

# Using Photoshop to edit RAW/JPEG images for film editing

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Using today's modern cameras offers great opportunity in using the latest editing software that utilises processes that benefits the quality of digital images. RAW is the highest quality of digital image recording/processing; most modern digital professional cameras have RAW setting. The following visual instructions illustrate some of the various processes when using a RAW image in Photoshop CS3.

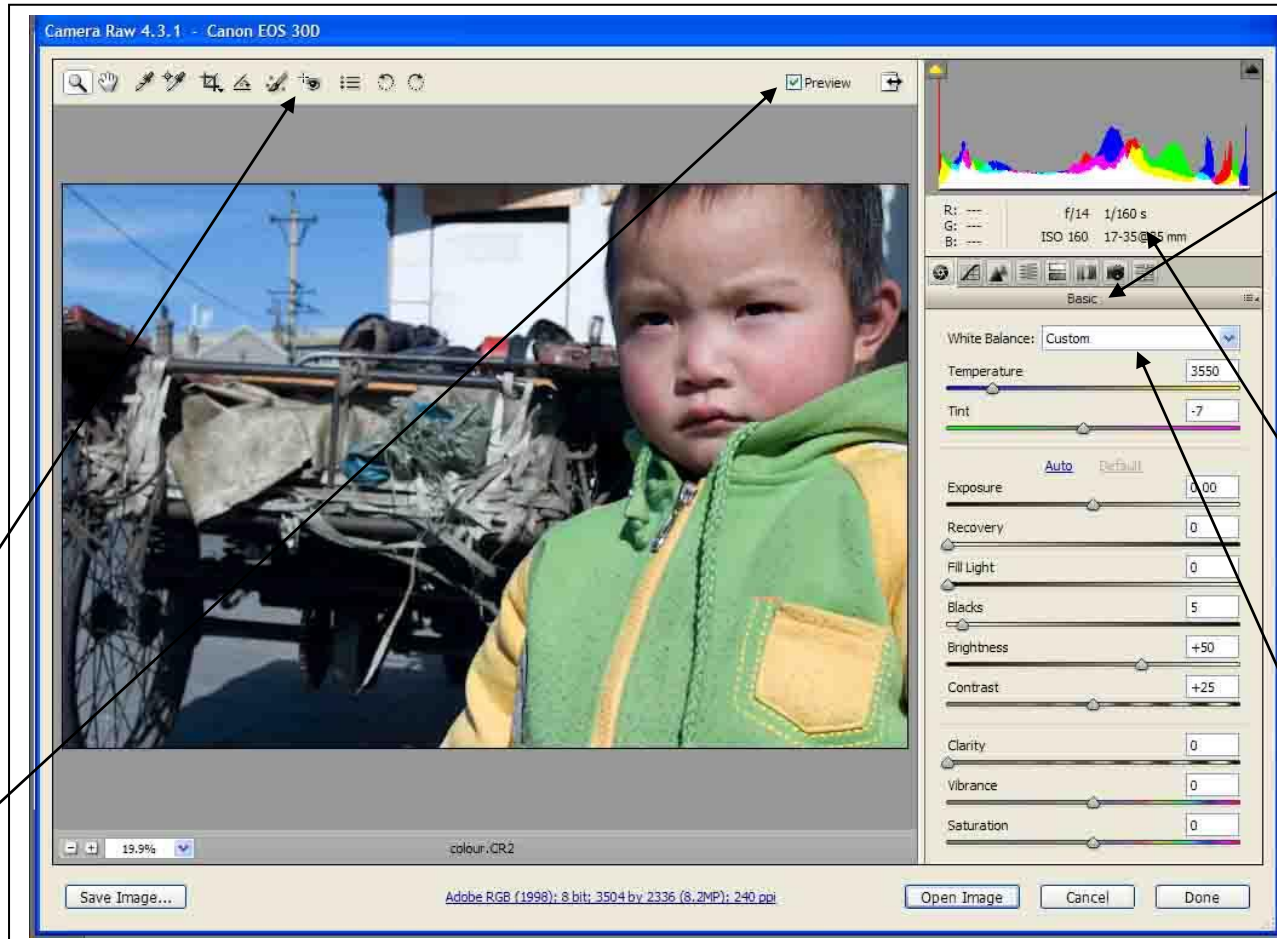
When you open a RAW file in Photoshop, it will open in a different manner to a normal JPEG, TIFF, PDF etc. Photoshop has its own in built RAW processing facility. This is an editing stage before you enter Photoshop. It has many of the same image settings and controls as Photoshop, but is more advanced and specific to the RAW image settings. As RAW images store all information taken on the camera it also gives the ability to work directly with the conditions the image was taken in, and alter various aspects of the image in relationship to the information stored.

When you first open an RAW image save an XMP for the image without altering the image, this will be the XMP for the original image. This process is set out on page 9 of this guide. This will be the first task of the class. In the image folder called "Raw Processing 1 images" is where we will save the image changes and XMPs. (XMP info <http://www.adobe.com/products/xmp/>) all images and files are located in the folder called "STILLS TEST".

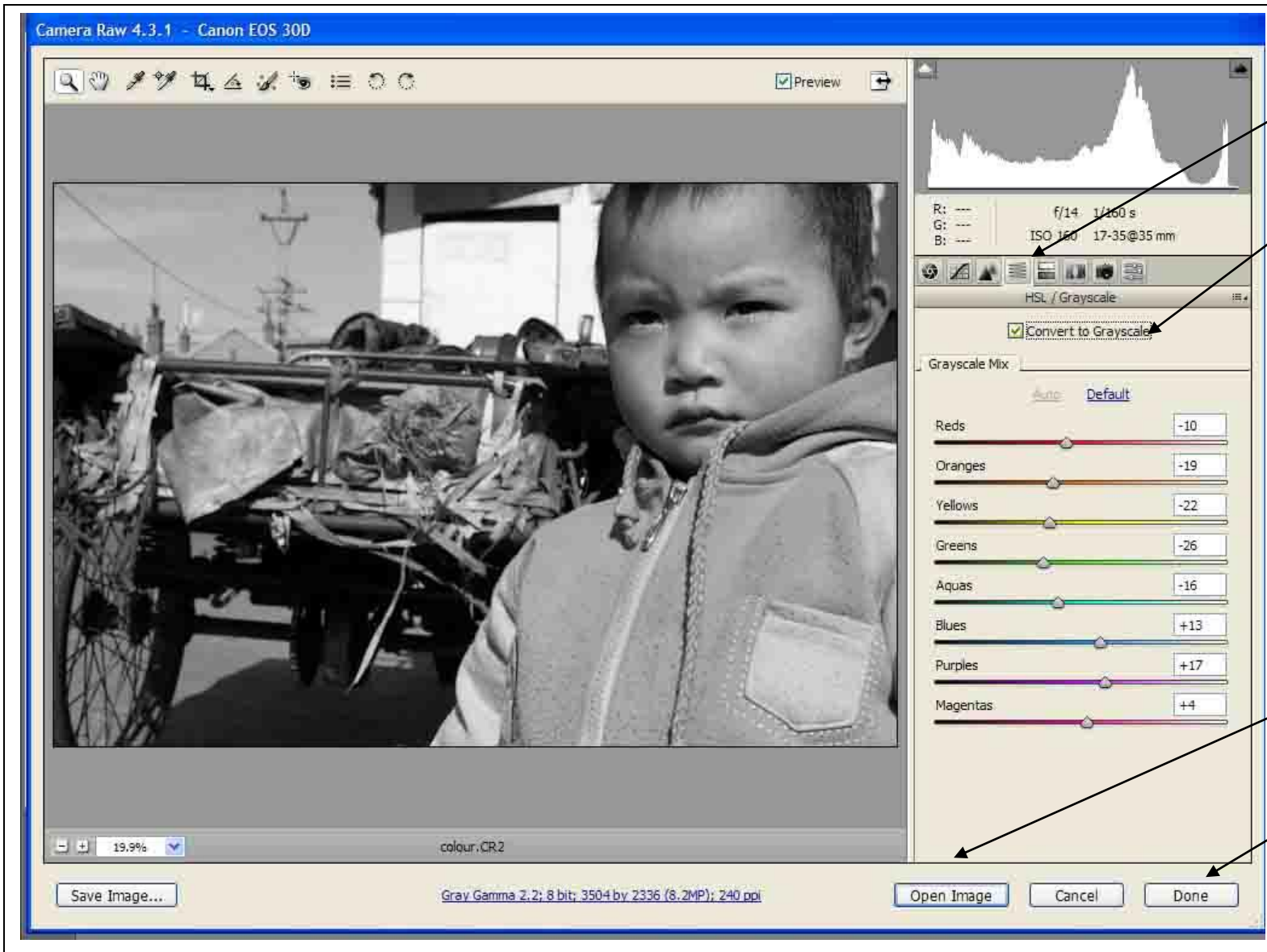
The image for this tutorial is called "Colour" found in the folder called "RAW images" it does not matter what RAW image is used. Open this image in Photoshop. File > Open > navigate to RAW images folder > select the image called "Colour" click open

Along the top line of the work space you'll notice differing icons from the zoom tool to rotation tools. The main tool here to use is the zoom tool to move in and out of the image. Cropping RAW images should be done when finished, or in Photoshop.

Make sure Preview is always ticked.



On the right side of the work space is all the "Tabs" that open up the differing presets for each facility. The opening tab when you open the RAW image is the Basic Tab. Here the images settings are displayed from the actual day the image was taken; outlining death of field known as "f numbers", Shutter speeds, film speeds and lens used on the camera. The white balance is automatically set on custom and the image is adjusted. You should change this setting to "as shot" to see the actual shot you took.



