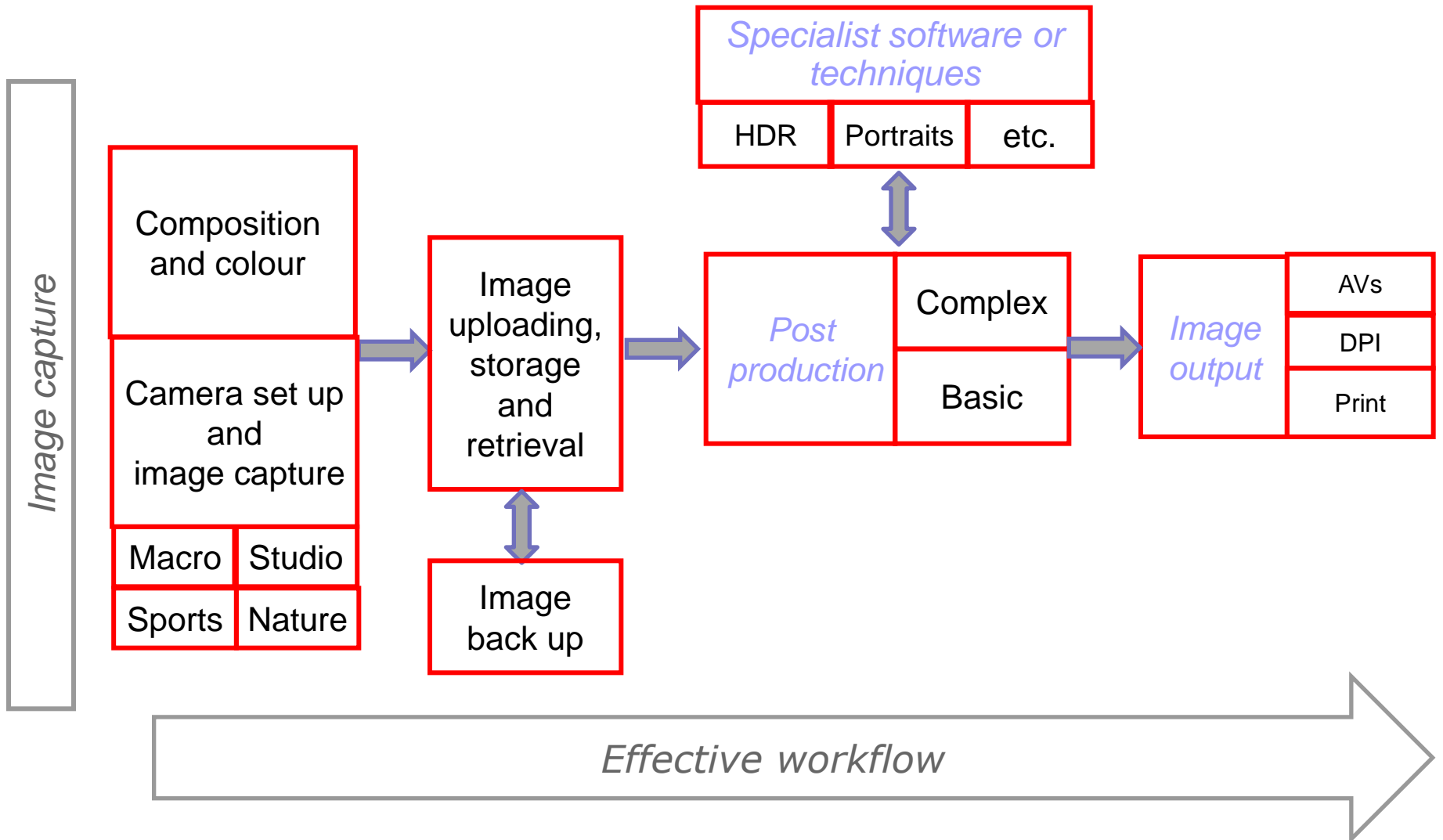


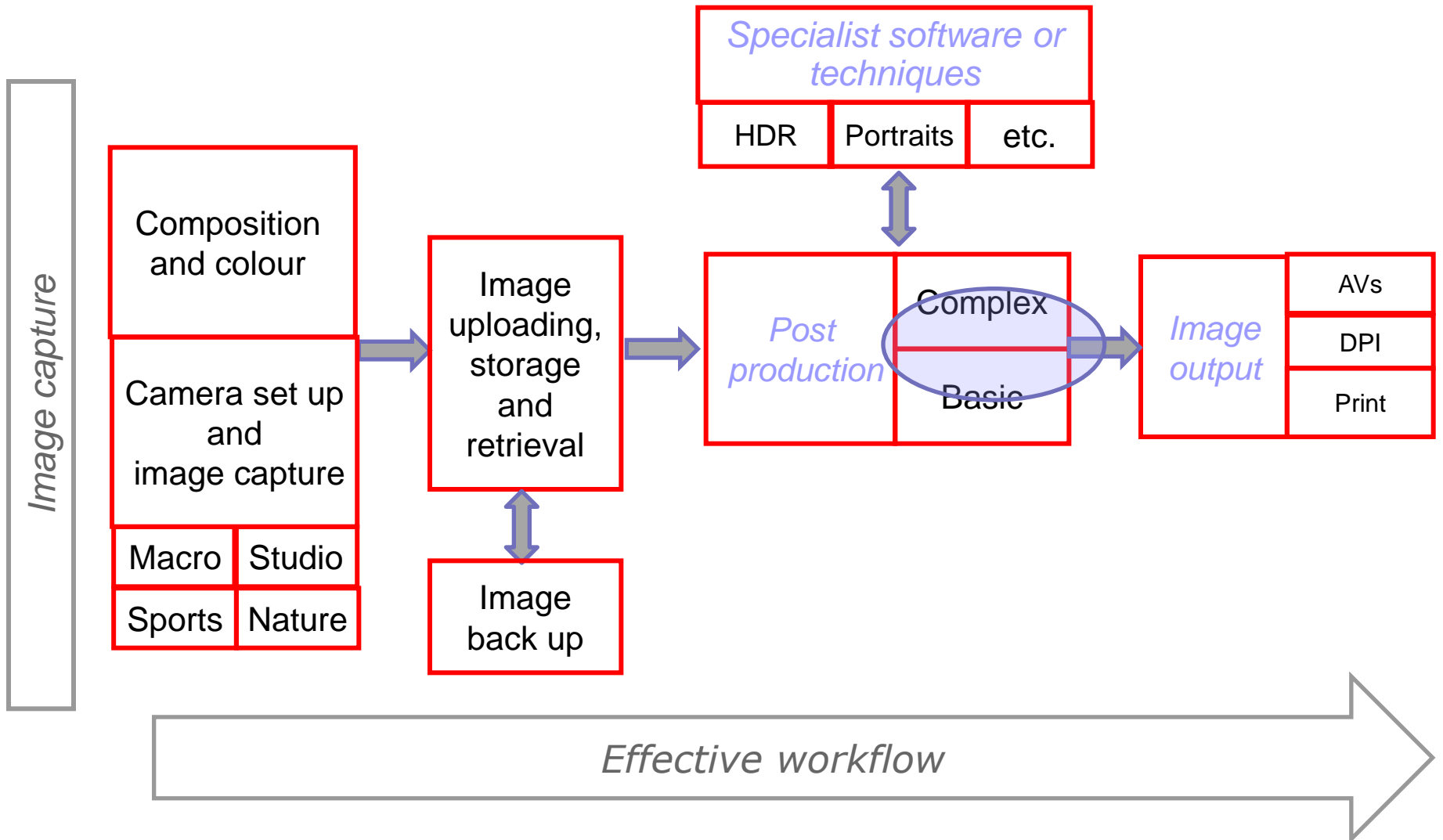
# **SIMPLE IMAGE MANIPULATION USING PS ELEMENTS (OR CS)**

