Creative In-Camera Techniques

NVPS Education and Training Dec 13, 2016

Agenda

- Introduction
- Longer shutter speeds
 - Camera movements
 - Live Demonstration
- Multiple Exposures In Camera
 - Live Demonstration
- Creative Flash
 - Live Demonstration

Introduction

- Upcoming NVPS competition theme of "Drag the Shutter"
- Show us your best shutter drag. Whether capturing motion in waves or panning cars zooming by, we want to see you get creative with this topic. Slow down your shutter speed to <u>show a sense of motion or action</u>."
- Longer exposure techniques
- Flash/Strobes techniques

Longer Exposures

- Creative longer exposure techniques can include:
 - Shoot moving objects: waterfalls example
 - Panning
 - Moving camera up, down, sideways
 - Rotating camera
 - Zooming lens in or out

Shooting Moving Objects - Waterfalls

- Camera settings (ISO, aperture, shutter speed) vary depending on the lighting, volume and speed of water
- Tripod highly recommended
- Experiment with shutter speed to get the look you want
- Too long and water becomes mushy blob
- Too short and water becomes "frozen"
- Best to show movement and striations

Various shutter speed effects



f/2.8 1/125 Second



f/10 1/10 Second



f/22 1/2 Second

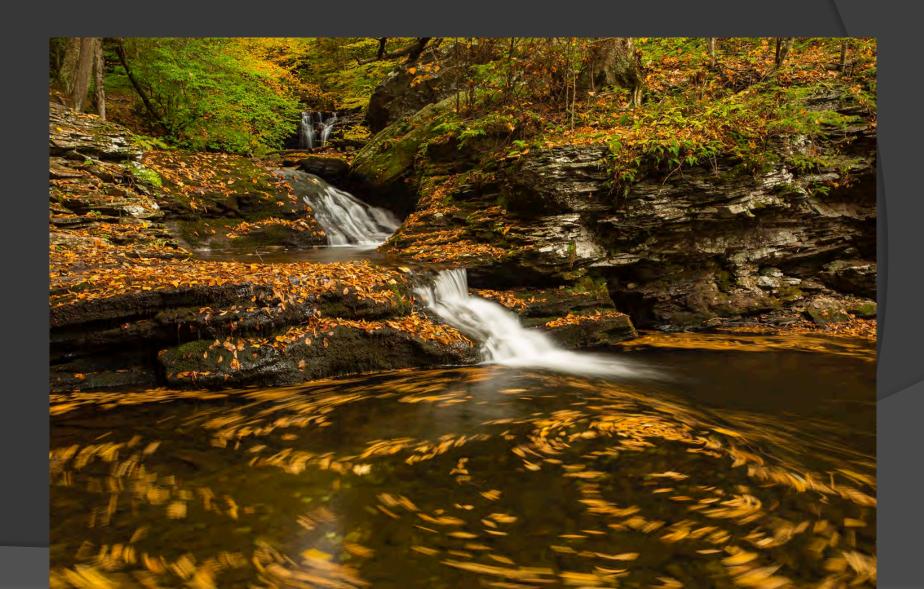
Fast shutter speed – frozen water



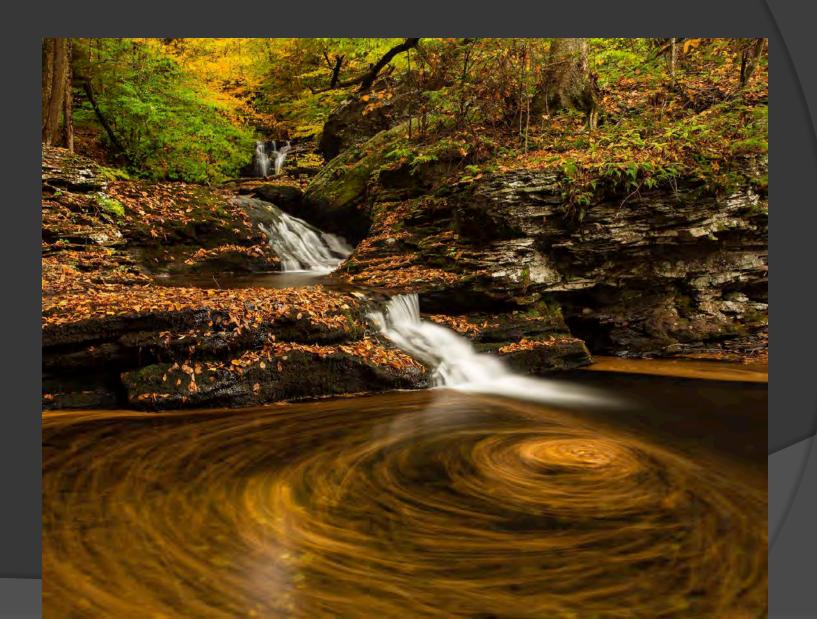
Slower Shutter Speed



2 second exposure



30 second exposure





Panning

- Move camera to match the speed of your subject so some (or all) of it is in focus while the background is blurry
- Provides a sense of motion
- Shutter Speed: Some guidelines suggest starting at 1/30 or 1/20 second and moving up or down from there
- Strive to have something in the picture sharp

