Creative Photographic Techniques

Bob Breach and Ruth Martin

Format for tonight

- Reviewing some of the main creative techniques that may be used in the member's challenge

- Questions and discussion

- Trying out the approach using your own equipment

- *There are too many techniques to go through in detail tonight.*

- *We will cover what we can and more will be covered in future workshops and through information sharing*

- *The slides can be used as basic notes which can be expanded as necessary*

Introduction

Wide range of techniques available

- **Used for different reasons**
  - Some are quite "niche" but can be used for specialist creative effects (e.g. light painting, ICM)
  - Some tend to be used mainly for certain genres (e.g. focus stacking for macro)
  - Some might be used more widely to enhance composition or impact (e.g. DOF)
- **Some**
  - Can only be used at time of image capture
  - Can require input both at image capture and post processing stage
  - Can be done (or created) post processing

Where can they be applied

Point of capture only

- Light painting
- ICM
- Freeze motion
- Panning
- DOF
- Bokeh
- Long exposure

Point of capture/post*

- Focus stacking
- High key
- Low key
- HDR
- Multiple exposure
- Motion blur

* Although some techniques can be replicated in post for some at least it is often better in camera

Creative techniques by type

Shutter speed
- Freeze motion
- Motion blur
- Panning
- Long exposure
- (ICM)

Aperture
- DOF
- Bokeh
- Focus stacking

Exposure
- HDR
- High key
- Low key

Creative
- Multiple exposure
- Light painting

Motion
Freeze/Blur/Pan/Soft/ICM

Capturing motion

- How do you create the sense of speed or motion in two dimensional images?
- Different techniques
  - Freeze motion – using high shutter speed or even high speed flash to stop action (e.g. bird in flight, running athlete)
  - Motion blur – Shutter speed set to blur some elements (but may be sharp on static elements)
  - Panning – shooting a moving subject (e.g. car) whilst following with your lens. Subject stays sharp but background blurred
  - Long exposure - deliberately using low shutter speed to create a soft or dreamy image
  - ICM – Intentional camera movement to create artistic effect

But all need lots of patience and practice

Freeze motion

- Use wide f stop to throw background out of focus
- Use eye/subject tracking to make sure key elements in focus
- Adjust shutter speed relative to speed of subject (maybe 1/200 to 1/5000
- For very fast subjects (hummingbirds/insects) use high speed flash to freeze

Motion blur

- Camera on tripod or held very steadily
- Adjust shutter speed relative to speed of subject
- Ideally have static elements in frame
- Practice, practice, practice

Panning

- Shutter speed relative to speed of subject
  - Bike maybe 1/50th; fast car 100th; but adjust as necessary
- Focus on subject, hold camera firmly and follow subject carefully as shutter pressed
- Practice, practice, practice

Long exposure

- Camera on tripod (or held very steadily) depending on shutter
- May need "neutral density filter" to allow slow enough speed
- Adjust shutter speed relative to subject and blur required
    - River/waterfall 1-5 secs
    - Receding surf ½ sec; soft waves 15 sec
   - Clouds 30 sec

Low key/High Key

Low key lighting

- A low-key image is one that contains predominantly dark tones and colours
- Conveys atmosphere and mood which is usually dramatic and full of mystery
- Creates striking contrasts through reduced lighting where shadows are now the primary element of the composition
- Can work with colour but often better with mono