Bob Breach

# STAGES IN IMAGE CREATION



# STAGES IN IMAGE CREATION



# FORMAT FOR THIS EVENING

- Presentation covering:
- Update on basic image correction
- Additional simple image manipulation
  - Highlights and shadows
  - Cloning and spot removal
  - Layers
  - Filters
- *Plenty of time for discussion and problem solving*

The presentation will focus on PS Elements 8 but the principles are the same for other PS software

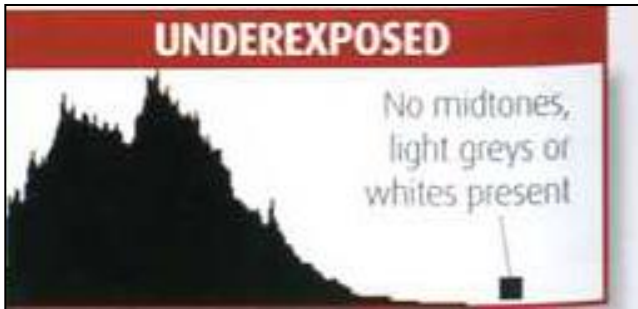


# Basic image correction

# 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 (most 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
- A key of managing digital images is understanding the histogram- a graph showing distribution of pixels from pure black to pure white

# 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 exposure, contrast, brightness, saturation, clarity/vibrance etc.
  3. Use levels and curves if necessary
  4. Adjust highlights/shadows #
  5. Adjust colour temp/colour tone # (mono conversion if required)
  6. Minor cloning/spot removal
  7. Other adjustments using layers/filters if required
  8. Sharpening/image output

*# in raw only*



# TYPICAL POST PRODUCTION SEQUENCE

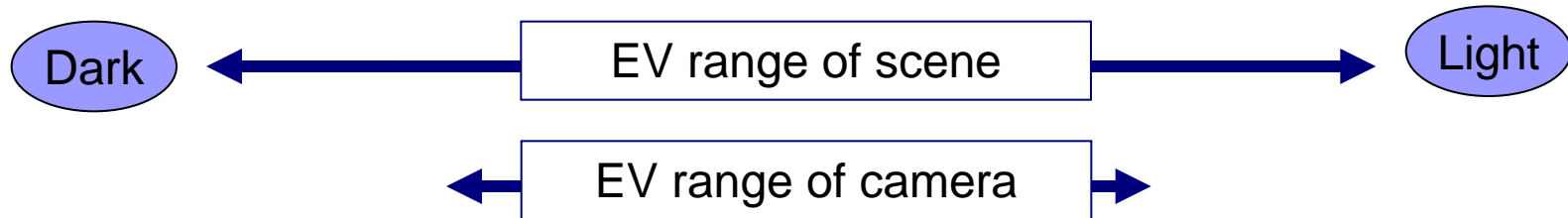
- Varies depending on:
  - whether raw or jpeg
  - personal preference
- Can use various software but tools and availability vary
- Typical approach
  1. Crop and straighten image
  2. Adjust exposure, contrast, brightness, saturation, clarity/vibrance etc.
  3. Use levels and curves if necessary
  4.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

**Note: For most image manipulation software there are various ways to achieve the same effect. Decide which works best for you and practice**



Highlights and shadows

# WHAT IS THE PROBLEM?



- 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: meter tries to work out an “average” exposure but can either blow highlights (pure white- no ink) or lose shadow detail (pure black)

# DYNAMIC RANGE

***Dynamic Range***- the range of brightness that can be faithfully recorded

**Dynamic Ranges of Common Devices**

Device	Stops	Contrast
Computer LCD	9.5	700:1
DSLR camera (Canon EOS-1D Mark II)	11 <sup>[4]</sup>	2048:1
Print film	7 <sup>[4]</sup>	128:1
Human eye	10–14 <sup>[5]</sup>	1024:1 – 16384:1

*Note : Lower end digital cameras will have lower EV range*

# WHAT CAN BE DONE ABOUT THIS AT RAW CONVERSION STAGE ?

- Check for highlights/loss of shadow details using warning tool
- Use recovery tools to reduce highlights and bring out shadow detail
- Can use raw conversion to produce bracketed images post capture for HDR programs
- Some raw software now has local adjustments or layers. Use to make local adjustments of various parameters
  - Capture one
  - Nikon FX
  - Lightroom

