

DEVELOPING AN EBOOK PRODUCTION WORKFLOW:  
CHALLENGES AND LEARNING AT TALONBOOKS

*by*

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## A b s t r a c t

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Talonbooks, a Canadian literary publisher established in 1967, initiated ebook production in 2012 and began to develop a feasible workflow. Talonbooks first attempted to produce universally functional “reflowable” ebooks intended for consumption on any of many popular devices. Different but similarly popular formats necessitated the emergence of a two-pronged approach: EPUB files were produced, duplicated, optimized for Kindle devices, and converted to Mobipocket. This workflow was still in use at Talonbooks as of December 2013. As Talonbooks tackles the electronic (re)production of its sizeable backlist, and as technology and the economics of book publishing change, the workflow will be developed further. The latter half of this report identifies challenges and opportunities – improving metadata; establishing indexing practices; experimenting with emerging digital-publishing platforms/tools; and employing outside contractors selectively in order to complete backlist ebook conversion – and analyzes them within the context of digital book publishing as it was from approximately 2009 to 2013.

**Keywords:** Ebooks; Ebook production; EPUB; Conversion; Workflow; Talonbooks

**Subject Terms:** Electronic Books; Electronic Publishing; Standardization

## A c k n o w l e d g e m e n t s

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*“The publication of high thoughts  
is the dynamic power in the arteries of life;  
it is the very soul of the world.”*

– ‘Abdu’l-Bahá, 1875

## Table of Contents

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PAGE	CONTENTS
<i>ii</i>	<b>Approval</b>
<i>iii</i>	<b>Partial Copyright Licence</b>
<i>iv</i>	<b>Abstract</b>
<i>v</i>	<b>Acknowledgements</b>
<i>vi</i>	<b>Table of Contents</b>
<i>vii</i>	<b>List of Figures and Tables</b>
<b>1</b>	<b>1. Introduction 1</b>
<b>1</b>	1.1 Ebook Production: More Awkward than “Agile”
<b>5</b>	1.2 Talonbooks and Its Ebook-Publishing Strategy
<b>8</b>	<b>2. Talon’s Workflow</b>
<b>9</b>	2.1 Iteration 1: Learning the Ropes
<b>11</b>	2.2 Iteration 2: In the Swing of Things
<b>12</b>	2.2.A <i>The Kindle-Optimization Process</i>
<b>16</b>	2.3 Summary of Workflow Developed
<b>18</b>	<b>3. Some Current Challenges and Recommendations</b>
<b>20</b>	3.1 Improving Talon’s Positioning within the “Long Tail” through Better Metadata
<b>23</b>	3.2 Indexing Electronic Books
<b>26</b>	3.3 Experimenting with Ebook Layout
<b>28</b>	3.4 Selective Outsourcing to Serve the Digital Marketplace
<b>32</b>	<b>4. Conclusions</b>
<b>35</b>	<b>References</b>
<b>38</b>	<b>Appendix: Talonbooks Ebook Proofreading Checklist</b>

## List of Figures and Tables

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PAGE	FIGURE	NAME OF FIGURE
12	Table 1	Key differences between “universal” and Kindle-optimized EPUB files
13	Figure 1	Additions to and revisions of the Talonbooks Proofreading Checklist
17	Figure 2	Ebook production workflow employed at Talonbooks, June–September 2012

# 1. INTRODUCTION

## 1.1 Ebook Production: More Awkward than “Agile”

The context in which books are read has changed dramatically in recent years. Reading onscreen has become increasingly popular, as evidenced by a jump in the sales of ereading devices (including multi-function tablets and smartphones)<sup>1</sup> and the rapid disappearance of brick-and-mortar bookstores (as Erin Williams discussed in her Master of Publishing project report, “The Chapters Effect on British Columbia-Based Literary Publishers”). Even the definition of “book” is in question.<sup>2</sup> Unsurprisingly, this has affected the nature and context of book publishing and production, as publishers attempt to meet demand and stay abreast of changing technologies. One pragmatic effect is that publishers have had to produce large numbers of electronic publications (or ebooks) quickly, in order to access new revenue streams and the emerging market for backlist titles.

Ebook production (or *e-production*) has been fraught with difficulties: software inefficiencies, apparent incompatibility with established print-production procedures, backward-compatibility issues, and the general slowness of humans and organizations to change (no matter how well-intentioned they may be). As such, book production workflows in general do not yet efficiently accommodate e-production. The following summary, written by Alison Knight in 2007 (at the dawn of the current wave of digital publishing), is still relevant in 2013:

In the late 1990s, the ebook was widely expected to revolutionize publishing. With its promise of immediate availability, low costs, and state-of-the-art features, industry analysts ... predicted the development of a multibillion dollar ebook market by 2005. Yet the reality for most publishers of ebooks has been one of confused production and low revenues. The reasons behind this state of the ebook market are manifold ... lack of reader willingness to abandon print, and widely divergent file format requirements on

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1 According to a study conducted by the International Data Corporation in March 2011, sales for all ebook readers worldwide more than doubled between the third and fourth quarters of 2010, rising to 12.8 million units shipped. Of these, 48 percent were Kindle models. (IDC)

2 For the purposes of this report, “book” refers to a composition, primarily of text, that is published or intended for publication as a complete, stand-alone work.



the part of distributors and readers combine to produce a market defined by inflated disorder and wary indifference. (1)

These difficulties have been addressed to some degree over the past decade but still persist. Standards of quality are still being established, and best practices are difficult to discern.

Another significant challenge arises from the fact that book publishers generally wish to sell electronic versions of both frontlist (new) and backlist (old) titles, for all represent potential sources of revenue. The prospect of producing electronic versions of backlist titles is a daunting one, especially to publishers that have sizeable backlists. The production files used to reprint backlist titles are in many cases archived or housed in formats that are inconvenient or difficult to retrofit (Portable Document Format [PDF], old page-layout files, and sometimes, in the case of books published in the 1980s and earlier, only as film separations or printed copies). In many cases, digitization (the conversion of printed works to any digital formats) – itself a time-consuming process – must take place before ebook production can begin.

Talonbooks is a mid-sized publishing company by Canadian standards, with six full-time employees and a handful of part-time employees, regularly employed freelancers, and occasional paid interns. Small and mid-sized book-publishing companies like Talonbooks are in a particularly difficult position; even those that want to produce ebooks are not necessarily prepared to do so. Expertise is not widespread; building ebooks requires working knowledge of XHTML (extensible HypertText Markup Language) and css (Cascading Style Sheets), and many companies do not have suitably skilled staff members. Even large publishers do not typically have, in-house, the specialized knowledge required to fix errors in EPUB<sup>3</sup> files (Sandusky, Secrets), though they may be more able to hire dedicated ebook-production staff than small and mid-sized publishers. Nor do small publishers have the tools. There is no industry-wide agreement about what software to use when making ebooks (though Adobe InDesign is a common starting point), in part because few software programs have been built for this purpose. Plenty of common tools and documentation are available to web and app developers, “but there are

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3 EPUB is the most widely supported ebook format. Its nature will be discussed in various sections of this report. (Note that the International Digital Publishing Forum spells and capitalizes this word as “EPUB,” but many variants are in use; this report conforms to the IDPF standard but permits variants found in product names or quoted works.)

next to none for book developers” (Walker) – though certain promising platforms are in development and will be discussed in this report.

Also, until recently, Canadian publishers had no need to answer to the monstrous, US-based corporations that manufacture and market ereading devices and act as ebook vendors. Now it is incumbent upon ebook publishers, who already struggle to stay current with software revisions and versioning, to conform to standards set by these corporations – notably Apple, which sets more stringent specifications for EPUB files than other vendors, and Amazon, which enforces the use of its proprietary formats when all other significant devices and vendors support EPUB. Amazon’s reasons for this enforcement are obvious, given its current position as the world’s largest ebook retailer (Hoffelder) and the manufacturer of a widely successful ereader.

At present, ebooks need to be produced in at least three different file formats (PDF, EPUB, and a Kindle format such as KF8 or Mobipocket) in order to reach the majority of ebook readers in the trade market. As Knight aptly observed, “In order to provide ebook offerings through all available channels and to all consumers, publishers must produce ebook files in multiple formats, which usually involves costs and labour that currently outweigh the revenue that ebooks are capable of producing” (2). Most of the revenue seen by book publishers still comes from print books, but ebooks have gained ground; according to a September 2013 report on Canadian publishing in *Publishers Weekly*, “previous anxieties about ebooks also seemed to be generally allayed as average ebook sales seem to be stable at about 17% of revenue. Although they are still growing, they are no longer tripling as they did at first” (Williams S3). It is true, however, that “while many of the larger publishers long ago passed the double-digit threshold, many small and mid-size publishers have lagged when it comes to generating a significant portion of their revenues digitally” (Digital Book World). Given that revenue streams in book publishing have altered so significantly within such a short period (about five years), it is difficult to argue that publishers should hold ebooks in ill regard, yet not many have embraced e-production as inevitable or integral to their margins and mandates (to *publish*: to prepare certain content and make it available for sale and consumption).

