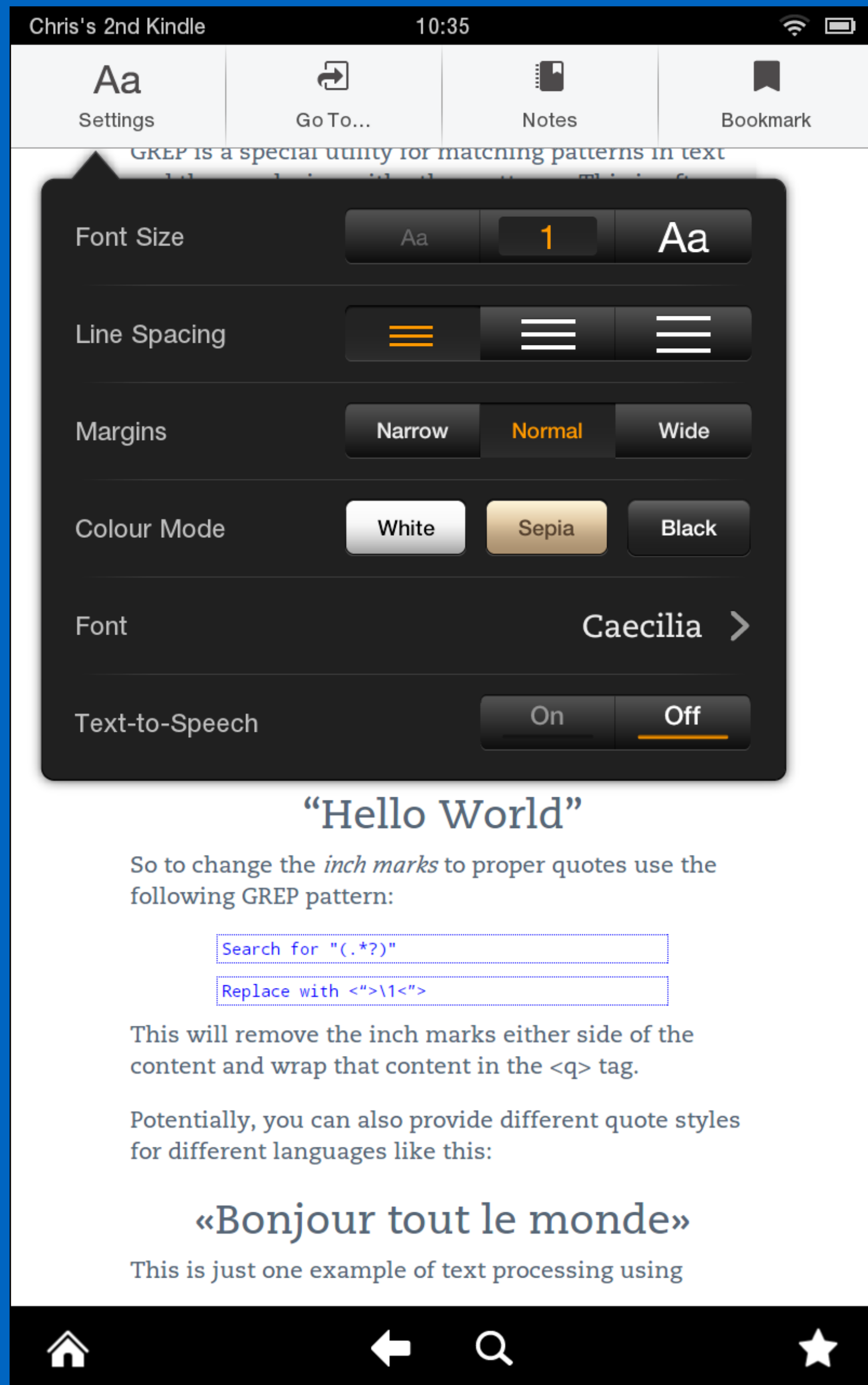
Page 6 Back to page 5

Right to left and lines read down

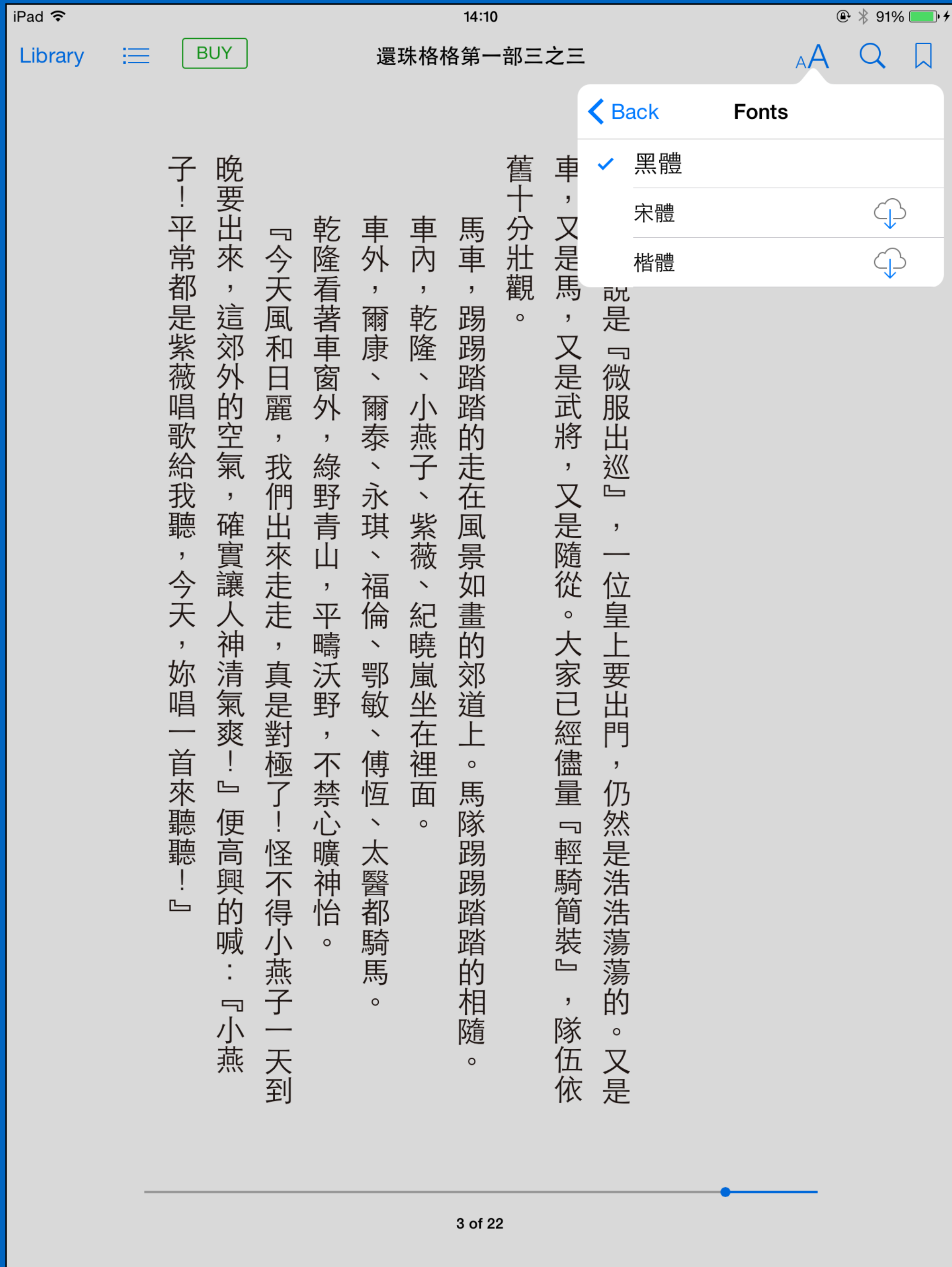
Re-flowable eBooks



Left to right and lines read across



Kindle Fire



iPad

The **Page?**

- **Print Book Designers** *build for page*
- **In** *re-flowable eBooks*, the **'page'** *does not really exist*

Spreads in Re-flowable eBooks

- **Designers cannot specify double page spreads**
- **left or right arrangement cannot be specified**

Typography

- **No repeatable elements**
(headers, footers, page numbers)
- **Text can be colour and elnk**
devices will make grayscale
- **Contrast for readability**

Typography

-Fonts

- **Font size**
 - **this won't be ignored by the devices, but users can increase/decrease**
- **Embedding fonts**
 - **some devices can use embedded fonts**

Images / Captions

- **controls should be present to keep image and caption together**
- **large versions should be available for ‘zooming up’**

Table of Contents

- **TOC not needed on the page for ePUB but needed for Kindle/MOBI**
- **TOC needs special attention for nesting**
- **Will be interactive**
- **no page numbers for on page version!**

A table of
contents
in print

Contents

Shakespeare's Life..... vi

Our Knowledge of Shakespeare	vi
Stratford	vii
Birth and Parentage	viii
Education	ix
Marriage.....	ix
Early Life in London.....	ix

Portraits of Shakespeare..... xi

Dramatis Personae..... xv

Act I

SCENE I	1
Athens. The palace of Theseus	
SCENE II	15