# WHAT CAN BE DONE ABOUT THIS AT POST PRODUCTION STAGE?

- Layer masks
  - Open images with different exposures and blend together by use of layer masks and brush/eraser tool
- Layer blending
  - A tool within PS-CS that blends 2 images together to increase tonal range
- Digital grads
  - Effectively reproduces the effect of a grad filter
- Dodge and burn
- Image merge (HDR) - Later versions of PS elements (8+) and CS (2+)

Most sophisticated control through use of specialist HDR software



Other simple image  
adjustments

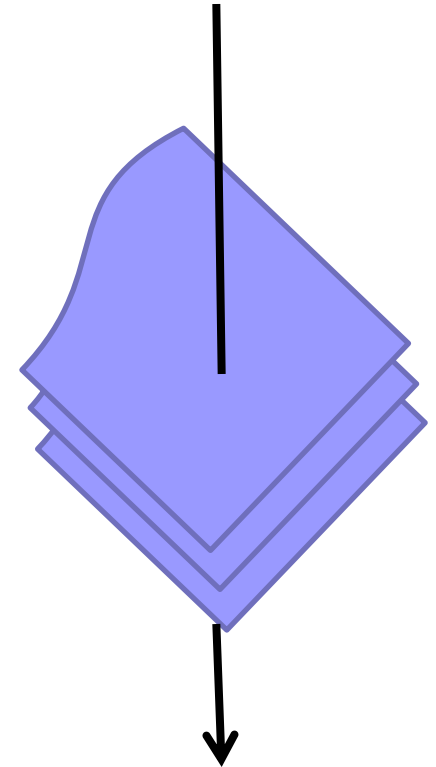
# OTHER SIMPLE IMAGE ADJUSTMENTS

- Using layers and layer masks to:
  - Clone out distracting elements
  - Selectively adjust parts of image
  - David Eaves workshop notes set out a range of other more complex things that can be done



# HOW DO PS LAYERS WORK

- Imagine a series of clear acetate sheets stacked on top of each other
- As you look down through the stack the images on each sheet “add together” to form the overall image
- To adjust the overall image you can
  - Add or remove layers
  - Put masks over some layers so only certain parts of the image can be seen
- At the end the sheets can be combined together to form a final image