The so-called Agile Publishing Model represents an attempt to shift the thinking in the publishing industry away from traditional methods associated with manufacturing and toward those associated with software development – specifically, what is known in that arena as “agile” development. The agile approach to software development is essentially iterative and dependent on communication between

product developers and users/customers *during* a product's development. (It is centred on problem solving and improving functionality and, as such, has served well the maintenance and improvement of software products and the development of focussed computer/web applications.) Though still in its experimental phase, the conceptual framework of the agile publishing model is clear enough. As Kristen McLean of Bookigee outlines, the key principles include "quick cycles ... self-organizing working groups (as opposed to traditional hierarchical working interactions), and iteration (Agile publishers assume that there are going to be changes along the way) ... One of the more radical differences between Agile and traditional publishing ... is that it emphasizes process over perfection. 'It's more important to get it out than to get it perfect, because when you get it out you can test it'" (quoted in Habash). Thus an agile approach to publishing is one in which ongoing communication between publishers, authors, and audiences affects and refines iterations of books in development that eventually become final products.

Agile methodologies are being implemented by various publishers in many areas within publishing, including e-production, but their most common application is to content creation (at the editorial development stage). The application of "agile" to book publishing, though, has proved awkward; even McLean admitted that the "focus on process (which leads neatly into agile's tenet of customer feedback and interaction) is difficult for [traditional] publishers to accept" (quoted in Habash). "Agile" may not be directly applicable to publishing after all because it requires the dismantling of several core assumptions. Brett Sandusky writes as much in his blog, "The Mass-Produced Artisanal Breakfast Sandwich," and enumerates the faults:

Agile is a methodology that deals in product development and engineering for digital products. Its main goal [depends on] feedback loops that tap into user behavioural data and bring both user behaviour and preferences to light which necessarily inform further development cycles. This is accomplished by small agile teams which work on, usually, one product ... Relationships with customers are not only built but are a cornerstone of Agile strategy ...

[But the] business model of publishing is based on selling many, many products simultaneously ...

Publishing's content strategy is to put out the best content, edited, polished, beautifully presented. Book products ... are the fruit of years and months and weeks of labor by various individuals.

... publishers are not cultivating direct consumer relationships well, particularly in ways that allow for true behavioural and usage feedback loops to be implemented.

And now ... the big one: development. Thus far, publishers not only have such little control over development of their digital products because this is happening overseas, for the most part, by conversion houses, but few people in-house have enough knowledge to even understand the coding of a digital product a publisher creates.

Here we actually see the antithesis of Agile development.  
(Sandusky, Mass Produced)

Still, a sea change is evident: many publishers have begun to see themselves as, or now wish to become, curators of content that can be read in whatever format a reader desires and repurposed and revisited, rather than makers of physical products in a manufacturing chain. The movement toward agility, as represented by this change in attitude, is positive.

## 1.2 Talonbooks and Its Ebook-Publishing Strategy

Talonbooks (legally Talon Books Ltd. but often referred to simply as Talon) is a trade-book publisher based in Vancouver, Canada, that publishes drama, poetry, literary fiction, and non-fiction. While its publishing program exists exclusively outside the mainstream, and it is not financially self-sufficient (it depends on grant funding), Talon contributes to the world's literary canon and, importantly, to Canadian culture. Talon's backlist is its most significant asset; in spring 2013 it consisted of 485 titles written by such pre-eminent Canadian literary figures as Michel Tremblay, George Ryga, George Bowering, Bill Bissett, Daphne Marlatt, Drew Hayden Taylor, Fred Wah, and Morris Panych. The backlist's dramatic works alone, which include some of Talon's oldest titles (published in the late 1960s), comprise a unique reservoir of revenue – one that could potentially be tapped anew by publishing electronic versions.

Talonbooks is by no means a pathfinder in digital publishing or ebook production, and it faces all the challenges outlined in the previous section. Though the vast majority of its revenue comes from print books, its owner and publisher, Kevin Williams, sees it as increasingly imperative that Talon

offer new titles as both electronic and print publications. Talon also aims to (re)produce electronically as many backlist titles as possible.

Over the summer of 2012, Talonbooks began producing ebooks in-house. Williams has commented on the rationale behind this decision: “The decision to produce ebooks in-house derives from the operational reality that [publishers] still have to proofread ... the files for ebook conversions done out of house. One also needs expertise these days in producing all sorts of book files. If you are going to proof and check the finished file, which is most of the work of conversion, you may as well do the conversion and keep control over the means of production” (Williams, email message to author). Talon’s strategy initially was to start producing frontlist titles from current seasons as ebooks and then work through the backlist titles in reverse chronological order according to publication date (though certain titles were prioritized based on demand, popularity, and ease of production). Two goals were set: (1) to henceforth publish frontlist titles in both print and electronic formats simultaneously, and (2) to gradually make available electronic versions of most backlist titles. Williams has described the decisions that led to setting these goals:

In the brief period of time that publishers have been producing and marketing ebooks, the experience gained has shown that modern book promotion works better when you are promoting the ebook and print book at the same time. We lost a lot of [reportage in] mainstream media in the book business but we now use social media and Internet activity instead. The market makers for books are on the book-related social media [web]sites, [and] those readers may be ebook readers or print books readers; if you want them to engage in conversation about your books you have to make sure both e- and p-books are available to them. (Williams, email message to author)

Talon did not implement the agile publishing model per se, but the attitudes associated with that model were part of the organic development of Talon’s ebook production workflow, in that it was iterative and required a humble posture of learning. Agile principles, not practices, were applied – and they were applied not to content creation but to the perfection of the e-production process.

At the outset, Talonbooks gathered the resources it would need to undertake the work of producing ebooks and to develop capacity in this area. No member of

Talon's permanent staff is entirely dedicated to ebook production, but all are active acquirers of knowledge and skills, and Talon is equipped with the software needed for e-production (Adobe InDesign, HTML/text editors, and Sigil, an EPUB editor). Talon's principal designer, Leslie Smith, also functions as the information technology specialist, so incorporating ebook conversion into the company's production workflow came somewhat naturally; Smith also took on the role of ebook publisher. The addition of the author of this report to the staff as an intern – one who knew HTML and had some editorial experience – proved valuable; I was able to proofread, test, and eventually edit both the outer content and inner code of EPUB files.

By mid-August 2012 – as the Fall 2012 titles were going to press – a workflow had emerged and was in use. The development and refinement of that workflow is the subject of this report, which reviews the methods and tools utilized, discusses conditions and challenges, and comments on the learning that took place at each stage. It may be understood as a chronological map of producing ebooks at Talonbooks. The learning acquired during this company's foray into ebook production of both its frontlist and backlist, which itself occurred during a transformative period in publishing, constitutes a case study for small publishers learning about digital publishing and may also be of interest to individuals working in ebook development.

## 2. TALON'S WORKFLOW

As part of the ebook production workflow developed at Talonbooks over the summer of 2012, Talon built ebooks in two formats: Mobipocket (or Mobi), which is a proprietary format owned by Amazon Kindle (indeed, it is one of a few formats – all proprietary – that Kindles can read); and EPUB, an open source format that can be read on many popular devices (including iPad, Kobo, Nook, and other tablets and smartphones). EPUB is essentially a compressed (“zipped”) file readable by ereading devices and applications (apps). In its unzipped state, it can be seen to contain certain types of files:

- an OPF file (Open Packaging Format), typically called simply “content.opf,” that holds meta-content, notably a book’s metadata (information about the book itself – author, title, publication date, etc.), a manifest of all other files in the EPUB, and a “guide” (an optional navigational enhancement);
- an NCX file (Navigational Control for XML documents) that acts as an external or *navigational* table of contents, used by ereading devices (as opposed to an internal or *inline* table of contents, which takes the form of an XHTML file within the body of an ebook’s text);
- at least one but usually many XHTML files, which comprise an ebook’s body of text (e.g. chapters);
- a folder containing images (jpeg or other formats);
- a CSS file; and
- folders containing embedded fonts or miscellaneous enhancements, if desired.

(More information about EPUB specifications can be found on the website of the International Digital Publishing Forum [IDPF], which is the organization that oversees the EPUB format.) Talon produced EPUB 2.0 files in compliance with current standards set by the IDPF. EPUB files were then converted to Mobipocket format so as to be readable on Kindle.

