

How to Use Adobe InDesign CC to Add “Real” Page Numbers to a Reflowable Kindle Textbook with an Index, so that Index Entries Correspond to Print Edition Page Numbers, and Link to the Specific Text *relevant to the Given Entry Topic*

Why do textbook authors/publishers require “real page numbers”? So readers can know what page they are on, so scholars can cite the page in academic papers, and students be sure they are reading the class assignments.

Note that since a “page” in a book translates into multiple “locations” in a reflowable eBook like the E-ink Kindles, the page numbers in an index topic entry are not actually linked to the page number (whether visible or invisible) in the eBook. They are linked to the topic material - the index marker embedded by InDesign at a specific word. The fact that this link may go to a position in the text that is a few “locations” from the actual page number is not a bug, it’s a feature. Links go to “relevant paragraphs,” not page numbers, as Amazon requires.

Kindle Digital Publishing Guidelines strongly recommend that the publisher remove some page numbers from reflowable E-ink Kindles, specifically those in the Table of Contents. This is because the typical mobi eBook does not have page numbers. When they do have page numbers, Amazon should support them in the ToC, as they do in the Index. Unfortunately, communication with KDP support is poor.

KDP’s own conversion process now removes page numbers from the Table of Contents even though the publisher leaves them in and requests the Kindle Real Page Numbers feature, which supports the Go to Page feature and “page-flips” with page numbers. Inconsistently, KDP leave linked page numbers in the Index, which, they say, should go to “relevant paragraphs” and not to page numbers (which may be distant from the topic).

9.3.10 Page Number Guidelines

Kindle books do not always map directly to page numbers in physical editions of the book. Even if the Kindle Real Page Numbers feature is activated in the Go To menu, references within the eBook to page numbers should be handled as follows:

- Table of contents: If there are page numbers in the print source’s TOC, they should be removed in the digital conversion. The name of the section should be retained and hyperlinked to the relevant location in the eBook. For example, if a print source TOC displays the entry “Chapter 1 ... P. 36”, then the eBook should only display “Chapter 1” hyperlinked to the correct digital location.
- Internal links: If there is text that refers to another page in the eBook, such as “see page XX”, this text should be linked to the relevant paragraph within the eBook.
- Index: Every page number in the index should be linked to the relevant paragraph in the eBook (or the relevant illustration, table, or chart).
- Links within index: If there is an entry that references another section of the index, such as “see also XXX”, this text should be linked to the relevant section within the index.

Of course for a fixed layout (FXL) EPUB3, InDesign includes page numbers that match the print edition (PDF) output, because the EPUB pages are essentially exact copies of the print edition. All the eReaders that support FXL should support page number navigation from the TOC and the index, although Amazon’s own digital conversion unfortunately deletes page numbers from the Table of Contents, at least for reflowables.

When InDesign exports Reflowable EPUB3, it includes real page numbers for each of the XHTML files. These numbers can be preserved in the conversion from EPUB to Amazon's MOBI format. For example, Kovid Goyal's *Calibre* preserves them. Kindle Previewer appears to remove them. But on request, the KDP quality assurance team may preserve them. We show one example below where they did.

When page numbers are present, Kindle's Go to feature in E-ink Kindles like *Paperwhite* may activate the option to Go to Page rather than to a Location (an arbitrary number that changes with the font size). But KDP guidelines say that this option is to be suppressed, and the Page link grayed out, when there are no "real" page numbers in the text.