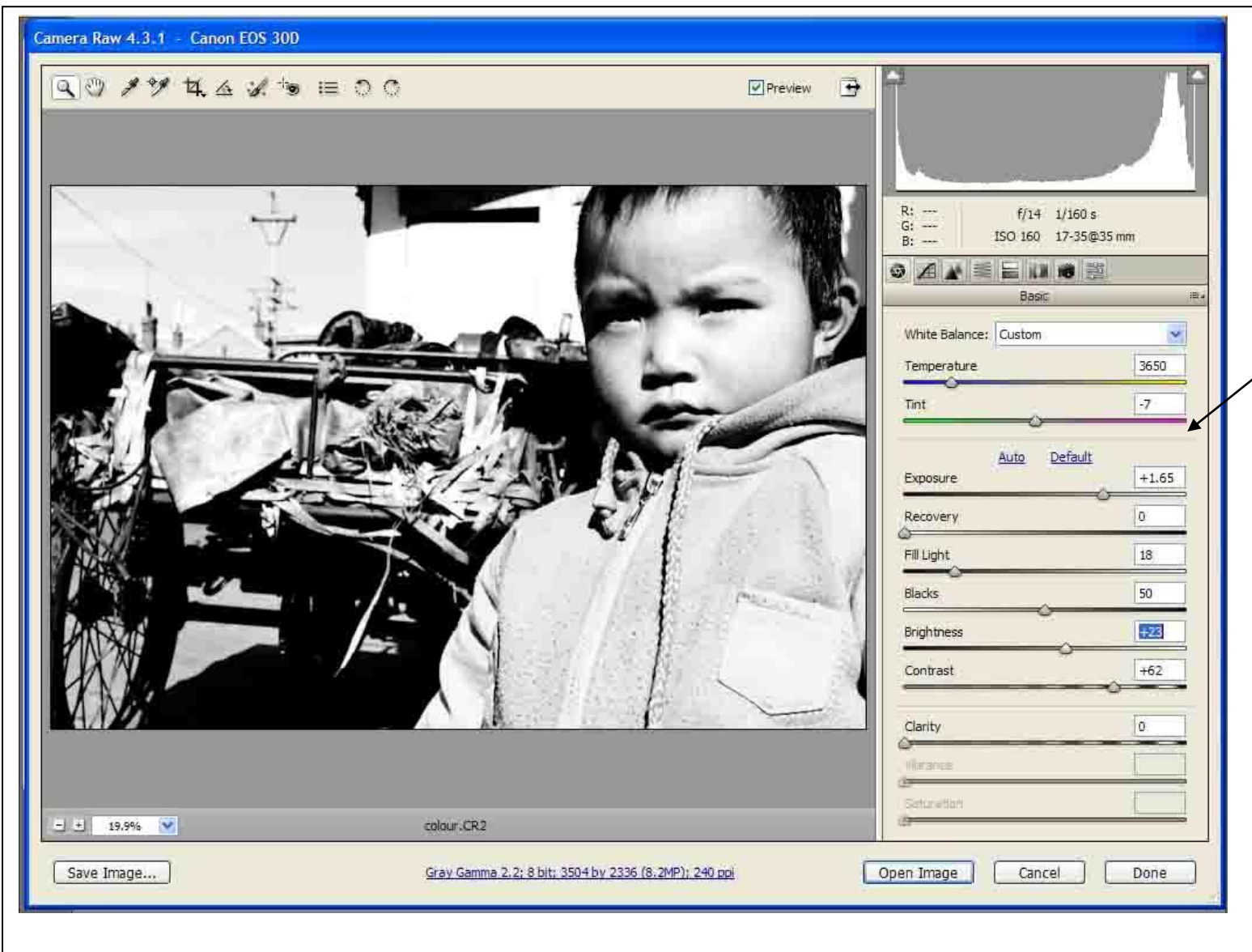
To convert the images to black and white click the HSL/Greyscale tab.

Tick the Convert to Greyscale

You can change the Grey scale Mix on the bottom panel to add differing amounts of tonal ranges to the image. This is best left alone and left on default, as black and white settings are usually adjusted in the basic tab.

The Open image button will open the image into Photoshop. The Done image will close the RAW file and save the work you have done to the image.

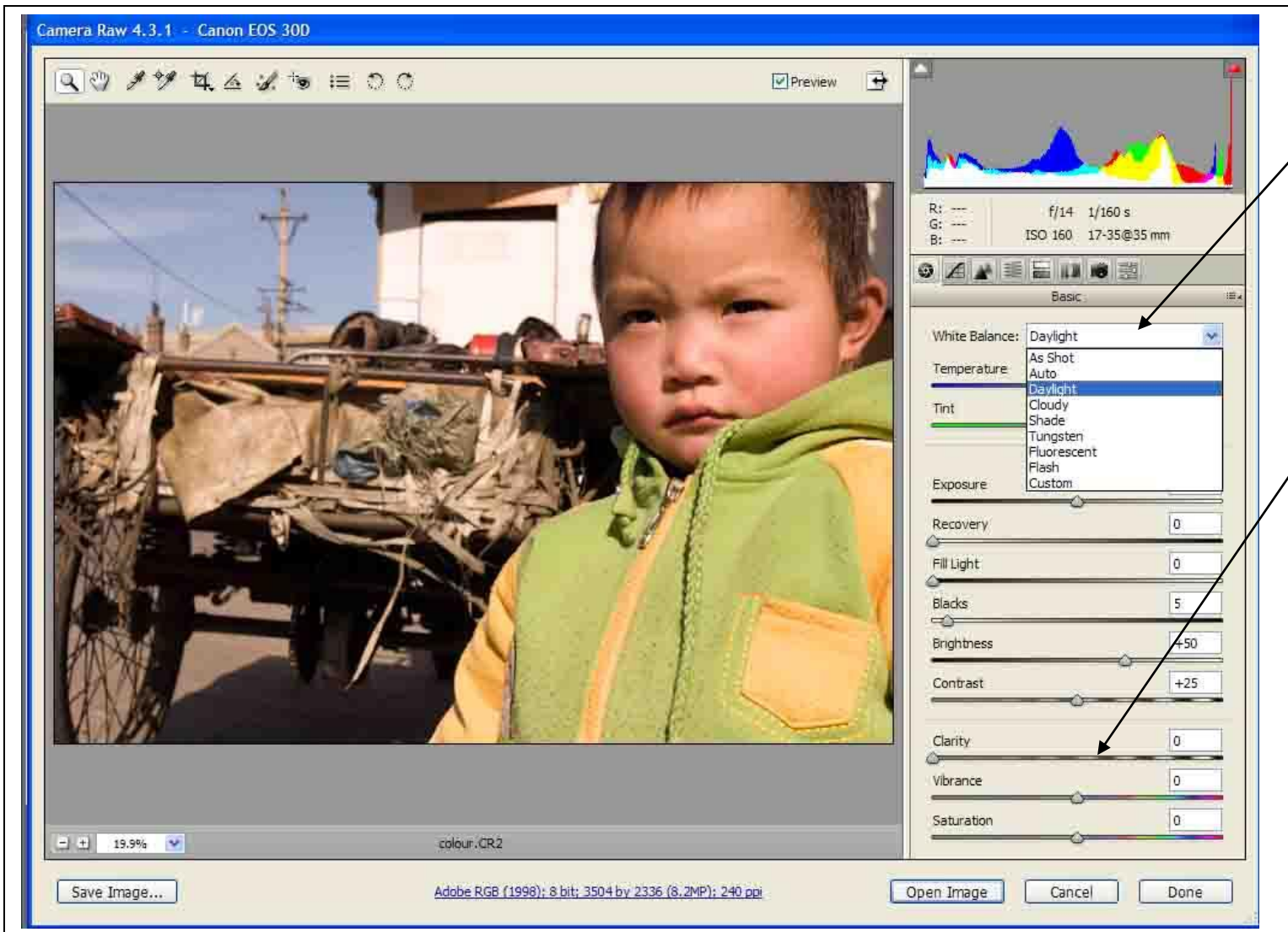
Adjusting Exposure in Adobe Camera Raw CS3 <http://www.photoshopsupport.com/photoshop-cs3/adobe-camera-raw-exposure-adjustments/index.html>



Going back to the basic tab, you can adjust the image by using the differing facilities. Here is where you can control the appearance of how you want the image to look. Increasing brightness and contrast to remove grey scale from the image, and make the whites and blacks deeper. Increasing the black areas in the image; Adding fill light to the light areas of the image. Changing the exposure closing and opening the aperture either lighting or darkening the image. Each facility to be explored further in class and listed

Class notes:

Video tutorial on using Camera Raw CS3 <http://www.ephotozine.tv/video/adobe-photoshop-cs3-tutorial--camera-raw-799>  
[http://books.google.co.uk/books?id=KFXgQa5m\\_jmC&dq=raw+in+photoshop+cs3+guides&printsec=frontcover&source=in&hl=en&ei=mkYJS\\_XvBtKs4Qa8qO23Cw&sa=X&oi=book\\_result&ct=result&resnum=11&ved=0CDcQ6AEwCg#v=onepage&q=raw%20in%20photoshop%20cs3%20guides&f=false](http://books.google.co.uk/books?id=KFXgQa5m_jmC&dq=raw+in+photoshop+cs3+guides&printsec=frontcover&source=in&hl=en&ei=mkYJS_XvBtKs4Qa8qO23Cw&sa=X&oi=book_result&ct=result&resnum=11&ved=0CDcQ6AEwCg#v=onepage&q=raw%20in%20photoshop%20cs3%20guides&f=false)



You can adjust the white balance of an image to various settings from As shot, meaning how the image was recorded on the camera. The RAW facility will calculate the best settings for the image; even converting the daylight shot to a Tungsten lighting environment.

