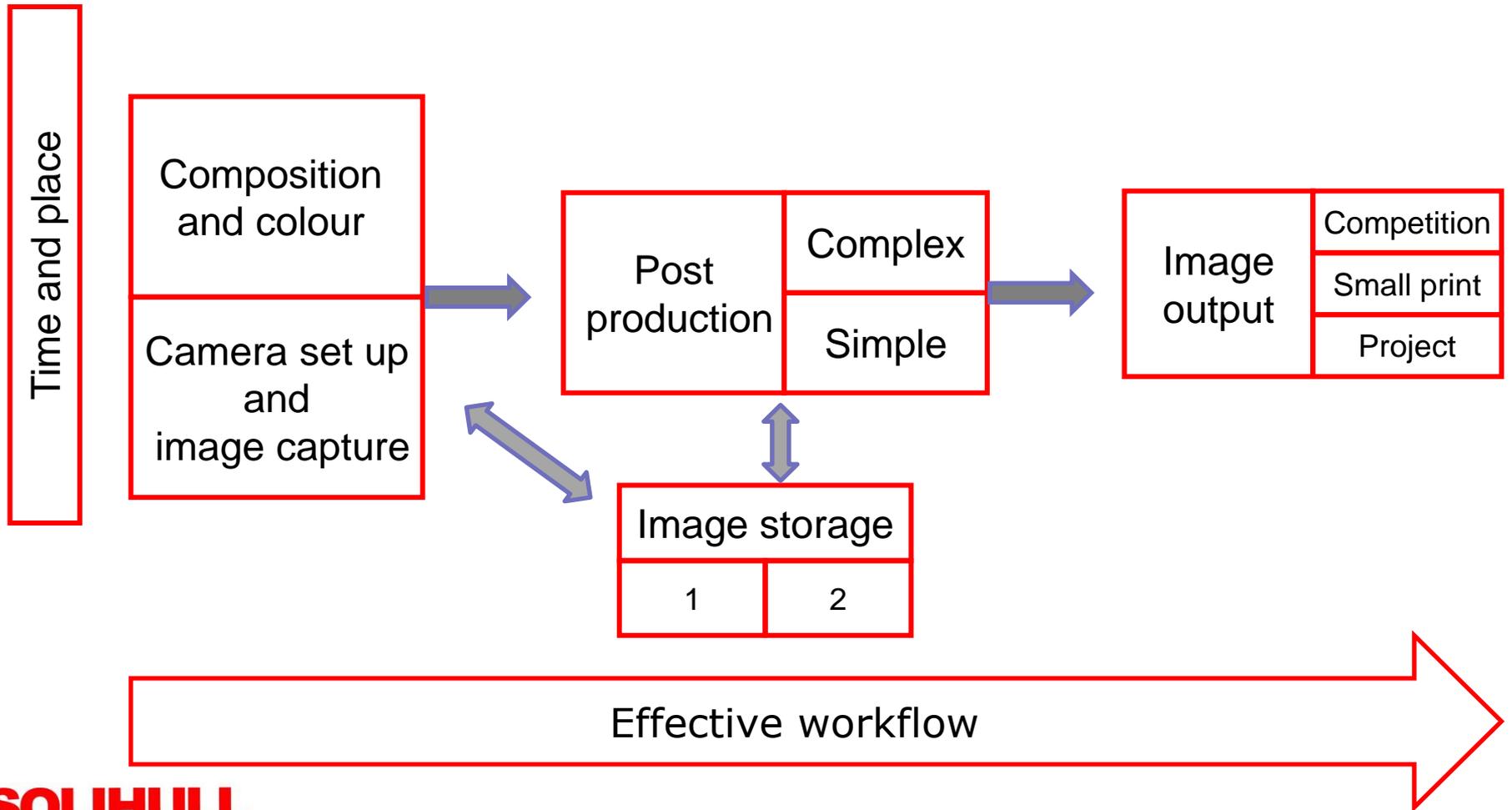


# Basic digital post production

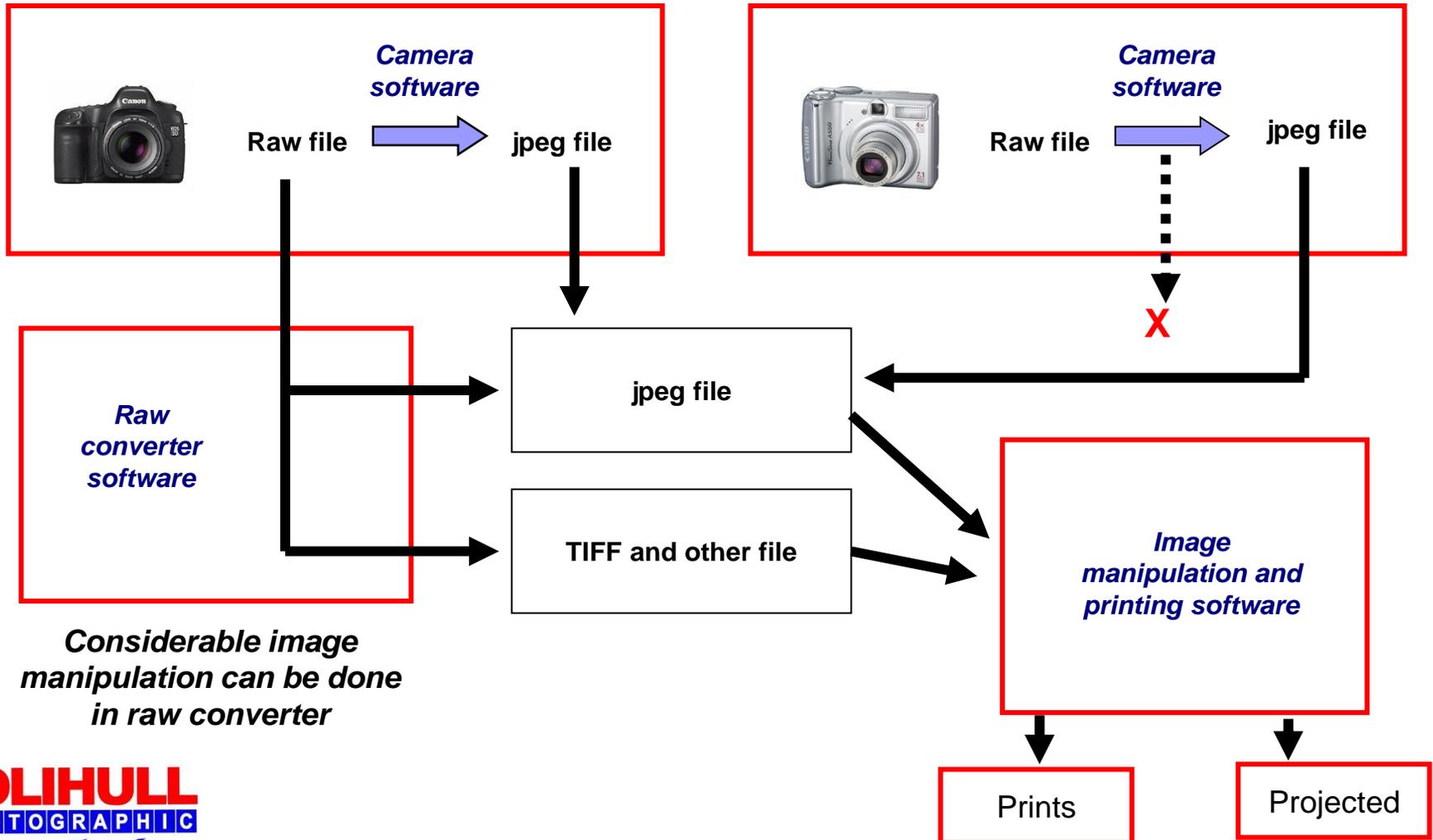
Bob Breach

# STAGES IN IMAGE CREATION



# FILE TYPES AND POST PRODUCTION

Camera software can be set up in different “styles” and file sizes



# IN- CAMERA JPEG ADJUSTMENT

For those that want to shoot jpegs:

- Many cameras allow you to define the way that the raw image is processed
  - E.g. Colour/saturation/sharpness etc.
- Sometimes called “styles” or equivalent
- Effectively you provide instructions to camera for internal processing of all jpegs
- Better cameras allow you to set different styles
  - i.e. raw processing instructions for different types of image



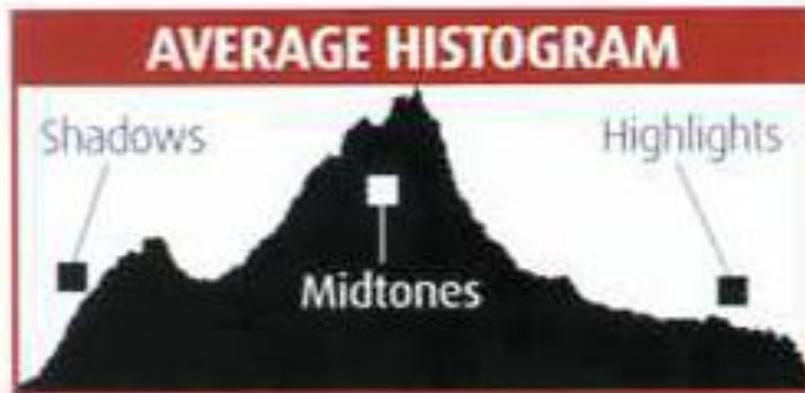
But much better to  
control each image  
the way you want to

# BASICS OF POST PRODUCTION

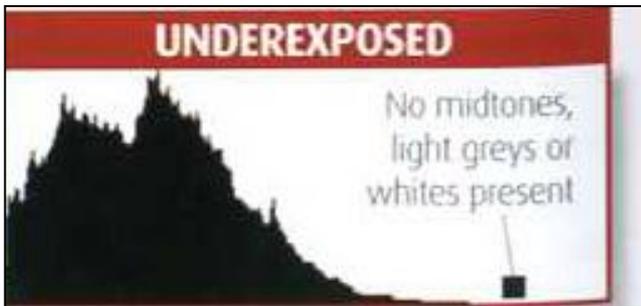
- Can use either raw or jpeg files, but raw better:
  - Specialist raw converter e.g. Capture one, Nikon NX, Lightroom
  - Adobe Elements or CS (more recent versions include raw converter)
- Develop your own workflow so it becomes second nature
  - Same basic approach for all images
  - But may have some differences depending on type of output required
- Key to managing digital images is understanding the histogram- a graph showing distribution of pixels from pure black to pure white

# CHECKING THE HISTOGRAM

- The histogram is your friend
- Shows distribution of light and dark pixels
- Use whilst making post production changes