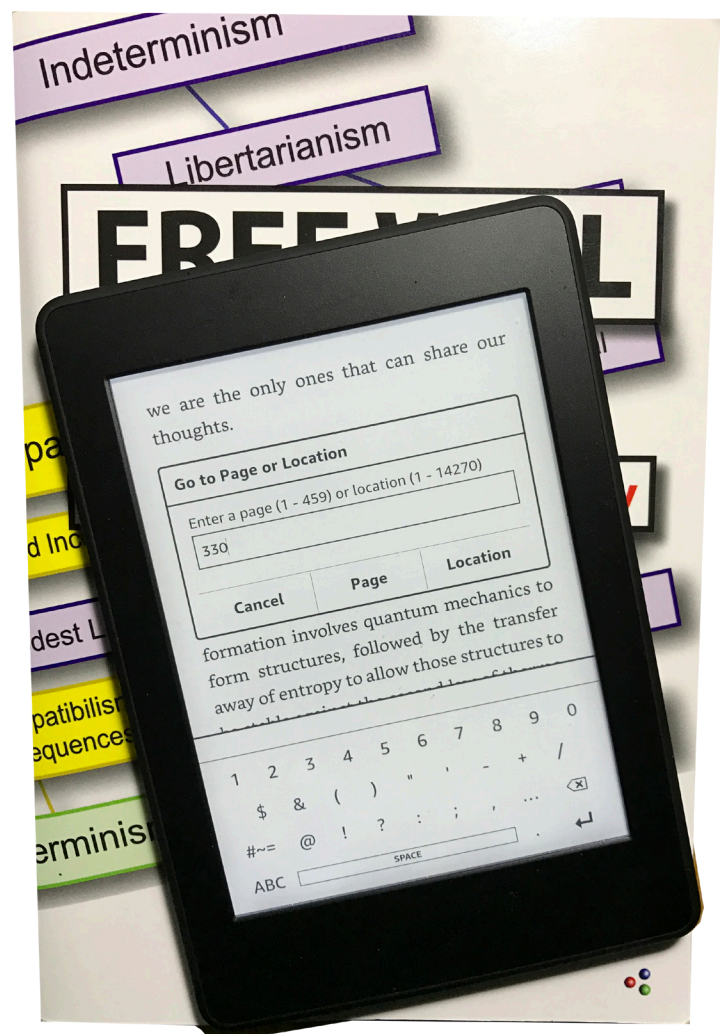
KDP has good reasons for discouraging the use of automatically placed real page numbers. Imagine that the page break comes in the middle of a sentence, or even in the middle of a long word hyphenated across the page break!

When major textbook publishers create an elaborate index, they can afford to pay copy editors to insert page numbers at appropriate locations such as the nearest paragraph break, even changing a sentence break in the middle of a long paragraph to a page break, in order to better approximate the print edition. (One must avoid moving a word tagged with an index marker across a page boundary, which would disrupt the index entry.)

How can InDesign publishers add real page numbers that will survive in Kindle MOBI files? Our emphasis is on Kindle, because they have such a commanding share of all eBook sales. But real page numbers in all your reflowable EPUB books will show them on all eReaders, so it's worth the extra effort even apart from Kindles.

Our first reflowable Kindle book, *Free Will*, in 2011, implemented real page numbers perfectly. In the new Kindle Paperwhite, it supports "Kindle Real Page Number" guidelines, and KDP has turned on their "page-flip" and Go to Page features for that book.

The page numbers are no more obtrusive than those in any print book. In our first *Free Will* book, they were implemented as small gifs which were a bit clunky.



This most common proof that free will cannot exist is based on the two-part **standard argument** against free will, which we examine in Chapter 4.