Simple studio set up

Black Seamless Background

Subject

Light
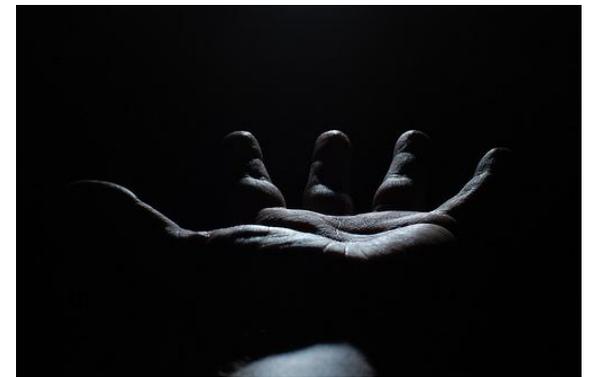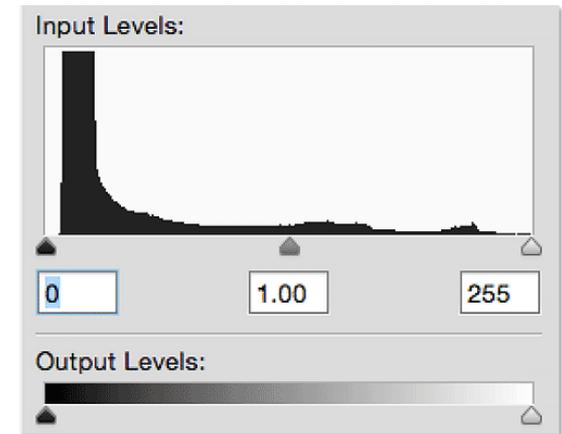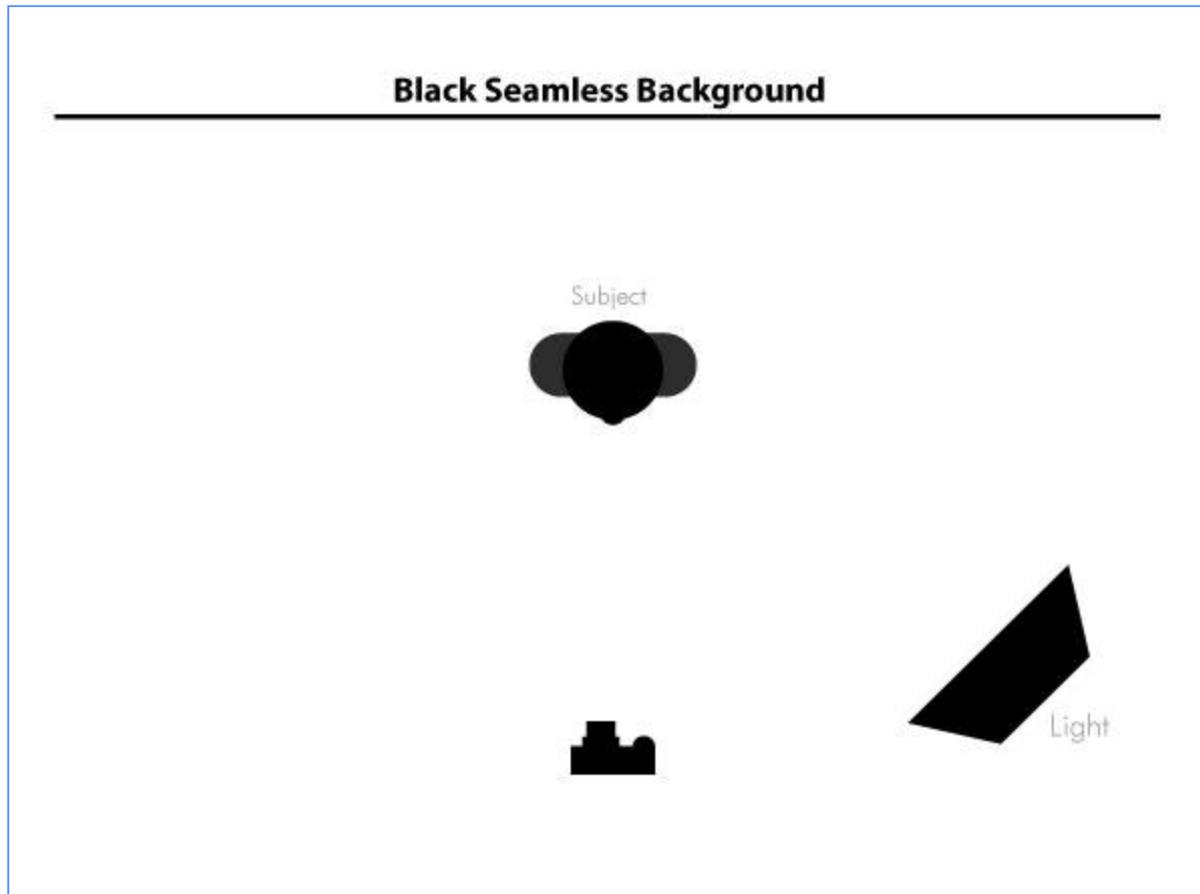
Could use flash instead – see fun with flash notes