# USING THE HISTOGRAM



*Note that sometimes you may wish to have pure blacks e.g. silhouette*



*The "ideal" exposure*

*Note that sometimes you may wish to have pure white e.g. high key*



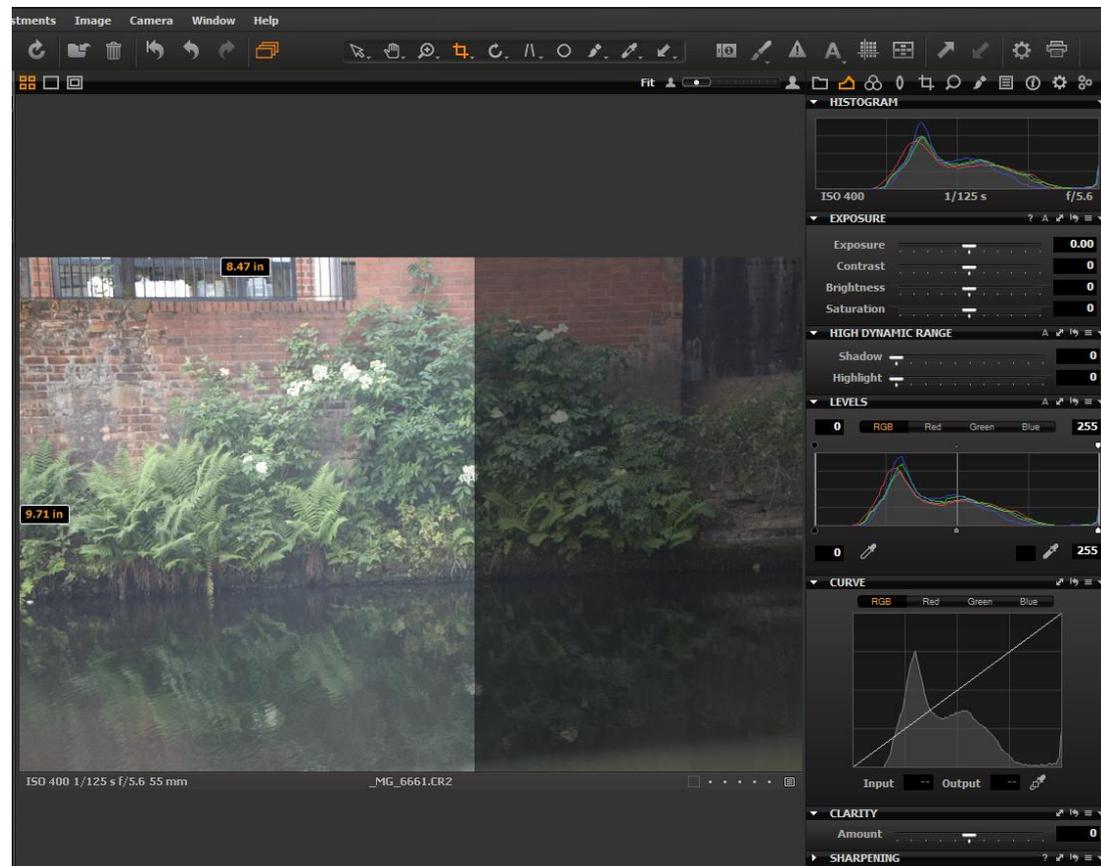
# TYPICAL POST PRODUCTION SEQUENCE

- Varies depending on:
  - whether raw or jpeg
  - personal preference
- Can use various software but tools and availability vary
- Typical approach
  1. Crop and straighten image
  2. Adjust
    1. Exposure, contrast, brightness/saturation
    2. Adjust clarity/vibrance etc.
  3. Use levels and curves if necessary
  4. Adjust highlights/shadows (raw tool or PS dodge/burn)
  5. Adjust colour temp/colour tone (mono conversion if required)
  6. Minor cloning/spot removal
  7. Sharpening/image output

Using raw

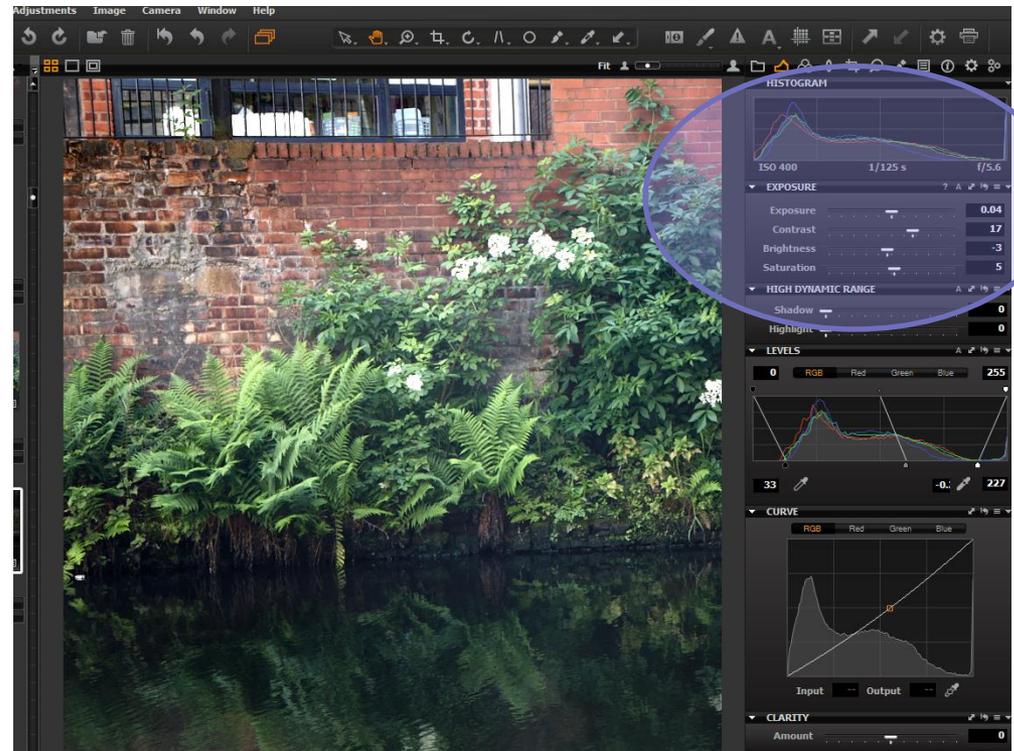
# STAGE 1

- Crop and straighten image
- Improves composition- e.g. rule of thirds
- But the smaller the crop the less pixels



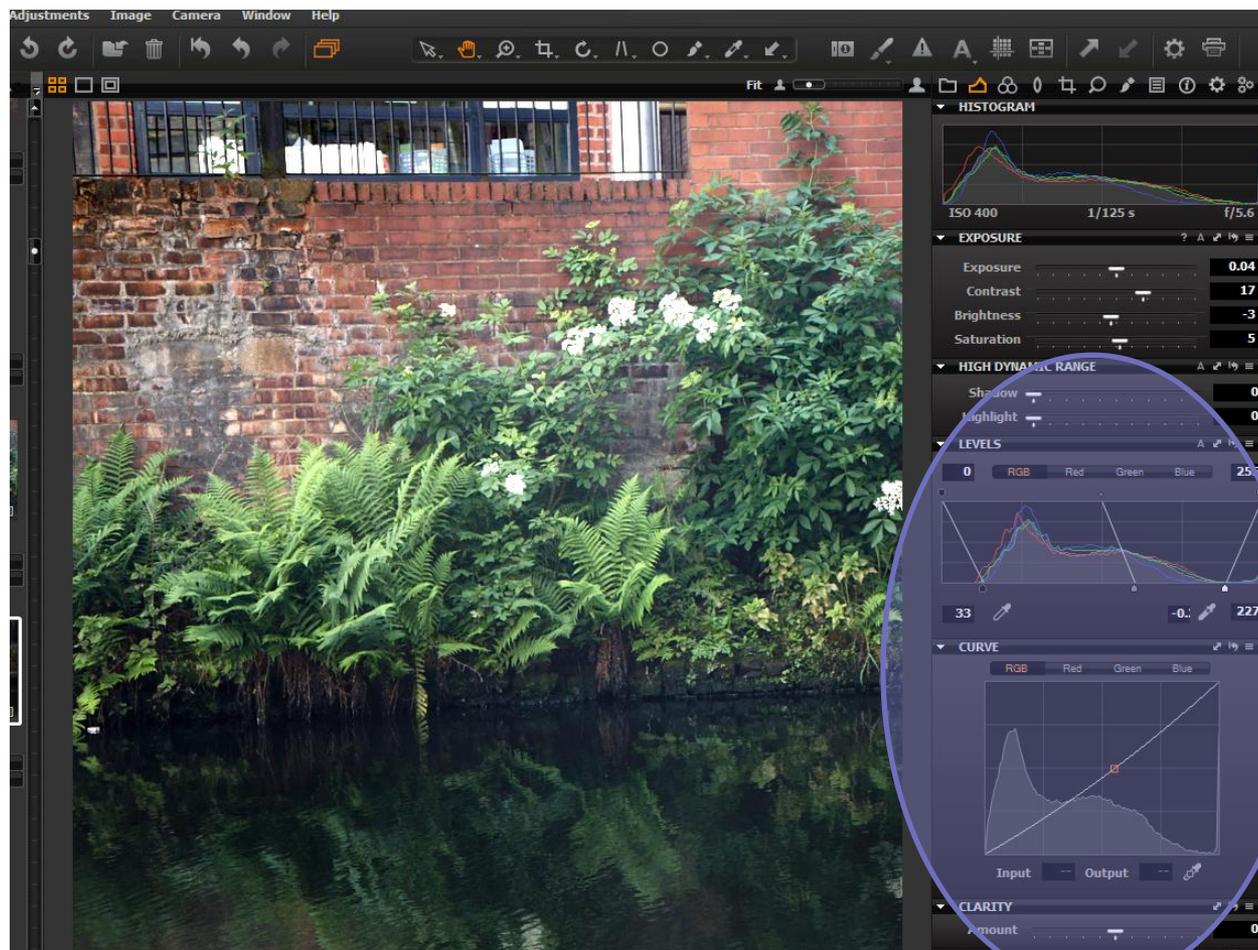
# STAGE 2

- Correct image basics - affects whole image
  - Exposure
  - Contrast
  - Brightness
  - Saturation
- Also in raw
  - Vibrance/clarity
- Always use sliders with care