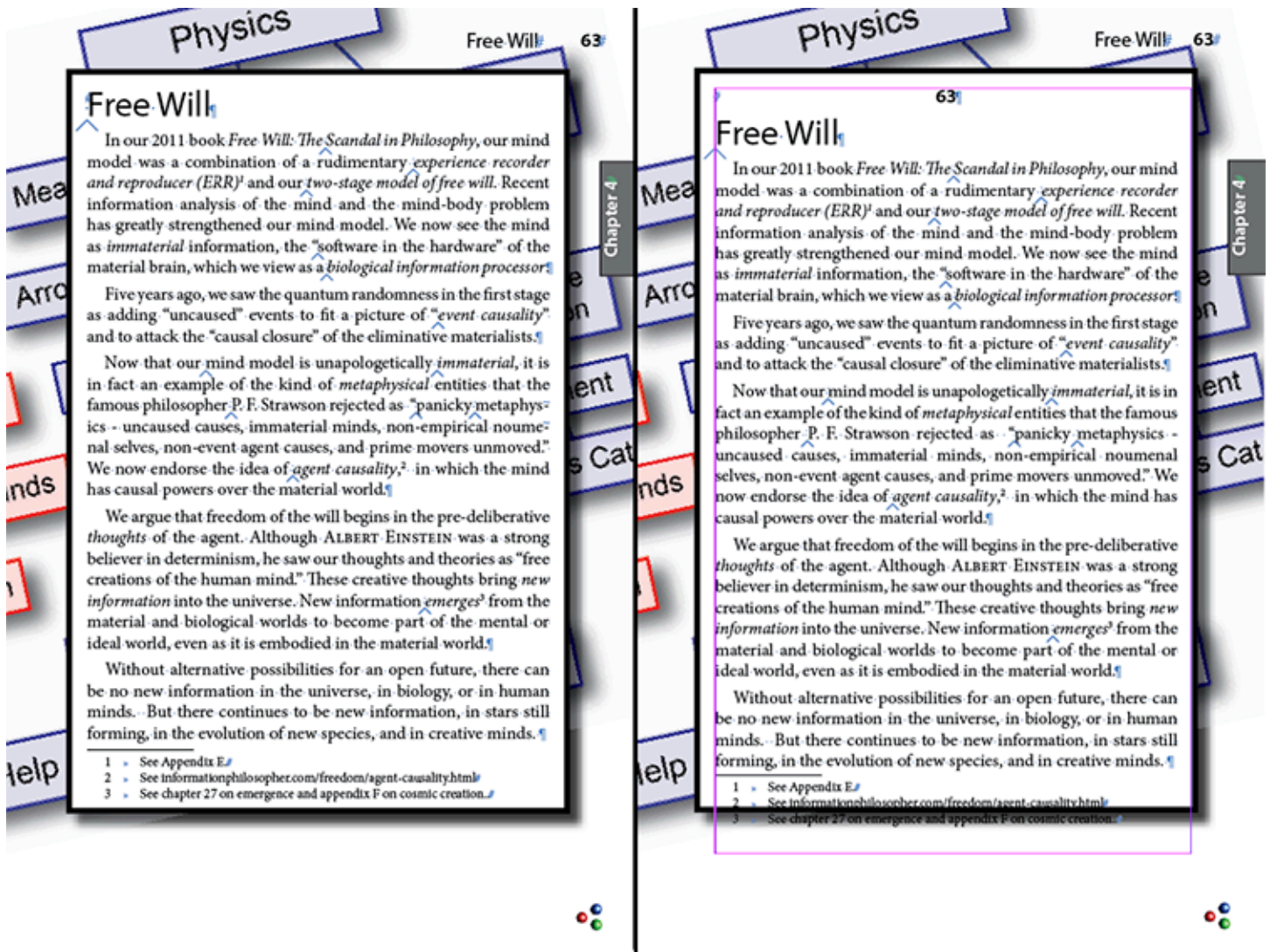
The Standard Argument **Against** Free Will

- 1) If our actions are determined, we are not free.
- 2) If our actions are directly caused by chance, they are simply random, and we cannot be responsible for them.

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Despite more than twenty-three centuries of philosophizing, I believe that the main reason that no progress has been made is that most modern thinkers have not moved significantly beyond the second part, the problem of reconciling **indeterminism** and **free will**. They assume that choosing from random **alternative possibilities** makes the choice itself random. This is the mistaken idea that "free" actions are caused directly by a random event.

In our recent Great Problems book, the page numbers are not gifs, they are just text. They scale with font size



changes and match the page number style in the print/PDF and FXL EPUB versions.

Above left is a page as it appears in the Print/FXL EPUB version and on the right it has the added in-text page number for EPUB Reflowable export by InDesign, pushing the original text down. Words with hyperlinked index markers (blue carets) should not be accidentally moved to another page.

When InDesign exports the right hand page as Reflowable EPUB, the automatic page number and chapter title from the Master Page will not be exported, nor will the shadowed frame and background graphic. The added page number, whose character style matches the FXL EPUB page number, is exported in the xhtml text.

On the right is an example of our 2016 EPUB Reflowable page, with the page number inline and centered in the text. You can “Look Inside” this Kindle eBook on Amazon.

www.amazon.com/Great-Problems-Philosophy-Physics-Solved-ebook/dp/B01LZPICAL Or I can “loan” you a copy.

are not causally determined by immediately preceding events, so they are unpredictable by any agency, including us. They can then be the source of the creativity that adds new information to the universe.

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Chance gives us the “free” in free will.

Adequate determinism gives us the “will” in free will.