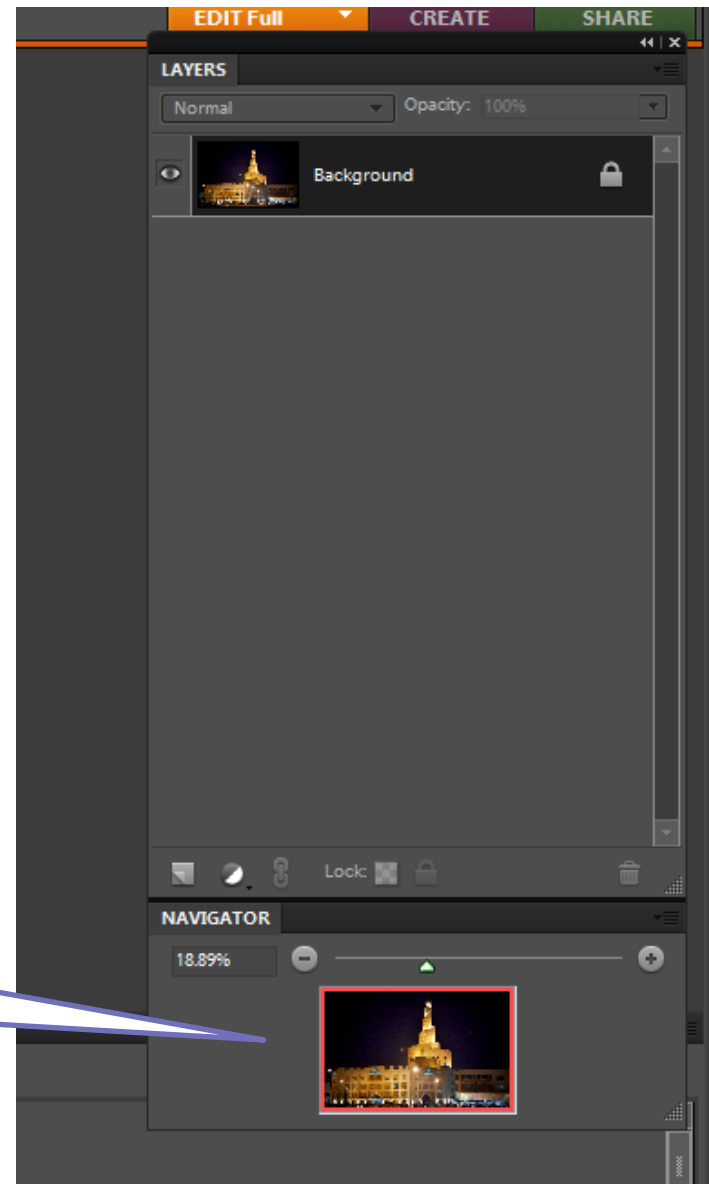


# LAYER TIPS

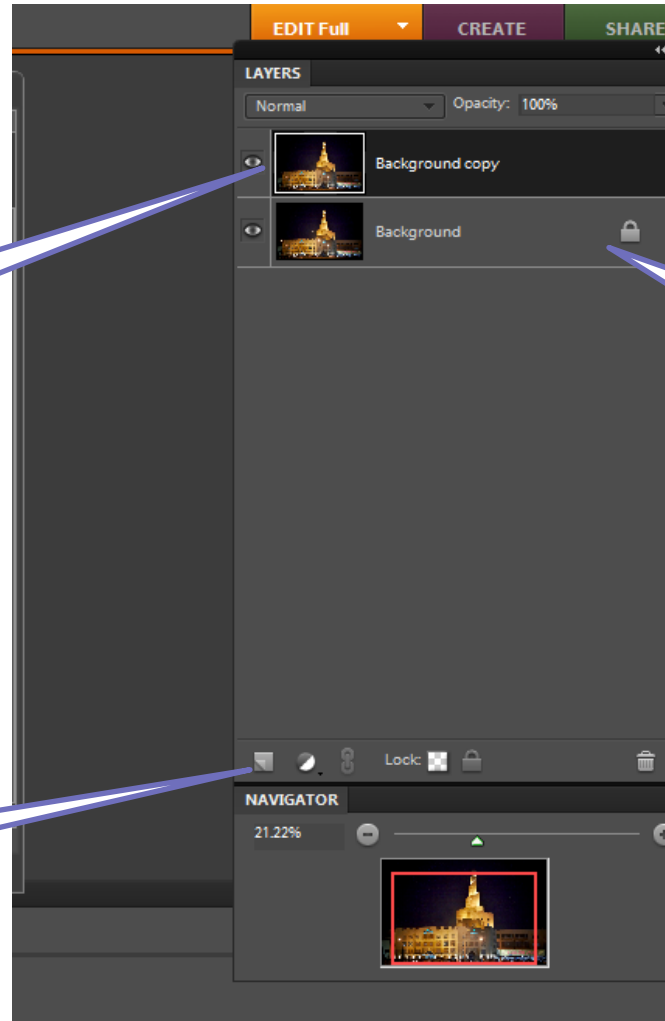
- Easiest to move around image and expand/contract using “navigator” tab
- Carry out any adjustment
  - On new layer not on “background”
  - For multiple adjustments or complex cloning use separate layers
  - In both cases easier to go back one stage if mistake rather than losing all corrections
- Can save work in progress on image (including layers) but only as large PSD file
- Only when happy with final image should you “flatten” image and save for final output as TIFF or JPEG file

# THE NAVIGATOR TAB

Use slider or +/-  
keys to expand  
image. Move red  
square to  
navigate around  
image