# STAGE 3

- Levels and curves
- Allows some selective adjustment of different parts of the histogram
- Can add punch or change mid tones



# POST CAPTURE RAW LEVELS ADJUSTMENT

Using the Levels Tool



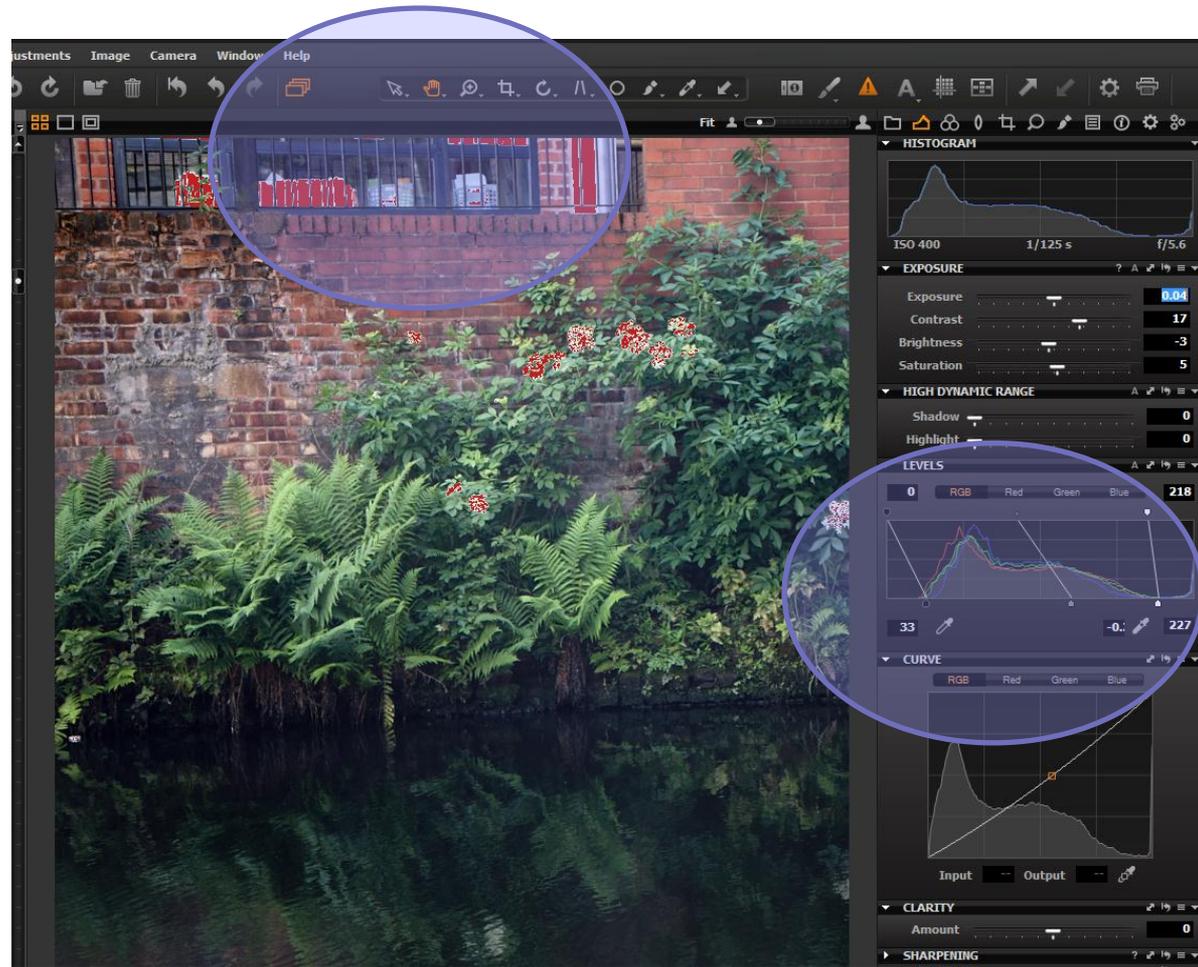
The left image is straight out of the camera and shows both lens flare and some degree of underexposure. The right image is after correction in the Levels Tool.