Most Talon books contain large blocks of text and a limited number of images, which makes it relatively easy to “reflow” the content in a given book. This simply means taking advantage of the built-in functionality of ereading devices that repaginate text when readers select different fonts or text sizes. In “reflowable” content, type and images do not have strict, formal relationships and are set with few line or page breaks. Designer Craig Mod has coined the term “formless content” to describe content that can reflow without adversely affecting the

reading experience: “Formless Content is unaware of the container. Definite Content embraces the container as a canvas” (Mod). Books containing Definite Content, also known as fixed-layout books, are at present most easily electronically produced as PDFs, though platforms are emerging for producing such content as apps or in other formats. (Note that Talon did not concern itself with producing complex fixed-layout ebooks during the period discussed herein.)

## 2.1 Iteration 1: Learning the Ropes

The first iteration of Talon’s workflow emerged in May and June of 2012 and was based on research and trials conducted by Smith, the ebook publisher. In this phase, Talon’s ebook production team, which then consisted primarily of Smith and me, the intern, attempted to create a workflow by which a single, universally readable ebook file could be produced, then simply converted to Mobi format. The goal can be summed up simply: *one file to rule them all*. This clarion call, tolling for format standardization, was raised by Elizabeth Castro, ebook developer and educator, in her slide show “EPUB in the Wild.”

Talon employed a set of steps to this end. First, Smith exported files from InDesign to EPUB after carefully applying styles and arranging blocks of text and images so that the order of content would be preserved during conversion. Castro succinctly described this process in her online book *EPUB Straight to the Point*: “InDesign converts your file into EPUB by creating XHTML/CSS approximations of the styles that you have applied in InDesign” (Castro, *EPUB Straight*). Each new EPUB file was then tested and proofread (by me) on various ereading devices; the team had access to a Kobo WiFi, an iPad 2, and a Kindle Touch (which Talonbooks purchased for this purpose).

Talon developed its first ebook proofreading checklist during this phase. Proofreading consisted of looking for malfunctions and errors – generally formatting errors that had been introduced during conversion from InDesign to EPUB, but also general editorial oversights – including:



- flow of text throughout whole book (correct content order, completeness of text);
- page breaks and line breaks (presence and correct location of);
- incorrectly styled elements (for example, second-level headings showing as first-level headings);
- tables of contents (presence of, accuracy of hyperlinks);
- images (size, placement in text flow, relationship to captions); and
- general errors (spelling, punctuation, formatting, etc.), either originating in the print book or introduced during conversion.

I noted errors and reported them to Smith, who then prepared the given EPUB file for its second (and, ideally, final) round of proofing by making changes to it directly using Sigil, an open source EPUB-editing program.

After errors had been fixed, I converted the EPUB file to Mobi for testing on the Kindle. Amazon's ebook-coding software, KindleGen, was found to be unnecessary because the desired results could be achieved by working only with EPUB, so the team did so as much as possible. After optimizing a duplicate EPUB file for Kindle (a process discussed in chapter 2.2.A), the EPUB file was converted to Mobipocket.

Additions and changes were made to the proofing checklist as the team learned what was typical and where difficulties were likely to arise. Each ebook presented its own set of challenges and thus each required troubleshooting. Certain parts of all of Talon's first few ebooks did not function properly on the Kindle. Most significantly, cover images did not render properly (or sometimes at all). If the cover image worked on the Kobo, it would disappear on the Kindle; if it worked on the Kindle, it looked too short or "squished" on the Kobo and the iPad. After some trial and error, we concluded that preparing one cover image file for use on all devices was not possible. Vendors' specifications for cover size and resolution vary from device to device, depending on the constrictive limitations of the screens. Some devices tested at Talon could not accommodate cover images of different relational (or absolute) dimensions. Cover images needed to be constrained for the Kindle, and that usually did not do justice to the designs; images optimized for Kindle could not be used on other devices.

A further cover image-related challenge arose from one simple element of code in the OPF file. Kindle's publishing guidelines stipulated that XHTML files housing cover images be listed as non-linear (in other words, forcibly removed from the linear flow of content – that is, from the order of the XHTML files in a given ebook).

In EPUB files, on the other hand, XHTML files could be included in the linear flow of content, or they could be left unspecified, with no apparent ramification. Thus, relevant items were added to the proofreading checklist, most having to do with the functionality of the cover image: size, resolution, dimensions, placement (centred on page/screen), and inclusion in linear flow for EPUB and exclusion from for Mobi. With each ebook produced during this phase, Smith made new attempts to solve these problems. After a series of trials, he decided that troubleshooting similar slews of problems in each EPUB file was inefficient and slowed production down. Mitigation sapped time; prevention, in the form of a revised workflow, would be preferable.

It became clear that the lofty goal – one universal file – would be unattainable for the time being. It was impossible to tailor a single EPUB file to suit all of the most popular ereaders (Kindle being, at the time, the obvious outlier). Castro herself acknowledged the difficulties inherent in striving to produce a universal EPUB: “sometimes, you’ll decide to leave some devices behind” (Castro, EPUB Straight). Leaving the Kindle behind, however, was not an option (given its market share and Talon’s desire to provide ebooks to the widest possible audience), so in early July 2012 the elements of the workflow were revisited and refined.

## 2.2 Iteration 2: In the Swing of Things

After the initial period of trial and error, Smith decided that creating two separate ebooks would be necessary: one EPUB file to suit the iPad and other EPUB-enabled ereading devices, and one EPUB file optimized for conversion to Mobipocket for Kindle devices. As such, the key difference between the first and second iteration of the workflow was the Kindle-optimization process, which will be elucidated after a more general discussion of improvements in the proofreading/testing process.

In this second phase, the first step of the production process was maintained: a file was exported from InDesign to EPUB. The EPUB file was then edited in Sigil and tested on EPUB-enabled ereaders (Kobo WiFi and iPad 2). The proofreading/testing phase became more streamlined; I was trained to edit the EPUB content and code, so EPUB-editing and troubleshooting had a faster turnaround (files no longer had to go back and forth between two people innumerable times). It also became clear that some aspects were easier to check by testing the ebook on ereaders while others were easier to check by viewing the EPUB’s innards in Sigil; the former were mentioned in the previous section as proofreading practices associated with

the first iteration of the workflow, and the latter were, primarily, elements within the OPF file. Thus, the scope of proofreading was broadened to include checking whether

- the book’s metadata had been included in the OPF file and was correct;
- the manifest listed all of the EPUB file’s content (all HTML files, CSS files, images, and embedded fonts);
- the spine listed the book’s contents in the reading order desired by both Talonbooks and ebook vendors; and
- the guide denoted the book’s major structural elements (cover, title page, preface, main text, copyright page, etc.), for use by ereaders’ built-in navigational tools.

Detailed information about the nature of manifests, spines, and guides is available in the descriptions of these standard EPUB elements on the IDPF website, and information about their purposes can be found in *EPUB Straight to the Point*. See especially Castro’s diagram “Essentials of content.opf in EPUB” for an illustration of key elements in the OPF file and their interrelationships and interdependencies (Castro, EPUB Straight).

### 2.2.A The Kindle-Optimization Process

To adapt an EPUB file for Kindle devices, after errors had been fixed and meta-content double-checked, a duplicate file was made and then optimized according to Kindle publishing specifications and instructions from Talon’s US ebook distributor, Constellation. Table 1, below, illustrates the key contrasting requirements of each EPUB file.

**Table 1: Key differences between “universal” and Kindle-optimized EPUB files**

Generic ebook (EPUB file 1)	Amazon Kindle ebook (EPUB file 2)
Full cover image (full dimensions, often 600 × 907 pixels)	Cropped cover image (Kindle-screen-optimized dimensions: 600 × 800 pixels)
xHTML file containing cover image included in linear flow during reading (tagged as <code>linear="yes"</code> or unspecified in spine of OPF file)	xHTML file containing cover image excluded from linear flow during reading (tagged as <code>linear="no"</code> in spine of OPF file)

After each Kindle-optimized EPUB file was proofread, it was converted to Mobipocket using the software programs Calibre or Kindle Previewer, each of which offered different benefits. As Kindle Previewer received software updates and certain functionalities were increased or added, it became the preferred Mobi conversion tool (for one reason, because both this software and the format it generates are owned, maintained, and offered by Amazon, and thus one could expect a fairly smooth process and clean output). In any case, after conversion, each Mobi file was tested again on the Kindle Touch and, barring any errors (usually introduced during EPUB-to-Mobi conversion), each was uploaded for distribution, at the same time as finalized EPUB files. (Generally, all files associated with one title were uploaded at the same time.)