Cheap approach

Dark Room

Wall

Door

Subject

Reflector

Light

Wall

Bright Room

And can also use for outdoor shots at night

Creating low key shots in post processing

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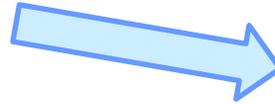© Linsey Wilt Photography for iHeartFaces.com
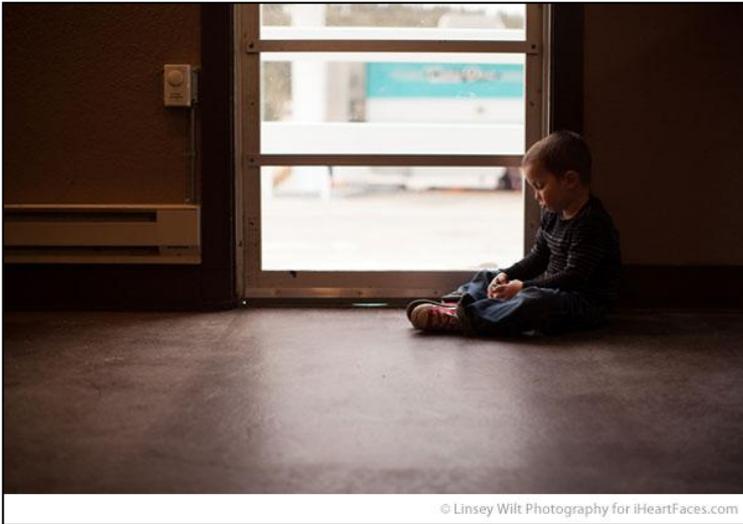
- Different ways
  - Convert to mono
    - Use levels with layer masks to adjust tonal values and contrast
    - Clone out light areas where necessary
  - Copy main image onto black background and paint back relevant areas
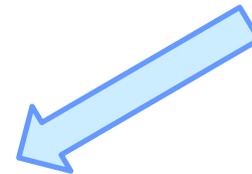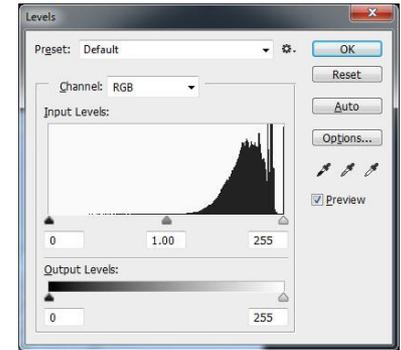
AN EXAMPLE

Raw file

Rotate/crop/Mono

Final image tidied

High key lighting

- A high key image is one that is mostly bright, with a range of light tones and whites and not very many blacks or mid-tones

- A high key image tends to be upbeat, optimistic or youthful

- Often also used with an added diffuse layer or less saturation to create a soft mood

- Can create in studio
- Or in post processing
  - □ Convert to mono or desaturate
  - □ Use levels and curves (where necessary in layers)
  - □ Add light Gaussian blur and/or reduce clarity/vibrance

Can also use high key for external images

Multiple Exposure

Multiple Exposure

- **Definition:**
  - Multiple exposure is a technique that combines two or more images into a single photograph.

Multiple Exposure

Andrew Prokos

Pro Grade Digital

Multiple Exposure

- **Techniques:**
  - In-Camera Method:
    - Many cameras now include a multiple exposure function allowing you to combine images directly in camera
    - Key Steps:
      - Select the number of images you want 2-10
      - Chose an overlay mode: average, lighten or darken
      - Each time you shoot an image it will be loaded on top of your previous image on the back display so you can see how your image is building up.

Multiple Exposure

- **Techniques Contd:**
  - Post Processing Method:
    - You take a series of images in your camera as normal.
    - Use post-processing software to combine the images together to achieve a final multiple exposure shot.
    - You will need to understand the process of layering images on top of one another as well as the use of opacity and blending modes to achieve the effect you want.

Multiple Exposure

- **Tips:**
  - Use a darker subject or scene as your base or first exposure.
  - For the second image use a background with lots of texture and colour.
  - Underexpose the images slightly so that when you combine them a properly exposed image is achieved.
  - Use a tripod – it will help keep your images from moving and produce a clearer result.
  - If you are creating a multiple exposure in post processing software try all of the different blend modes to see what you can create.
  - Have fun – experiment.

Light Painting

Light Painting

- **Definition:**
  - A photographic technique where a light source is used either in front of the camera or to one side during a long exposure slot.