**Before**

**After**

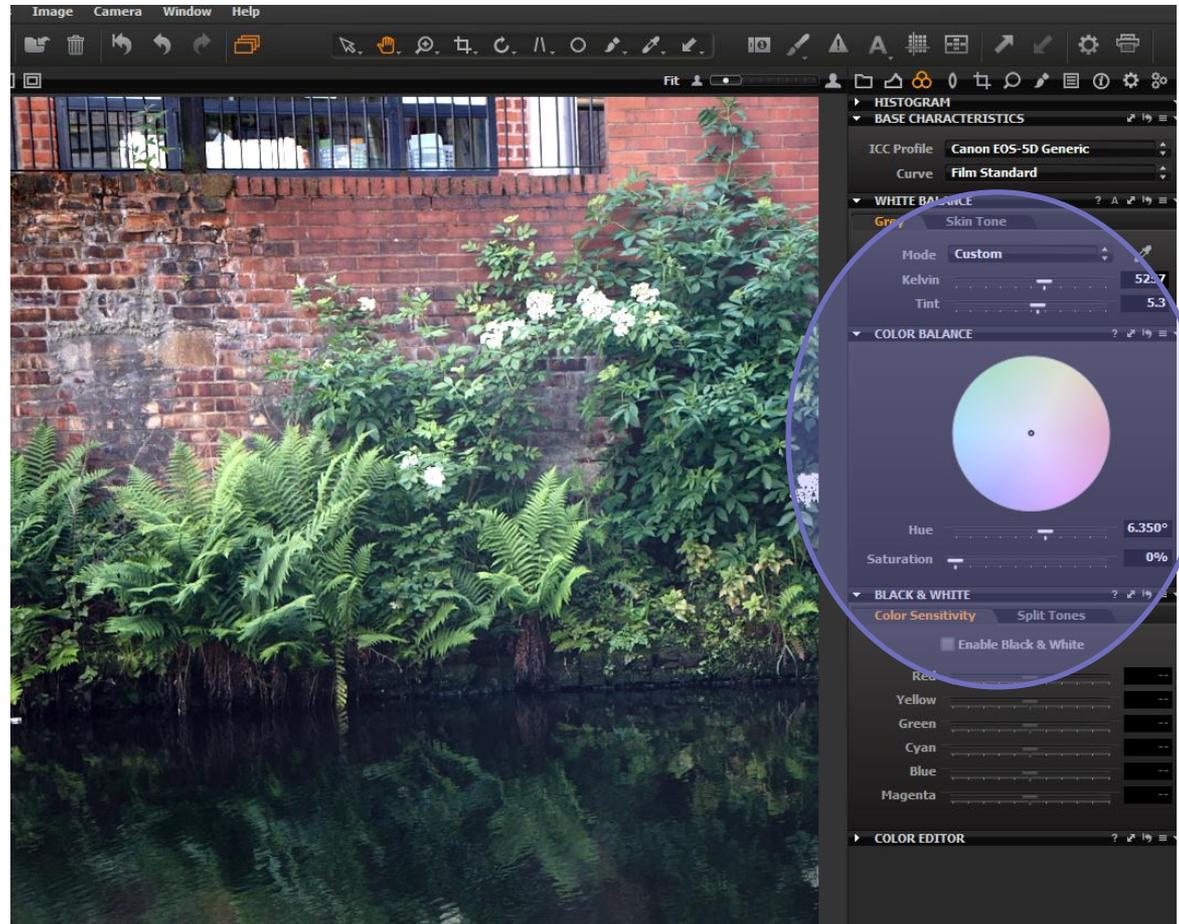
# STAGE 4

- Highlights and shadows
  - Tone down bright parts of image
  - Bring out shadow detail
- Can do best in raw using sliders
- Use highlight warning
- But also dodge/burn in PS



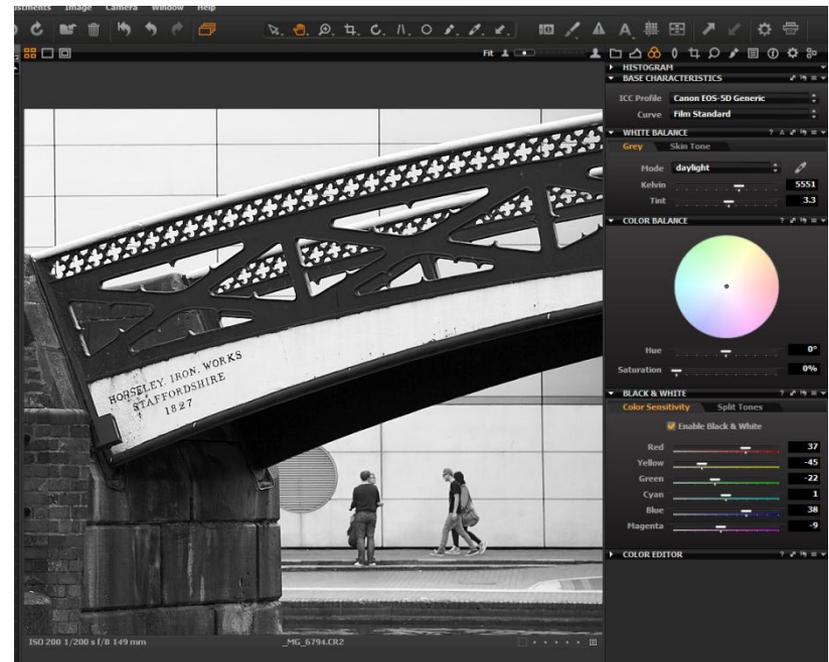
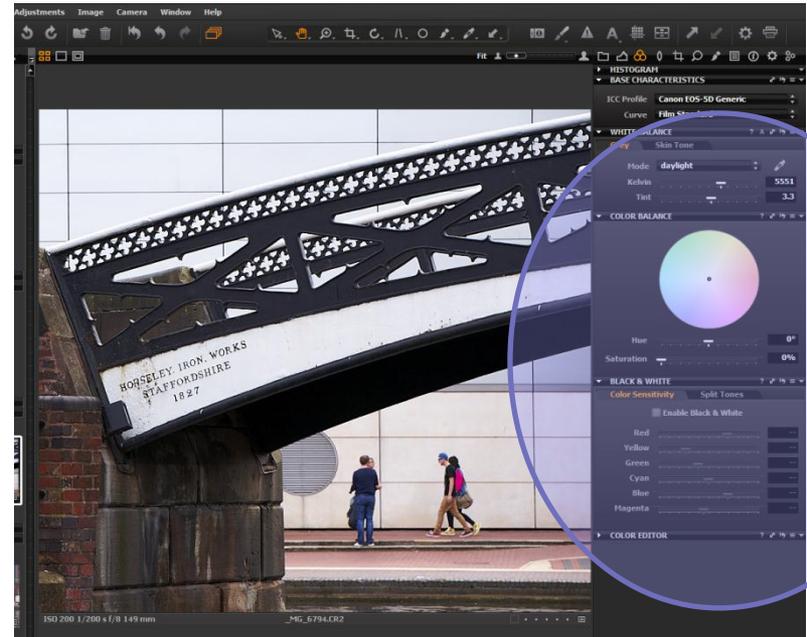
# STAGE 5