Figure 1 indicates select additions to and revisions of the Talonbooks proofreading checklist (the early iteration of which is found in the Appendix) that were made while this second iteration of the workflow was in development, over July and August 2012. By this time, the proofing checklist had become a simultaneous production manual, a how-to list; that is, building, testing, proofreading, and troubleshooting overlapped. The bold portions of text represent elements that had been overlooked at various points and had caused problems (the team learned to take special note of these elements).

**Figure 1: Additions to and revisions of the Talonbooks Proofreading Checklist**

<p>Front matter</p> <p>_____ Correct cover image included in EPUB (from backup production files)</p> <p>_____ Full-sized cover image used (“page one” cover image included in images folder &amp; referred to on first HTML file – jpeg image, colour, full dimensions ...)</p> <p>_____ TOC (internal) links active and link to correct content</p> <p>Links and references</p> <p>_____ TOC (external) links active and link to correct content</p>
---

Continued ...

Figure 1 (continued)

### Catalogue cover image

- \_\_\_\_\_ Catalogue cover ready for upload to Constellation: stand-alone jpeg file that is 2,500 pixels on its longest side × approx. 1,500 on its shortest, in accordance with 1:6 ratio recommended by KDP [Kindle Direct Publishing]

### Preparing two versions

- \_\_\_\_\_ Double-check <metadata> element in OPF file
- \_\_\_\_\_ Validate EPUB file as a whole and fix any errors (manually)

### Preparing an EPUB file optimized for Kindle (ready for Mobi conversion)

- \_\_\_\_\_ Duplicate final generic EPUB file and use for Kindle-optimization (this second EPUB file will be converted to Mobi)
- \_\_\_\_\_ Kindle cover included in Images folder (jpeg image, colour, 600 × 800 pixels ...)
- \_\_\_\_\_ Both cover images – Kindle cover as Image and page-one cover as Text – as well as page one (HTML cover file) appear in <manifest> element of OPF file:

```
<manifest> ...  
<item href="MyCoverImage.jpeg" id="my-cover-image"  
media-type="image/covername.jpeg" /> ...  
</manifest>
```

```
<manifest> ...  
<item id="my-html-cover" href="cover.xml"  
mediatype="application/xhtml+xml" />  
</manifest>
```

- \_\_\_\_\_ <metadata> element of OPF file refers to appropriate image file (name="cover" is mandatory! "x" mandatory if "x" also included in file ID listed in manifest)

```
<metadata> ...  
<meta name="cover" content="xmy-cover-image" />  
</metadata>
```

Continued ...

**Figure 1 (continued)**

\_\_\_\_\_ <guide> element in content.opf file is optimized for Kindle: page one/cover (XHTML file) is listed as type="cover" (mandatory!) and type="text" element refers to first page of text

```
<guide> ...  
<reference type="cover" title="Cover Image"  
href="cover.xml" />  
</guide>  
  
<spine> ...  
<itemref idref="my-html-cover" linear="no" />  
</spine>
```

\_\_\_\_\_ <guide> element in content.opf file is optimized for iPad (all possible references are included) – see [IDPF.org] EPUB 2 specs re: <guide>

\_\_\_\_\_ Convert Kindle-optimized EPUB to Mobi

### Final tasks

\_\_\_\_\_ Upload 3 files to Constellation website: EPUB file, Mobi file, and catalogue cover

## 2.3 Summary of Workflow Developed

The workflow was, to some degree, tailored to each book's needs, but it did have an overarching structure. Figure 2 (on page 17), "Ebook production workflow employed at Talonbooks, June–September 2012," depicts that structure and represents the state of the workflow toward the end of the second phase of its development. This figure was originally created as a mind map (used by me, the intern) to track and recall decisions and efficiencies. Estimations of time included in Figure 2 are based on the experiences of myself and Smith.

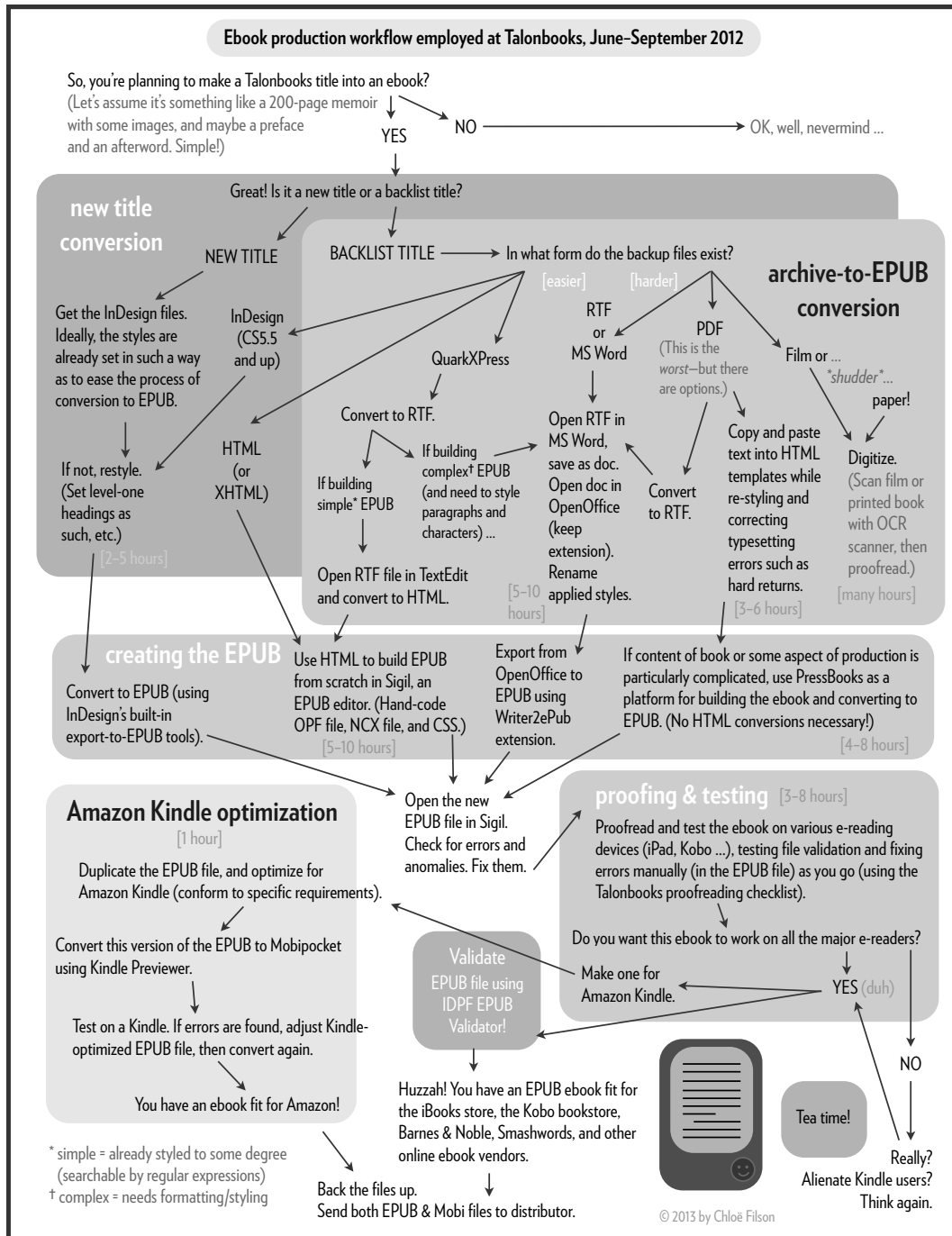
Figure 2 sheds light on why e-production (at least in the early stages) is a consultative process: by necessity! Before selecting a title for e-production, the relevant "Talonites" took into account the book's content (whether it was suited to become an ebook), its publication date, demand, and the state of its backup production files. Each title took its own path through the depicted workflow. The rationale behind each decision or task was the result of consultation, ongoing research, and trial and error – and the fact that, as yet, there is no one piece of software that can "do it all."

Each piece of software mentioned in Figure 2 facilitated specific tasks and was chosen carefully from available resources to suit specific purposes. For example, the e-production team longed for but could not find a plain-text editor that could also read and export to HTML (HyperText Markup Language) and/or XHTML. The ubiquitous word processor, Microsoft Word, can export its ".doc" or ".docx" format to HTML but does not produce clean, compact source code. TextEdit, the plain-text editor native to Apple's operating system (Mac OS), is included in Figure 2 because it, unlike other similar programs (e.g. TextWrangler), could convert rich-text format (RTF) to HTML fairly cleanly while retaining some formatting (bold, italic). Writer2ePub, the OpenOffice plugin for exporting EPUB files from files with the extension ".odt," also came in handy on occasion.

