



# Photoshop Tutorial

Millbrae Camera Club

2008 August 21



# Introduction

Tutorial



# For this session...

- Speak up if:
  - you have a question
  - I'm going too fast or too slow
  - I'm not speaking loudly enough
  - you know a better way



# Basic Image Correction

Tutorial



# Where to Look

- For basic image adjustments, see...
  - Image → Adjustments...
  - levels, curves, hue/saturation, etc.
- For basic image corrections, see...
  - Edit → Transform
  - scale, rotate, warp, etc.



# Converting a Background Layer

- Many edits not available on background layers
  - Edit → Transform menu disabled
  - background layers do not allow transparency
  - double-click background layer in Layers palette to convert to normal layer
  - Layer → Flatten Image to collapse all layers into a single background layer



# Demo: Adjusting Exposure

- Contrast & Brightness

- Levels

- black / white / gray point sliders
- Alt-drag the black and white points to set Input Level limits precisely
- use Output Levels to prevent “blocking & baring” for prints



# Contrast & Detail

- Out-of-camera tonal distribution indicates level of detail captured
  - increasing contrast makes detail apparent
  - adding too much contrast clips and/or blows
  - decreasing contrast compresses detail (can be lossy)
  - high contrast & little detail → graphic effect





# Demo: Adjusting Exposure

## ■ Curves

- use for fine control over tonal distribution
- try Auto (works for Levels too)
- Ctrl-click image to drop reference points on the curve

## ■ Use Shadow/Highlight to increase *local* contrast

- not the same as levels or curves

## ■ Set Curves layer to Luminosity blending mode

- prevents subtle color shifts



# Demo: Adjusting Color

- Hue/Saturation

- clipping & blowing color channels

- Color Balance

- Photo Filter

- Desaturate

- easiest way to remove all color
- not a good B/W conversion method, though



# Demo: Rotation & Warping

- Rotate canvas
  - use ruler tool to set desired horizontal or vertical first...
  - then Image → Rotate Canvas → Arbitrary...
- User Warp to correct barrel and pincushion distortion
  - Edit → Transform → Warp
  - use guides as a straight reference



# Using Guides

- Click and drag out a guide from a ruler
  - View → Rulers to show rulers on main view window
- Once a guide is placed, selections and tools snap to them
  - View → Snap and View → Snap To → Guides must both be checked

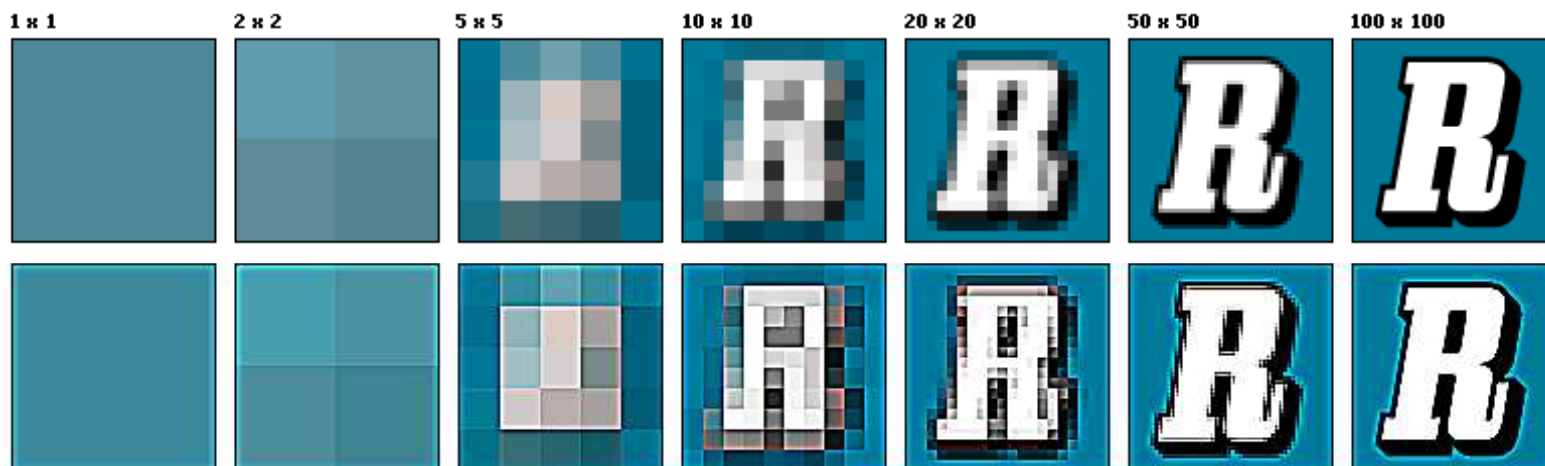


# Moving / Removing Guides

- Move a guide that's already been placed...
  - ctrl-drag the guide to new location
- To remove a guide...
  - ctrl-drag the guide on top of the ruler
- To remove all guides...
  - View → Clear Guides

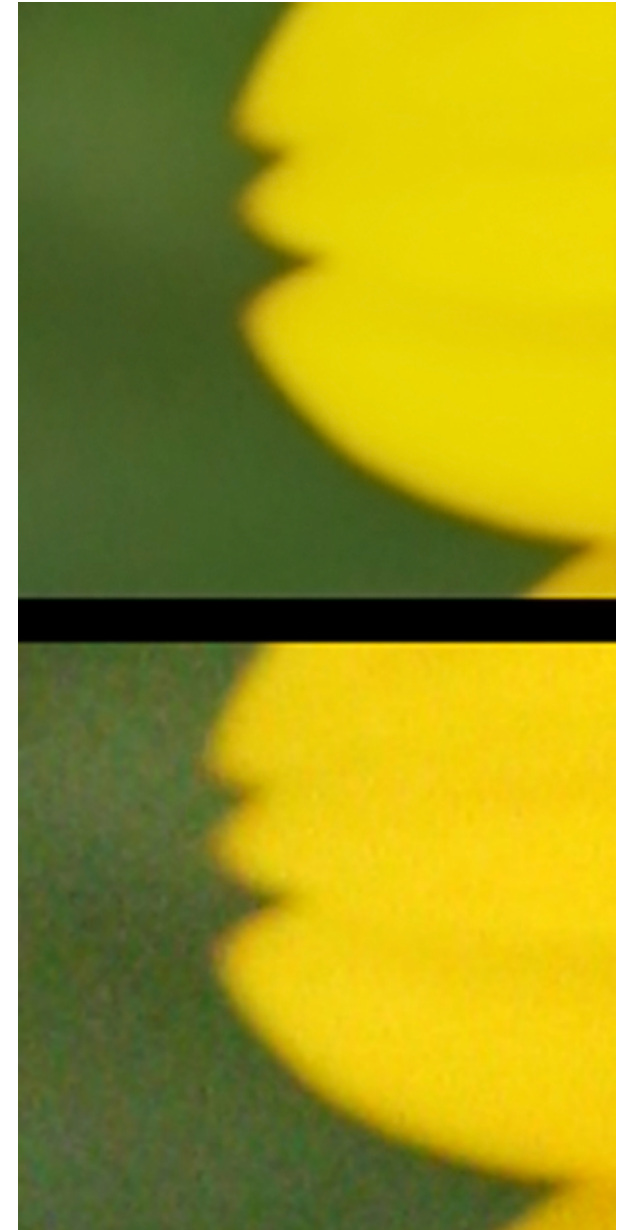
# Sharpening Basics

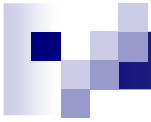
- Objective sharpness
  - high resolution means more information is present
- Subjective sharpness
  - increasing acutance, or “sharpening”, *creates the impression* that more information is present



# Sharpening Basics

- Most digital photos require sharpening
  - all digital cameras contain a low-pass filter
- Avoid the dreaded halo
  - example on last slide
- Always increases noise
  - noticeable in edge-free areas
- Demo
  - Sharpen & Sharpen More





# Questions







Layers

Tutorial



# Layers Defined

- Layers are slices of image information in a visually meaningful sequence
- Two basic types
  - an “image layer” contains pixel and vector information
  - an “effects layer” adds tonal, color, pattern, or texture effects
- Layers only operate on image information contained in lower layers



# Demo: Layer Basics

- Layer palette shows for each layer...
  - order
  - visibility
  - opacity
  - selection state
  - link state
- The main view window cannot show all of the information contained in all layers!



# The Principle of Overshoot

- When using a layer, it often makes sense to overdo an edit, then fine-tune using Opacity
- Later edits may impact an earlier ones
  - overshooting allows you to refine a previous edit
  - strive to “separate concerns” on different layers (ex: exposure adj. + Luminosity blending mode)



# Demo: Layer Toolbar

- Create and paint in an empty layer
  - make sure the correct layer is selected
  - effects of painting isolated to new layer
- Create an effects layer
- Delete a layer



# Demo: Layer Organization

- Group layers using a layer set
  - useful for easy A/B comparison, too
- Name layers and layer sets
  - otherwise, you'll forget why you added some layers



# A/B Comparison

- Reference comparison is important
  - brain adjusts what the eye sees under different lighting
  - no such thing as “color memory”—which is Coke red?

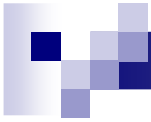


- Use Layer Comps for...
  - complex A/B comparison
  - multiple reference comparisons (A/B/A/C)



# Demo: Layer Comps





# Questions





# Selections, Masks, & Channels

Tutorial



# Channel Basics

- Anything that can be represented as a grayscale image is a type of channel
  - selections (can be converted to alpha mask)
  - layer masks
  - vector & shape masks
  - primary colors of current color mode
- Demo: Channel palette



# Demo: Selection Basics

- A selection limits an edit to the selected area of the current layer
- Lots of different ways of defining a selection
  - selection tool
  - lasso
  - dozens (hundreds?) more...



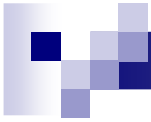
# Demo: Mask Basics

- New layer + active selection → layer mask
- A layer mask conceals or reveals areas of the associated layer
  - black areas of mask conceal corresponding area of associated layer
  - white areas of mask reveal corresponding area of associated layer
  - gray areas of mask partially reveal corresponding area of associated layer



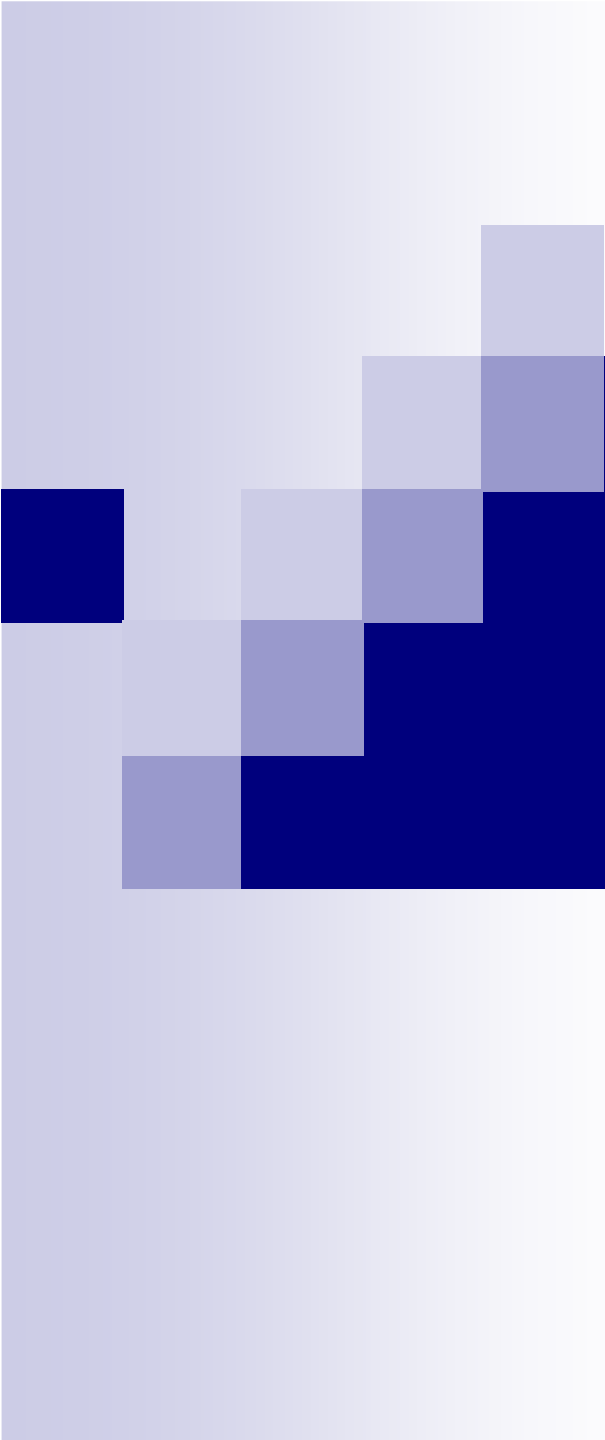
# Demo: Manipulating Masks

- Delete & create new layer mask
- View mask in main view window with Alt-click
- Operate on layer mask instead of layer
  - blend using a soft brush
  - blend using blur filter
- Use a gradient mask



# Questions





# Post-Processing Workflow

Concept





# Assessing an Image

- Set goals *before* you begin editing
- Attack one goal at a time
  - separate edits into different layers/layer groups
  - adopt a “post-processing workflow” (fancy way of saying: approach goals in correct order!)
- Maintain focus on big picture



# First Steps

- Open a copy—never the original!
- Leave the original in *Background* layer
  - serves as a reference and a guide
- Create a base layer
  - do all transformations on this layer
- Create a crop boundary layer
  - define, but don't crop yet!



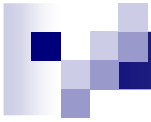
# Middle Steps

- Order & combine goals before attacking them
- Isolate changes to layers whenever possible
  - effects layers first
  - image layers last
- If you can't achieve a goal, get as close as you can and move on (80/20 rule)
- Save strategically (and frequently)



# Last Steps

- Save PSD
    - 16-bit Adobe RGB
  - Copy PSD to avoid accidental save
  - Last steps
    - flatten image
    - crop, size, & set print resolution (if printing)
    - sharpen
- 
- choose file format
  - set color profile, then bit depth
  - set print levels (if printing)
  - stroke (if desired)
  - canvas size
  - hairlines, targets, & cut marks
  - save output final



# Questions





The End

Thank you!