- Adjust colour temp or tone
- Can alter mood or time of day



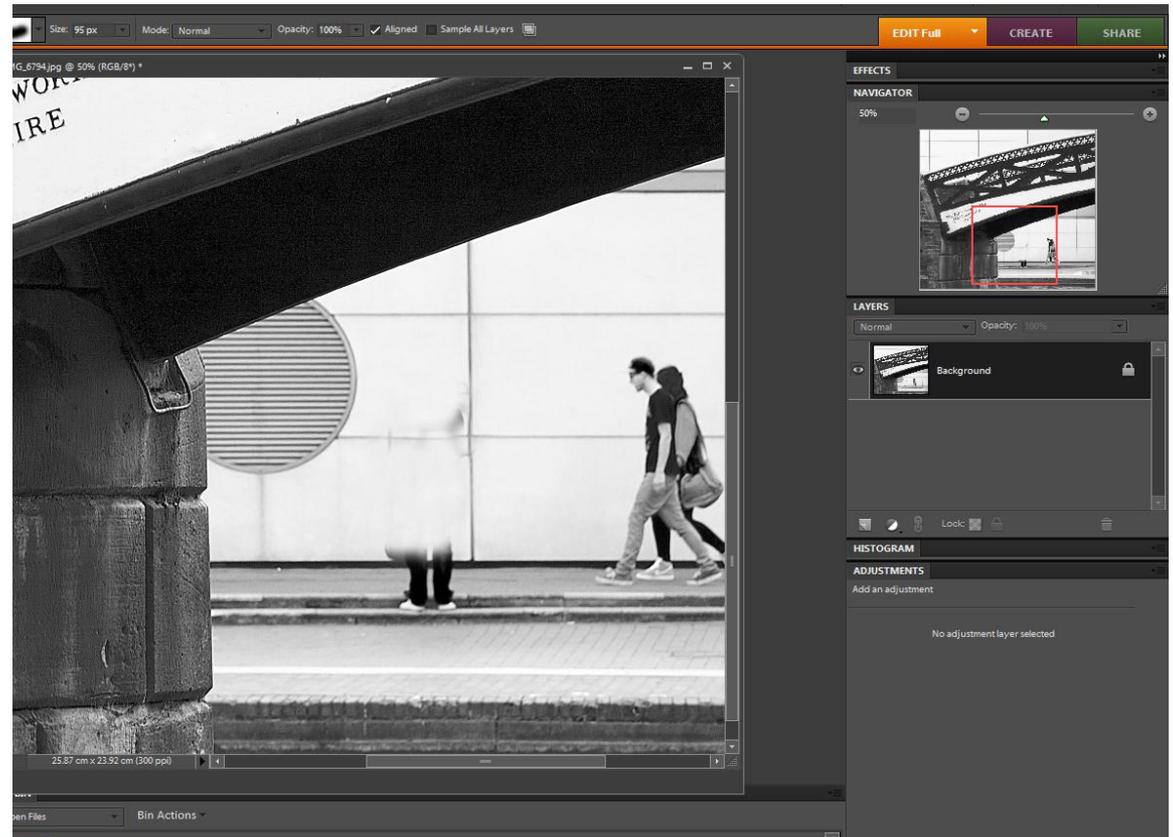
# STAGE 5a

- Mono option
- Depending on programme can adjust different colour channels to vary grey tones



# STAGE 6

- Minor cloning or spot removal
- Use clone tool or healing brush in PS
- Or some raw converters



*Remove distracting elements*

# IMAGE OUTPUT

- Can take a variety of forms
- For example
  - Snapshot prints
  - Large prints
  - Slide shows for use on TV, computer, projector
  - Web
- Each output format has different requirements
  - Lower quality JPEG fine for slides, web or 6x4 prints
  - Higher quality JPEG OR tiff for bigger prints
- Raw can be converted into various outputs from same raw file

# TIFF v JPEG

## ■ TIFF

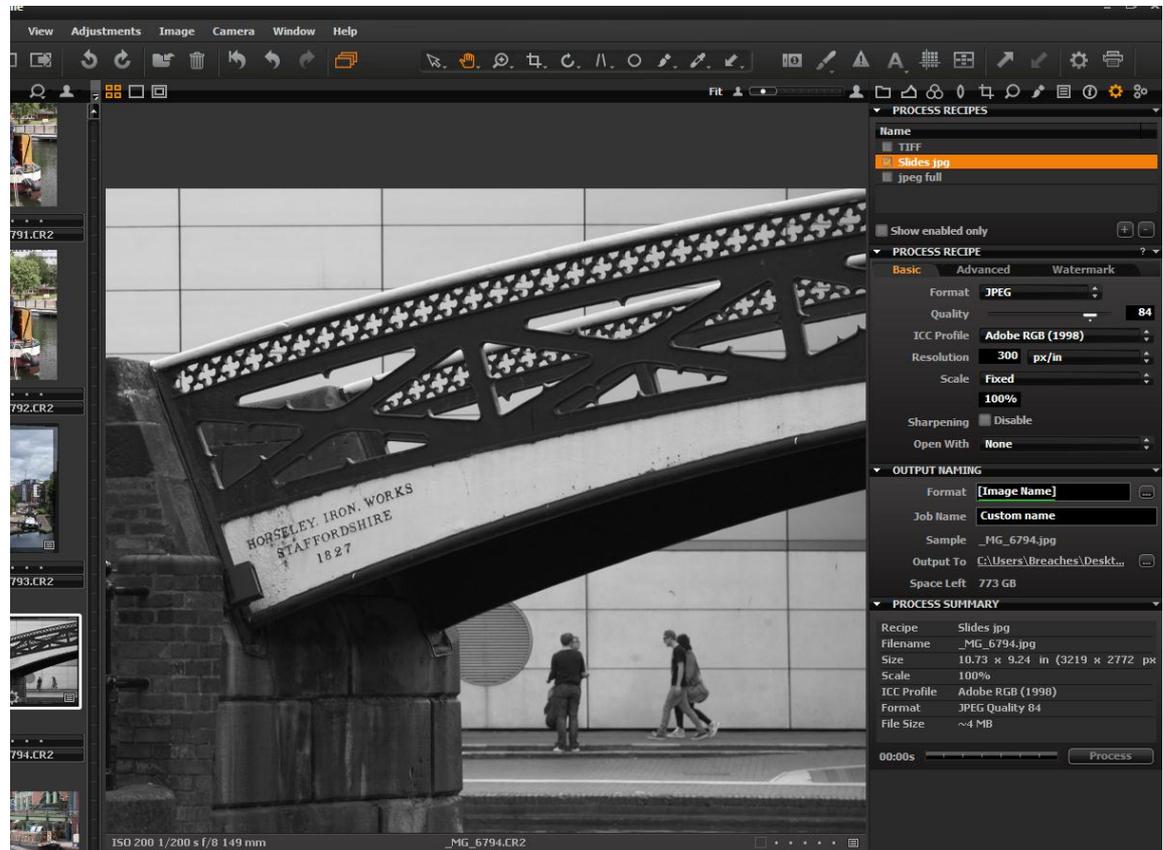
- Better quality with no image degradation
- Larger files
- Choice of 8bit or 16 bit
  - 16 bit much better (65000 grey tones compared to 256)
  - Not all Photoshop filters work with full 16bit TIFF
- Ideal for
  - larger quality prints
  - competitions or commercial purposes
  - Where lots of adjustment planned

## ■ JPEG

- Smaller file size which can be varied
- Quality degrades the more manipulation takes place
- Ideal for
  - Smaller prints
  - Web
  - Slide shows