The second iteration of the e-production workflow was implemented in July 2012 and was still in use in a more refined version over a year later. It is expected that additions and changes will be made as digital publishing continues to develop. Talonbooks is poised to keep learning and discovering efficiencies – but it would benefit from adopting certain approaches, which are discussed in the next section.

Figure 2:

Ebook production workflow employed at Talonbooks, June–September 2012





### 3 . SOME CURRENT CHALLENGES AND RECOMMENDATIONS

During the development of the workflow outlined in Chapter 2 of this report, learning opportunities arose at every turn, and this chapter will address a few of the most salient.

The most obvious challenge is format standardization. The universal adoption by all vendors of one format – in other words, the adoption of EPUB by Amazon – would have sweeping and in some ways inconceivable effects. Conceivable benefits would include

- reducing expenses (of time and money) to some degree;
- encouraging the advancement of ebook design (which is a common concern among publishers and readers); and
- facilitating ebook buying for readers (who could be certain of universal compatibility among ebooks and ereading devices).

Standardization of this sort, however, is highly optimistic at present. This report's implicit critique of Amazon is based in the incompatibility of its proprietary formats with the industry-standard EPUB; although specifications for ebook content differ from vendor to vendor, Apple's iBook store, the Kobo bookstore, the Nook Book Store, Smashwords, and other large vendors all support the open source format. It is unrealistic to hope that Amazon will abandon its proprietary formats any time soon, especially given the company's recent efforts at vertical integration (establishing the self-publishing platforms CreateSpace and Kindle Direct Publishing and acquiring the preeminent book review-based social network, Goodreads). Nor is format standardization in the hands of publishers, though interested parties will no doubt continue to advocate for it and for the open source philosophy as an ethically and economically sound approach to a rapidly changing industry.

Meanwhile, book publishers continue to suffer disconnects between print and electronic production. The means of print production remain closely tied to manufacturing, having been developed in the industrial era and refined throughout the twentieth century. The publishing milieu has, since the 1990s, contended with and broadened to include the Web and other fora and forms of digital content and now attempts to embrace methodologies native to software development (the agile publishing model, Web-first publishing, “born-digital” products). Talonbooks was

founded during the former paradigm and is now attempting to straddle the two, as many publishers are, with various levels of comfort.

Talon has already taken actions that demonstrate a willingness to participate in the arena of digital publishing and dedication to the effort to stay abreast of new developments. Electronic versions of Talon's Fall 2012 titles (excepting poetry) were either published on the same date as their print counterparts or produced and distributed within a few months, and Spring 2013 titles were (again excepting poetry and select titles) released simultaneously in print and electronic formats. Now that the practice is established, Talon should and will continue to produce electronic versions of new titles and publish them in tandem with the print versions.<sup>4</sup> In late August 2012, Talonbooks applied to the British Columbia Arts Council for a Capacity and Sustainability grant in order to hire the author of this report as an in-house ebook production staff member for one year. In October, Talon was awarded half the amount it applied for; the contractor would work for six months, and I began in late November. As of June 2013, the company had restructured itself to some degree, and I had become a permanent staff member, dedicating about half my time to ebook production. It was wise, in the opinion of this author, to invest in ebook development in this manner.

Talonbooks is daily gaining a stronger footing in digital publishing but still faces challenges small and great. Most significant, in terms of the amount of labour and cost, will be producing electronic versions of all backlist titles. What follows is a survey of some challenges of ebook production and some discussion of steps that could be taken in order to improve the quality of ebooks and develop in-house capacity. The discussion will address improving metadata-related practices and metadata in ebooks, establishing policies and practices related to indexing, experimenting with emerging digital-publishing platforms and tools, and selectively employing outside contractors in order to complete backlist ebook conversion. Recommendations are offered for the consideration of Talonbooks and small and mid-sized book publishers in general, as well as book developers and others working in ebook production.

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<sup>4</sup> Talon now produces EPUB and Mobi files but has not yet provided its distributor with any fixed-layout ebooks, aside from basic PDFs, though it intends to do so.

### 3.1 Improving Talon's Positioning within the "Long Tail" through Better Metadata

Books published by Talon appeal to niche audiences. To date those audiences have been limited by low discoverability (via traditional distribution channels). Publishing books in electronic formats, the corollary of which is low cost of continuous availability, now has the potential to benefit Talon.

By November 15, 2013, after about a year of selling ebooks, Talon had sold 925 copies of nearly fifty titles to a total of \$7,420. Of that revenue, \$2,450 was generated by one frontlist best-seller, which had sold about 300 copies. The remaining \$4,970 came from backlist titles that had sold between one and one hundred copies; a few very recent titles have sold about eighty copies, a handful have sold less than five copies, and the majority have sold somewhere between ten and twenty-five. It would appear, then, that for Talon ebook revenue is generated in comparable parts by a wide selection of backlist titles and a relatively small number of frontlist titles.

This limited amount of data indicates to some extent the validity of the "long tail" economic theory posed by Chris Anderson in 2004. The term "long tail" sums up the conglomeration of conditions that gives consumers, including those with "niche" tastes, access to a huge archive of content (music, books, movies, etc.) by way of online databases and e-commerce. Anderson discussed the "sheer size" of the book industry's long tail, intimated the ascendancy of online vendors, and asserted that publishers and media producers would see their old products revitalized by renewed accessibility:

analysis of the sales data and trends from [Amazon, Netflix, the iTunes store,] and others like them shows that the emerging digital entertainment economy is going to be radically different from today's mass market. If the 20th-century entertainment industry was about hits, the 21st will be equally about misses. ... Combine enough non-hits on the Long Tail and you've got a market bigger than the hits ... The average Barnes & Noble carries 130,000 titles. Yet more than half of Amazon's book sales come from *outside* its top 130,000 titles. Consider the implication: if the Amazon statistics are any guide, the market for books that are not even sold in the average bookstore is larger than the market for those that are ... In other words, the potential book market may be twice as big as it appears to be, if only we can get

over the economics of scarcity. Venture capitalist and former music industry consultant Kevin Laws puts it this way: “The biggest money is in the smallest sales” (Anderson).

In other words, e-commerce Amazon’s way allows for easy access to the backlists of most book publishers in both print and electronic formats – something impossible for brick-and-mortar bookstores to accomplish. From about 2010 onward, it was also possible to purchase books in electronic formats instantly from most ebook vendors; one did not have to wait even two days for a print book to be shipped and could instead start reading right away on an ereader. Today, it goes further than accessibility: a book published long ago now has the chance to become popular, or become popular again, owing largely to streamlined recommendations systems.<sup>5</sup>

It is reasonable to conclude that, for publishers like Talon, publishing ebooks and e-producing backlist titles is worth the investment. Ebooks certainly have the potential to overcome the problem of scarcity, and the long tail could be a boon.

The only remaining issue is discoverability. Talon has distribution channels for both p- and e-books in Canada and the United States, but publishers have little control over things like online book recommendations engines. What publishers do have control over is metadata, the bibliographic information that describes their products and identifies them throughout the supply chain and in the online world<sup>6</sup> – most important, the ISBN<sup>7</sup> and basic information like author, title, and key search terms. Accurate, complete metadata is vital to the life of a book in the marketplace. Brett Sandusky, who has taught courses on metadata in the publishing program at New York University, posits that marketing in its current incarnation “won’t work forever” because there will soon be “too much out there.” To prepare for that imminent circumstance, publishers must learn to “build discoverable products” – a large part of which, Sandusky asserts, involves buttressing metadata and the publishing practices related to it. “Better metadata means better sales”;

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5 This happened to *Looking for Alaska* by John Green, which reached the number-one position on the *New York Times* best-seller list in the summer of 2012 – seven years after it was published (Gundell). This unprecedented achievement was in part due to the popularity of Green’s 2012 book, *The Fault in Our Stars*, and the algorithm used by Amazon.com to make product recommendations (“others who bought this also bought ...”).

6 Publishers also have control over search-engine optimization (SEO) with regard to their own websites, but this does not cover the same ground as metadata, which is fed to book industry databases and built into ebooks themselves.

7 International Standard Book Number (a 10- and/or 13-digit number that uniquely identifies every book).

customers will be better able to find products in the vast marketplace if those products are described properly in databases. (Sandusky, Secrets)

Publishers collect metadata in an eXtensible Markup Language (XML) format known as ONline Information eXchange (ONIX), which is periodically fed to distributor and vendor databases. Each EPUB file also necessarily includes three basic elements of metadata:

1. title of the work,
2. creator's name, and
3. numerical identifier (usually an ISBN<sup>8</sup>).

