WEEK 2: SOFTWARE TOOLS & LIGHT

DIGITAL MEDIA E-10
EXPOSING DIGITAL PHOTOGRAPHY

DAN ARMENDARIZ

DANALLAN@CS.HARVARD.EDU
Shelley Westover
Rob McCarthy
Henry Vega Ortiz
Jordan Hayashi

TEACHING FELLOWS
http://digitalphotography.exposed/submit

PROBLEM SET AND PROJECT SUBMISSIONS
EXPLORE THE ENVIRONMENT

iPhone #nofilter
http://blog.digitalphotography.exposed

CRITIQUE AND PARTICIPATION
PINHOLE LENSES
SOFTWARE TOOLS

- Apple Aperture (discontinued 😞)
- Adobe
  - Lightroom/Lightroom Mobile
  - Photoshop/Photoshop Express
- Filterstorm (iPhone/iPad)
- Instagram (smartphones)
- PhaseOne
  - CaptureOne
  - MediaPro
- etc.
ORGANIZATION
TECHNIQUES

- Organize by some folder hierarchy in your operating system
- Rely on photo organization tool
ORGANIZATION TECHNIQUES

ORGANIZATION SOFTWARE

IMAGES STORED IN FOLDER STRUCTURE
Ratings, "Stacks"

Organization Techniques
ORGANIZATION TECHNIQUES

KEYWORDS

Actions
Car
iView Media Pro
People
Personal
Photo specs
Stock categories
Technology
United States
Wedding
Work
METADATA

- Stores information in the image file
- May include data on:
  - exposure details
  - exposure mode
  - camera type and settings
  - lens type and settings
  - location
  - time
  - copyright
  - metadata from photo apps (keywords, ratings, etc.)
KEY POINT

BACKUP YOUR DATA
SOFTWARE TOOLS

Dan Armendariz, 2014. Photo sequence, each around f/5.6, 1/20s, ISO 400
RAW PROCESSING

- We will primarily be using:
  - Adobe Photoshop
  - Adobe Lightroom
  - Apple Aperture
ETHICS

ADOBE PHOTOSHOP

How The Right Went Wrong
What would Ronnie do? And why the Republican candidates need to reclaim the Reagan legacy

BY KAREN TUMULTY
LIGHT

PROPERTIES OF WAVES & PARTICLES

Increasing Frequency (ν)

Increasing Wavelength (λ) →

Visible spectrum

Increasing Wavelength (λ) in nm →
THE EYE

- Retina
- Retinal blood vessels
- Cornea
- Iris
- Lens
- Macula
FOVEA

THE EYE
# RODS AND CONES

## THE EYE

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>RODS</th>
<th>CONES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VISION TYPE</strong></td>
<td>NIGHT VISION</td>
<td>DAY VISION</td>
</tr>
<tr>
<td><strong>LIGHT SENSITIVITY</strong></td>
<td>MORE</td>
<td>LESS</td>
</tr>
<tr>
<td><strong>FOVEAL CONCENTRATION</strong></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
<tr>
<td><strong>RELATIVE PRESENCE</strong></td>
<td>22 RODS FOR EVERY 1 CONE</td>
<td></td>
</tr>
<tr>
<td><strong>PRIMARY STIMULUS</strong></td>
<td>MONOCHROMATIC</td>
<td>TRICROMATIC (COLOR)</td>
</tr>
<tr>
<td><strong>DETECTION</strong></td>
<td>MOTION</td>
<td>DETAIL</td>
</tr>
</tbody>
</table>
RODS & CONES

THE EYE

[Image of a graph showing the absorption spectra of rods and cones in the eye, with wavelengths in nanometers and normalized absorbance plotted against wavelength.]
SIMILARITY TO THE EYE

CAMERAS

en.wikipedia.org/wiki/Single-lens_reflex_camera
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