

Janice Braud's WPC PHOTOSHOP WORKSHOP HANDOUTS

PHOTOSHOP CS2 WORKSHOP

CHANNELS, LAYERS, AND MASKS

1. Saving Selections as Channels
 - a. Open an image
 - b. Select an item or an area (use lasso or pen tools, etc.)
 - c. Under the Select menu, choose Save Selection
 - d. In Save Selection dialog, select “new” channel and give the channel a name (or let it default – it will be called Alpha channel if you don’t name it). Then click OK.
 - e. On the Channels palette, you will now see a new channel below the standard channels with the name you gave it.
 - f. If you save your image as a psd or tiff file, the new channel will be saved with it, allowing you to “reload” your selection at any time without manually recreating it.
 - g. Don’t forget to Deselect after working with a selection.

2. Sharpening with Channels
 - a. Avoiding noise when sharpening
 - i. With Photoshop Channels
 1. Bypassing the Blue Channel
 - a. Open Photo
 - b. Go to Channels Palette
 - c. Select Red and Green Channels (hold down Shift and click on both channels) – Don’t select Blue Channel
 - d. Under Filters, choose Smart Sharpen or Unsharp Mask to sharpen image (good settings on Smart Sharpen – 60% amt, 1.0 radius, remove: Lens Blur, check More Accurate)
 2. For Portraits (esp. women), Sharpen only the Red Channel, to avoid adding texture to skin.
 - ii. With Lab Color
 1. Under Image>Mode, choose Lab Color
 2. On Channels Palette, select the Lightness Channel only
 3. Under Filter>Sharpen, choose Smart Sharpen or Unsharp Mask and sharpen the image.
 4. Under Image>Mode, choose RGB to convert back to RGB color space.

- iii. Two-pass Lab Sharpening
 1. Convert to Lab Color space – Under Image>Mode, choose Lab color
 2. Go to Channels Palette, select Lightness Channel, and click on leftmost icon at bottom on Palette to Load Selection (or just click CTRL- ALT-1).
 3. We need to invert selection, so go under Select and choose inverse (or CTRL-Shift-I).
 4. Hide “marching ants” – CTRL-H.
 5. On Channels Palette, click on Lightness Channel
 6. Under Filters>Sharpen, choose Unsharp Mask, set amt to 500%, radius to 1, and threshold to 2. Then click OK.
 7. Now for second pass, open Unsharp Mask filter again. Set amount to 50% to 60%, and then move radius slider to somewhere between 15 and 30 pixels. Click on OK.
 8. Under Select, choose Deselect (or CTRL-D).
 9. Convert Image back to RGB. (Image>Mode>RGB)

3. Masking using channels

a. Masking

- i. Open photo, then go to Channels Palette
- ii. Find the channel with the most contrast (often the blue channel)
- iii. Duplicate that channel by dragging it to the new channel icon at the bottom of the palette
- iv. Select the new “copy” channel
- v. Using Levels, make the dark object blacker, then with white dropper, make the background whiter.
- vi. Using Lasso tool, make a loose selection around the dark object (to protect it), then CTRL-I to invert the selection.
- vii. Press D, then X to set foreground to black and background to white.
- viii. Then hit the Backspace key to fill background with white.
- ix. Press CTRL-D to deselect.
- x. Press X to set foreground to white.
- xi. Get the brush tool, and in the options bar, change the blend mode of the Brush tool to “Overlay” – this will allow you to paint with white right up to the black object without affecting it.
- xii. Press CTRL-I to make the background black and the mask object white.
- xiii. Now click on the Load Channel as selection icon at the bottom of the Channels palette.

- xiv. Press CTRL-J to place selected item on a separate layer.
 - xv. Drag the original layer to the trash icon.
 - xvi. Open a new background image, Select All, and drag (using Move tool) the new background onto the selected image. Move the selected image layer above the new background layer.
- b. Blend modes for Channels?
- i. Go to channels palette and select a channel. Drag the channel to the new channel icon at the bottom of the palette to create a copy.
 - ii. Under Image, select Apply Image.
 - iii. Change the Blending Mode to Multiply or Screen or other modes to get the effects that blending modes for layers provides.
4. Layer Masks and Adjustment Layers
- a. Creating a Layer Mask
- i. First create a duplicate layer (under Layer>Duplicate Layer, or drag a layer to the new layer icon at the bottom of the layers palette)
 - ii. Then select the new layer and click on the Add Layer Mask icon at the bottom of the Layers palette – to create a white mask. (Hold down Alt and click on the Add Layer Mask icon, and a black mask will be created).
- b. Painting on a Layer mask.
- i. Remember that “white reveals and black conceals.”
 - ii. A white layer mask allows the layer to show or to “take effect.” A black mask hides the layer so that it has no effect.
 - iii. Painting in white on a black mask will “reveal” the layer just where the painted area lies. Painting in black on a white mask will hide the layer just where the painted area lies.
- c. Composites with Layer Masks and gradients
5. Black and White Conversions
- a. Best of Three
- i. Open an image you want to convert to Black and White.
 - ii. Go to the channels palette, click on each channel (red, green, blue) to see which offers the best black and white version.
 - iii. Select the best channel, then right-click and choose duplicate channel.
 - iv. In the duplicate channel dialog, under the destination area/document: area, select “new” (and enter a name for the new document, if desired) to create a new, separate document.
 - v. Now convert to a Grayscale document, Image>Mode>Grayscale.
 - vi. To enhance contrast further, create a duplicate layer and change blending mode to soft light or overlay or whatever mode makes it look best.
- b. Lab Lightness Channel