An EPUB file will not pass validation<sup>9</sup> without this information – but these fields are not automatically included during the conversion of print to EPUB. Talon's current practice is to include as much metadata as possible in the InDesign file before conversion to EPUB, then to double-check the presence of basic metadata within the EPUB file (to ensure its validity) and add further metadata when possible – but these practices are not undertaken as systematically as the proofreading process is, with a comprehensive checklist. So Talon has not been remiss, but it should be more thorough: a set of basic, most desired metadata elements should be chosen by the ebook publisher (perhaps in collaboration with sales staff) and thenceforth considered mandatory for inclusion in every ebook. This checklist could take the form of an OPF file template including all desired metadata fields, which could be checked against or inserted into each EPUB file before distribution. Talonbooks has also begun to include “value-added” pages in each ebook that provide links to other

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8 At present, Talon assigns one ISBN for print publications and another for all electronic versions of the same publication. It should begin to assign individual ISBNs to each format, in accordance with the emerging best practice: the Book Industry Study Group (BISG), a trade association centred on the book industry in the United States, published a policy statement in December 2011 stipulating that individual ISBNs ought henceforth to be assigned to products, even very similar ones, having any differences in content, format, or usage rights. (BISG) Talonbooks looked into changing its practice, but its US distributor (Consortium) allows only one ISBN per title, for all electronic versions. As of July 2013 Consortium has not changed this practice; thus, as a distribution client, Talon is obligated to follow suit in order to have its ebooks distributed in the US market.

9 Validation is the process by which an EPUB file – like many software products and systems – is vetted for functionality standards and compliance with specifications. The IDPF provides a free EPUB validator on their website, through which ebook developers can run EPUB files during the final stages of e-production.

works by the author, more information about the author, or more information about the book's subject.<sup>10</sup>

### 3.2 Indexing Electronic Books

Indexing is still a significant challenge in e-production. Amazon, for example, claims to “index” each ebook it sells. More accurately, Amazon automates the building of a concordance by incorporating names and terms into an ebook's underlying “searchable” content – but the service is cursory and doesn't do justice to either indexes or the needs of all readers. Names and terms should, of course, be indexed, but what of concepts and themes? Furthermore, to which portion of text should an e-index link if given an abstract term or one that is discussed over a range of paragraphs? Peter Meyers, author of *Breaking the Page*, has succinctly summarized the purposes of the index:

Looking up a specific term ... is the biggie. ... But beyond ... simple retrieval tasks – which, after all, a good search tool is adequate for – ... an index is a kind of a collection of pre-made searches: rather than diving headlong and unawares into a search oval's do-it-yourself void, an index presents would-be searchers with an already assembled, alphabetized list of the 500 or so most common query items ... the standard ebook search oval has its role in the world of digital books. But for ... guided lookup missions ... it's a poor substitute ... (Meyers)

Meyers asserts that good indexes should include concepts and themes in addition to precise terms; offer guided discovery; help readers who know what they want but not how to describe it; signal depth of coverage (an item may be listed on one page or a range of pages, which tells the reader which part of the book has the most comprehensive information on a given topic); provide a one-stop tally of coverage points throughout a book (so that researchers can be confident they have read everything on a given topic in a given book); and provide readers with a general sense of the book's coverage (Meyers).

Large publishers may have access to indexing software that can produce cross-references as hyperlinks, but smaller publishers grapple with technology in an effort to index ebooks in a manner that befits comprehensive and facilitated reading

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<sup>10</sup> It remains to be seen whether readers of these ebooks find such calls to action engaging.

experiences. Talonbooks first faced the challenge of e-indexing while producing the electronic version of James Bacque's *Crimes and Mercies*, which had been converted to EPUB by an outside contractor. The index from the print version had been included in the ebook, directing readers to page numbers that no longer existed. Dynamic in the print context, this static index was almost entirely useless in the electronic context. Unsurprisingly, Talon's editorial staff – one of whom is an experienced indexer of print works – deemed this unsatisfactory.

In order to better understand existing technological options and seek solutions, the ebook production team undertook research, only to discover that best practices are not yet established and, as a result, different publishers take different approaches. Three options presented themselves:

4. Omit the prepared-for-print index from the ebook.
5. Include the prepared-for-print index, knowing it will be static. (Page numbers can be removed if desired, or a disclaimer can be included that states the page numbers correspond to those in the print edition.)
6. Prepare a separate “linked” or “embedded” index (in which markers of some kind – for example, HTML anchors – are embedded in an ebook and coded as cross-references to and from corresponding index entries).

The first two options are expedient but unsatisfactory. The third embraces the nature of ebooks (they have no predetermined page numbers, nor even pages) and is the most functional – as well as the most labour-intensive.<sup>11</sup> In fact, as an experiment, a staff member hand-coded linked indexes for a few Talon titles, and each took roughly five full days of work – an undesirably long time. Subsequently, another avenue of experimentation emerged: using embedded paragraph identifiers (numbers) in InDesign. Smith tested whether paragraph identifiers could be used to assist the indexing process, but he found it time-consuming and imprecise. As Meyers concluded, “Given the extra time and money required to build an index that may frustrate as often as it satisfies, no wonder most publishers, when asked about indexes, point to search as a decent substitute. It's not”<sup>12</sup> (Meyers).

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11 A how-to guide is available on Castro's blog, *Pigs, Gourds, and Wikis*: “Creating an index for EPUB with InDesign and GREP”

12 Meyers outlines his ideal system of ebook indexing, which involves a visually pleasing layout based on what is now standard in tablet screen navigation: a series of taps and pinch movements. As marvelous as it is, this ideal is not attainable at present, for it is not in development, and it would require cooperation from the manufacturers of ereaders.

Smith then posited that workarounds might exist in the form of scripts<sup>13</sup> written by ebook developers who were more technologically evolved than those at Talon. He was correct: Olav Martin Kvern had written a set of scripts that were licensed under Creative Commons and tested in a book built by Joshua Tallent of eBookArchitects.com. The first script inserts hyperlinks associated with notes into a book's text, with paragraph anchors (including mid-paragraph anchors in long paragraphs); the second checks the alignment of index anchors with current page numbers; and the third enables one to remove notes in case of page number errors (Wright Information Indexing Services). These scripts sounded promising but were deemed too limited and limiting to be implemented at Talonbooks, primarily because they depend on the use of expensive professional indexing software (CINDEX, Macrex, or SKY), which is more accessible to large or perhaps academic publishers. In early 2013, however, Smith discovered two tools that Talon then used to index *They Called Me Number One* by Bev Sellars: (1) IndexMatic 2, an InDesign script developed by Marc Autret, which automates the assignment of page numbers in InDesign to a list of terms prepared by a human indexer (in other words, it assigns page numbers to index terms by searching a document); and (2) Index for EPUB, another script by Ben Milander, which embeds HTML anchors and hyperlinks when exporting from InDesign to EPUB (it builds hyperlinked cross-references between index page numbers and locations in an ebook), thus creating a "clickable" index. The resulting embedded index in *They Called Me Number One* is functional, and it is likely that Talon will employ these technologies when building ebook indexes for the foreseeable future.

In the effort to facilitate e-producing indexes (beyond simple, searchable concordances), there is one other simple and obvious solution that trade publishers either overlook or choose to forgo. I refer to visible (textual) paragraph identifiers, which could be assigned to paragraphs in both print and electronic books. Paragraph identifiers, applied to the text of other types of books (including trade

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13 In this context, "script" refers to a program written for a software environment that automates (and speeds up) the execution of a task or tasks that could otherwise be done by a human.



books), would unify content across platforms and formats,<sup>14</sup> lend flexible structure to formless content (which by its nature is no longer tied to pages, the traditional identifiers associated with text), and serve naturally as anchors for hyperlinked cross-references, even when topics are addressed in a range of paragraphs. The predominant argument against incorporating paragraph identifiers – that they intrude upon the reading experience – is not convincing; certainly designers of both print and electronic books can be trusted with muting the presence of paragraph identifiers, making them attractive, or – ideally – building them in such a way as to allow readers to turn them on or off. Readers have long been accustomed to seeing page numbers – and ignoring them – even while immersed in reading; paragraph numbers might take getting used to, but the precedent is set.

### 3.3 Experimenting with Ebook Layout

Ebook layout is daily becoming more efficient as production tools emerge. Designers and ebook producers, including Craig Mod and Elizabeth Castro, have advocated for some time for the development of better design tools and ebook-production platforms. Baldur Bjarnason, a web developer and scholar with interest in ebook production and interactivity, has specifically recommended the development of software that allows for simple, theme-based ebook production (Bjarnason).