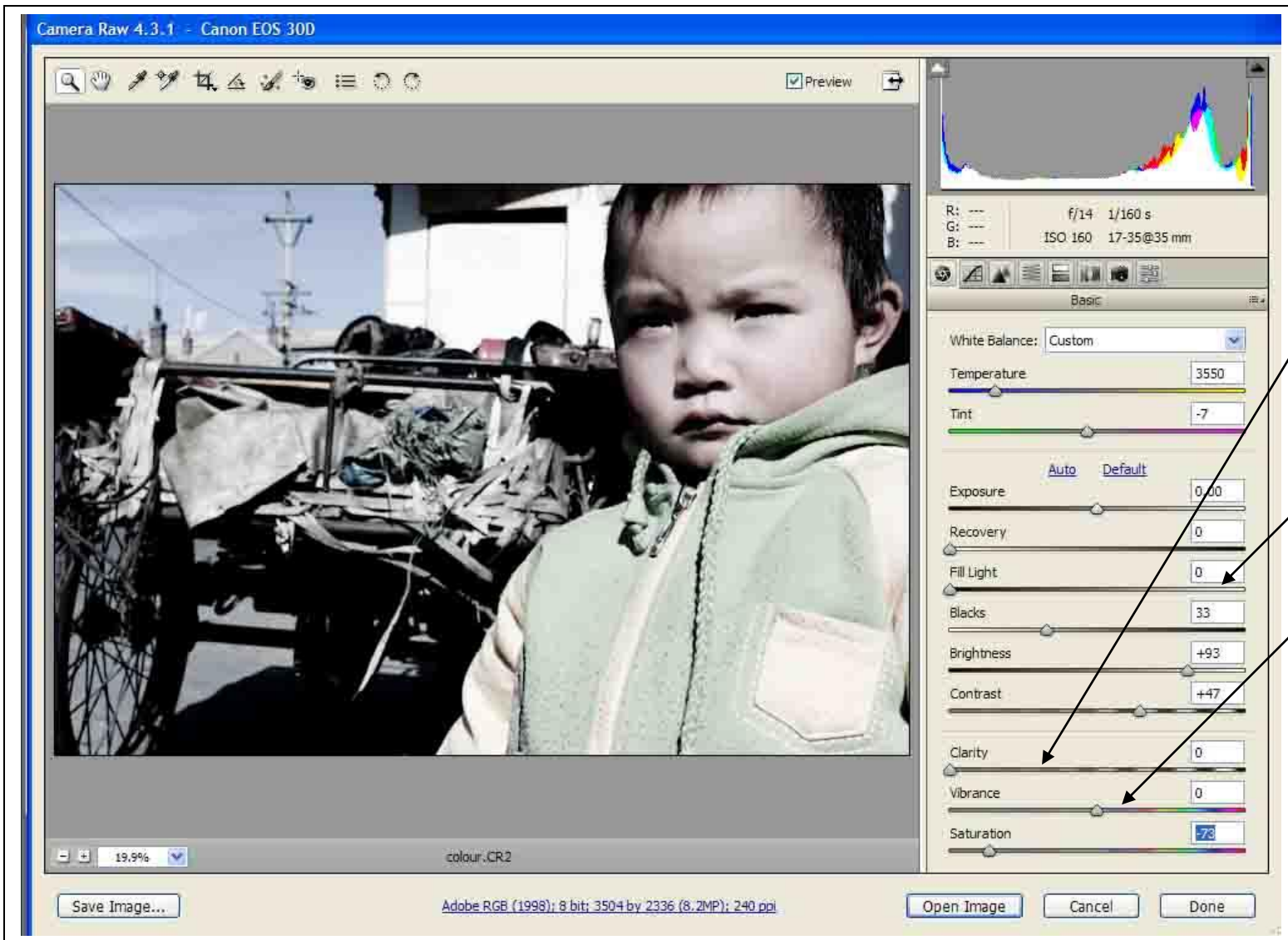
There are sliding bars to adjust the temperature, tint, vibrancies and saturation as well, giving greater control of the image.

Class notes:

Tutorials on using Camera Raw CS3 and using all facilities in Photoshop, worth a look and read.

[http://books.google.co.uk/books?id=KFXgQa5m\\_jMC&dq=raw+in+photoshop+cs3+guides&printsec=frontcover&source=in&hl=en&ei=mkYJS\\_XvBtKs4Qa8qO23Cw&sa=X&oi=book\\_result&ct=result&resnum=11&ved=0CDcQ6AEwCg#v=onepage&q=raw%20in%20photoshop%20cs3%20guides&f=false](http://books.google.co.uk/books?id=KFXgQa5m_jMC&dq=raw+in+photoshop+cs3+guides&printsec=frontcover&source=in&hl=en&ei=mkYJS_XvBtKs4Qa8qO23Cw&sa=X&oi=book_result&ct=result&resnum=11&ved=0CDcQ6AEwCg#v=onepage&q=raw%20in%20photoshop%20cs3%20guides&f=false)

[http://books.google.co.uk/books?id=VbKI0r6kWLgC&dq=raw+in+photoshop+cs3+guides&printsec=frontcover&source=in&hl=en&ei=mkYJS\\_XvBtKs4Qa8qO23Cw&sa=X&oi=book\\_result&ct=result&resnum=12&ved=0CDcQ6AEwCw#v=onepage&q=raw%20in%20photoshop%20cs3%20guides&f=false](http://books.google.co.uk/books?id=VbKI0r6kWLgC&dq=raw+in+photoshop+cs3+guides&printsec=frontcover&source=in&hl=en&ei=mkYJS_XvBtKs4Qa8qO23Cw&sa=X&oi=book_result&ct=result&resnum=12&ved=0CDcQ6AEwCw#v=onepage&q=raw%20in%20photoshop%20cs3%20guides&f=false)



Using the saturation, and temperature means you can remove the colour from the image, and cool the tonal range giving a differing appearance to the day it was taken on.

The Clarity bar adds amounts of blacks and greys to defined areas to make elements stand out, like framing a light area with a strong outline.

Fill light adds a general light to the whole of the image, good if an image is over exposed and dark.

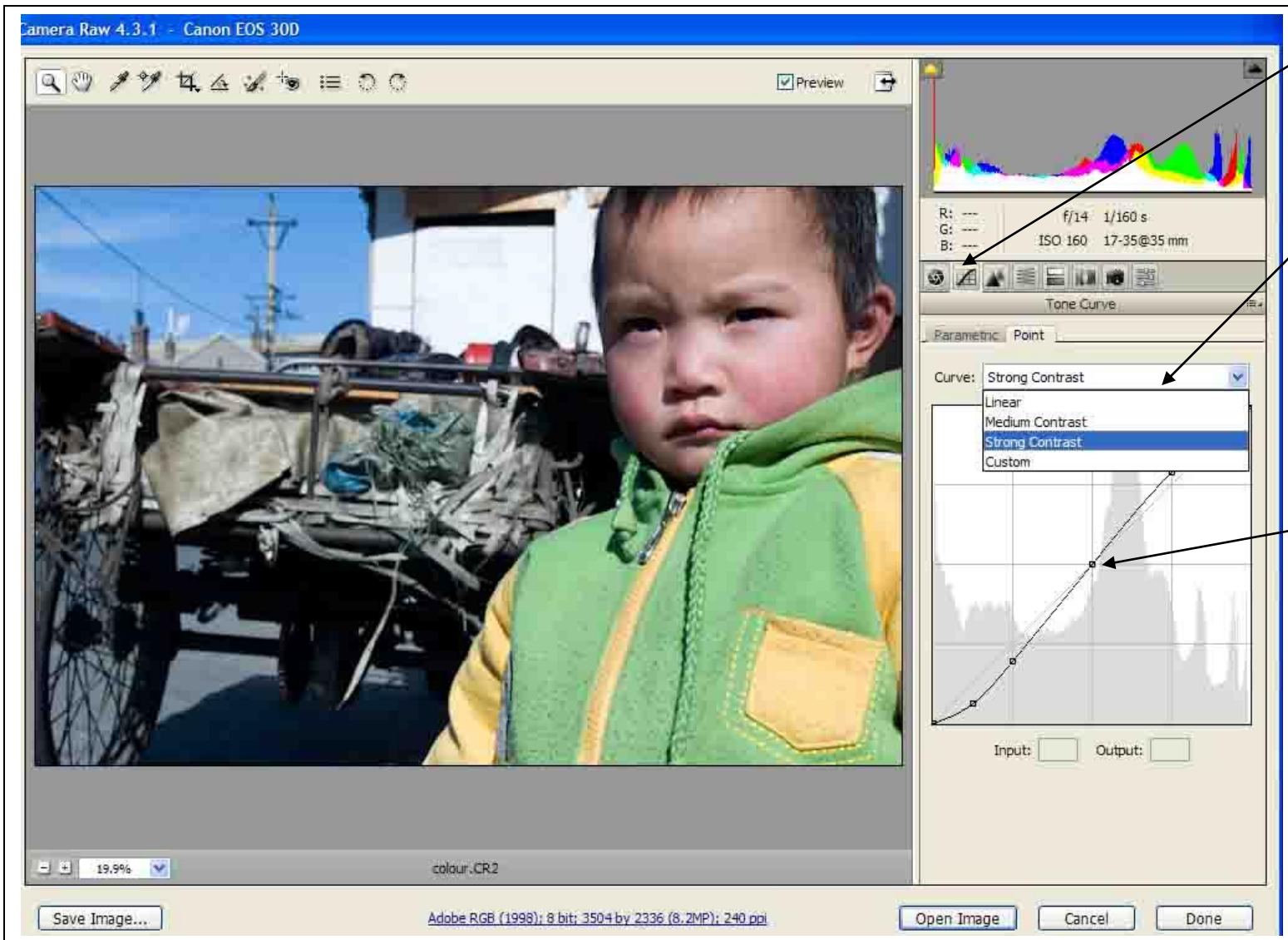
Vibrancy increases or decreases the colour intensity from luminous to lustre matt.