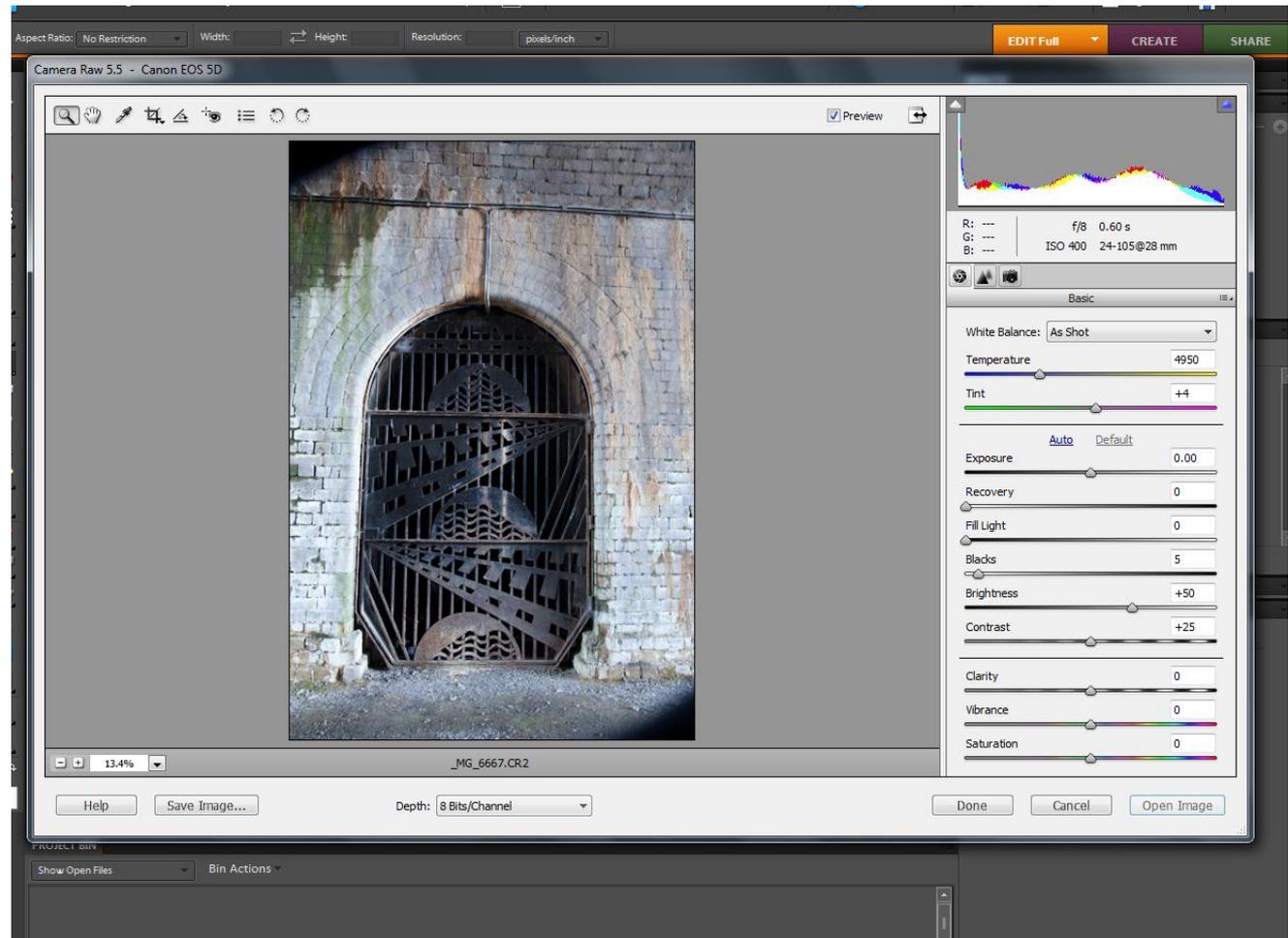
# OUTPUT FROM SPECIALIST RAW

- Lots of options
- Jpeg, Tiff
- Specify locations etc.



# OUTPUT FROM PS ELEMENTS RAW

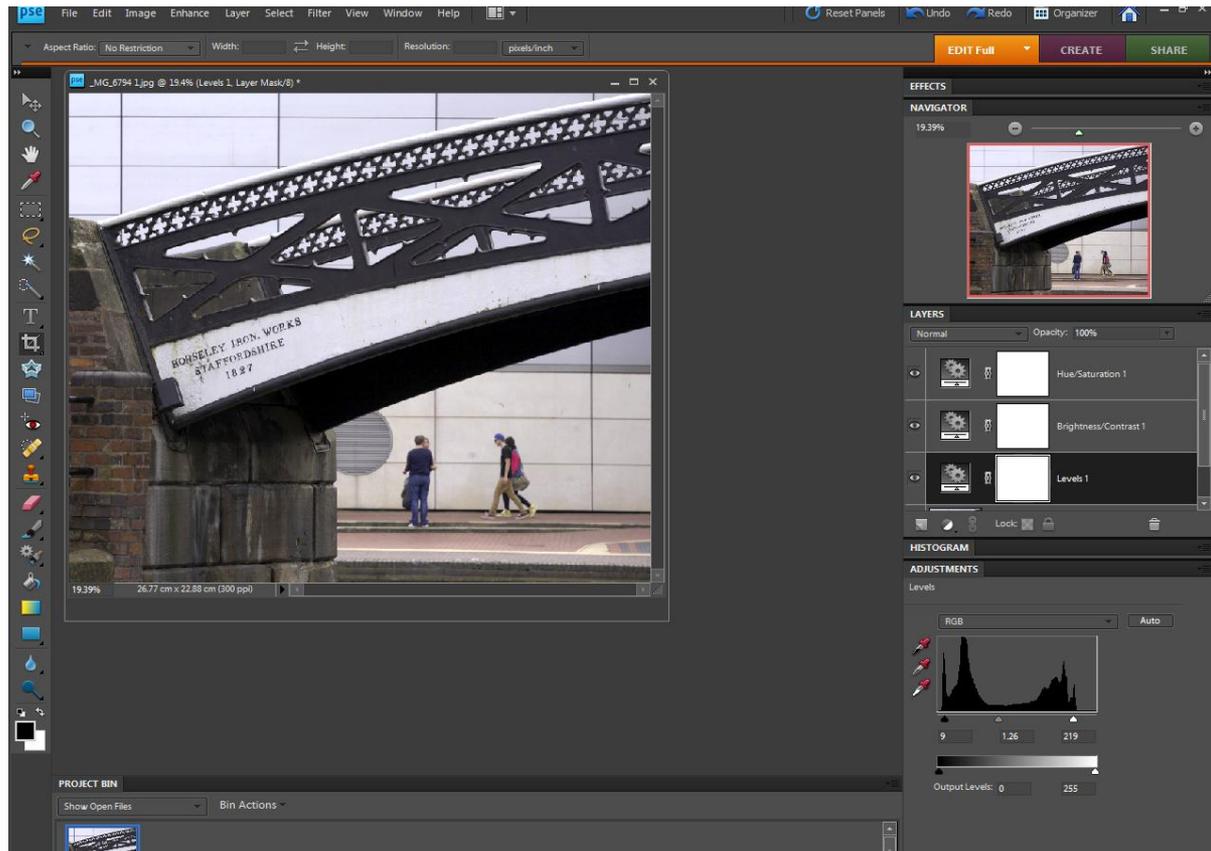
- When finished raw conversion press open image
- Save as whatever format needed after further adjustments
- Can also save as DNG file



