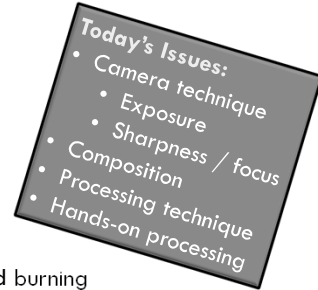


PHOTOGRAPHY:  
MINI-SYMPOSIUM

**Making Your  
Images *Pop***  
In Adobe Lightroom  
Loren Nelson  
www.NaturalPhotographyJackson.com

## Agenda for the morning

- Welcome and introductions
- Overview of general problems in photography
- Avoiding image blahs
  - Focus / sharpness
  - Exposure
  - Composition
- Making images **pop**
  - Contrast and luminosity
  - Vibrance and clarity
  - Local adjustments, dodging, and burning
- Wrap-up by 12:30 PM



## What ruins a photo?

- Poor composition
  - Lack of clear subject, foreground, background
  - Clutter and distractions
- Improper exposure
  - Over-exposure
  - Under-exposure (sometimes fixable in PP)
- Unintentionally blurred image
  - Out of focus / improper depth of field
  - Subject moves too fast for set shutter speed
  - Camera shake

## Learning Objectives

- At the end of this session, you will be able to:
  - Identify the possible causes of blah images
  - Select best images for post-processing/editing
  - List means to enhance white balance, hue, and saturation
  - List means to optimize contrast, vibrance, and clarity
  - Understand techniques to sharpen an image
  - Use local adjustments to make images **pop**
  - Identify useful post-processing filters & plug-ins
  - Obtain more pleasing and dynamic images

## How do you define *Pop?*

- Clearly identified subject with foreground and background
  - Good composition
- Tack sharp
  - Focused, good depth of field, no diffraction or blur issues
- Proper exposure (tonality)
- Good contrast
- Sharp corners and edges (no cut-offs)
- Appropriate color saturation
- Highlights and lowlights; depth to image
- Other?

## File Type and image *POP*

- **RAW files** (.CR2, .NEF)
  - Large file size
  - Non-viewable image data
  - EXIF and other metadata and JPEG thumbnail (.XMP)
- **DNG** (Adobe, .DNG)
  - Smaller file size, non-proprietary
  - Non-viewable, slightly compressed image data
  - No .XMP side-car file needed
- **JPEG images** (.JPG, .JPEG)
  - Highly compressed, much smaller image file
  - Edited by camera/software
  - Each save loses data (lossy compression)

12 – 14 bit  
4,096 – 16,384  
levels

8 bit  
256 levels

Luminance levels (brightness) per RGB channel

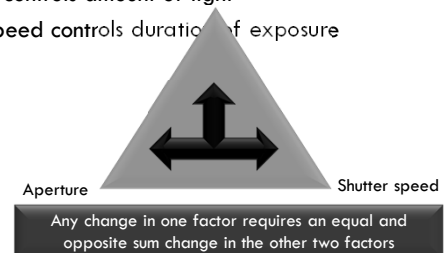
## JPEG Compression

- JPEG compression is “lossy”
- Each save causes data to be lost
- Frequent saves degrades image
- Not affected by opening and closing only



## Exposure Control Triangle

- Three elements control exposure
- ISO sets sensor sensitivity
- Aperture controls amount of light
- Shutter speed controls duration of exposure



One “stop” or EV (exposure value) implies a doubling or halving of exposure.