Class notes:

Adjusting settings using Adobe Camera Raw CS3: <http://www.photoshopcafe.com/cs3/acr4.htm>

Good site to join for all Adobe training: [www.lynda.com/Learn/Adobe](http://www.lynda.com/Learn/Adobe)

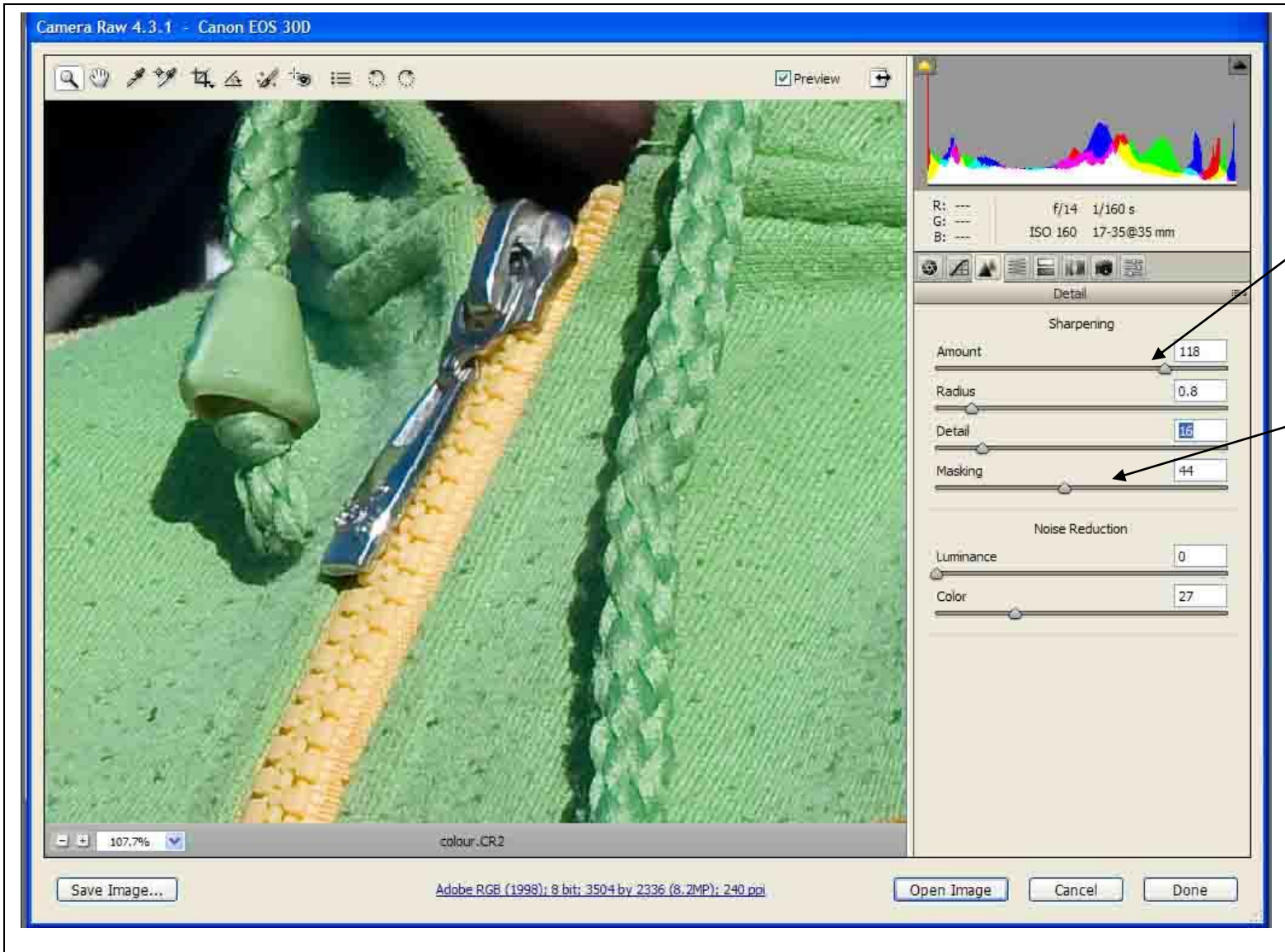
Video tutorial on camera RAW basics: <http://adobe.jsoftj.com/?p=55>



On the tone curve tab, you can set generic tonal curves to the whole of the image. You can also define and control differing parts of the tonal curve. Using anchor points which you can place on the tonal line and then adjusted. This is for advanced practitioners who work on selected parts of the image. But is a good way of developing your eye for subtle adjustments of the image.

Points can be added to the tonal line and adjusted by grabbing each point, holding the left mouse button and moving up or down. Many points can be added to the curve at any point.

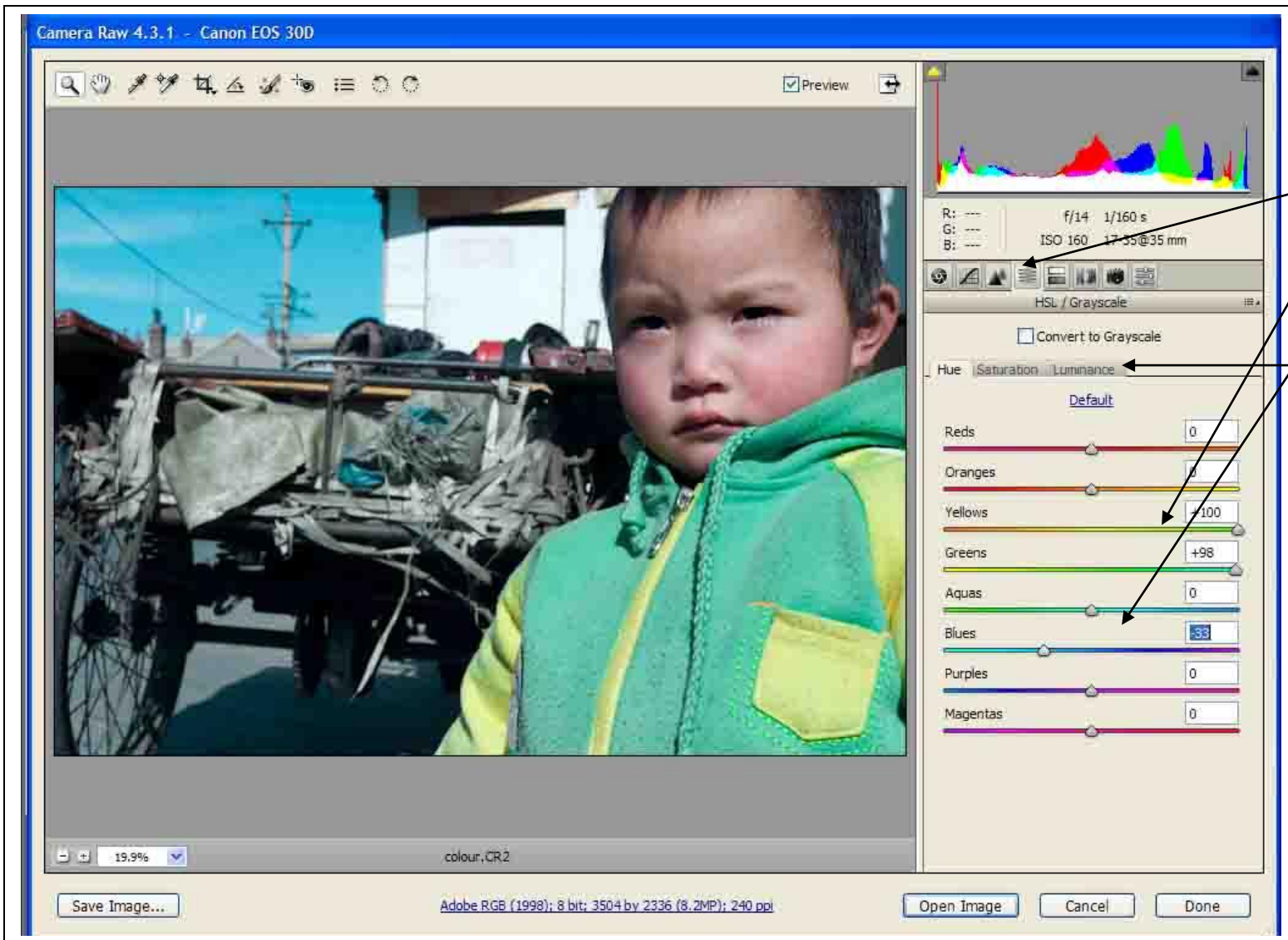
Class notes:



On the “details Tab” you can adjust the pixels and clarity of the image, what is called sharpening pixels.

You will need to zoom into an area to see the full effect of these powerful tools. If you increase the “Amount slider” to full, you’ll see the details of the area sharpen, what is occurring is the pixel edges are being calculated and each one is becoming crisper around the edges. If you increase the “Masking slider” this tool softens the pixels around the edges of each element i.e. the zip outline and keep the pixels inside the edges sharp. This process is for defining soft images, or sharpening text, objects with hard edges, like a building, even water drops. The photographic industry has set parameters for sharpening images, AP will not use images sharpened more than 30%.

