FILM-BASED DIGITAL IMAGING WORKFLOW
FOR PETER THOMPSON'S DIGITAL IMAGING II CLASSES
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The following is a *film-based* digital workflow for editing photographic images in Photoshop. The goal of the workflow is to allow you to create a MASTER IMAGE FILE of the highest quality from which you can strike any type of derivative image for any type of output you might desire in the future. This workflow is one of several possible workflows: what's important is that you learn one—and know how it works--and then tailor it to fit your needs. Some steps may not be necessary for the particular image you are working on. In that case, skip a step and move to the next. Following these steps should, in most circumstances, provide you with an optimum Master File, and do so in an efficient, logical and repeatable manner.

COLOR	BLACK AND WHITE
1. SCAN IMAGE Scan your film negative or transparency in (optimally) 16-bit RGB color at the appropriate file size in megabytes as determined by your desired output size (physical size plus optimum resolution).	(same)
2. SET UP WORKSPACE AND ANALYZE IMAGE • Create image project folders (Scans, WIP, Finals). • Check Photoshop workspace layout, Preferences, Color Settings, black point and white point percentages, reset all tools, then re-select 3X3 color sample option. • Study image to determine appropriate enhancements: check photograph's margins, light conditions, light directions, location of specular highlights (if any), and general feeling.	(same)
3. RESIZE, ROTATE, CROP, ADJUST PERSPECTIVE, CORRECT LENS DISTORTION AND CHROMATIC ABERRATIONS, AS NECESSARY.	
(OPTIONAL) INPUT SHARPEN *On a copy of the background layer, use edge mask procedure recommended by Jeff Schewe (sharpening_schewe.pdf). Blending mode: luminosity.*	
4. GLOBAL COLOR AND TONAL CORRECTIONS **Set black and white points and overall brightness using one of the following two methods:** A) Toe in black and white point sliders on the red, green and blue channels on a Levels adjustment layer. Then adjust midtone slider on the Levels composite RGB channel to set overall brightness. Blending mode: normal. **OR** B) Determine location of white and black points using Threshold adjustment layer and mark each point with a color sample. On Levels adjustment layer link white and black point eye droppers to the appropriate color sample. Then adjust midtone slider on the Levels composite RGB channel to set overall brightness. Blending mode: normal	(same)

	CONVERT TO BLACK AND WHITE If converting from color to black and white, do it now using your preferred method (i.e., Black & White or Channel mixer or Hue & Saturation adjustment layers).
Set midtone contrast Use Curves adjustment layer. Blending mode: luminosity **Set color balance** Use Curves adjustment layer. Blending mode: color **Set hue and saturation** Use Hue & Saturation adjustment layer. Blending mode: saturation Make sure your global corrections are set before you begin any local corrections. For efficient, logical layer management, we recommend that these global color and tonal corrections be placed inside a layer set folder entitled GLOBAL CORRECTIONS.	**Set midtone contrast** Use Curves adjustment layer. Blending mode: luminosity
5. LOCAL COLOR AND TONAL CORRECTIONS Above the GLOBAL CORRECTIONS folder, make corrections to specific areas of your image using a 50% auto dodge layer, selections with adjustment layers, etc. For efficient and logical layer management, place these corrections inside a layer set folder entitled LOCAL CORRECTIONS.	(same)
(OPTIONAL) CONVERT TO EIGHT BIT *If working with large megabyte file sizes that make corrections time intensive, consider converting your 16-bit image to 8-bit at this point: flatten image and convert to a bit depth of 8 bits per channel. This will reduce file size for ease of operation in Photoshop and save space on your hard drive. We recommend that you save the layered version of this file separately.*	(same)
	FOR BLACK AND WHITE PRINTING If printing in grayscale using RGB inks, remain in the RGB color space. To print as duotone / tritone / quadtone / or gradient mapped image (using a spectrum of primarily black and grey inks), you must convert your image to the Grayscale color space prior to printing.
6. SPOTTING AND RETOUCHING On a blank layer placed immediately above the Background layer, remove dust, scratches and other imperfections using Spot Healing Brush, Healing Brush, or Clone stamp tools. To use the Patch tool use the Background layer. Make retouching and creative alterations and manipulations as necessary. Blending mode: normal.	(same)
(OPTIONAL) CREATIVE SHARPENING *Copy all the previous layers (Option + Merge Visible) and apply the Schewe creative sharpening technique #2) to specific parts, as needed.*	(same)
(OPTIONAL) SOFT PROOFING	(same)

7. OUTPUT SHARPEN A) For images of "normal" megabyte size, keep layers intact and sharpen using the Unsharp Mask filter in Photoshop. Size the file to final physical size and final resolution for that size as well as for type of output and media used. Then use Schewe method #3 (see sharpening_schewe.pdf), or Matt Siber's (advanced_sharpening_screen.pdf), or your preferred method. View monitor image at 50% screen zoom, or 25% for high resolution inkjet, to evaluate how it will appear on paper. **OR** B) For images of excessively large megabyte size or for those images using many retouching layers, flatten the layered image. Size the file to final physical size and final resolution for that size as well as for type of output and media used. Then use Schewe method #3 (see sharpening_schewe.pdf), Matt Siber's method (advanced_sharpening_screen.pdf) or your preferred method. View monitor image at 50% screen zoom, or 25% for high resolution inkjet, to better evaluate how it will appear on paper. Output sharpening can increase the appearance of dust and other artifacts, so recheck image prior to printing.	(same)
8. SAVE LAYERED VERSION Save a copy of layered version of your image (to preserve ability to make future changes, as necessary).	(same)
9. PRINT View the print under the lighting circumstances in which it will be shown (optimally, 3660º Kelvin). If adjustments need to be made for the lighting color temperature, use the appropriate adjustment layers (most often, Curves to warm or cool the image, and/or Hue and Saturation for saturation boost) placed at the top of the layer stack.	(same)
10. ARCHIVE Save your scans and your master files on at least one *external hard drive* (not on CD's or DVD's because of data instability and eventual loss).	(same)