Panning

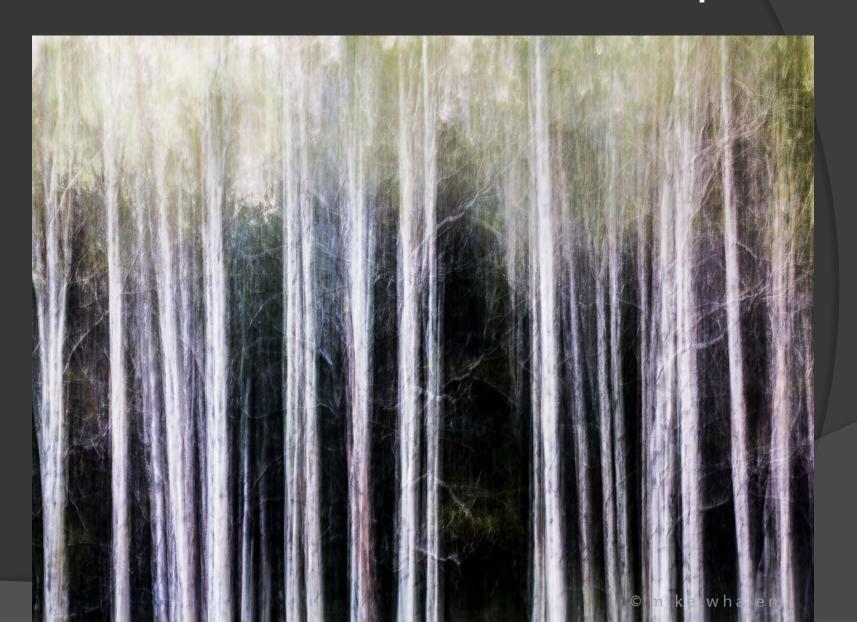
- Most photographers will use hand-held, but using a tripod will work if the subject is on a predictable plane
- VR (Vibration Reduction) or IS (Image Stabilization feature in various lenses makes panning a lot more consistent and much easier to accomplish
- Takes lots of practice