Class notes:



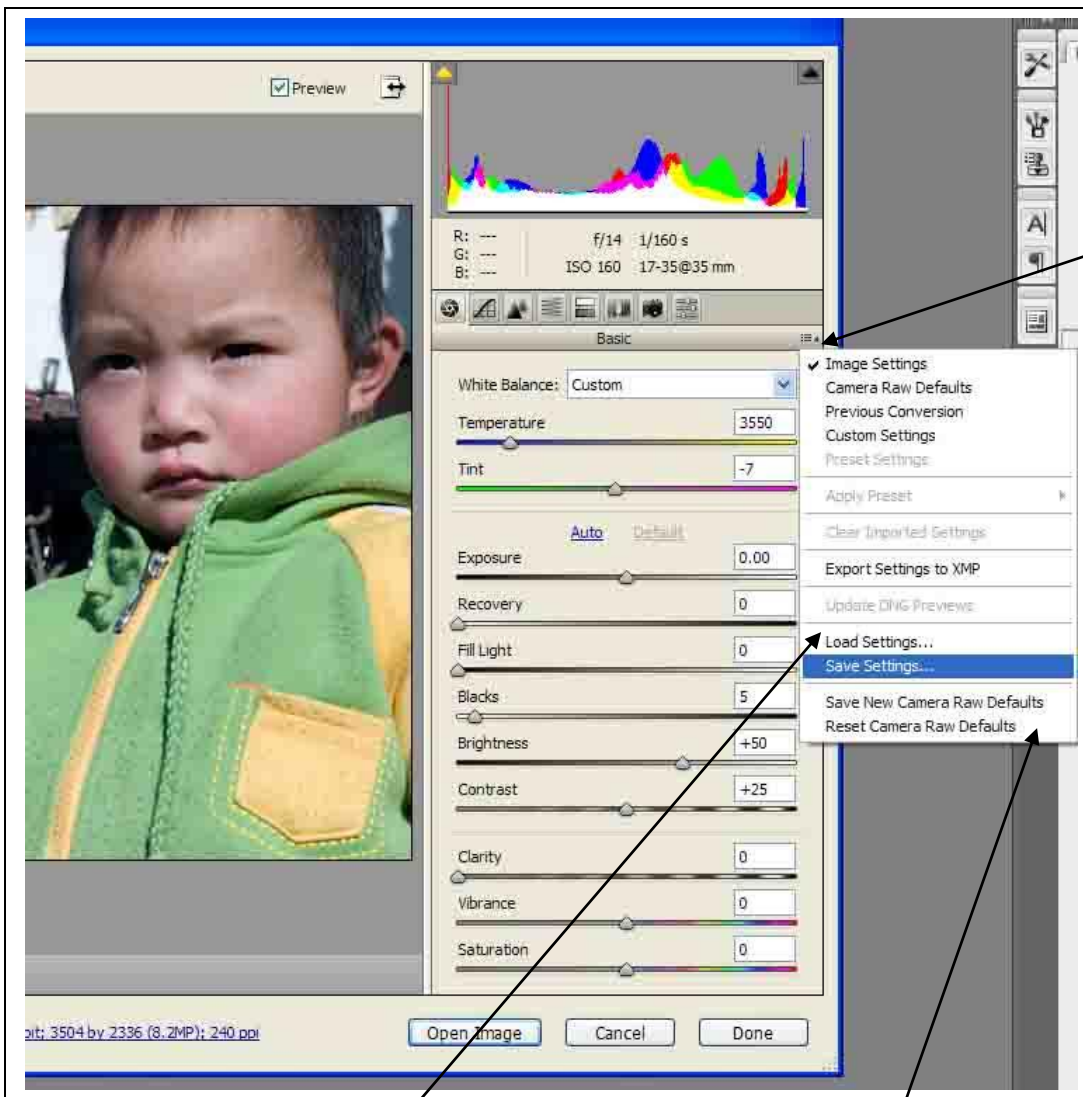
Compare this image to the opening image and see the difference is the colours of the jacket and the sky.

On the HSL/Grayscale tab, the Yellows, Greens have increased to maximum and the Blues reduced to -33, changing just those Hues in the image. There are three other Tabs to change the saturation of the colours and luminance of the colours.

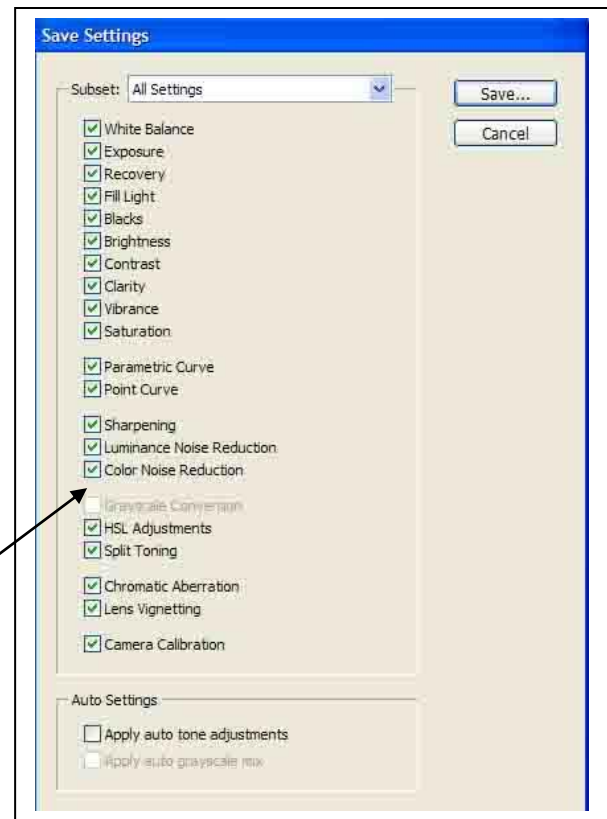
Class notes:

Using the “save image” button gives you the chance to save your RAW image as any file type, and convert RAW image into a Jpeg, PDF, Tiff and many other files; you do not have to enter Photoshop to save the file to another format.



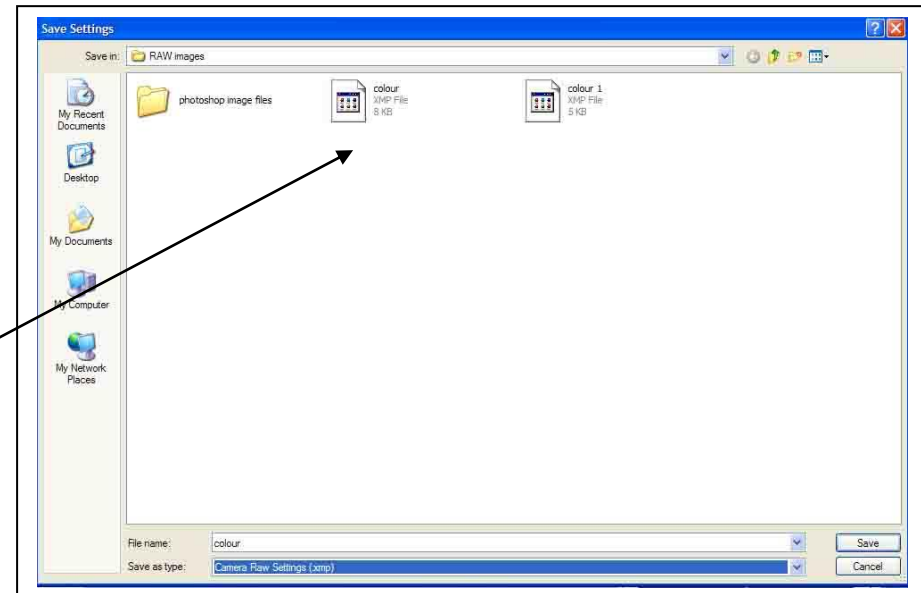


When the image is finalised there are differing ways to save. The Unique element of the RAW image is a separate file can be saved to save the new settings, these are called XMP files. On the end of the Basic Tab is a drop down folder, click here and go to save settings. The Save settings dialog box will appear and you can define what elements you wish to save.