- **Types:**
  - Shooting from a distance where you shine your light on the scene to light up the subject without the light being in the shot.
  - Light painting in front of the camera. This is more obvious and eye catching.

Light Painting

Digital Photography School

Behance

Light Painting

- **Tips:**
  - You need to set a long shutter speed so that you capture light over time.
  - Use of a tripod will stabilize the camera over a long exposure to prevent blurriness.
  - Use flashlights, glow sticks or any portable light to create your light patterns.
  - Choose a dark location to maximise the visibility of your light patterns. Shoot at night or a dimly lit area.
  - Experiment.

Light Painting

- **Techniques:**
  - ☐ Shoot in manual to set the shutter and aperture.
  - ☐ Think about your white balance setting when using artificial light – incandescent or tungsten are good settings to start off with.
  - ☐ Focus using auto then move to manual so that the focus stays as it is.
  - ☐ Basic settings:
    - ▪ ISO 100
    - ▪ Aperture F8
    - ▪ Shutter speed 30 seconds
    - ▪ Then review your image and adjust your light or movement accordingly

Intentional Camera Movement
(ICM)

ICM – Intentional Camera Movement

- **Definition:**

  - A creative photography technique that involves deliberately moving the camera during exposure to create abstract or impressionistic images.

- **Well-known photographers:**
  - Bill Ward
  - Shona Perkins.

ICM - Intentional Camera Movement

Franklin Arts

Digital Photography School

ICM – Techniques and Tips

- Some photographers use Shutter Priority others Manual.
- Use of filters allow you to use longer exposures especially in light conditions.
- Rain is good, as is: dusk, dawn and cloudy days.
- Go for subjects that have strong lines, colours and textures.
- Experiment using different speeds, directions and combination of movements to discover what works best for you.
- Camera movement techniques:
  - Wrist flick – curve the camera
  - Up and down as you go across
  - Zoom the lens
  - Use circular motions
  - Go from side to side.
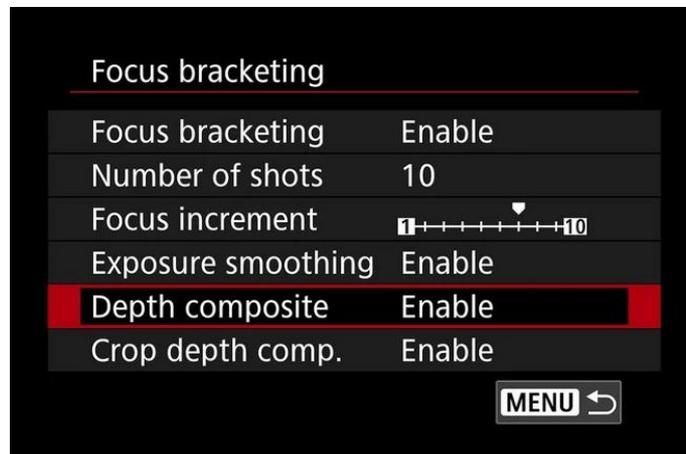
ICM – Camera Settings

- Be prepared to take lots of shots to find the one you like.
- Shutter Priority:
  - 1/20 of a second to ½ second. Some photographers go for 1 or even 2 seconds. You need to try out what suits your subject and weather conditions.
  - ISO 100.
  - Use a single point focus.
  - A1 Servo AF.
- Manual:
  - As above but set your aperture for between F11 to F16.
- Focus before pressing the shutter.
- Move the camera whilst holding the shutter button down.

Focus stacking

Focus Stacking

- Focus stacking software can be a very powerful tool for macro *
  - Camera takes multiple images with point of focus changing slightly for each exposure
  - The resultant images are then combined in the software to create a combined image with much greater depth of field on subject but still soft background
- Can either:
  - Mount camera on tripod and move focus point manually –works but tedious
  - Some newer cameras will take predetermined number of multiple shots automatically with focus changing slightly for each

Focus bracketing	
Focus bracketing	Enable
Number of shots	10
Focus increment	1 +++++++++ 10
Exposure smoothing	Enable
Depth composite	Enable
Crop depth comp.	Enable

MENU ↩

Some camera models will also now stack for you "in camera" e.g. Canon R7 and R5 mk 2

But can also improve DOF for landscapes giving maximum sharpness throughout image