Thoughts come to us freely. Actions go from us willfully.

We must admit indeterminism, but not permit it to produce random actions as some Determinists mistakenly fear.

We must also limit the determinism, but not eliminate it as some Libertarians mistakenly think is necessary.

The evaluation and careful deliberation of all the available possibilities, both ingrained habits and creative new ideas, help us to “self-determination.” This makes us the responsible “agent cause” of our actions.

How To Do It

Adding “real page numbers” inline to the InDesign text flow should be done only after the final print/FXL version (left image above) is complete, because the page numbers are located at specific positions in the text flow. And page numbers must be added individually, because InDesign cannot automatically generate them or relocate them when text is added or changed.

Whenever the page number text is added to a document page, automatic flow will alter the following page breaks, pushing text into the next page (or overset text on the last page of a document), so you must lengthen the page (as above right) to preserve the location of the page break. It may be possible to add the page number as conditional text, which is set to be invisible for export as fixed layout EPUB, and set to visible for reflowable EPUB. This means you have a single master book and its document files. It has the advantage that you can make changes and then regenerate the index.

Alternatively, you may duplicate the book and all documents, images, etc. in a separate folder, add page numbers, and export the reflowable EPUB. You need not make any changes in the index document.

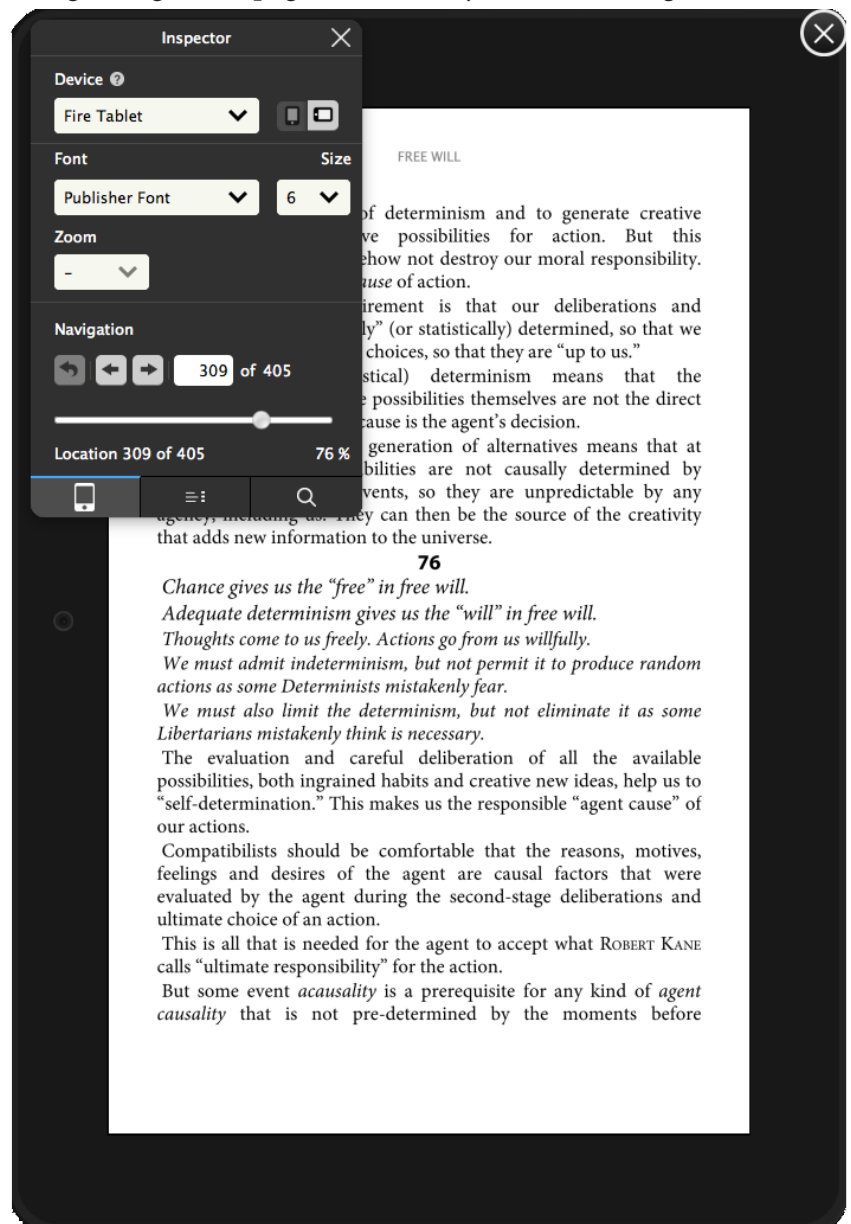
The Reflowable page number should come at the beginning of the page. It can be styled to left or right to mimic facing pages, but centering is least obtrusive. It can have the same font style and size as the print/FXL version.