Panning Examples



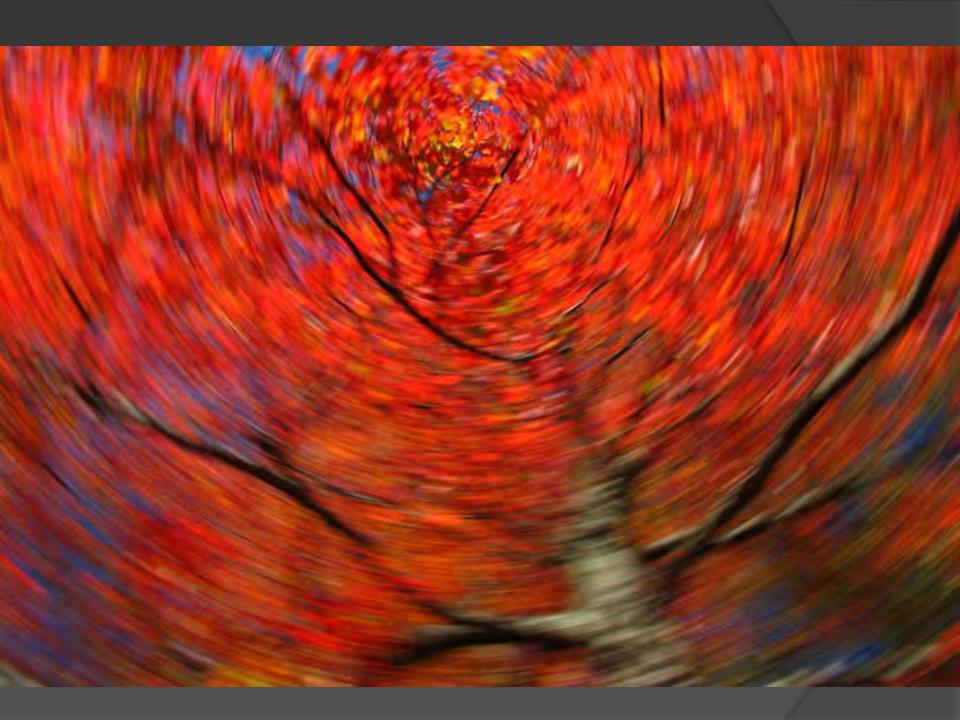


Camera Movement Examples



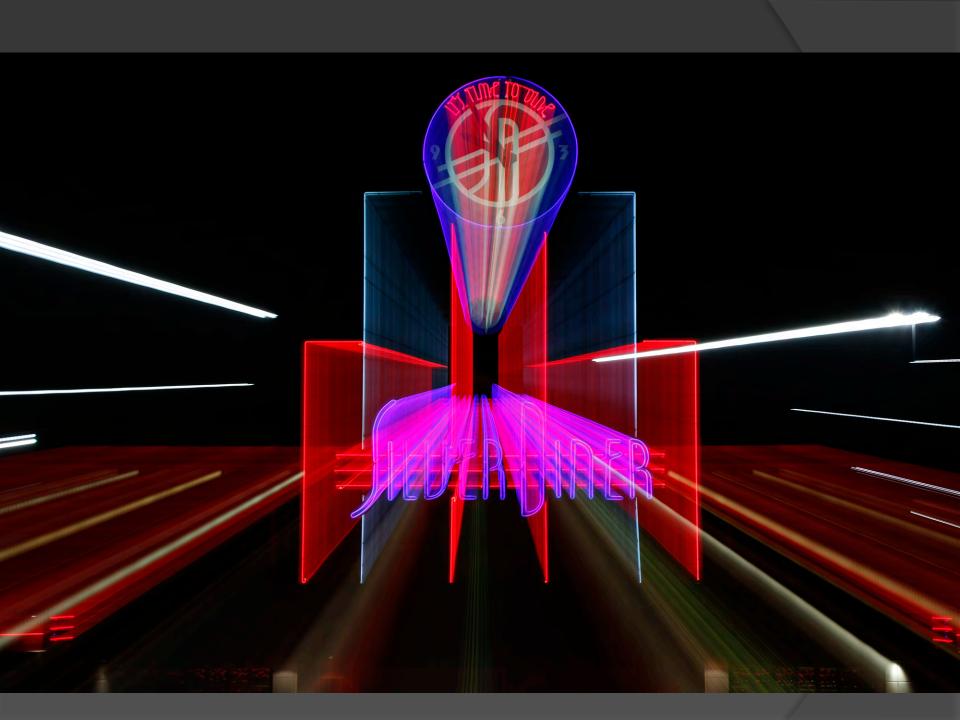












Creative Camera Techniques Live Demonstration

Jeff Hancock

Multiple Exposure Images

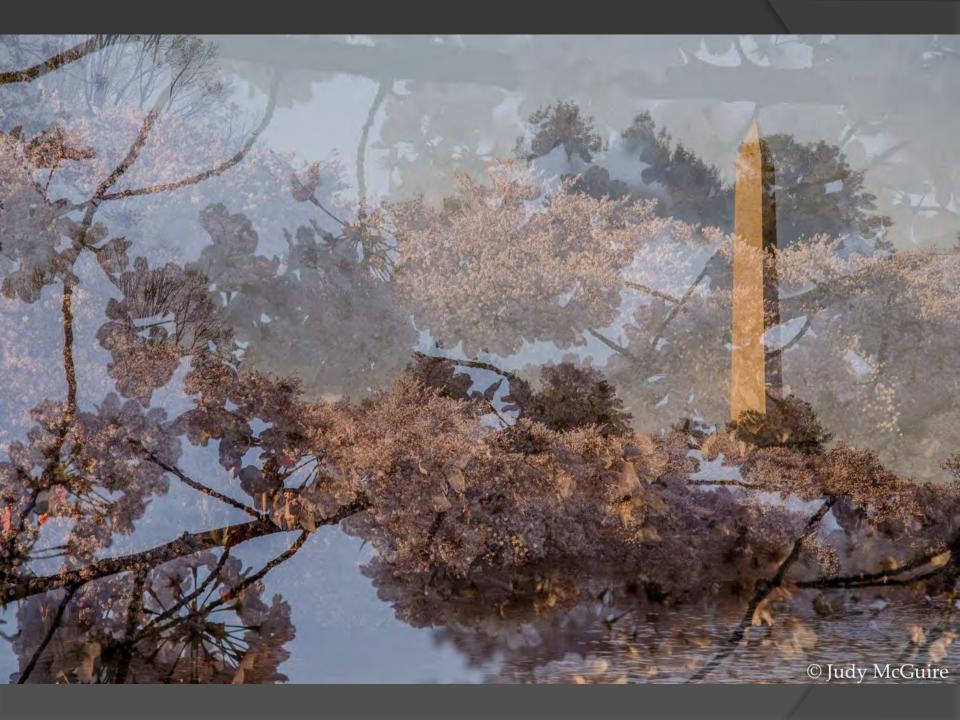
- Multiple exposure feature allows you to take 2 or more images and superimpose them in-camera into a single image.
- Similar to HDR which shoots the <u>same</u> image at different exposures and combines into one for high dynamic range
- Multiple exposures allow you to combine different images together, or the same subject moved slightly or zoomed in or out