Focus Stacking

- **Which settings?**
  - As much an art as science
  - How many shots?
    - Large object 3-6?
    - Smaller object at least 10-50
    - For best results or really small subjects potentially 100 or more
  - What focus intervals?
    - Some cameras will do this for you to some extent
    - More images in theory give greater precision but takes longer and more processing
  - What F stop
    - Maybe a couple of stops from maximum e.g. F 4/5.6 on F2.8 lens?
  - Depends on
    - Size of subject
    - Aperture on camera
    - Distance to subject
    - Subject static or moving

- **Experiment lots but be aware that memory cards and hard drives can fill up without careful management**

Focus stacking software

- Various stacking software available
- I use Helicon Focus
  - Not cheap (£97 - 202 for permanent licence)
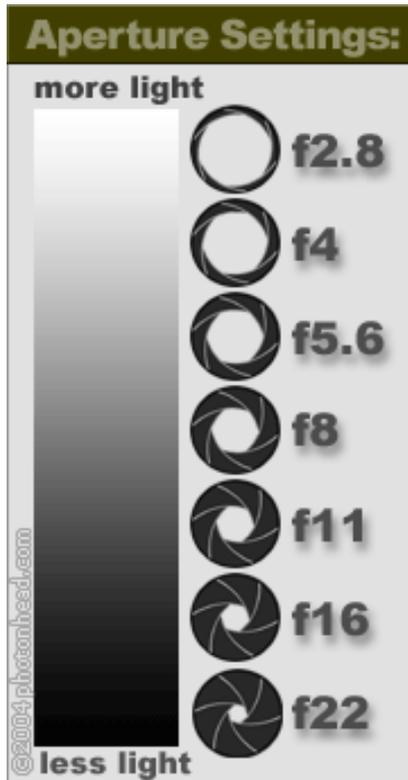- Also Photoshop; Zerene stacker; Affinity; and others?

Depth of field

Aperture

Aperture Settings:

more light

f2.8

f4

f5.6

f8

f11

f16

f22
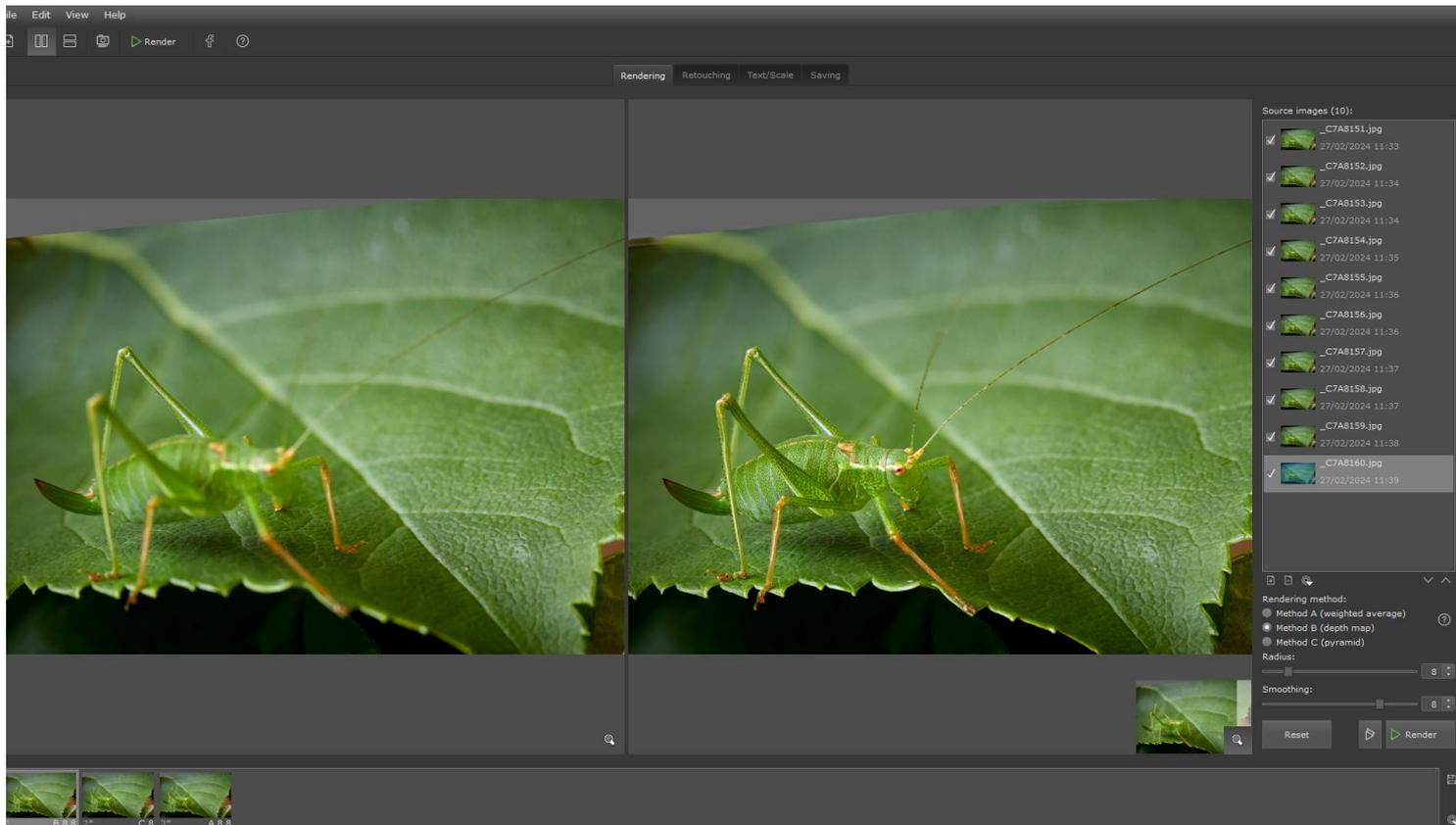
less light

← **Less DOF** **More DOF** →

f/1.0 f/1.4 f/2.0 f/2.8 f/4 f/5.6 f/8 f/11 f/16 f/22 f/32 f/45 f/64

↑

**Lower limit for most
zoom lenses**

- Aperture controls light entering camera
- But also controls depth of field

Creative use of dof

- Learn how use of DOF can help your image
- Shallow DOF to focus on main subject- can be off centre to improve composition
- Make sure that focus point is on main part of image e.g. eyes for portrait
- Large DOF for landscapes etc. but make sure there is foreground interest

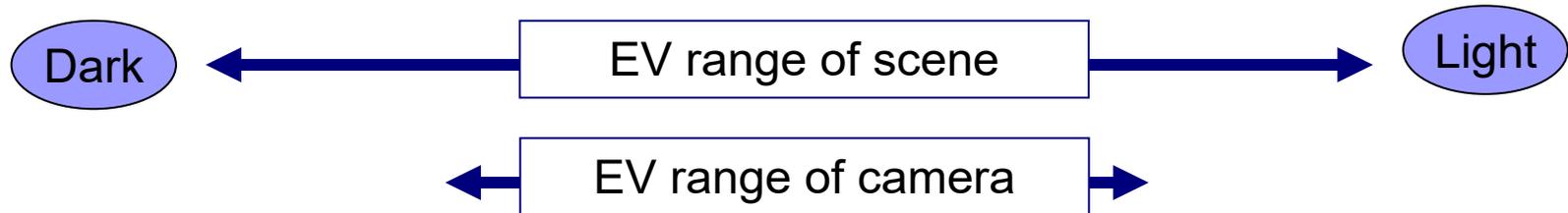# Creative use of DOF (differential focussing)

Bokeh

Bokeh

- Bokeh is the aesthetic appearance of out of focus lens blur, especially with bright lights
- Varies with lens; best with low F stop (1.8) and long lens
- Have light source behind, keep subject close and background far away

High dynamic range (HDR)

HDR - Why? – Exposure Range

| Dark | ← | EV range of scene | → | Light |

| ← | EV range of camera | → |

- All cameras including digital have finite exposure range between dark and light areas of the picture
- Measured as exposure value (EV) or "stops"
- If the scene you are trying to photograph is outside this range the camera cannot cope
- Commonly occurs e.g. with bright skies or inside buildings
- The result: The meter tries to work out an "average" exposure but can either blow highlights (pure white- no ink) or lose shadow detail (pure black)

High Exposure Range - Options

- Take in RAW and hope to recover detail later (highlights/shadows) to some extent
- Recompose
  - Check histogram (many cameras have highlight warning) and recompose picture to minimise EV range (e.g. avoid bright sky)
- Fill in flash- weddings/portraits in bright daylight
- Use graduated filters to balance exposure between dark and light areas- ideally needs tripod
- Bracket exposure and merge later (HDR)
  - Many cameras now allow auto exposure bracketing
  - And many software allows automatic merging
  - Or do manually using PS