A theme, as in print book design, might comprise a set of design decisions (about colours and fonts, for example) that communicates a certain mood or tone, which, typically, communicates or reinforces the mood or tone of a piece of writing. A template, then, would be the utilitarian manifestation of a theme: perhaps it would take the form of a CSS file that could be applied to every ebook or, as Bjarnason recommends, to ebooks of certain categories, to be determined by publishers. To quote an apt description, “CSS files determine the styling of the content documents and can therefore control certain aspects of the ebook, such as paragraph alignment, typeface, relative font size, line spacing, etc. Though some of these elements may be overridden by certain ereading devices, a well-designed CSS file can still manage

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14 With regard to unity, consider the potential for increasing the functionality of e-textbooks: students who are reluctant to use electronic textbooks because teachers and professors refer to page numbers (during lectures and when assigning reading) could be referred instead to specific paragraphs and ranges of paragraphs and would subsequently be able to use any edition of a print and/or electronic textbook. Another example is religious texts, in which paragraph-level identifiers are often utilized; readers are comfortable referring to verses, chapters, and passages by numerical identifiers and are thus able to use any edition easily and interchangeably.

to create a unique ‘look’ for an ebook” (Humble 43). Once applied, a template could be adjusted to accommodate a book’s specific needs. Appealing and widely functional ebook themes, designed by teams of designers, typesetters, and developers, and available for use by publishers of all sizes, are now emerging. The website EPUB Zen Garden is one notable example of a collection of EPUB themes that can be browsed online and are downloadable as fully customizable CSS templates.

PressBooks (formerly Book Oven) also offers a collection of themed templates, though these templates are not downloadable on their own (one must first insert some book content) and actually represent only one aspect of a much broader suite of e-production services. Indeed, PressBooks, which is still in development, can be seen as a proto-platform of the theme-oriented kind Bjarnason recommends. Built on the blogging platform Wordpress.com, PressBooks is a Web-based publishing platform for producing books of all kinds: web-based, reflowable ebooks in various formats, and PDFs fit to print. I used PressBooks to produce two Fall 2012 ebooks (Gagnon’s *Against the Wind* and Hesiod’s *Theogony / Works and Days*) and, in the process, determined that its full suite of services was not required for e-production of the kind under way at Talon. Adopting the software to access only a fraction of its functionality is not worthwhile (unless a specific title can be published as an ebook via no other means).

Bjarnason has asserted that, ideally, the “ebook design and development industry would disappear and be replaced by a theme development industry,” which would positively affect capacity within publishing: “there wouldn’t be any ebook developers any more than you have ‘.doc’ developers. The fact that we have an industry of people whose job description is close to indistinguishable from ‘fixes office documents by hand in a hex editor’ is insane. The only developers the ebook industry should have are tool developers, people who program and make the writing programs that export the ebooks, theming apps that add themes to ebooks, and the design tools for the edge cases” (Bjarnason). These assertions seem to indicate that Bjarnason is in favour of moving from craft to database, but the two are not mutually exclusive. While it’s true that most publishers today would see each of their books as the “edge cases” described by Bjarnason, and would subsequently be less enchanted by his vision,<sup>15</sup> it is also true (and perhaps more pressing) that the craft is currently bogged down – those who should be

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15 Bjarnason also notes that ereader manufacturers, who thus far have preferred to impose stringent defaults, would have to develop devices that would not corrupt the designs by imposing such defaults.

typesetting or designing ebooks are developing (coding) them – and would be relieved to have access to databases of code that would function, essentially, as starting points for layout.

At present, as Linnet Humble notes in her 2012 MPub project report “Unconverted: Outsourcing Ebook Production at a University Press,” themes in the form of cascading style sheets (css) can be commissioned or created by publishers (Humble 43). The first EPUB template employed at Talonbooks, for example, was developed in November 2012 by Smith and me for dramatic works and consisted of a css file that stipulated paragraph and character styles (fonts, sizes, alignment, etc.) for character names, dialogue, and stage directions, among other things. This template is now applied to all Talon plays produced as ebooks, though each undergoes customization.

Talon and publishers in similar circumstances should certainly begin to collect in-house libraries of code (xHTML and css) to facilitate e-production. (To do this, they might consider adopting software that computer programmers, web developers, and designers use for the same purpose.) Certainly some conventions have been established and applied to Talon’s ebooks, but those conventions have not been organized into a style guide or reference document. Ebooks that have been produced in-house may themselves serve, for a time, as a code library in EPUB form, because css and xHTML used in one ebook can be recycled into others. Talon would benefit from the creation of an ebook style guide, separate from the proofing checklist, which could be developed organically as e-production occurs and style decisions are made. Taking these steps would represent the acceptance of e-production as part of standard procedure and would move knowledge from the memories of individuals to institutional repositories.

### 3.4 Selective Outsourcing to Serve the Digital Marketplace

Many publishers chose, in the first years of significant ebook production, to outsource much of the work to other presses, self-publishing companies, independent contractors, or “conversion houses.” Large book publishers especially have already outsourced or are in the process of outsourcing backlist ebook conversion by sending files in bulk to conversion services and then immediately distributing returned ebooks – unfortunately, with little or no proofreading (Sandusky, *Secrets*). Even publishing companies of comparable size to Talonbooks have chosen to outsource. UBC Press, for example, while a scholarly publisher, is a mid-sized book

publisher based in Vancouver. Humble reviewed its approach to ebook publishing and summarized some reasons for choosing to outsource e-production: the ability to experiment with digital publishing while minimizing financial risk; the ability to enter the ebook business without making immediate changes to current business models; the ability to take advantage of financial incentives offered by organizations like eBOUND Canada; the precedent in publishing (specifically at UBC Press but elsewhere as well) of hiring freelancers for contract work; and the larger movement of Canadian business toward outsourcing on the grounds that it reduces expense and promotes international business relationships (14–20).

In 2009, the Association of Canadian Publishers (ACP) launched an initiative to assist publishers with “engagement in the digital marketplace regardless of their size or level of expertise” through the not-for-profit organization eBOUND Canada.<sup>16</sup> eBOUND offers assistance for ebook distribution, digital asset management,<sup>17</sup> conversion,<sup>18</sup> and professional development. Though eBOUND Canada has continually expanded and improved its services, Talonbooks would not benefit from eBOUND’s distribution or digital asset management services, as it already has distribution in Canada and the US (through Raincoast Books and Constellation, respectively) and it manages its digital assets in-house. With regard to professional development, Talon staff occasionally participate in webinars presented by Digital Book World but could also take advantage of eBOUND’s reservoir of video tutorials and other resources.

Talonbooks began 2012 in a state of experimentation with digital publishing. While learning the basics about building ebooks himself, Smith outsourced the conversion of two titles, Bacque’s *Crimes and Mercies* and Hildebrandt’s *The Battle of Batoche*, both of which were structurally complex (having images and captions, sidebars, indices, appendices, notes, commentary), requiring many hyperlinked cross-references. Hand-coding these elements would have taken much time, and Talon’s staff did not yet have the necessary skills. (They were, however, learning the ropes of e-production at this same time by producing the similarly complex book *Taking My Life* by Jane Rule, the second ebook ever published by Talonbooks.) Both the outsourced ebooks returned rife with errors and, consequently, required unexpected and undesired investments of

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16 Formerly Canadian Publishers Digital Services (CPDS).

17 DAM – storing files and distributing them to vendors.

18 To EPUB, Mobi, etc. from InDesign, Quark, Word, or scanned print books.

time in the form of proofreading and troubleshooting. Both need to be (re) produced from scratch. Many publishers circa 2010 had similar experiences; UBC Press, for example, experienced similar (and greater) problems, which are described in detail in Humble's report (21–39). Despite that, UBC Press continues to outsource (Humble 13).

Ebook production was at first eased into Talon's production schedule by staggering publication dates. The electronic versions of given titles were released some months after their print counterparts, with the extra months buying some time for e-production (after the staff got a print book to press, some attention could be shifted to the electronic version). A grace period of about a year allowed for trial and error while training the staff to meet firm e-production deadlines. Gradually, the workflow and production schedule began to accommodate simultaneous print and electronic release. Thus Talon experimented with both conversion services and in-house ebook production and decided to invest in the latter – financially, technologically, and with regard to human resources. Talonbooks will continue to strive for its goal of simultaneous “p” and “e” publication (producing frontlist titles as both print and electronic versions that share a single publication date), but converting the backlist will be an ongoing project.

Using a carefully selected conversion service for this purpose at some point would allow Talon to press on, continually, with both backlist and frontlist ebook production. For certain complex books, Talon could consider working with small companies or independent contractors who can give significant attention to each ebook they produce, such as Wild Element (Perth, Ontario) or Brady Type (Toronto). Independents like Talon could even seek contractors who might do ebook conversions for a percentage of sales rather than upfront fees, such as Ebook Publisher (Scotland) – a viable option for publishers that cannot afford to hire more e-production staff or allocate more time toward it – though by sharing risk, one reduces revenue. Whatever the business model, independent publishers should partner with contractors that prioritize quality, not quantity.