Multiple Exposures

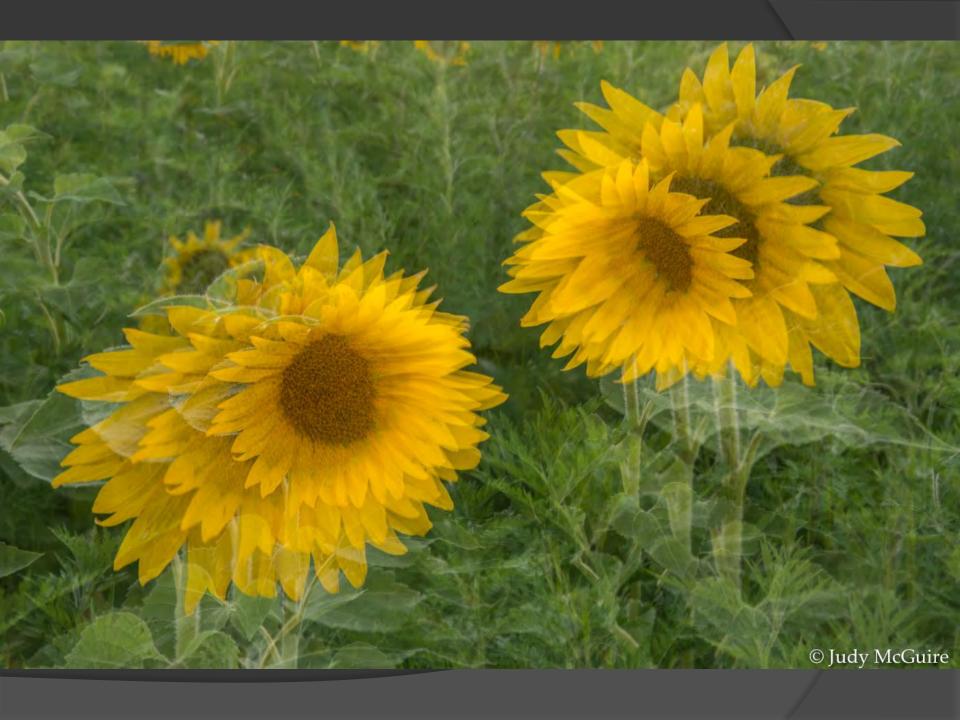
- You can also do multiple exposure (compositing) in photo processing software
- To do multiple exposure in camera, you need a camera with that capability: several Canon and most Nikon DSLR cameras...(and others like Fuji, Olympus, etc.) have that function built in
- Check your manual (or web) for instructions for your particular camera

Multiple Exposure Examples









Multiple Exposure Portraits

- Shoot underexposed image bright background, backlit subject
 - Overcast day shoot up at subject
 - Artificial backlight
- Shoot second image properly exposed
- Dark areas in the first image will be "filled" by subject of second image
- Canon ME will result in Raw file if blending two Raw images

Multiple Exposure Examples









Canon 5DM3 Multiple Exposure (ME)

 First shoot your base image(s) with your subject underexposed with some deep shadows

 Then select the Creative Photo button on top left corner of back display and step through options

- Picture style select second option ME
- Enable ME: Func/Ctrl
- Select option: Additive, 2, All, 1 shot only
- Select image for ME
 - Once image is selected, press Set/OK to choose
- Then shoot your second image
 - Use Live View so you can see how images align
 - Set exposure for your second shot
 - Shoot the second shot
- Camera will combine the images filling the dark and shadows from first shot with the second shot

Multiple Exposures in Camera

Demonstration – Portrait

Creative Flash

Speedlites

- Advantages light weight, more portable, most use common batteries, usually less expensive
 - Note: there are good off-brand versions of Canon and Nikon speedlites at significant savings
- Disadvantages less power (less light)