Athens. Quince's house	

Act II

SCENE I	23
A wood near Athens	
SCENE II	37
Another part of the wood	

Act III

SCENE I	47
The wood. Titania lying asleep	
SCENE II	59
Another part of the wood	

Table of Contents

Shakespeare's Life	4
Our Knowledge of Shakespeare	4
Stratford	7
Birth and Parentage	8
Education	9
Marriage	10
Early Life in London	11
Dramatis Personae	13
Act I	15
Scene I	15
Athens. The palace of Theseus	15
Scene II	27
Athens. Quince's house	27
Act II	33
Scene I	33
A wood near Athens	33
Scene II	46
Another part of the wood	46
Act III	54

A Midsummer Night's Dream

Egeus: father to Hermia
 Lysander: in love with Hermia
 Demetrius: in love with Hermia
 Philostrate: Master of the Revels to Theseus
 Quince: a carpenter
 Snug: a joiner
 Bottom: a weaver
 Flute: a bellows-mender
 Snout: a tinker
 Starveling: a tailor
 Hippolyta: Queen of the Amazons, betrothed to Theseus
 Hermia: daughter to Egeus, in love with Lysander
 Helena: in love with Demetrius
 Oberon: King of the Fairies
 Titania: Queen of the Fairies
 Puck: Robin Goodfellow
 Peaseblossom: fairy
 Cobweb: fairy
 Moth: fairy
 Mustardseed: fairy
 Prologue: Pyramus, Thisby, Wall, Moonshine, Lion are presented by: Quince, Bottom, Flute, Snout, Starveling, and Snug
 Other Fairies attending their King and Queen:
 Attendants on Theseus and Hippolyta:

Scene: Athens and a wood near it

Page 13

Page 14

Last page in this chapter

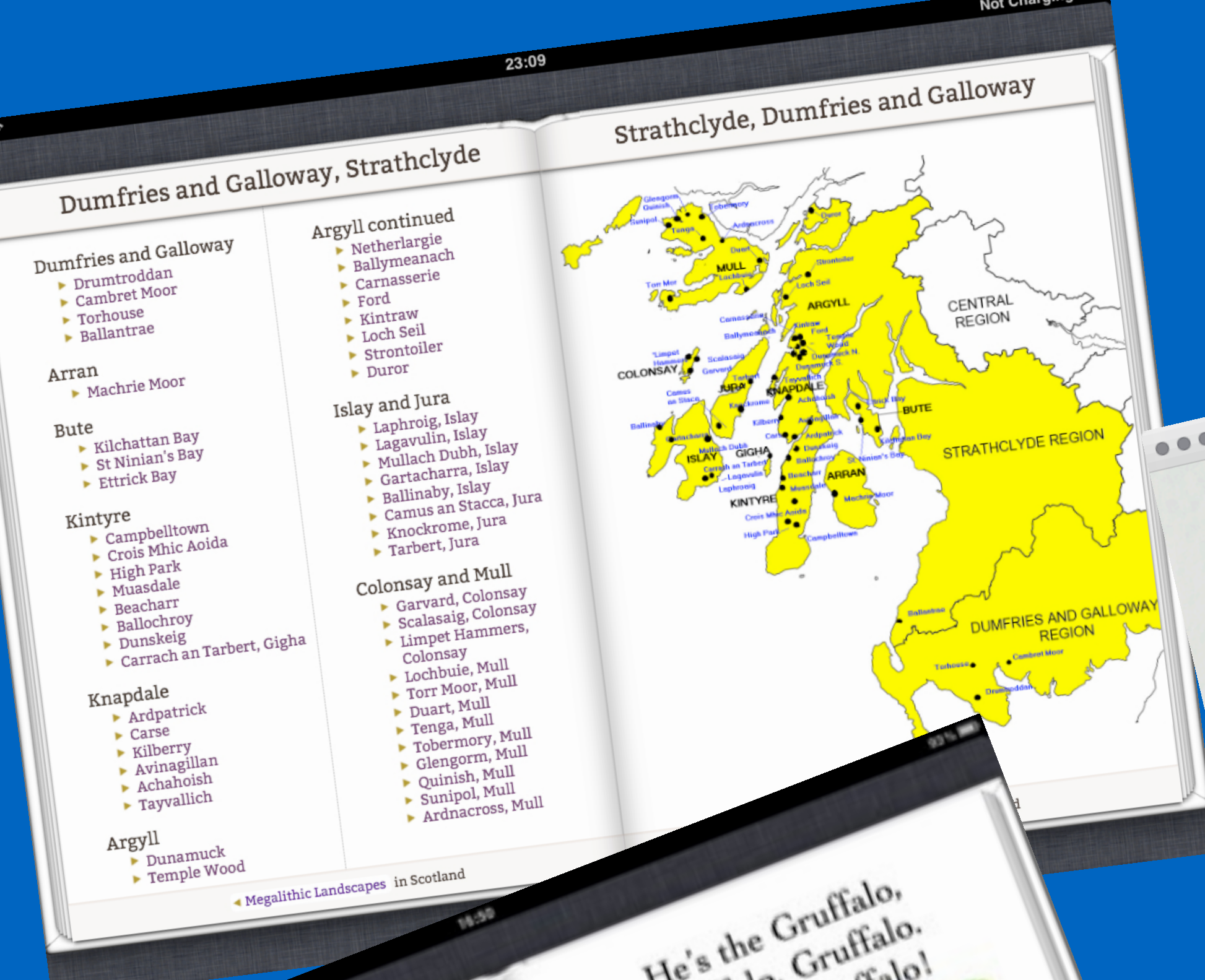
Table of contents in eBook as drop down. Page numbers generated automatically