Before adding page numbers, you should export the PDF of the fixed layout and keep it open in a PDF reader like Acrobat Pro, so as a page gets longer, you can refer to the PDF and lengthen the page precisely to match the print version.

Now how did we convert this EPUB Reflowable to MOBI for the Kindle? The EPUB file was converted in *Calibre* to MOBI (it took two minutes to convert) and submitted to KDP, who accepted it for publication the same day.

But KDP did not *activate* Go to Page or Go to Location for this new book. KDP says that their Real Page Numbers feature for Kindle books is not done automatically at the moment, but should be done in the future and will be done for this book eventually..

Note that Kindle Previewer 3 can see the pages and offers page number (not location) navigation.



Note also that when inline page numbers are added as recommended above, InDesign exports a Reflowable EPUB file with each page number in its own paragraph element, indicated by the three arrows in the xhtml file.

```

1 <?xml version="1.0" encoding="UTF-8" standalone="no"?>
2 <!DOCTYPE html>
3 <html xmlns="http://www.w3.org/1999/xhtml" xmlns:epub="http://www.idpf.org/2007/ops">
4   <head>
5     <title>Free_Will</title>
6     <link href="css/idGeneratedStyles_0.css" rel="stylesheet" type="text/css" />
7     <link href="css/idGeneratedStyles_9.css" rel="stylesheet" type="text/css" />
8   </head>
9   <body id="Free_Will" lang="en-US" xml:lang="en-US">
10    <div id="_idContainer025">
11      → <p class="Page-Number">63</p>
12      <p id="_idParaDest-23" class="Chapter-Title"><a id="_idTextAnchor020"></a>
13      <p class="Main-Body">In our 2011 book <span class="italic _idGenCharOverri
14      <p class="Main-Body">Five years ago, we saw the quantum randomness in the
15      <p class="Main-Body">Now that our <a id="_idIndexMarker453"></a>mind model
16      <p class="Main-Body">None of these thinkers understood our notion that abs
17      → <p class="Page-Number">64</p>
18      <p id="_idParaDest-24" class="Section-Title"><a id="_idTextAnchor021"></a>
19      <p class="Main-Body">Our two-stage model is now the most plausible explan
20      <p class="Main-Body">In our research on the history of the free will probl
21      <p class="Main-Body">Some of course are more clear and comprehensive than
22      <p class="Main-Body">Recently we discovered a possible two-stage argument
23      <p class="Main-Body"><span class="Name">Titus </span><span class="Name"><a
24      <p class="Indented-Quote">"If all motion is always one long chain, and new
25      <p class="Main-Body">But now we have found evidence that Lucretius made th
26      → <p class="Page-Number">65</p>

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For those who would like to see the files that I used, you can download them from my website.

The InDesign EPUB3 Reflowable export:
http://www.informationphilosopher.com/books/problems/Great_Problems_Flow.epub (10.3MB)

The Calibre conversion to mobi:
http://www.informationphilosopher.com/books/problems/Great_Problems_Flow_Calibre.mobi (3.9MB)

And here is my current best effort to produce a fixed-layout KF8/mobi version.
http://www.informationphilosopher.com/books/problems/Great_Problems_Praticbha.mobi (50.3MB)

The InDesign EPUB FXL source is here.
http://www.informationphilosopher.com/books/problems/Great_Problems_FXL.epub (15.1MB)

It looks as good as any "Print Replica" file. It includes the hyperlinks (you can tell by mouseover them), but they do not work at present. We will try to edit the EPUB to eliminate items that offend Amazon.

Please contact me with your criticisms and suggestions - bobdoyle@informationphilosopher.com.