## Aperture (f-stop) Pro and Con

### High f-stop

- Small aperture
- Wide depth of field
- Slow shutter speed
- Star-effect in bright light
- Motion effects
- Diffraction softening



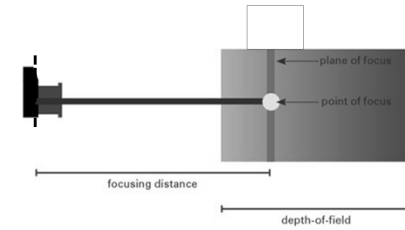
### Low f-stop

- Large aperture
- Narrow depth of field
- Fast shutter speed
- Freeze action
- Minimize camera shake
- Corner softening

## Depth of Field – what is acceptable focus?

- Lens focuses on a single plane – parallel to the sensor
- A range of “acceptable” focus occurs on each side of the plane
- Rule of thumb – 1/3 in front and 2/3 behind plane of focus

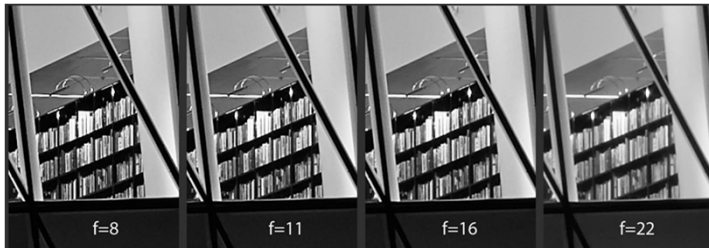
Only a rule of thumb!  
Actual acceptable focus varies with the lens, its focal length, and the focusing distance



<http://digital-photography-school.com/>

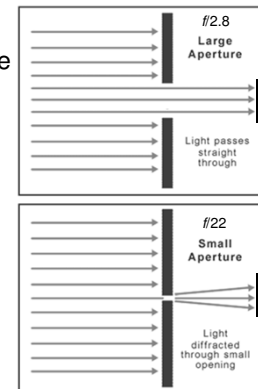
## Diffraction

- Assume high quality lens
- Full-frame camera defraction-limited at smaller than  $f/22$
- APS-C sensor defraction-limited at smaller than  $f/16$



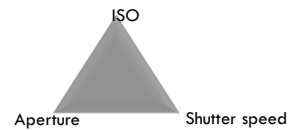
## Diffraction

- Minimal with large aperture
- Potential problem with small aperture
- Depends upon sensor size
  - Full frame above  $f/22$
  - APS-C above  $f/16$
- Result is lower resolution
- Softer image
- Maybe compounded by slow shutter speed



## Shutter Speed Pros and Cons

- |   |   |
|---|---|
| <p><b>Pro high (fast) shutter speed</b></p> <ul style="list-style-type: none"> <li>• <b>Freeze</b> action</li> <li>• Minimize camera shake</li> <li>• Large aperture so narrow depth of field</li> <li>• Need higher ISO</li> </ul> | <p><b>Con low (slow) shutter speed</b></p> <ul style="list-style-type: none"> <li>• <b>Blur</b> image for motion effect</li> <li>• Smaller aperture so greater depth of field</li> <li>• Can use lower ISO</li> </ul> |
|---|---|



## Critical focus challenges

- Low light situations
  - Longer shutter speed – more camera shake
- Long telephoto / super-zoom lens
  - More ‘magnification’ of camera shake
- Extreme close-up / macro
  - Extremely shallow depth of field
  - More ‘magnification’ of camera shake

## Post-processing / Editing

- Exposure / luminosity – intensity of light
- Contrast / tonality – range of luminosities
- Saturation (intensity of color)
- White balance
- Level and crop
- Sensor dust
- Distractions
- Digital noise reduction
- Sharpen

## Post-processing Sharpening

- Not really sharpening
- Local contrast adjustments of “edges”
- Noise reduction / sharpening paradox
- Lightroom or CameRaw clarity slider
- Lightroom or CameRaw sharpening
- Photoshop sharpening tools
- Other software sharpening tools

## Keys to sharper images

- Camera stabilization
- Appropriate lens
- Appropriate shutter speed
- Choose best focusing mode
- Always consider best motion blur for moving subjects
- Apply noise reduction and sharpening in post-production

## Compositional Elements

### Direct the viewer

- Focus – emphasize the primary subject and add context
  - Lines – natural, artificial, and implied
  - Shape – repetition, regularity, irregularity
  - Frames – real and implied
  - Tonality – exposure and contrast
  - Color – bright directs
- } Editing?