HDR - Exposure Range
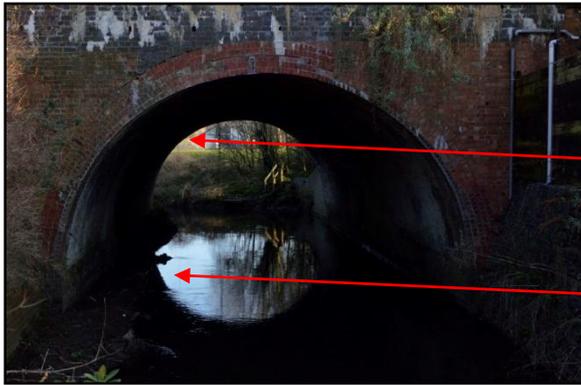
"Normal" photo

HDR – Exposure Range

3 Bracketed photos

2 stops under exposed   "Normal" photo   2 stops over exposed

Detail in burnt
out area
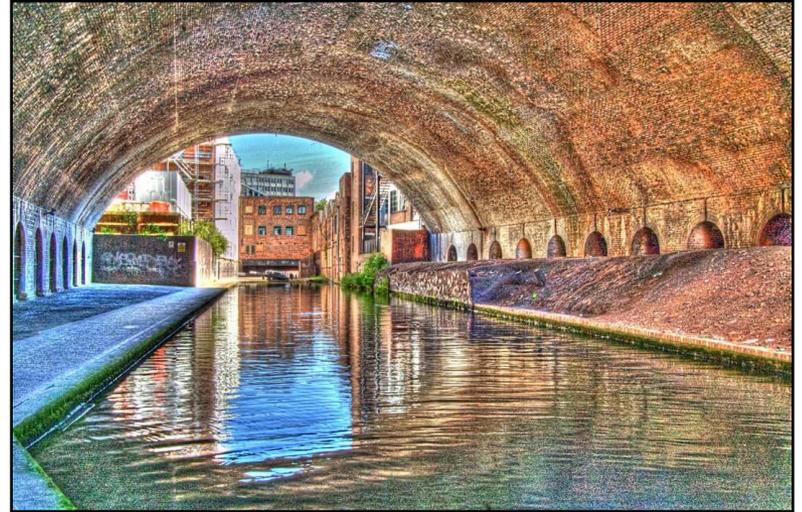
Detail in blocked
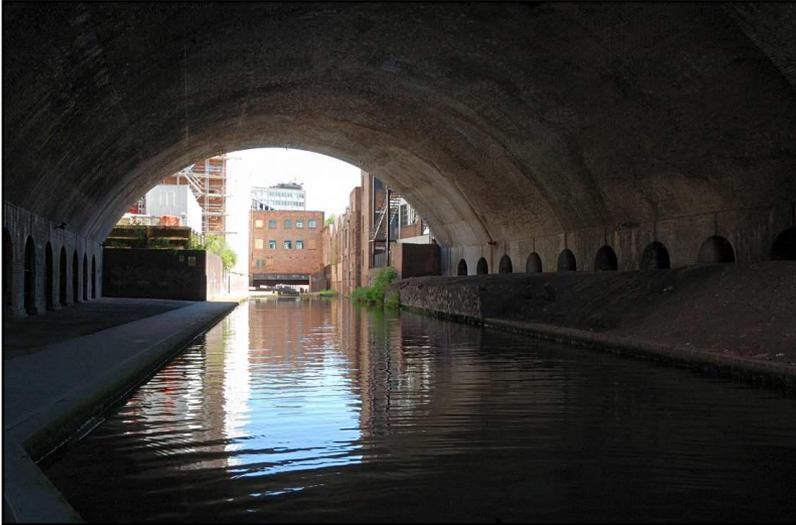out area

HDR – Final image

HDR – How much to bracket?

- In high contrast situations – bracket by 2 stops

- In low contrast, gloom, or mist – bracket by 1 stop or ½ stop

HDR – Surreal Results

- *There are lots of techniques to consider*

- *Choose a couple that could feature in the members evening on 22nd April*

- *Look at your camera to see how it could be used to support these techniques, and talk to others for help*

- *Look up on line references using the provided guide*

- *Another workshop scheduled for Monday 30 March*