- i. Open image and convert to Lab color (Image>Mode>Lab color)
 - ii. Go to channels palette and select Lightness channel.
 - iii. Under Image>Mode, choose Grayscale, and when dialog asks “Discard other channels?” click on OK.
 - iv. On the layers palette, duplicate the layer (CTRL-J). If image is too light, change blending mode to multiply, and adjust opacity if this makes it too dark.
 - v. If parts of the image are too dark after changing blend mode to multiply, click on Add Layer Mask icon at the bottom of layers palette. Now, using paint brush tool, press D, then X to get black foreground, and paint over the areas that are too dark.
- c. Calculations Method
- i. Open Image to convert to black and white.
 - ii. Under Image menu, choose Calculations.
 - iii. Under Source 1, select Red as the channel
 - iv. Under Source 2, select Green or Blue as the channel
 - v. For blending, select Overlay from the pop-up menu
 - vi. You can experiment with different channel choices (red and blue, green and blue, red and green), and with different blending modes (soft light, multiply, etc.) and with opacity percents – to get the best result.
 - vii. When finished with choice comparisons, at the bottom of the dialog, select “new document” as result.
 - viii. Under Image>Mode, select Grayscale to convert your alpha channel document to an ordinary grayscale document.
- d. Channel Mixer Method
- i. Open image, then under Layer>New Adjustment Layer, choose Channel Mixer.
 - ii. In Channel Mixer dialog, check Monochrome box at lower left.
 - iii. Adjust values for Red channel to about +75%, drag green and blue sliders to the right until contrast looks the way you want it to. Lower the contrast slider to about – 12% to allow more leeway with the green and blue sliders.
 - iv. If any area is blown out, you can use the “built in” mask on the channel mixer layer to reduce the highlights. First, select the background layer and desaturate (Shift, Ctrl, U). Then select the channel mixer layer. Press D, then X to set foreground to black. Select brush tool and paint with black over blown out areas to reveal darker version from background layer.
6. Enhancing color with Lab Color
- a. Open image (preferably a somewhat flat or dull image)
 - b. Under Image>Mode, choose Lab Color
 - c. Under Image>Adjustments, choose Curves
 - d. In Curves dialog, Alt-click on grid to change to 10% intervals
 - e. In Curves dialog, select the “a” channel (green to magenta color channel)

- f. Move the top right point of the curve one gridline to the left, then move the bottom left point of the curve one gridline to the right. Don't click Ok yet.
- g. Now select the "b" channel (blue to yellow channel) and repeat "f" above.
- h. Now select the lightness channel. Adjust the curve **slightly** to increase contrast and/or open shadows. Now click OK.
- i. Convert back to RGB (Image>Mode>RGB)

7. Better Color with Channels

- a. Blending Channels
 - i. Open two images, one exposed for sky and one exposed for foreground (or two images converted from raw, with exposure adjusted for sky in one and foreground in the other).
 - ii. Holding down the Shift key, use the Move tool to move the lighter image over the darker one. (Shift key causing correct alignment of images)
 - iii. Look at the channels palette and click on each channel to see which channel has the most contrast between sky and foreground. Then reselect RGB composite channel.
 - iv. On the layers palette, select the top layer, then click on the Add a layer style icon, and select blending options from the pop-up menu.
 - v. In the Blending options dialog, toward the bottom where it says "Blend if" – select from the pop-up menu the channel identified above as having the most contrast (red, green, or blue)
 - vi. On the "this layer" sliders, drag the top right slider to the left. As you do, the sky from the layer beneath begins to blend into your photo. Once the full sky is in place, press and hold the ALT key, then continue to drag the slider a little further to the left. As you do, the slider splits in two, which creates a smoother blend between layers.