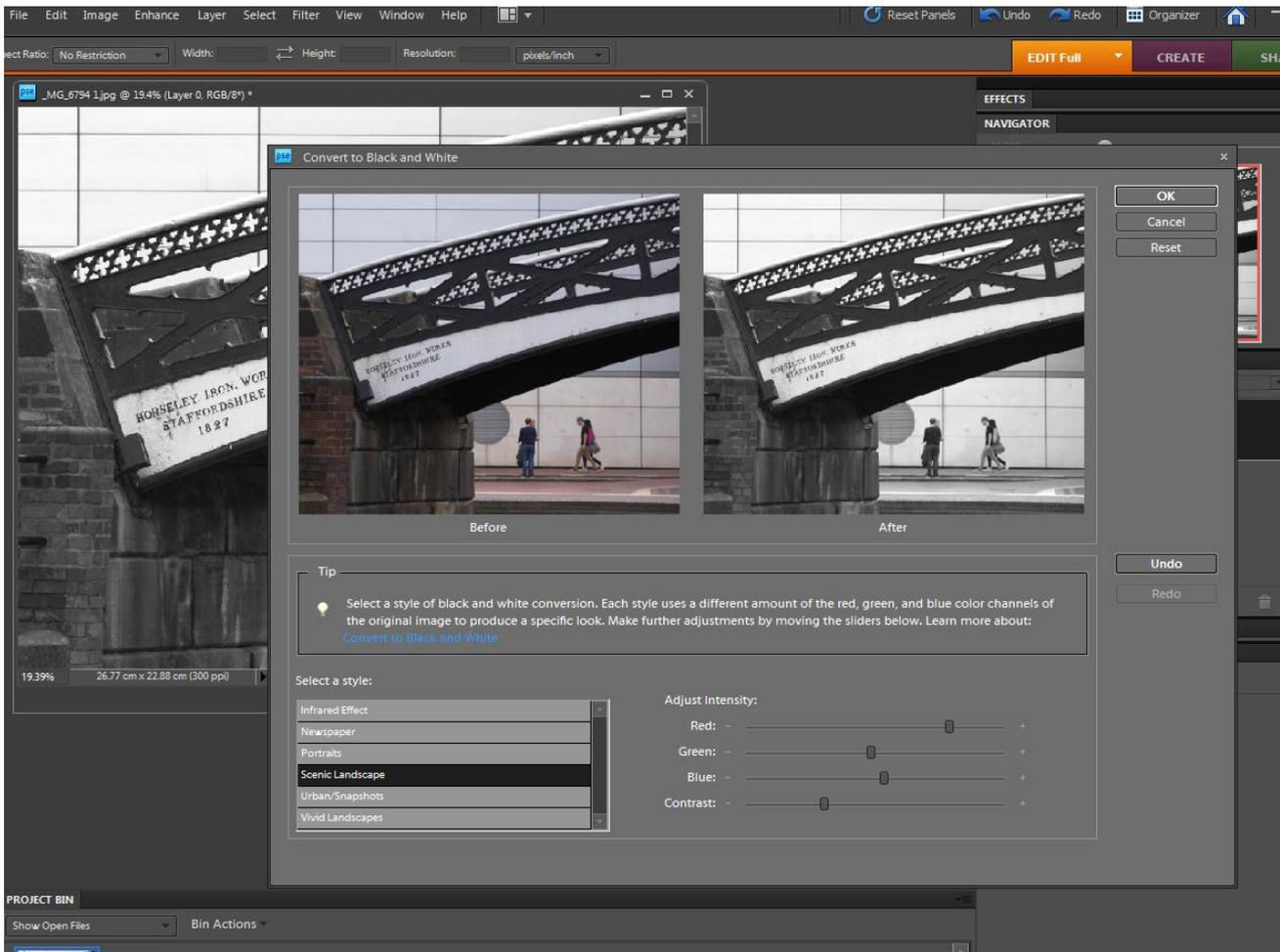
Using jpeg

# BASIC CORRECTIONS IN JPEG

- Same principles
- Tools
  - In different places
  - Often not as good as raw



# MONO CONVERSION



# Prints and slides

# PRINTING AND SLIDES

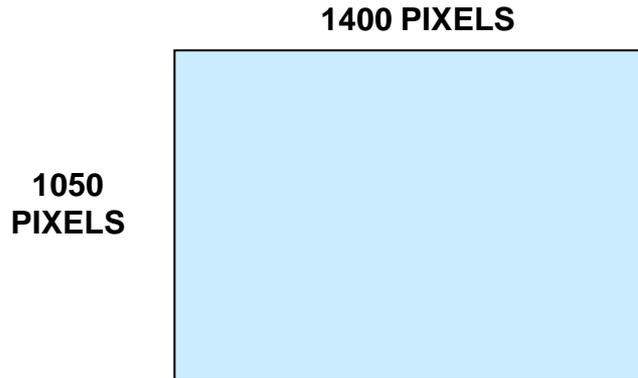
## ■ Printing

- Getting high quality print can be complex
- Need to optimise file size to print size – interpolation

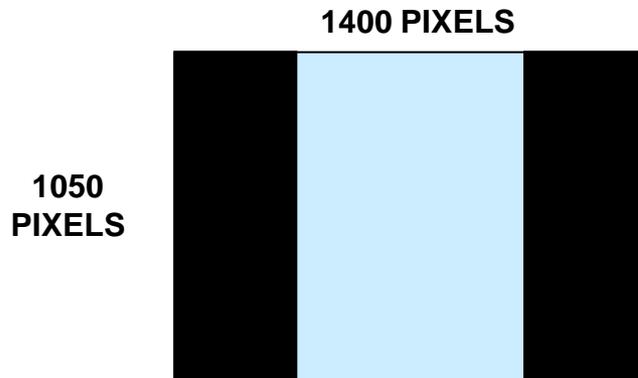
## ■ Slides for projection or TV

- Adjust image size ratio and pixels to output medium
- Most LCD HDTVs now 16/9 (1366x768 pixels)
- Society projector 4/3 (1400x 1024 pixels)
- Set suitable (black?) background if image does not fit available space

# PIXELS FOR PROJECTION (4x3 SCREEN)



- Full frame images
  - Image/image size/pixel dimensions



- Cropped images
  - Set background to black
  - Set image size as above using maximum dimension first eg 768 for portrait
  - Image/canvas size/size/pixel dimensions



NOW IT'S YOUR TURN