# USING LAYERS



Click to switch layer visibility

Background layer

Duplicate layer: drag and drop

Delete layer: drag and drop

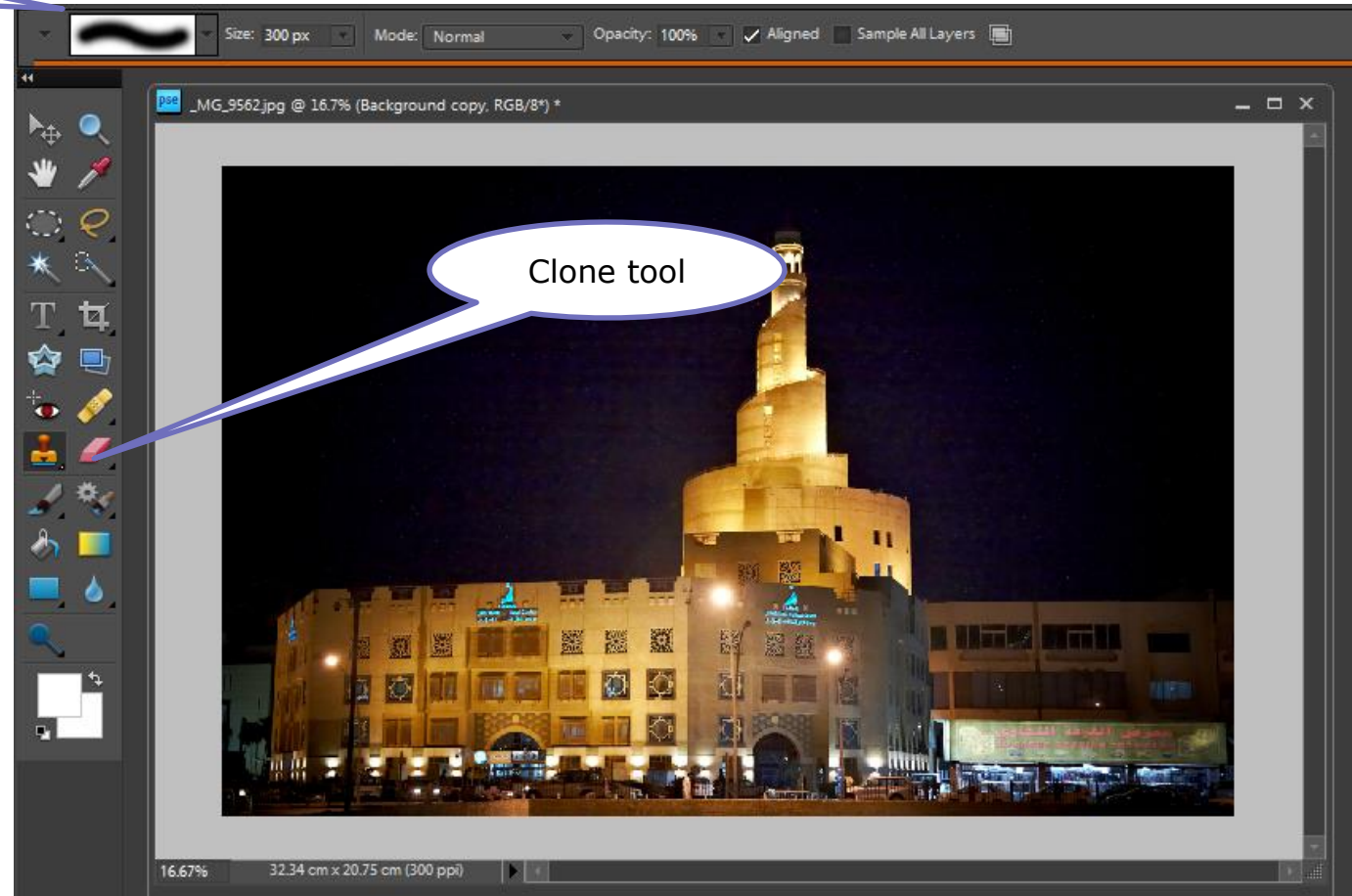
# CLONING

Brush type-  
soft edge  
usually best

Adjust size of  
brush using  
slider or bracket  
keys

Reduce opacity  
to make  
changes more  
gradually

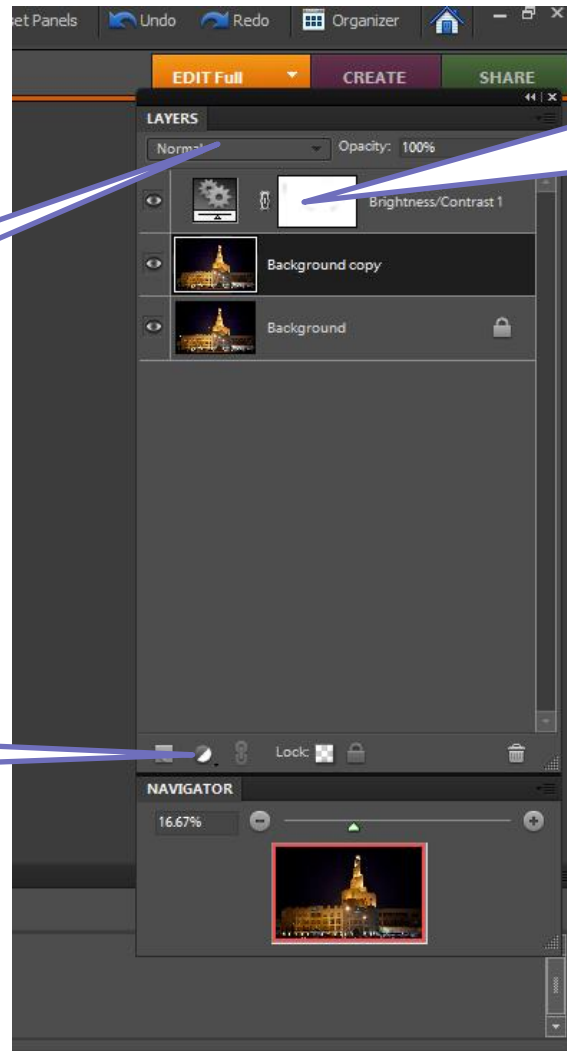
- Place cursor on area to be copied; hold down "alt" and left click
- Move cursor to area to be pasted and left click to "paint" over area
- If mistake go back and start again using "undo" icon



# USING ADJUSTMENT LAYERS

- Can add adjustment layer which can be masked so applies to only part of the image
- In Elements the following main ones are available
  - Levels
  - Brightness/contrast
  - Hue/saturation
  - Solid colour
  - Gradient
  - Plus others
- Can also add a filter effect to one layer and blend with the layer below e.g. Gaussian blur
- Each layer can have the opacity adjusted to change how much is added to the layers below
- Can also change the way the layers blend with each other