Index

- **Index needs to be interactive**
- **Index can be left out of eBook**
- **Search facility can be used instead**

Fixed format eBooks

- user cannot change the font-size
- can be **ePUB fixed-format**
 - for iOS (iPads etc)
 - for Nook
 - many other recent devices
- **alternative** can be **book app**
 - for iOS or Android



ePUB fixed-layout format



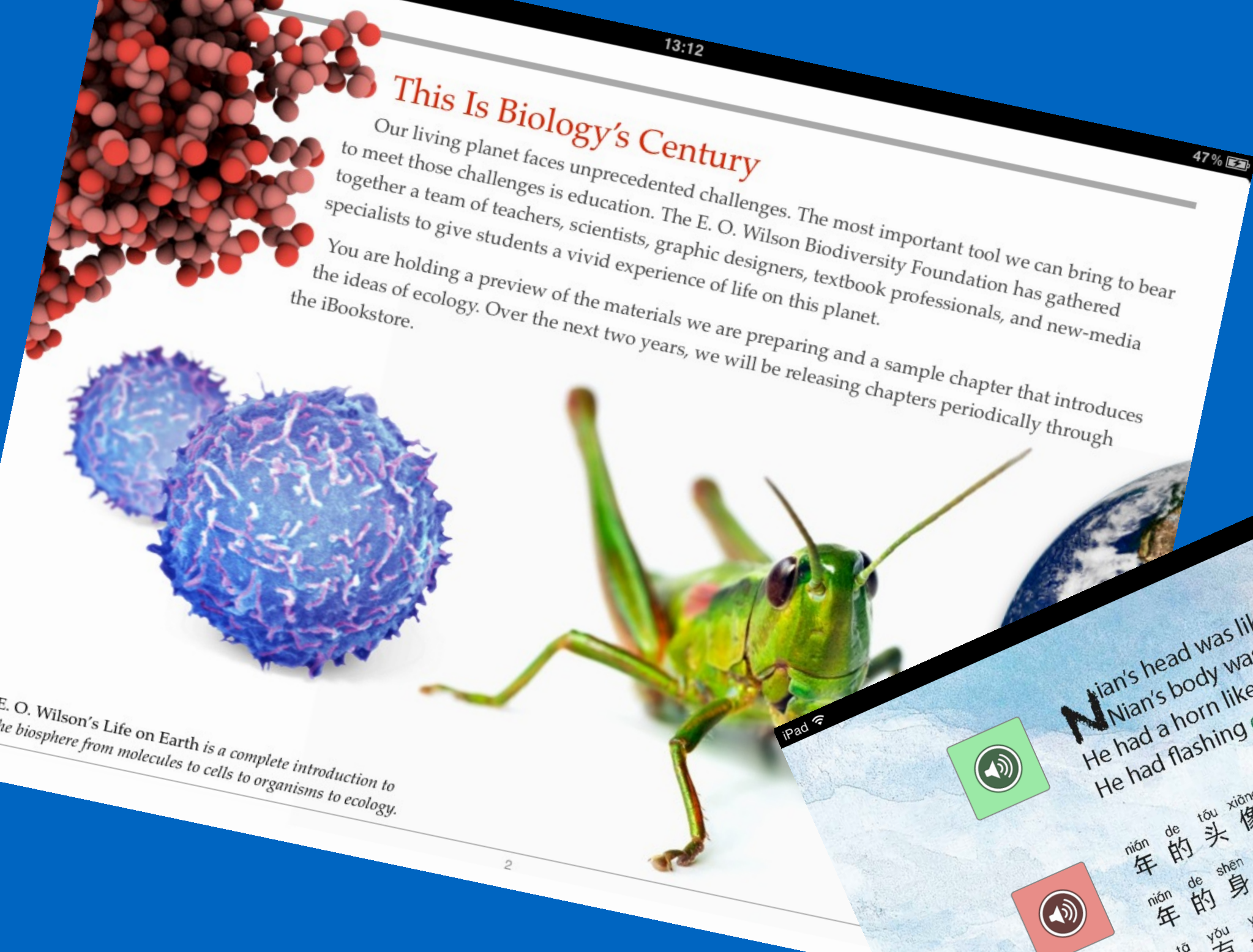
但

there is another format



Apple iBooks

based very loosely on ePUB standard but with positioning and special iOS device specific parameters



Apple's 'Multi-touch' format built with iBooks Author Only available for Apple devices

Multimedia Enhancements

- **ePub and Apple iBooks can be enhanced with:**
 - **Video**
 - **Animation**
 - **Read-aloud**
 - **Audio / Music / Narration**

eBook Readers

设备

- **eBooks need reader software**
- **Vendors can control distribution through the reader**
- **eBooks are added to the user's 'library'**

eBook Readers

设备

- **quality of software is variable**
- **latest standards not always supported**
- **can include DRM to lock eBook to device or purchaser / borrower**