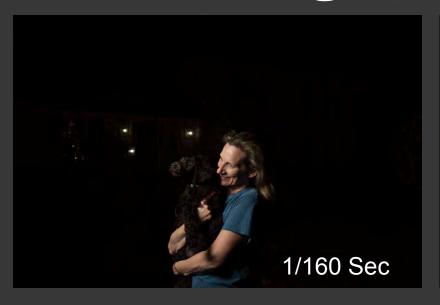
Strobes

- Advantages more power, modeling light, many modifiers
- Disadvantages less portable, most need external power...some use built-in batteries, usually more expensive

Dragging the Shutter w/Flash

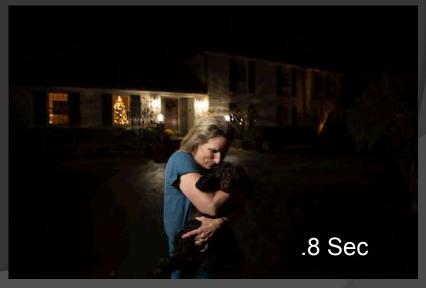
- Shutter speed does not affect flash exposure
- Slow the shutter speed to let in more ambient light to get better balance with flash/strobe light
- Can be used with camera movements to show motion
- Start camera settings with higher synch speed like 1/200 sec or 1/160 sec
 - If there is ambient light, background will probably be too dark
 - Experiment by reducing shutter speed until you get the image/effect you want

Shutter drag w/flash example







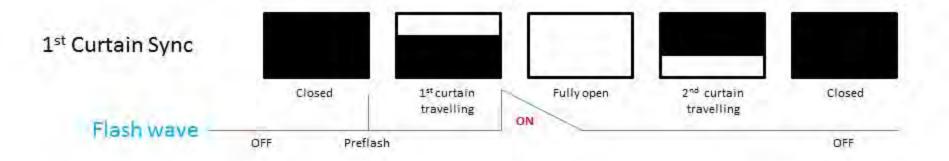


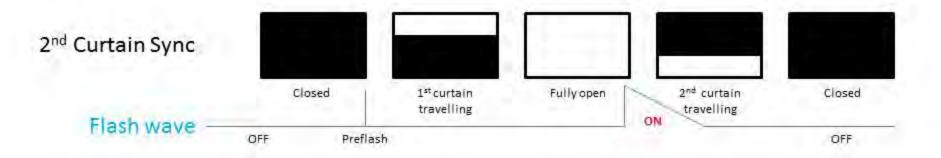


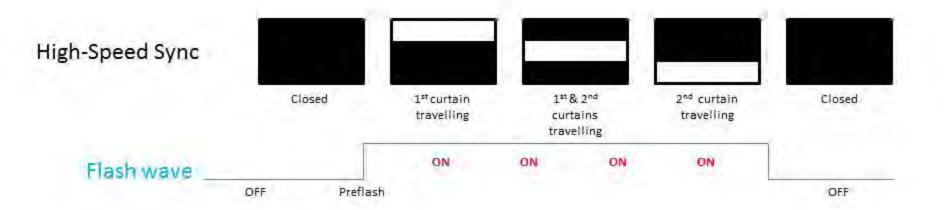
Demonstration

Shutter Drag with Flash Sync

- First curtain (normal) sync Flash fires at beginning of the exposure, in synch with the first curtain
- 1st curtain opens Flash fires freezing action- remainder of (longer) exposure blurs movement in <u>front</u> of frozen image; 2nd curtain closes. Blur trails are in front of subject.







First Curtain Sync/Slow Shutter Example with Moving Object







Shutter Drag changing Sync cont'd

- 2nd curtain (rear curtain) sync flash fires at the end of the exposure in sync with the second curtain movement
- 1st curtain opens Ambient exposure blurs movement, flash fires freezing the action, 2nd curtain closes. Blur trails <u>behind</u> the subject look more natural
- 2nd curtain sync works best with linear movement across the frame.
- Experiment with shutter speeds to get the blurs you want for your subject

Canon vs Nikon

- Many Canon cameras do not have the ability to select rear curtain sync in the camera settings (including 5DM3)
 - It's built into most Canon's speedlites to include the 600, 580, 420 series
- Nikon camera many Nikons have the ability to select second/rear curtain sync in the camera
- Check your manuals (or web) for instruction for your camera

Rear Curtain Sync Examples







First Curtain Sync

Second Curtain Sync



First Curtain Sync

Second Curtain Sync



Shutter Drag w/Rear Curtain Sync

Demonstration