# ADJUSTMENT LAYERS



Click to open up  
and change  
adjustment

Adjustment layer:  
click from drop  
down menu

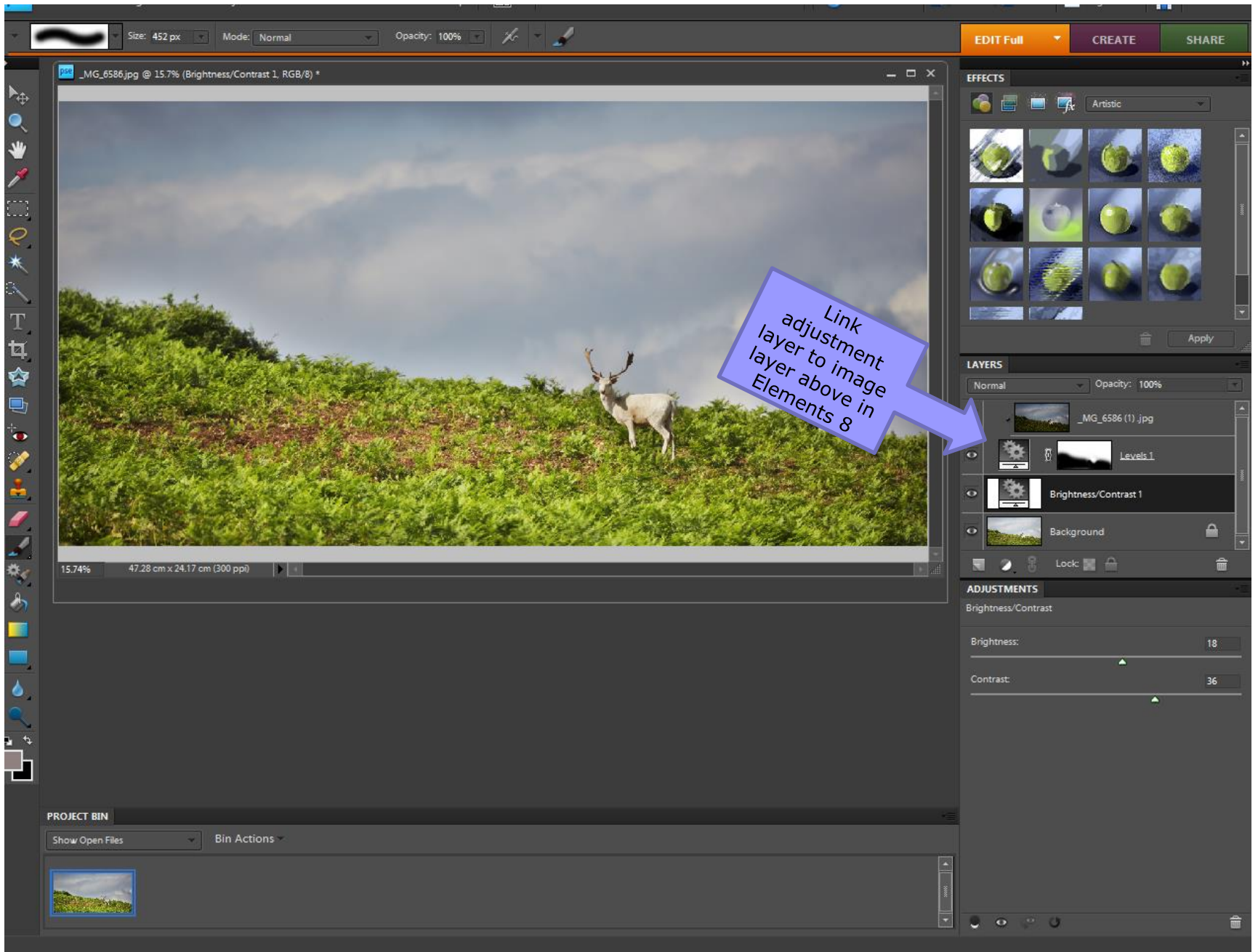
Layer mask:  
"paint" to  
define area of  
mask which  
applies  
adjustment to  
layer below

**Use  
black/white  
switch to +/-  
mask**

# MIXING IMAGES TOGETHER

- You can mix two images to blend in different ways
- Can use to manage high dynamic range by creating two images with different exposures from original file
  - Open 2 files and bring one image into the other as a new layer (drag and drop or copy/paste)
  - In Elements v9+ you can then add a layer mask to one image and using black/white brush “mask out” one part of the top image
  - In earlier versions you have to cheat by linking the image to an adjustment layer mask using layer/create clipping mask
- Similar approach when mixing 2 completely different images (Kathryn Scolah) and see also David Eaves notes





Link adjustment layer to image layer above in Elements 8

EDIT Full CREATE SHARE

EFFECTS



LAYERS

Normal Opacity: 100%

- \_MG\_6586 (1).jpg
- Levels 1
- Brightness/Contrast 1
- Background (locked)

Lock icons are visible for the 'Background' layer.

ADJUSTMENTS

Brightness/Contrast

Brightness: 18

Contrast: 36

PROJECT BIN

Show Open Files Bin Actions



# AND FINALLY

- Photoshop has a huge range of options many of which are not user friendly
- There are many different ways to achieve the same effect
- Experiment but then decide on the main things you wish to use and then
  - practice, practice, practice
  - so it becomes second nature



NOW FOR SOME  
PRACTICAL WORK TO  
EXPERIMENT OR SORT  
PROBLEMS