Creating eBooks

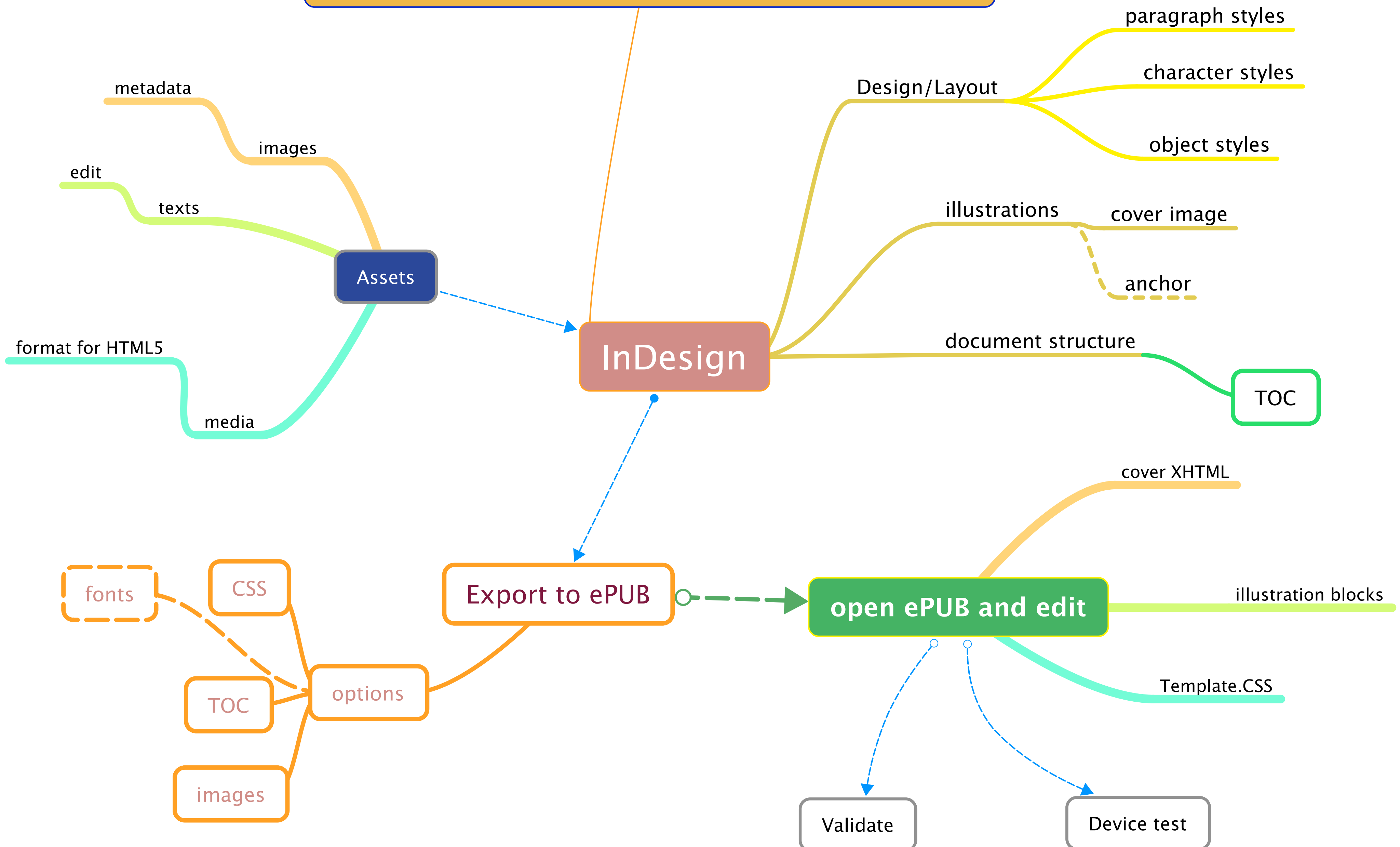
How *do we make:* **eBooks?**

- for ePUB standard
 - use Adobe InDesign+
 - some editing of HTML and CSS
- for Kindle
 - convert from ePUB standard
- Skills needed
 - design and layout / typography
 - knowledge of web technology



ePUB

ePUB production





ePUB

3

mimetype

ePUB file Contents

META-INF

container.xml

OEBPS

toc.xhtml

toc.ncx

content.opf

cover.xhtml

chapter1.xhtml

chapter2.xhtml

chapter3.xhtml

CSS

style.css

publisher.css

images

mypic.jpg

more images

fonts

Georgia.otf

more fonts ...

XML Editor interface showing the source code of rls.html. The main editor area contains the following XML code:

```
1 <?xml version="1.0" encoding="UTF-8" standalone="no"?>
2 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1 //EN" "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml">
4   <head>
5     <title>rls.html</title>
6     <link href="template.css" rel="stylesheet" type="text/css" />
7   </head>
8   <body>
9     <div id="rls.html" xml:lang="en-GB">
10      <div class="Basic-Text-Frame">
11        <p class="firstlineinverse"><span class="firstletter">W</span>e built a ship upon
12          the stairs</p>
13        <p class="poemline">All made of the back-bedroom chairs,</p>
14        <p class="poemline">And filled it full of sofa pillows</p>
15        <p class="poemline">To go a-sailing on the billows.</p>
16        <p class="firstlineinverse"><span class="firstletter">W</span>e took a saw
17          and several nails,</p>
18        <p class="poemline">And water in the nursery pails;</p>
19        <p class="poemline">And Tom said, "Let us also take</p>
20        <p class="poemline">An apple and a slice of cake;"-</p>
21        <p class="poemline">Which was enough for Tom and me</p>
22        <p class="poemline">To go a-sailing on, till tea.</p>
23        <p class="firstlineinverse"><span class="firstletter">W</span>e sailed
24          along for days and days</p>
25        <p class="poemline">And had the very best of plays;</p>
26        <p class="poemline">But Tom fell out and hurt his knee,</p>
27        <p class="poemline">So there was no one left but me.</p>
28      </div>
29    </div>
30  </body>
31 </html>
32
```

The Archive Browser on the left shows the file structure of rls.epub, with encryption.xml highlighted. The Outline pane at the bottom left shows a tree view of the document's elements, including p "poemline" and p "firstlineinverse".

from InDesign to:

- **ePub re-flowable**
- **ePub fixed layout**
- **IDML to use in iBooks Author**

ePub post editing

- **some of the ePub file may need editing**
- **some additions may be required**
- **editing HTML and XML inside the package**
- **conversion to Mobi / Kindle**