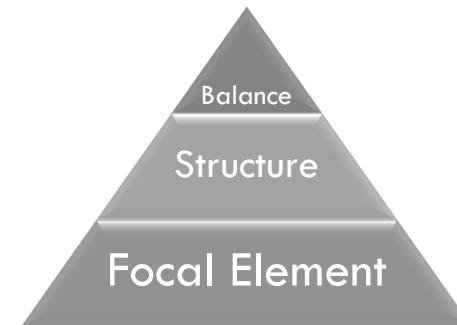
## Composition

- Right lens for subject and distance
- Fill the frame
- Clearly defined subject
  - Simplify the image
  - Eliminate clutter
  - Check your edges and corners
- Foreground, subject, background relationship
- Rule of thirds – avoid “bulls-eyes”
- Leading lines
- Patterns (exception to the pattern)
- Natural frames

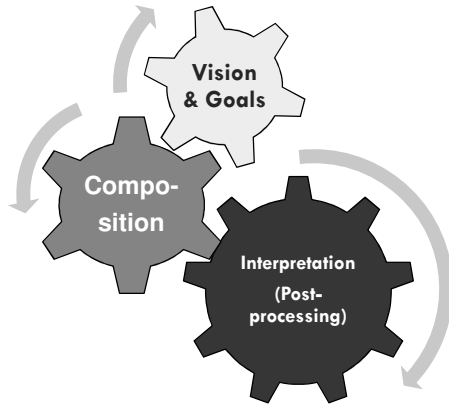
Ask yourself, in one word, what is the picture?

## Composition Pyramid

- Relative importance



## Spectacular Imaging



## Composition Goals

- Create impact
- Stimulate imagination
- Emotion is key

## Composition is about balance

- Aspect ratio
- Format
- Shapes
- Edges and corners
- Arrangement
- Lines
- Focus
- Shadows & reflections
- Foreground/background
- Viewer's path
- Point of view
- Texture and detail
- Gradations
- Negative/positive space
- Contrast
- Color

Post –production and editing impact

## Adobe Lightroom® as a Photography Tool

- Organizer / database
- RAW file converter / viewer
- Image-level non-destructive editing
- Limited local, non-destructive edits
- Multiple output tools

## LightRoom vs PhotoShop

### LightRoom

- Synchronized editing
- Image storage system
- Database / search engine
- Adobe Camera Raw
- Image-level editing
- Non-destructive edits
- Limited local edits

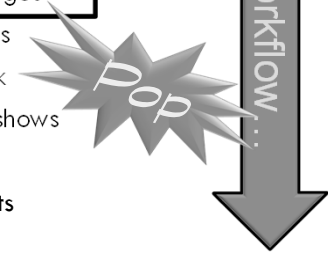
### PhotoShop

- Single image editing
- Bridge is viewer
- Adobe Camera Raw
- Pixel-level editing
- Destructive edits
  - Smart objects
- Layers & overlays
- Masks
- Content-aware fill

The programs are different but complementary.

## LightRoom Modules

- Library – organize your images
  - Import, export, publish images
- **Develop** – process your images
- Map – geo-tag your images
- Book – create a photo book
- Slide show – create a slideshows
- Print – print your images
- Web – create a web objects



## Post-processing (Editing) Goals

- Optimize white balance and tint
- Optimize overall exposure and contrast
- Correct saturation problems
- Enhance local exposure and contrast
  - Dodge & burn; clarity
- Crop for final use (straighten, fix corners and edges)
- Eliminate distractions: clone, heal, blur, etc.
- Create vignette
- Merge images: HDR, panorama, focus-stacking
- Other local adjustments, filters, etc.

