

Turning the Pages™ Page Image Preparation Guide

The goal of TTP page image preparation is to separate the page graphic from its background in the photograph. The end result should be the individual page **in a layer on transparent**. In addition to this it may be necessary to straighten the page and apply some adjustments to achieve optimum image quality. This guide assumes knowledge of Photoshop.

We have divided the tasks into 2 stages. This means that any mistakes can be easily rectified by going back to Stage 1. Most of these steps can be automated in Photoshop using batch actions, with the exception of the cutting out and straightening.

In summary, the order is:

1. **Cutting**
2. **Straightening**
3. **Cropping**
4. **Image correction**
5. **Resolution**
6. **File naming**
7. **Output with resizing & sharpening (optional)**
8. **Save as PNG format**

1. Cutting out

Duplicate the background layer twice and fill the middle layer with a flat colour that's the opposite from the background colour so you can see if you have missed any bits.

Using the lasso with the Alt key (or option key on Macs), cut around the contour of the page on the top-most layer. Do this in sections - avoid selecting the contour of the whole page all at once as it is easy to make a mistake and have to start again.

Save the file. (Optional: to save disk space, save the selected page contour as an alpha channel and delete the 2 duplicated layers).

N.B. This approach is most suitable for rare, old books, which often have irregular page shapes. In the case of more recent, or printed books which have straight page edges, this may be excessively labour-intensive and instead of steps 1 and 2, simply use the marquee tool to create your rectangular selection. Alternatively, if the photography takes place with a black piece of card or paper behind each page, it may be possible to use labour-saving tools in Photoshop such as the magnetic lasso or the magic wand instead of the standard lasso.

Once you have cut out all the pages, duplicate your "Stage 1" folder and name it "Stage



2”.

2. Straighten the spine

If the page is crooked, it needs to be rotated slightly to straighten it and/or to achieve a straighter spine edge. Use the free transform tool and rotate as necessary.

3. Crop

Select the page and crop it right up to the edges of its contours – i.e. with no margin around it. The inside spine of each page must be cropped straight with no gaps.

4. Image correction

This should ideally take place with a calibrated, profiled monitor. Care should be taken with image correction particularly if batching. Page tones and hues can vary from page to page and so the application of blanket settings may give unexpected results. It is a good idea to survey the images to discern variations using the thumbnail view or in Adobe Bridge, then apply your batch setting to a few randomly-chosen images to check that it's suitable.

Levels:

Levels often require adjustment. It is important to do this *after* the page has been cut from its background (otherwise the levels are based on the background image too). It is best done using an adjustment layer, so it can be changed at a later date if necessary.

Colour balance/curves:

With older transparencies and scanners, there may be a colour-cast and it is necessary to adjust the colours slightly. As with levels, this should be done using an adjustment layer.

Brightness & contrast:

It is not usual to use these settings, however in some cases, for example if the script is very faint, these can be adjusted to bring out the text and make it more legible.

Page clips/fingers:

These should be touched out using the relevant tools in Photoshop.

5. Resolution

The CMS requires images to be 96 dpi. Go to Image > Image size > and uncheck 'Resample Image'. In the resolution field enter 96 and ensure the drop-down menu is set to pixels/inch.

6. Filenaming

The only thing to make sure is that all your files are in alpha-numeric order for the CMS so your files could be ordered thus:



- Front binding
- Inside front binding (verso)
- Page 001 (recto)
- Page 002 (verso)
- Page 003 (recto)
- and so on..
- inside back binding (recto)
- back binding
- spine

7. Resizing and sharpening (optional)

The Turning the Pages CMS can create online books in two formats: using fixed images or using DeepZoom technology. The former loads images of a fixed size, and the latter can load images of any size, using tiling technology transparent to the user. The kiosk version only supports images of a fixed size.

If you only want to create fixed-image online books the CMS will automatically process your images to 1600 pixels in height but you may wish to resize your images in advance and apply an Unsharp Mask filter to make your images sharper.

Once you have completed Stage 2, duplicate your “Stage 2” folder and name it “Stage 3”.

1. Resize images to 1600 pixels high
2. Merge visible layers
3. Filter > Sharpen > Unsharp Mask
4. Apply sharpening settings

If you want to take advantage of the online DeepZoom capabilities of TTP, then you can create images for ingest into the CMS at their source resolution. So, instead of outputting all final files as 1600px PNGs, you might assess the average height of your cropped original files to be (eg) 4100 px and save them out at that size. Upscaling images from their original size to get a larger DeepZoom source file is possible, but you should be mindful of any image degradation in the upscaling. With these larger files the CMS will output smaller versions for use in the kiosk.

8. Save

Save your files as PNG format.

Your page image files are now ready for import into the Turning the Pages™ CMS.

You can also watch an example of the page cutting out process via the following [playlist](#).