Specifics for Chinese Language

- **can use right to left**
- **can use vertical reading**
- **may need some editing of the CSS and metadata**

Language Specifics

```
@charset "utf-8";  
html {-epub-writing-mode: vertical-rl;}
```

```
<spine toc="ncx" page-progression-  
direction="rtl">
```

EPUB uses HTML5 ruby elements:

```
<ruby>両隣<rt>りょうどな</rt></ruby>
```


Conversion and Export Tools

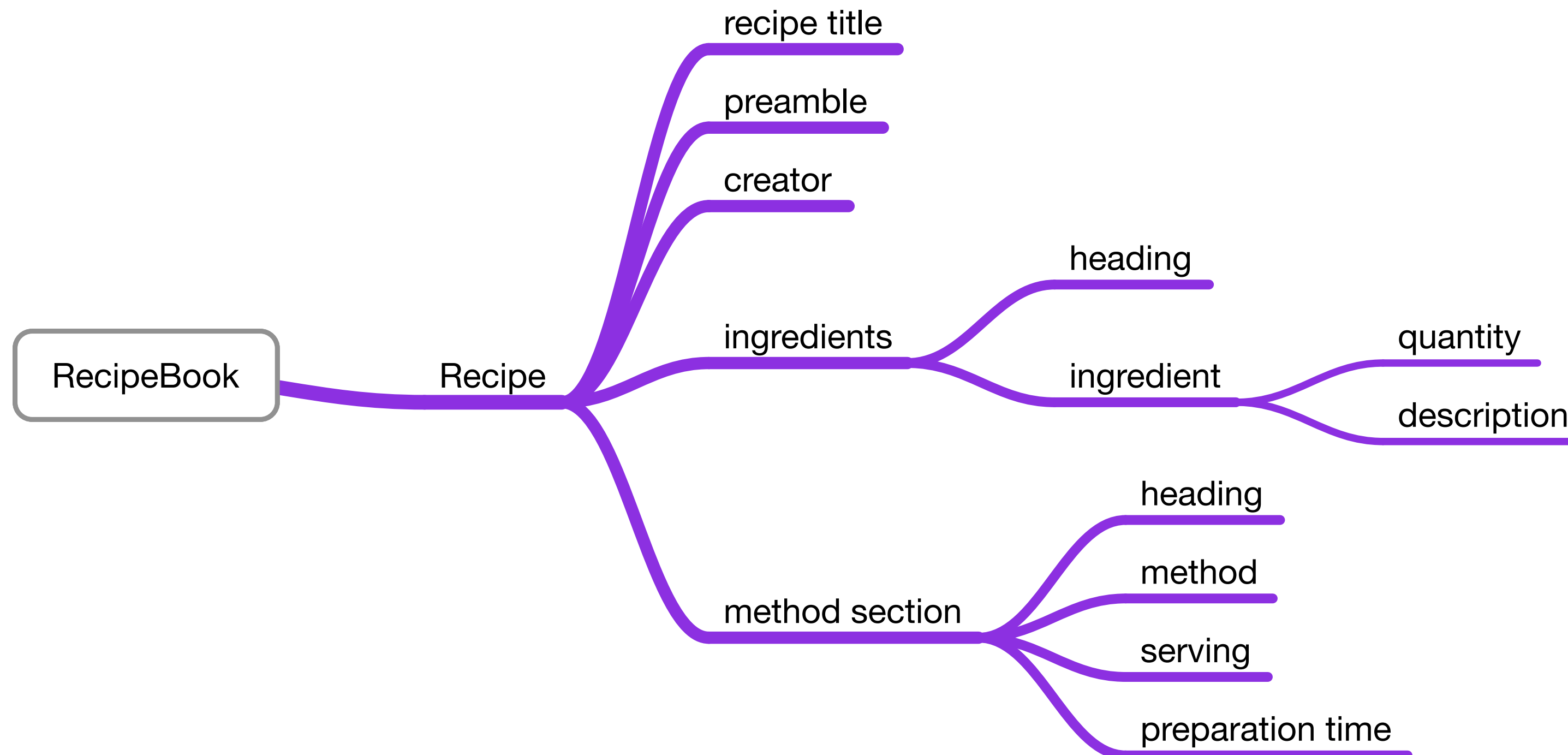
- **ePub can be converted to Kindle formats**
- **can use vertical reading**
- **may need some editing of the CSS and metadata**

**Using XML and
WEB first**

烹饪书

Example:

Cookery Book



DTD

```
recipelist.dtd* x all_recipes_1373551652.xml x
1 <!-- this is the start of the recipes DTD -->
2 <!ELEMENT recipes (recipe)+>
3 <!ELEMENT recipe (recipetitle,main_photo*,caption*,preamble?.creator*,ingredients, method_section)>
4 <!ELEMENT recipetitle (#PCDATA)>
5 <!ELEMENT main_photo (#PCDATA)>
6 <!ELEMENT caption (#PCDATA)>
7 <!ELEMENT heading (#PCDATA)>
8 <!ELEMENT creator (#PCDATA)>
9 <!ELEMENT preamble (#PCDATA)>
10 <!ELEMENT ingredients (heading,ingredient+)>
11 <!ELEMENT ingredient (quantity?,description)>
12 <!ELEMENT quantity (#PCDATA)>
13 <!ELEMENT description (#PCDATA)>
14 <!ELEMENT method_section (heading,method*,serving,preparationtime)>
15 <!ELEMENT method (#PCDATA)>
16 <!ELEMENT serving (#PCDATA)>
17 <!ELEMENT preparationtime (#PCDATA)>
18 <!ATTLIST main_photo href CDATA #REQUIRED>
19 <!ATTLIST main_photo alt CDATA #REQUIRED>
20 <!ATTLIST recipe origin CDATA #REQUIRED>
```

One or more times

Optional but as many as you like

Optional but only one

Editors Login and enter content

▼ • Title

Potato balls from Lesvos

▼ • Country of Origin

Instructions: Select a country from which this recipe comes from

Greece

▼ Preamble


Paragraph **B** *I* *ABC*

A delicious summer treat. Cook indoors or out on the barbeque. Serve up with Retsina or some cold Greek beer.