## Develop Module

- White and black points; highlights, shadows
  - Exposure, contrast – dynamic range
- Color temperature, white balance, and tint
- Presence (**pop**) - clarity, vibrance, saturation
- Crop, level, clean-up, filters, local adjustments
- Tone curve, HSL, split-tone
- Lens corrections and perspective control
- Sharpness; luminance & color noise reduction
- Special effects – post-crop vignette, grain



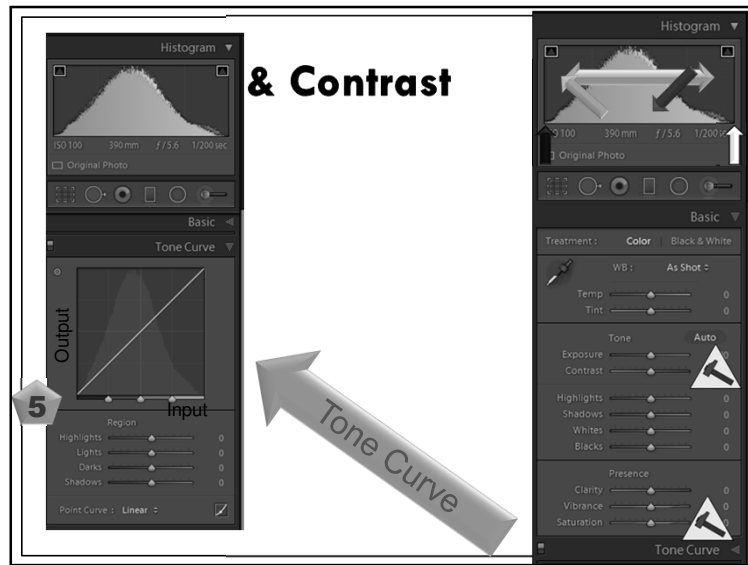
### Develop Module Panels

- Local adjustment tools – gradient, radial, brush, clone
- **Basic – exposure & color correction**
- Tone curve – contrast and dynamic range
- HSL – Hue, Saturation, Luminance, (B&W)
- Split Toning\*
- Detail – noise and sharpening
- Lens Corrections – aspect error, chromatic aberration
- Effects – vignette and grain
- Camera Calibration\*

\* = very low use

### Exposure & Contrast

- **Use histogram!**
- Gross exposure to shift curve right or left
- Set white and black points
- Open shadows and highlights
- Fine tune each segment
- Add clarity for details
- Consider vibrance - if exposure is increased
  - Preserves skin tones; acts only on unsaturated hues
- Consider saturation - if exposure is increased
  - Use with extreme care
- Add contrast (if needed); check tone curve for fine detail contrast adjustments



### Application of processing

- Eliminate distractions
- Focus attention on subject
- Add 'depth' to image
  - Color / saturation / vibrance
  - Contrast / sharpness / clarity
  - Dodging and burning
- Keys to creating *Pop*



## ABCs of Post-processing *Pop* 1

- Adjust overall exposure as needed (histogram)
- Set white point (histogram)
- Set black point (histogram)
- Open the shadows (up) / highlights (down)
- Re-touch exposure, white and black points, if needed
- Add clarity
- Add vibrance (watch saturation)
- Check white balance and tint
- Consider tone curve adjustment (for contrast)

Luminance  
Dynamic range

Color  
(Saturation)

## ABCs of Post-processing *Pop* 2

- Consider local adjustments
  - Gradient filter to tone down / saturate sky
  - Radial filter for accents (light or dark)
  - Dodge and burn with brush tool
  - Post-crop vignette?
- Time for Photoshop?
  - Selective removal of object(s) (“content aware”)
  - Local masking / adjustment layers
- Other presets and filters?

## Detail Panel

- View image at 100% at high contrast interface
- Look for color noise – correct
- Look for luminance noise – correct
- Sharpen but “mask” when needed to avoid over-sharpening in uniform contrast areas (sky)
- Detail rule:
  - Luminance noise reduction + sharpening = 100
  - Luminance noise reduction + sharpening = 80
- Don't forget noise reduction and sharpening in import presets
  - Noise reduction: 15-25% (low ISO)
  - Sharpening: 20-40% (very sharp)

## Good to Great Photographs

- Good photographs
  - Proper exposure
  - Sharp focus
  - Nice composition
  - Good subject
- Great photographs
  - Emotional impact / visual tension
  - Creativity and style
  - Feeling and emphasis
  - Seeing and understanding
  - Unique perspective / lighting

*Pop*