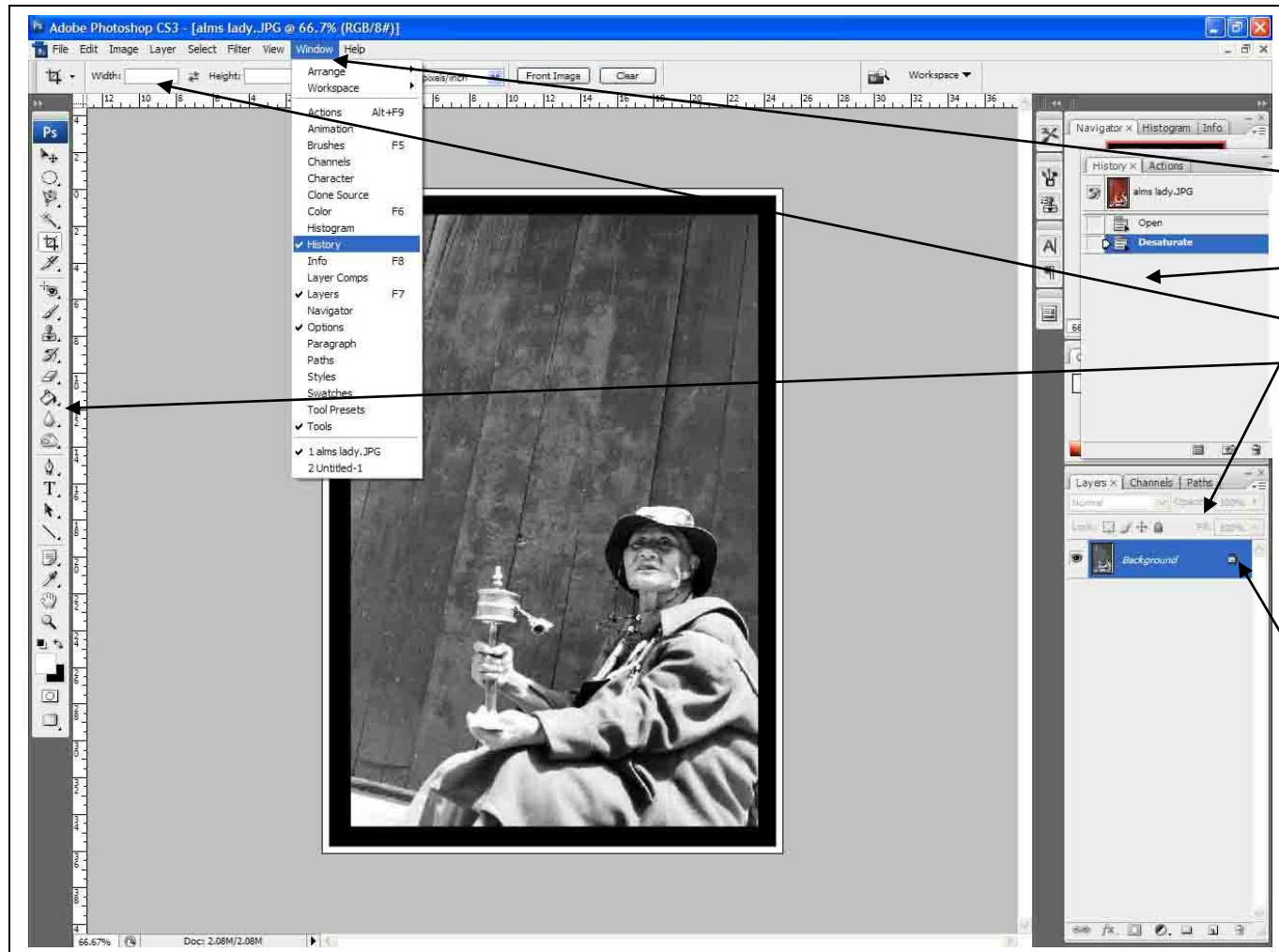
When you have worked on a RAW image you can load in any XMP file over the image. These files hold the image/workspace data, as does the original image. Referred to Metadata

The XMP file should be saved in same location as image. You can save as many XMP files as you like all having differing settings to your work. You can reset the XMP back to the original image at any stage; the original image is never saved over when you save XMP's.



## Altering the image in Photoshop

If you are not using a RAW format file, then below are listed some of ways to alter an image through differing techniques similar to the above guide. The standard image format for most digital cameras is JPEG, the size of the image quality (the amount of pixels in each shot) can vary and be set on the camera, ranging from 1 mega pixels to 8, 12 and upwards. These define the amount of pixels in each shot, which then defines the size the image can be produced. The more Pixels the larger the image can be printed/seen clearly. RAW is the best setting for the highest quality pixels within an image, and lends the image to a larger Dpi (dots per inch) the higher the dpi the better the image quality. This can be adjusted in Photoshop, but small Jpegs will normally only have 72dpi. This is good for using on a web site, as the image will normally be no larger than 6x4 inches on the screen, and does not slow the download speed, as the lower the dpi is smaller the file size, the larger the dpi is larger the file size. Using stills within a film sequence to be screen on a monitor or large scale (computer) projector requires good quality dpi (150dpi+), for the image to be projected on a television 72 or 96 dpi is best as it will not affect the resolution. (See end of this guide for full details that will be outlined in class on setting an image for television)



Open the image called “alms lady” in the RAW images folder  
When opening Photoshop, any version, here is CS3, you first make sure your workspace is defined. This is done by going to > Windows and checking that:

History

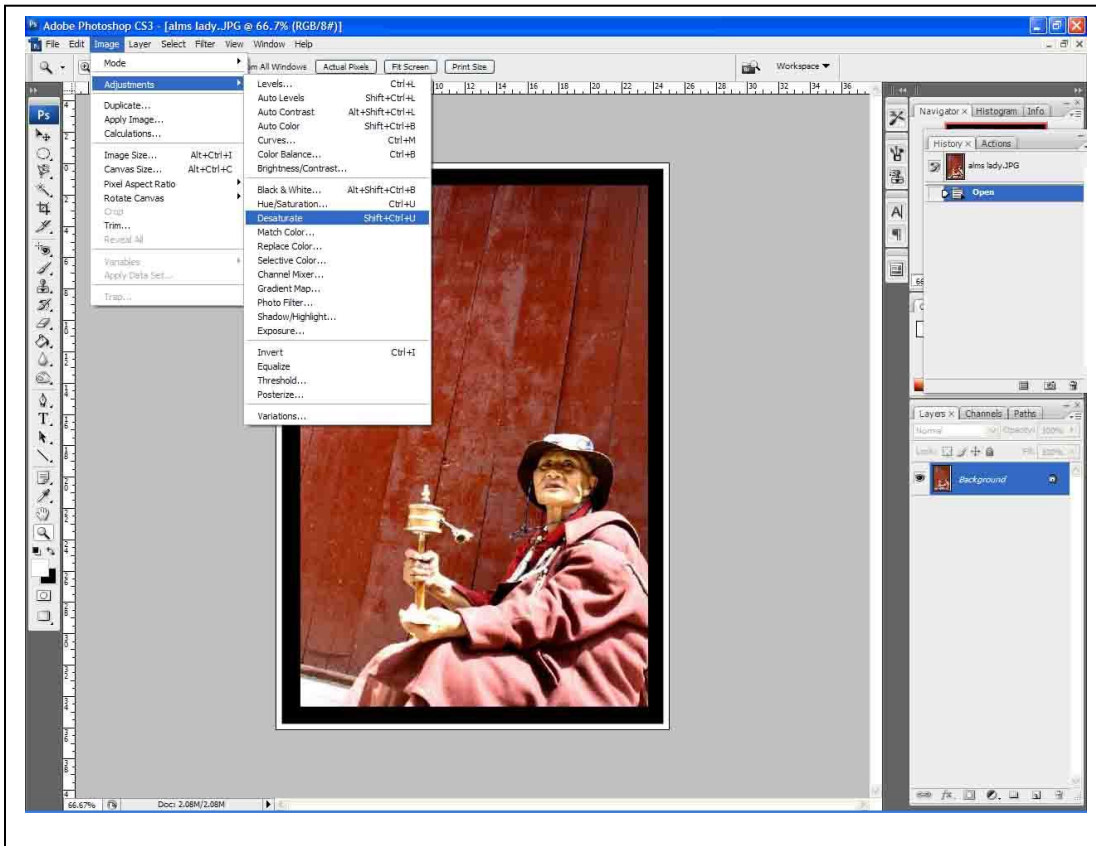
Layers

Options

And Tools are ticked.

These open the properties for each element, and become visible in the workspace. There are various other options that can be made visible for use. The New system on CS3 has most property items in collapsed boxes on the right hand side. The 4 outlined options highlighted are needed for editing.

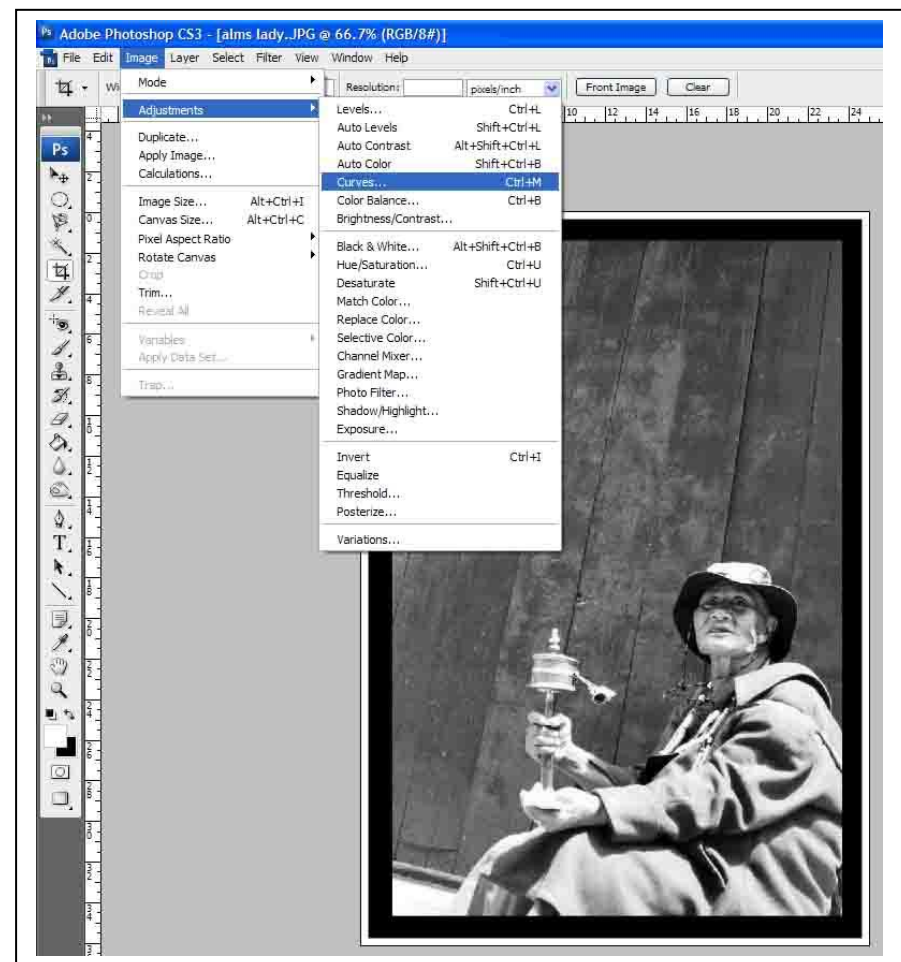
Each image that is opened in Photoshop is represented in the Layers box, and has a padlock over the layer. This needs to be unlocked to use the full potential of Photoshop. Double click over the padlock to unlock; a dialogue box will open, press OK to unlock. You can relock a layer at any stage by using the same padlock found above the layers.