Path: p

▼ Main Photo

Instructions: select one photo and add a caption (optional)

Main Photo	Short caption
 potatoballsfromlesvos.jpg	

▼ Ingredients

	Quantity	Description
1	1kg	potatoes, boiled and pureed
2	4-5	eggs
3		Bunch of Parsley finely chopped
4	1 and a half	grated dried mizithra cheese
5		olive oil
6		salt
7		pepper

+

▼ Instructions

Paragraph **B** *I* **Bulleted** **Numbered** **Code** **Link** **Unlink** **WYSIWYG**

Mix in a bowl the mashed potatoes with the eggs. See how tight the mixture is. If it becomes to watery do not add all the eggs. Then add the rest of the ingredients. Use plenty of parsley. Work the mixture with your hands and shape it into small round balls. Coat them with flour and fry on all sides until golden brown. Do not burn the oil because this way the potato balls might burn on the outside and remain uncooked on the inside. When ready remove from frying pan lace them in a platter on top of and absorbing paper and serve.

Web Page previews the content

Potato balls from Lesvos

A delicious summer treat. Cook indoors or out on the barbeque. Serve up with Retsina or some cold Greek beer.



Ingredients

- 1kg potatoes, boiled and pureed
- 4-5 eggs
- Bunch of Parsley finely chopped
- 1 and a half grated dried mizithra cheese
- olive oil
- salt
- pepper

Method

Mix in a bowl the mashed potatoes with the eggs. See how tight the mixture is. If it becomes too watery do not add all the eggs. Then add the rest of the ingredients. Use plenty of parsley. Work the mixture with your hands and shape it into small round balls. Coat them with flour and fry on all sides until golden brown. Do not burn the oil because this way the potato balls might burn on the outside and remain uncooked on the inside. When ready remove from frying pan place them in a platter on top of an absorbing paper and serve.

Serves: 4

Preparation time: 1 Hour

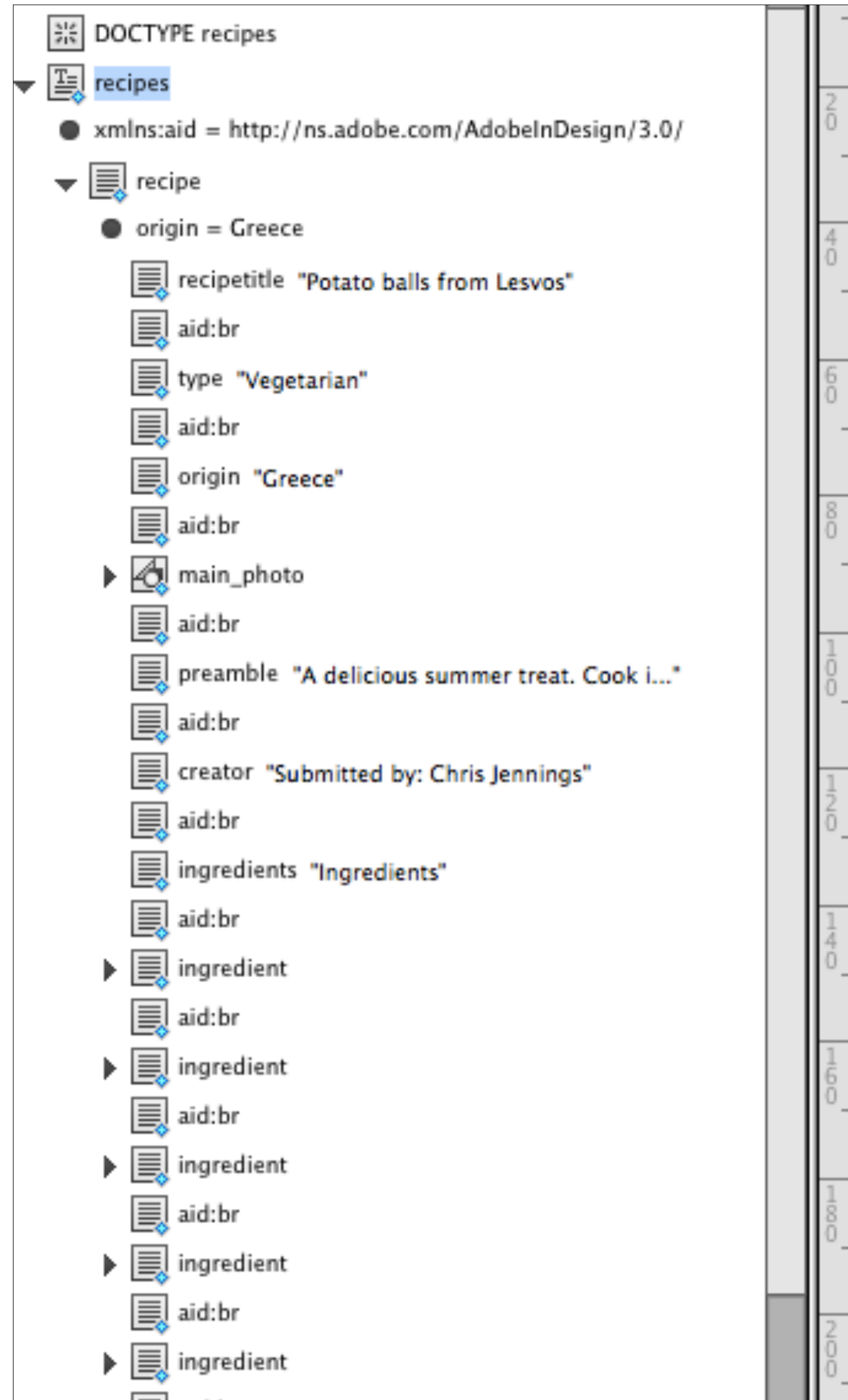
Submitted by: Chris Jennings

XML is exported

```
<?xml version="1.0" encoding="utf-8" standalone="no"?>
<!DOCTYPE recipes SYSTEM "recipelist.dtd">
<?whitespace-handling use-tags?>
<recipes xmlns:aid="http://ns.adobe.com/AdobeInDesign/3.0/">
<recipe origin="Greece"><recipetitle>Potato balls from Lesvos</recipetitle><aid:br/>

<type>Vegetarian</type><aid:br/>
<origin>Greece</origin><aid:br/>
<main_photo href="assets/images/potatoballsfromlesvos.jpg" alt="Potato balls from
Lesvos"></main_photo><aid:br/>
<preamble>A delicious summer treat. Cook indoors or out on the barbeque. Serve up with Retsina
or some cold Greek beer. </preamble><aid:br/>
<creator>Submitted by: Chris Jennings</creator><aid:br/>
<ingredients>Ingredients</ingredients><aid:br/>
<ingredient><quantity>1kg</quantity><description>potatoes, boiled and
pureed</description></ingredient><aid:br/>
<ingredient><quantity>4-5</quantity><description>eggs</description></ingredient><aid:br/>
<ingredient><description>Bunch of Parsley finely chopped</description></ingredient><aid:br/>
<ingredient><quantity>1 and a half</quantity><description>grated dried mizithra
cheese</description></ingredient><aid:br/>
<ingredient><description>olive oil</description></ingredient><aid:br/>
<ingredient><description>salt</description></ingredient><aid:br/>
<ingredient><description>pepper</description></ingredient><aid:br/>
<methods>Method</methods><aid:br/>
<method>Mix in a bowl the mashed potatoes with the eggs. See how tight the mixture is. If it
becomes too watery do not add all the eggs. Then add the rest of the ingredients. Use plenty of
parsley. Work the mixture with your hands and shape it into small round balls. Coat them with flour
and fry on all sides until golden brown. Do not burn the oil because this way the potato balls might
burn on the outside and remain uncooked on the inside. When ready remove from frying pan place
them in a platter on top of and absorbing paper and serve.</method><aid:br/>
<serving>Serves: 4</serving><aid:br/>
<preparationtime>Preparation time: 1 Hour</preparationtime><aid:br/>
</recipe>
</recipes>
```

