

Adobe Imaging Products

A Presentation to the Cary Photographic Artists Organization

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The Digital Darkroom

“Making a fine print digitally requires every bit of the skill and experience needed for photo darkroom printing.”

“...digital printing is easier is not true. ...the sheer number of possible controls makes the job much more complex.”

“It may look simpler, and it actually is faster, but it is definitely not easier.”

-- quotes from various industry-recognized, traditional darkroom practitioners who have turned digital

The Digital Darkroom

Why have you own darkroom?

Control and predictability

Pros and Cons of the Digital Darkroom

Pros

- More control and more precise control
- Safer
- Faster
- Portable/Multi-use
- Both color and black and white

Cons

- More expensive to start and maintain
- More complex
- What is an original print?

Adobe Imaging Products

- Photoshop Elements
- Photoshop CS/CS2/CS3
- Photoshop CS3 Extended
- Lightroom
- Bridge
- Camera Raw
- DNG Converter

Adobe Imaging Products

- **Photoshop Elements**
 - Consumer market image editing software
- **Photoshop Creative Suite**
 - Professional grade, image editing software
- **Photoshop CS3 Extended**
 - Medical imaging, 3D, Motion
- **Lightroom**
 - Sort – Organize – Edit – Track large volumes of images. Output slide show, web, print.

Adobe Imaging Products

- **Bridge**
 - Image browser. Can be launched separately or from within Photoshop
- **Camera Raw**
 - Adobe file conversion + editor plug-in accessed via Bridge or Photoshop
- **DNG Converter**
 - Copies manufacturer raw files to Adobe's open source DNG raw files

Elements of a Photograph

Before we discuss how Photoshop can be used by a photographer, lets first discuss the six basic elements of a photograph.

Elements of a Photograph

- **Subject**
- **Composition** (arrangement of subject, foreground, background, lighting)
- **Lighting** (quantity, quality, direction of light)
- **Tone, or luminance**
- **Color** (hue and saturation)
- **Problems**

One of the elements listed here is in every photograph.
Do you know which one?

Elements of a Photograph

Tone or Luminance

The measurement (quantification) of an object's brightness. It is how light or dark something is. It ranges from solid black to solid white.



Tone, or luminance, is little understood by many photographers. However, it is in every photograph.

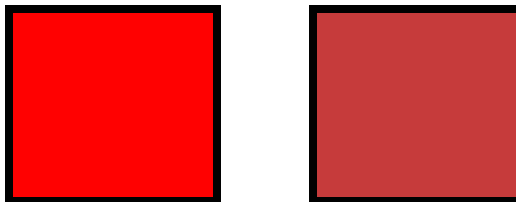
Did you know tone is what is being determined when you calculate exposure (*f*-stop and shutter speed)?

Elements of a Photograph

Hue and Saturation

Hue: The base color of an object. Where the object is on the color wheel. A dark red sweater has a hue of red and a tone of dark.

Saturation: How pure hue is. A pure red is more saturated than a brownish red.




What you can do in Photoshop

On a high level, Photoshop can be used to perform the following tasks

- Enhance
- Correct
- Create
- Prepare for Print or Display

What you can do in Photoshop

How does Photoshop's capabilities match to the elements of a photograph?

- Enhance
 - Correct
 - Create
 - Prepare for Print or Display
- 
- Subject
 - Composition
 - Lighting
 - Tone
 - Color
 - Problems

What you can do in Photoshop

- Enhance
 - Composition through cropping
 - Tone: overall contrast, local tones, dodge and burn
 - Color: saturation, spot color replacement
- Correct
 - Noise reduction (both kinds), color fringing, clone out defects, color correct, remove red eye, etc.
- Create
 - Black and White from Color
 - Panoramic
 - Digital Art
- Prepare for Print or Display
 - Resample and Resize
 - Single or mass prints
 - Web galleries

Examples

- Panoramic
- Digital Art
- Bold use of Tone

Bold Use of Tone



Old Faithful Geyser --Ansel Adams

Seeing Tone in Your Image

How to see tone in a color image.

- Create a Hue/Saturation adjustment layer
- Set Saturation to -100
- Set Blending Mode to Color

The last step is critical. If you do not change Blending Mode, you will not be looking at the correct tones.

Digital Darkroom Controversies

- Mac or Windows?
- Raw or JPEG?
- Converting color to Black and White
- Is it ppi or dpi?
- What is a giclée?

Digital Darkroom Controversies

Mac or Windows?

What do you need to do with your computer?

What software will allow you to do it?

What OS will run that software?

What OS does your circle of support use?

What OS do you need to share files with?

Security?

'Being cool' is not a valid decision criteria

Digital Darkroom Controversies

Raw or JPEG?

Image quality is more a function of skill than file format.

Raw is more flexible and allows more control. However, it is not a ready to use format. Therefore, move to Raw when you are ready for more control.

Digital Darkroom Controversies

Color to B&W

A Google search for converting color to black and white will give you 12,400,000 results.

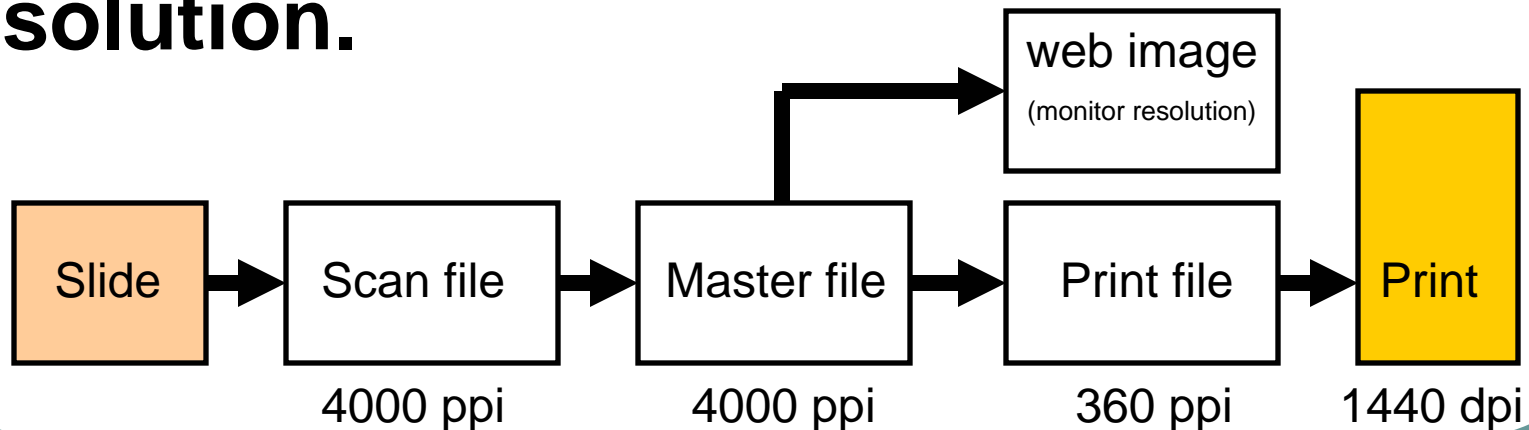
Whatever method you choose, make sure it gives you the very reason you set up a digital darkroom: Control and Predictability.

Digital Darkroom Controversies

ppi or dpi?

ppi is pixels per inch and refers to file resolution.

dpi is dots per inch and refers to print resolution.



Digital Darkroom Controversies

What is a giclée?

Giclée is a French word meaning to 'squirt' or 'spray'. First used in the late 1980s, early 1990s to market the Iris printer. It has come into vogue recently as a way to denote a high quality print made on an inkjet printer using fine art grade paper and archival inks. Occasionally used, inappropriately, to conceal the fact the print was made on an inkjet printer.

Key Concepts

- **Workflow**

- **Color Management**

A color managed environment allows the digital hardware and software to predictably reproduce color and shadow detail.

- Monitor calibration
- Out of gamut colors
- Printer profiles
- Printer black (white) point

The book *Color Confidence, The Digital Photographer's Guide To Color Management*, by Tim Grey.

- **Sharpening**

- **Luminance and color (chromatic) noise**

End

“I am sure the next step (in photography) will be the electronic image, and I hope I shall live to see it.”

-- Ansel Adams in his 1983 book *Examples: The Making of 40 Photographs*