As of July 2013, Talonbooks planned to participate in a conversion project through eBOUND, spearheaded by the Association of Book Publishers of British Columbia (ABPBC), of which Talon is a member. About twenty-five PDFs of backlist titles would be converted to EPUB files by one of eBOUND's contractors, to save Talon the time of doing this in-house (a cumbersome process – see again Figure 2). Talon can be comfortable outsourcing ebook conversions in this manner now that it has had significant experience with e-production in-house; if this batch is returned with

files containing errors, Talon must be and is now prepared to devote time to proof-reading and file cleanup before distribution. Talonbooks should hasten to make its backlist available electronically and, it appears, will do so by employing selective outsourcing over a period of a few years. Indeed it seems that, for the foreseeable future, Talon has hit upon the ideal combination: in-house e-production of frontlist titles, and batch conversion of backlist titles combined with in-house cleanup and tailoring.

## 4 . C O N C L U S I O N S

Traditional publishers all face the same basic challenges in digital publishing: accommodating e-production in their already heavy workloads and well-oiled workflows, and grappling with digital publishing in general as it settles into a justified and justifiable place in the book-publishing industry. But all publishers do not necessarily face the same specific challenges. It is my hope that, in having explored some of the specific challenges faced by Talonbooks, this report will prepare its readers to confront similar challenges in their own digital publishing endeavours.

It should also be noted that, while ebook production is the focus of this report, the means and methods of production are affected in various ways by the whole “ecosystem” of ebooks and its nascent tumult – for example, by continued shifts in pricing. Nor is it just established book publishers that are producing and selling ebooks now; the competition for market share has increased, admitting self-publishers, startups, and other media companies. The *Toronto Star*, for example, has successfully established Star Dispatches, an ebook imprint and subscription service (Cabot, Toronto Star). Direct sales, however, is one way for publishers of all kinds to retain some control, and, given that most ebook vendors are multinational corporations, publishers can increasingly sell ebooks directly (usually from their own websites) without jeopardizing long-held symbiotic relationships with local or even national booksellers.

Trade publishers that are pursuing digital publishing should be nurtured, as book publishers were in Canada in the 1970s (Lorimer 45). Governments both federal and provincial should continue to provide support (financial and other) for the Canadian digital book publishing industry and related research and development if they wish to maintain a high level of cultural production and do honour to its legacy. The Canadian publishing industry – its companies, self-publishers, professional associations, associated educational programs, and stakeholders, perhaps in collaboration – ought to support the development of simple tools and services for ebook production (including but not limited to eBOUND Canada and PressBooks, which is a Canadian enterprise) by using them, participating in their periods of beta-testing or forums, and recommending them to others. The industry’s collegial culture will, one hopes, ease the way during this somewhat stormy period.

Quality, of course, is as relevant to digital publishing as it is to traditional publishing.<sup>19</sup> Ereader manufacturers and ebook vendors make demands – in the name of quality and in the form of formatting requirements – yet publishers must make ebooks for their readers, not for vendors; they must avoid bending so far to meet vendor or manufacturer demands that they fail to meet those of their audiences. What Erin Williams concluded about Chapters-Indigo in her 2006 report can be applied to ebook publishers’ relationship to Amazon and Apple as supply-chain partners: while their demands may be seen as an unfair, competitive threat, the threat “is only real if publishers cater to it and restructure their lists, their infrastructures and their terms of trade”; instead they should “return to working for and with their communities of discourse ...” (86–87). Cultural production is and should remain the driving force behind trade publishing in Canada (though, of course, contributing to and participating in provincial and national economies must also be a factor).

Talon’s publishing program caters to specific audiences and remains decidedly outside of the mainstream – so much so that it is well positioned to benefit from the effects of the “long tail.” To support the continuation of that program, Talon must maintain strong relationships with its key interest groups: those involved in Canadian theatre, certain scholarly circles in the arts and the humanities, Canadian poets, and Canadian readers interested in supporting diversity of expression and literary works in general. Maintaining such relationships and knowing its audience have historically been Talon’s strong suits, and the company has, thus far, navigated the murky waters of ebook production while staying true to its publishing mandate.

Talonbooks produced and distributed its first ebook, *Maleficium* by Martine Desjardins, in May 2012. By May 2013 the company had produced and distributed nearly sixty ebook titles. There was some development of “agility” at Talonbooks, in the sense that the process took the form of cycles of consultation, action, reflection, and revision. The company benefitted from having two people on staff involved in ebook production rather than just one, regardless of whether or not either was

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19 Consider the case of *The Casual Vacancy*, the highly anticipated, first post-Harry Potter novel by J.K. Rowling. It was released on September 27, 2012, and reports that it was literally unreadable went public that same day; owing to a “file formatting mishap,” the ebook was accessible in only very small and very large font sizes (both prohibitive of reading). The book’s publisher, Hachette, issued an apologetic statement and replaced the bad file on September 28 (Hazard Owen). Readers who had paid \$18 for this ebook – about double the average cost of an ebook at the time – were angry to find their purchase defective. As Joanna Cabot wrote, “It seemed especially unfair to have to pay so steeply for a book that wasn’t even done right. Even those who may have tolerated the occasional typo in the past [in other ebooks] were beating the drum of complaint” (Cabot, Public Outcry). Occurrences of this sort reinforce the importance of the proofreading stage.



focussed on e-production full-time, for it takes at least two people to develop a culture of cooperative learning and collaboration. With these bulwarks, errors were less likely to be introduced or dysfunctional ebooks produced, and it was feasible to stay current with standards and specifications. Furthermore, when errors were detected after publication, ebooks could be fixed and redistributed (Constellation, Talon's us ebook distributor, was accommodating in this regard). Obviously publishers try to avoid errors, but ease of redistribution is a notable, new safety net, demonstrating that ebook production is more forgiving than print production. For now, even if the application of the agile publishing model, or iterative ebook publishing, means only that publishers have the ability to fix errors and form the habit of replacing dysfunctional ebooks with functional and attractive ebooks in the supply chain as soon as possible, this is progress. This is a satisfactory compromise for the time being, for it accepts both the degree of finality of a book as a complete work<sup>20</sup> as well as the reality of it as a digital product.

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<sup>20</sup> See footnote 2 (on page 1) for the definition of "book" in this context.

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## A p p e n d i x .

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### Talonbooks Ebook Proofreading Checklist

[This checklist was used at Talonbooks in May–June 2012. It was originally prepared by the production manager, but soon the ebook publisher and the editorial/digital intern began to oversee its upkeep.]

Title:

Author:

e-book ISBN:

p-book ISBN:

Pub year:

File format:

Devices checked on:

Proofreader:

Date:

#### Front matter

\_\_\_\_\_ Correct cover

\_\_\_\_\_ If back cover included, check that barcode and p-book ISBN removed

\_\_\_\_\_ “Other books by” page moved to back matter

\_\_\_\_\_ Copyright page moved to back

\_\_\_\_\_ References to printing, binding, and paper stock removed from copyright page

\_\_\_\_\_ Cover designer’s name added from back cover (and any image caption necessary)

\_\_\_\_\_ p-book CIP data replaced with “Cataloguing data available from Library and Archives Canada”

\_\_\_\_\_ e-book ISBN added to copyright page

\_\_\_\_\_ TOC links active and link to correct content

## Design and formatting

- \_\_\_\_\_ Folios removed
- \_\_\_\_\_ Entire book reviewed in all fonts available on device
- \_\_\_\_\_ Entire book reviewed in at least two font sizes
- \_\_\_\_\_ Italics applied properly
- \_\_\_\_\_ Boldface applied properly
- \_\_\_\_\_ Small caps applied properly
- \_\_\_\_\_ Consistency in style of part openings
- \_\_\_\_\_ Consistency in style of chapter openings
- \_\_\_\_\_ Consistency in style of running headers
- \_\_\_\_\_ Consistency in style of image captions
- \_\_\_\_\_ Image captions correspond to correct images
- \_\_\_\_\_ Every image in p-book appears in e-book
- \_\_\_\_\_ Images render adequately in sixteen greys
- \_\_\_\_\_ Errant hyphens from manual hyphenation in p-book removed
- \_\_\_\_\_ Indent paragraph style of p-book accurately reproduced
- \_\_\_\_\_ Block quotes properly set off from main text
- \_\_\_\_\_ Order of content in e-book replicates order of p-book

## Links and references

- \_\_\_\_\_ All internal cross references changed from page numbers to links
- \_\_\_\_\_ Cross references link back to original location
- \_\_\_\_\_ URL links in text active and accurate
- \_\_\_\_\_ Notes in text linked to Notes section and vice versa
- \_\_\_\_\_ Index linked fully and accurately