XML Imported to InDesign Template



Potato balls from Lesvos
Vegetarian
Greece



A delicious summer treat. Cook indoors or out on the barbeque. Serve up with Retsina or some cold Greek beer.

Submitted by: Chris Jennings

Ingredients

kg potatoes, boiled and pureed

4-5 eggs

Bunch of Parsley finely chopped

and a half grated dried mizithra cheese

olive oil

salt

pepper

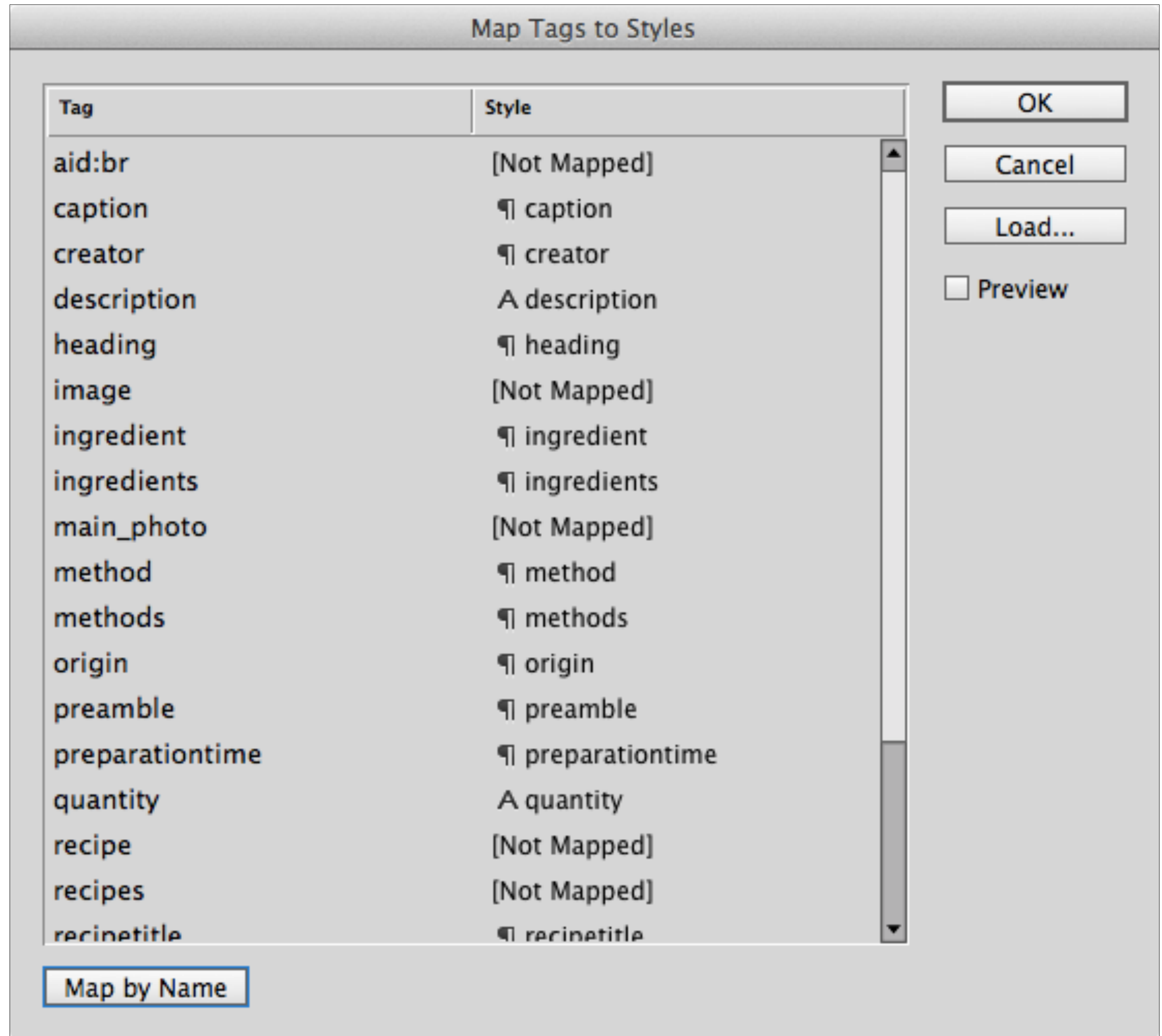
Method

Mix in a bowl the mashed potatoes with the eggs. See how tight the mixture is. If it becomes too watery do not add all the eggs. Then add the rest of the ingredients. Use plenty of parsley. Work the mixture with your hands and shape it into small round balls. Coat them with flour and fry on all sides until golden brown. Do not burn the oil because this way the potato balls might burn on the outside and remain uncooked on the inside. When ready remove from frying pan lace them in a platter on top of and absorbing paper and serve.

Serves: 4

Preparation time: 1 Hour

XML Tags are mapped to styles in template



Pavlova cake

Sweet Dish

Estonia



When strawberries are ready in July, Estonians have to make the Pavlova cake. Although it's of Australian origin, we make and eat it a lot and it has become more like our ethnic food. There are different ways of making pavlova. But the main thing is - it's easy and yummy! And what else would you like during hot summer days. Here's the recipe I use and all my family and friends say it's the best pavlova they've ever tasted.

Submitted by: Lea Adamson

Ingredients

- Meringue:
- 6 egg whites
- salt
- 2 dl white sugar
- 2 tablespoon of cornstarch
- 2 teaspoon of lemon juice
- Cream
- 400 ml 35% whipping cream
- 300 g of cottage cheese
- 2,5 dl of sugar
- strawberries

Method

Directions:

Preheat the oven to 160 degrees C and cover the pan with parchment paper. Draw a 26-28 cm diameter circle to the parchment.

In a large bowl, beat egg whites and salt on a high speed until soft peaks form. Add $\frac{3}{4}$ of the sugar gradually, while continuing to whip.

Content Management and XML

- If the documents and assets are managed in a web environment
- Content can be published to the web and -
- exported as XML
- this can be imported into an InDesign template
- from InDesign we can get PDF for print and
- ePUB for eBooks
- effectively this is a **web first model**

eBook Production:

**The ideal Digital workflow
for maximum flexibility**

Digital Workflow

XML

Optional import from XML

Content

- Section 1
- Section 2
- Section 3
- Section

Content is divided into discreet sections ready for import into InDesign

InDesign

InDesign is used in 'book' mode. Each section is a separate InDesign document

Book

- section1.indd
- section2.indd
- section3.indd
- section ...indd

From the book we can export ePUB and PDF directly

Print ready

PDF

ePUB3 reflowable or fixed

Using Amazon Kindle tools we can

convert to MOBI/KF8 for Kindle devices

Each section exported from InDesign as IDML

section1.idml

section2.idml

section3.idml

section...idml

Each IDML file is used to create a new chapter in iBooks Author

insert chapter from....

iBooks Author

template

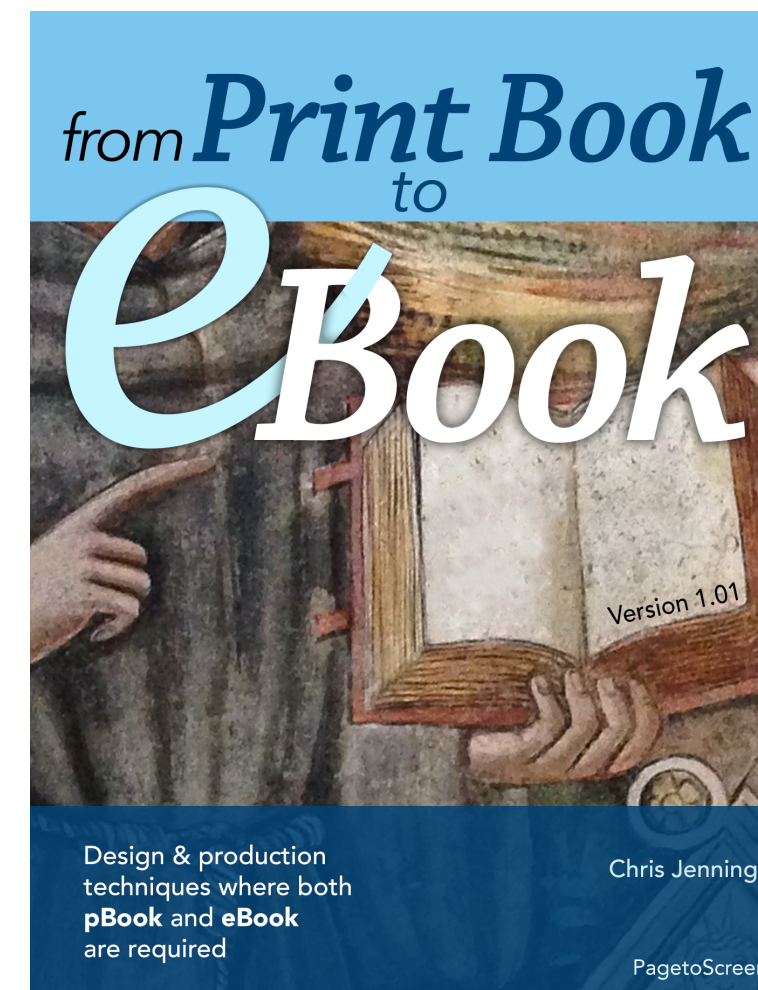
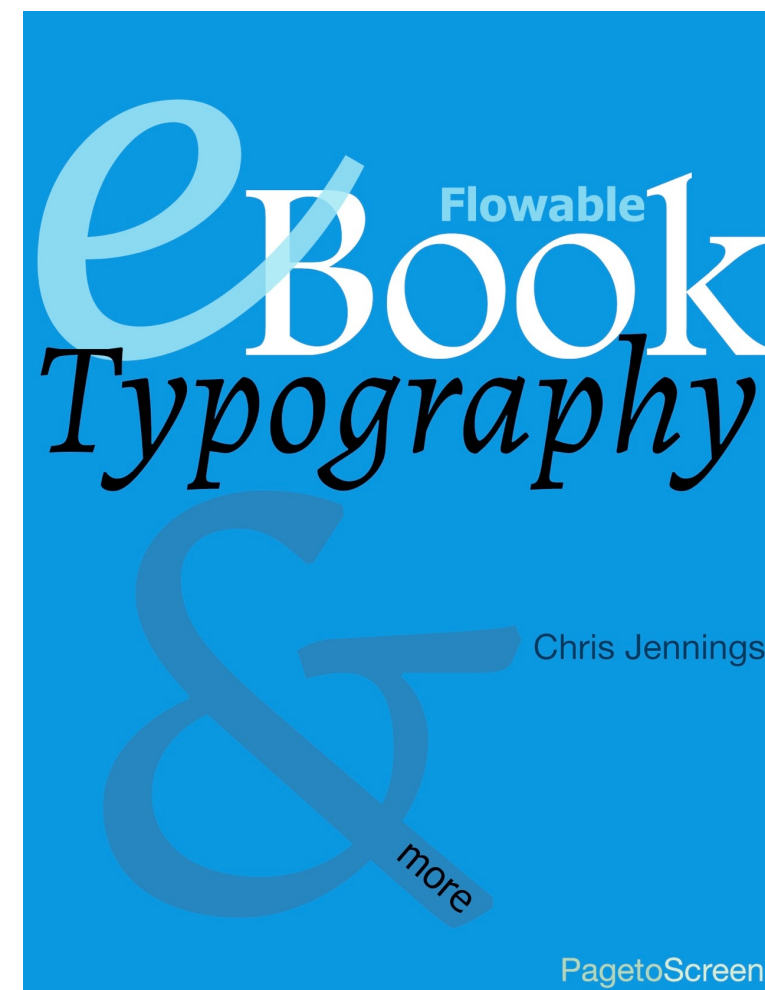
iBooks



谢谢

Thank You

Chris Jennings 2017



publisha.github.io

@ pageboy --
chrisjennings@brookes.ac.uk