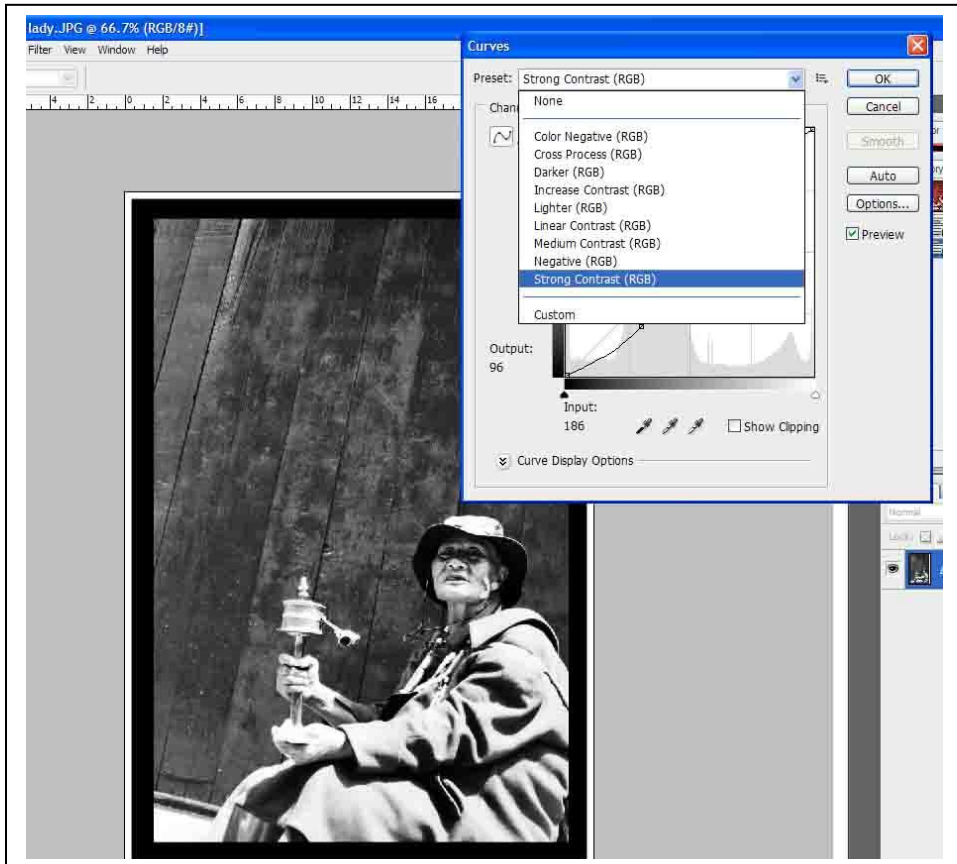
To change a colour photograph to Black and white, there are two ways, one is to convert the image to Greyscale the recommended process is to go Image > Adjustments > desaturate.

This removes the colour from the image, but does not affect the 4 colour channels; if you convert to greyscale the colour channels are removed.

Class notes:



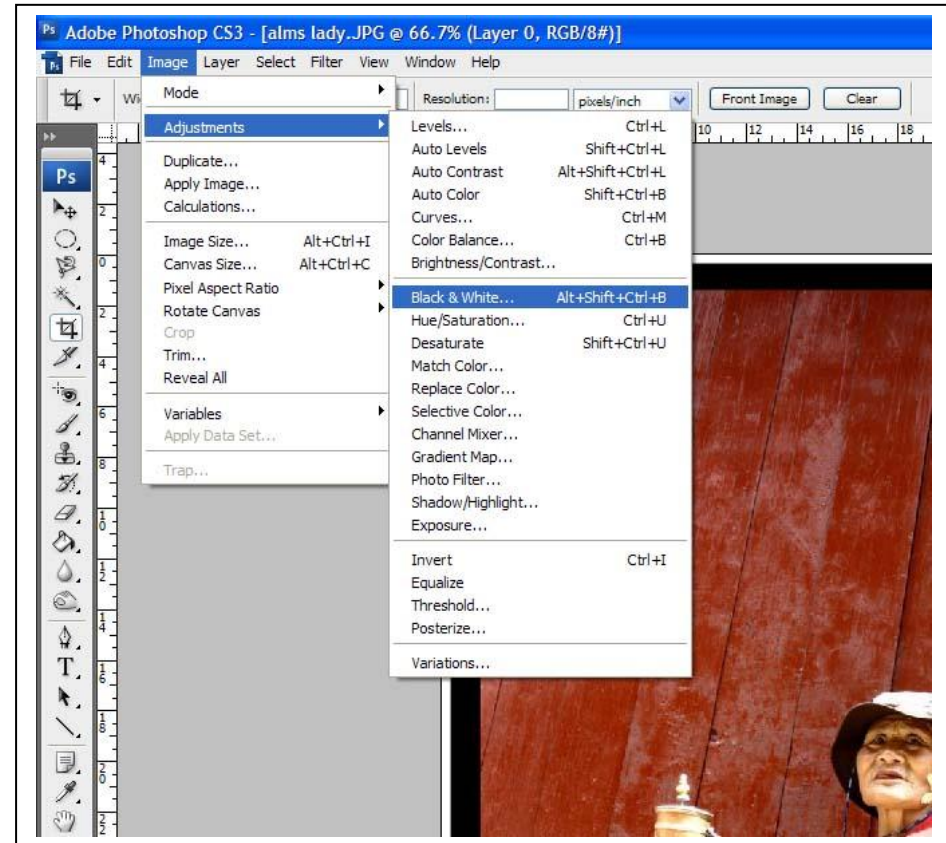
Once you have removed the colour from the image, you can adjust the tonal range with similar adjustment processes to the RAW facilities. Image > Adjustments > Curves  
 This works in the same manner as the curves in RAW and lets you control the contrast, brightness and tonal ranges in the image.



The curve settings have automatic settings which help to show the image in a variety of tonal ranges from strong contrast to lighter versions. And also lets you manually custom the settings.

You can also use Image > Adjustments > Brightness and Contrast for a simply tonal controller.

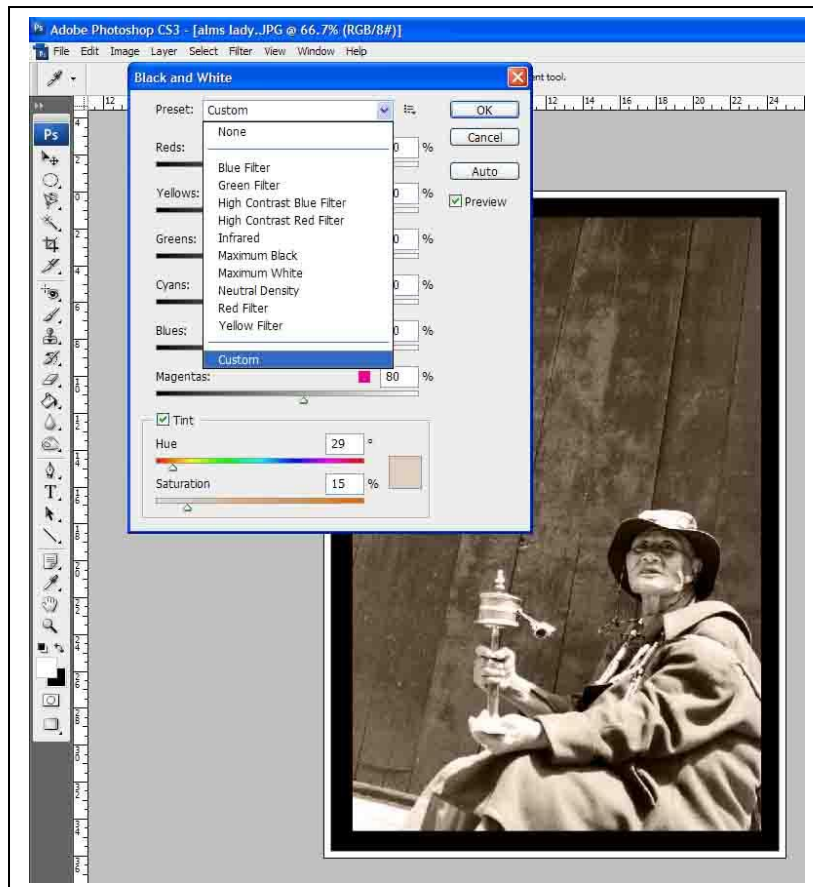
Class notes:



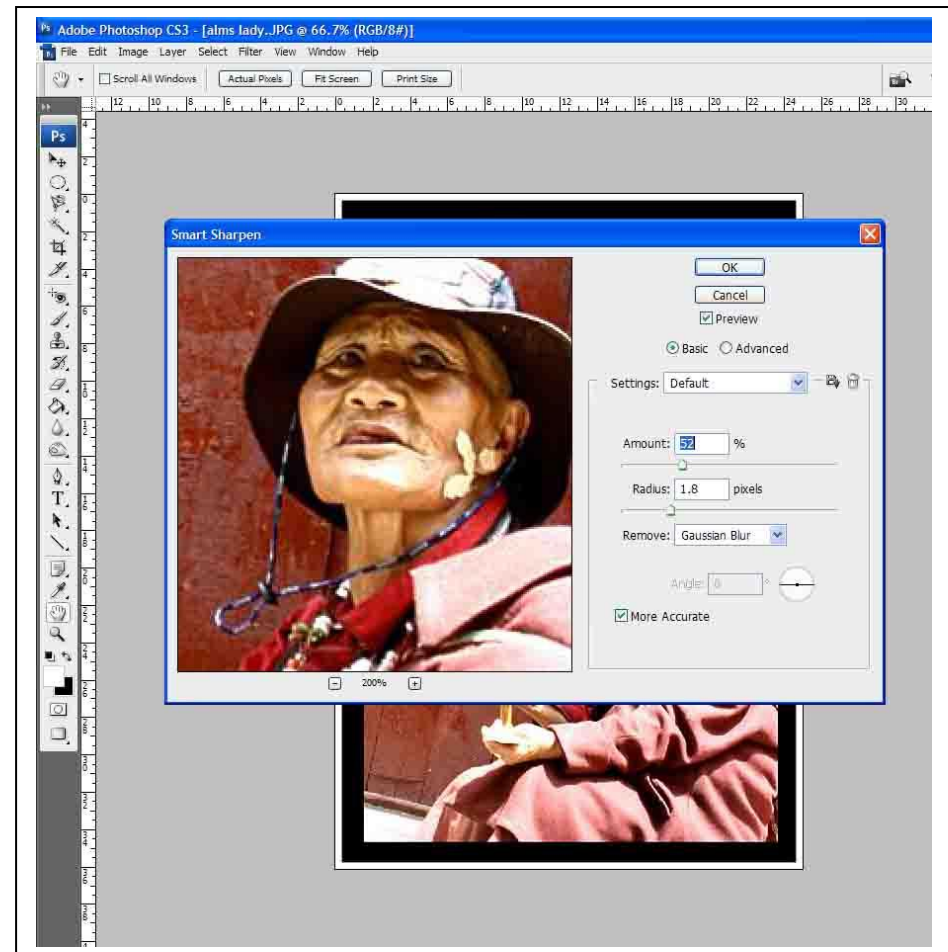
One of the new facilities to CS3 is the instant format from colour to black and white Image > Adjustments > Black and White

The previous ways of changing the colour image to black and white are universal to all versions of Photoshop from 7 to CS2.

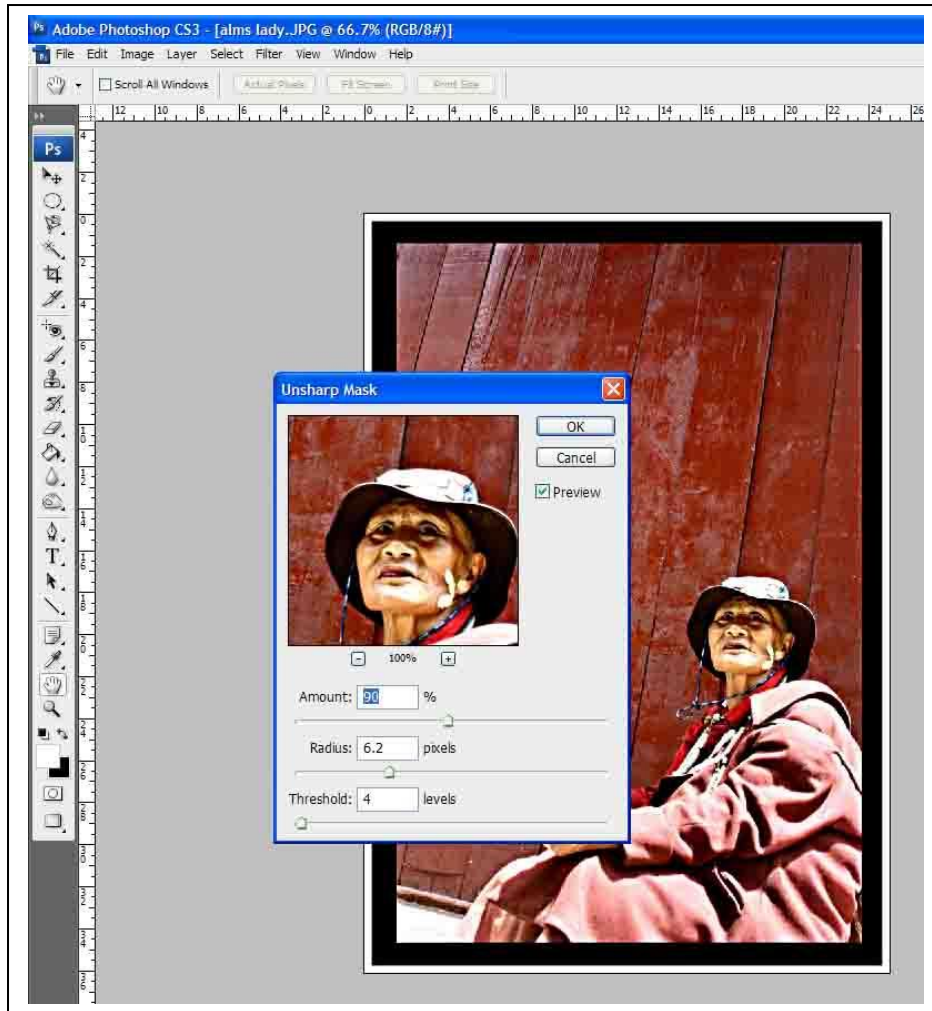
Class notes:



With the new Black and White process you are given a similar dialogue box that gives the editor the ability to add differing pre set contrast and lighting settings and also add Tints of tonal colour to the image and the new filter system. The filter system works in the same manner as if you had placed a filter on the front of the camera lens i.e. a Yellow filter increases the amount blue saturated into the camera. A red filter increases the contrast values and deepens dark areas. Once this process is completed you can revert and use the Curves to control the image to greater degrees.



Sharpening the image: Filter > Sharpen > Smart Sharpen  
 This filter works in the same way as the RAW sharpening tool, but has an advanced tab for greater control.  
 To see the sharpening effect altering the image, zoom into a specific area you wish to improve on the dialogue box. Make sure preview is ticked.



Unsharp mask: Filter > Sharpen > Unsharp mask  
Works in the same manner as the RAW sharpen tool.

Class notes:

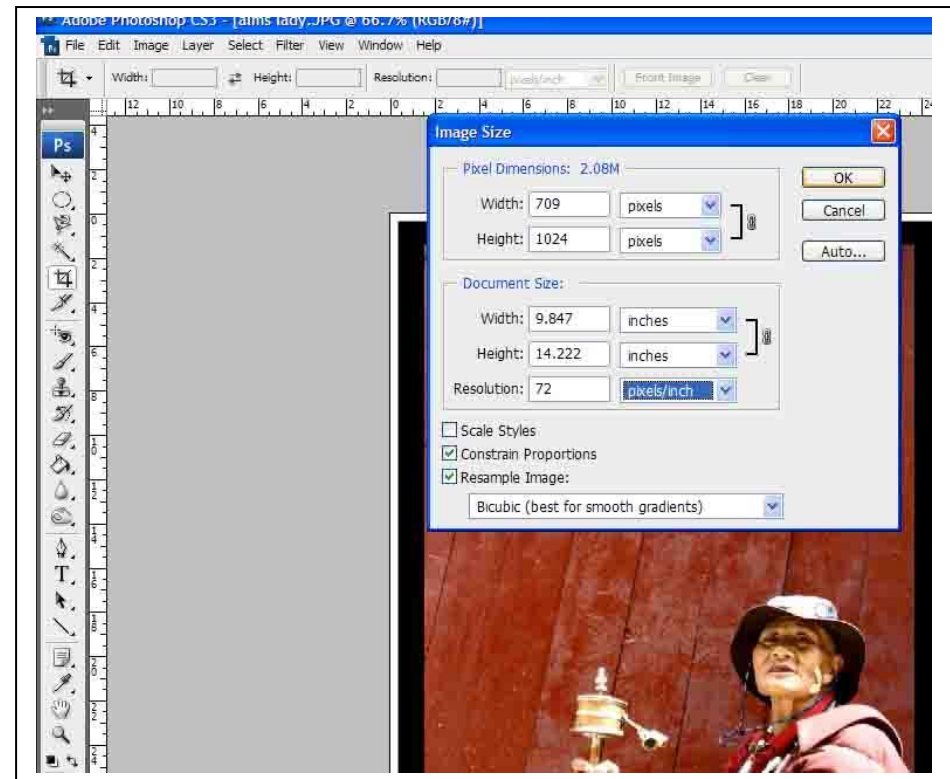


Image sizing: Image > Image Size

To check the dimensions and dpi of any image, go to the image size settings, here you can define and alter the size, scale, dpi and file size of the image. A RAW file image will have a general setting of 240dpi and have a large canvas size. A basic Jpeg will have a dpi of 72 and be set at a small canvas size. Here is where you can define the scale of the image to fit your product i.e. website, film sequence etc.

Class notes: