

## PHOTOSHOP TIPS:

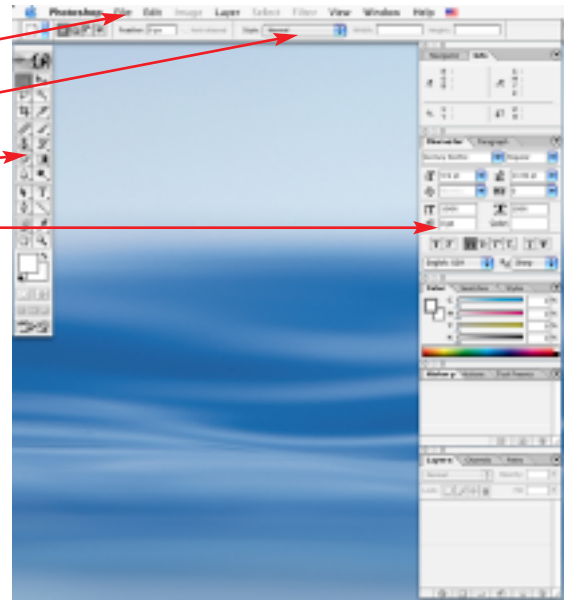
### The Photoshop workspace:

Menu Bar

Options Bar

Tool Bar

Palettes



### Photoshop tools:

Tools are found in the tool bar. Each one has a single key keyboard shortcut, pressing the letter will switch to that tool (pressing shift+the letter with scroll among the various modes of the tool). Some of the more commonly used tools are:



Marquee (M)—for selecting rectangular or oval image areas

Crop (C)—which can crop and rotate

Brush (B)—bring up a paintbrush or pencil drawing tool

Healing Brush (J)—for getting rid of dust

Clone Stamp (S)—also good for cleaning up an image

Type (T)—for adding type into your image

In addition there are some keyboard shortcuts for moving about your image:

[space] – switches to Hand tool; allows you to slide across the image

[space+cmd (a.k.a. the Apple key)] – zoom in tool

[space+cmd+option] –zoom out tool

D—return foreground and background colors to default

X—switch foreground and background colors

## BASIC OPERATIONS—CROPPING, ROTATING AND SCALING.

### Cropping

Draw a rough box around the image with the crop tool.

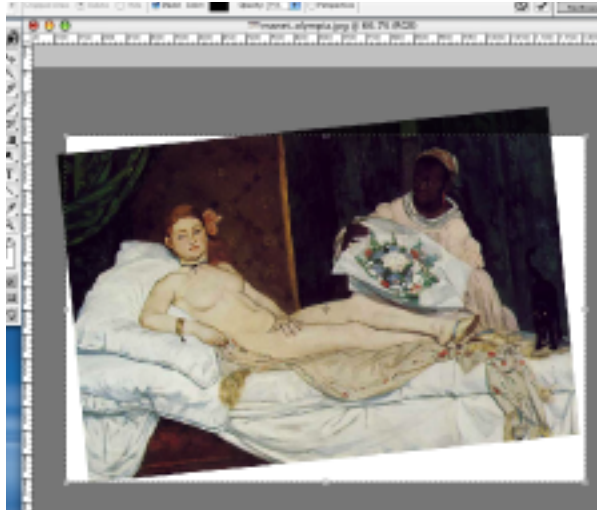
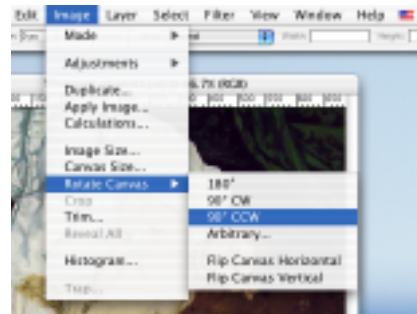



The image will turn dark in those areas that will be cropped out. Grab one of the open squares (control handles) at the edges of the box to fine tune the extent of the crop. Press [return] or [enter] to apply the crop.

## Rotating

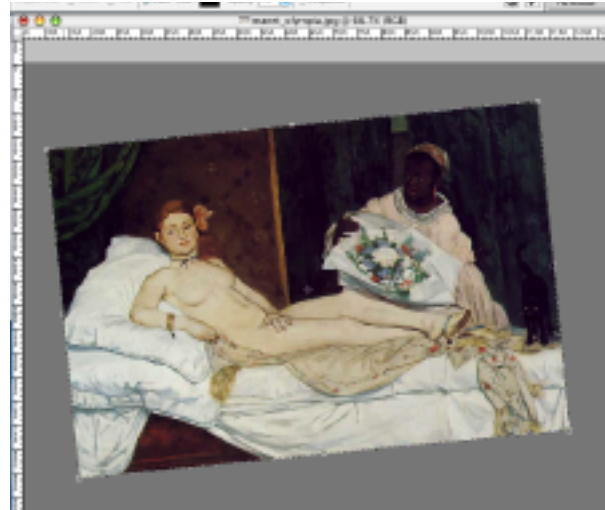
To quickly rotate 90° (clockwise or counter-clockwise) or 180° go to **Image > Rotate Canvas**

You can also rotate an image with the crop tool (C).



Draw a rough box around the image. Move your cursor outside the marquee, not over one of the control handles, and it will turn into a tiny arc with arrows on each end. 

Click and drag vertically or horizontally and the whole marquee will rotate.



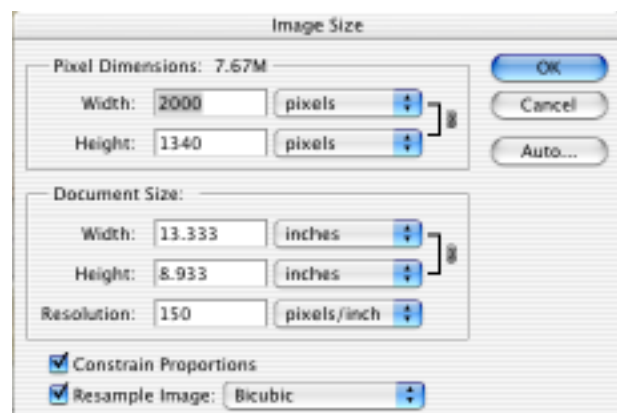
Align an edge of the marquee with an edge of the image to get the right angle. You can still push or pull the edges of the marquee to fine tune the crop before you apply it. When you have the marquee around the edges of the rotated image, press [return] or [enter] to apply the crop.

**TIP:** It's best to get the angle right the first time. Every time you rotate to an angle other than 90° you degrade the image quality a little bit.

## Scaling

Open the menu **Image > Image Size...** This will tell you the pixel dimensions, document size, and resolution of the image.

You can use this menu to resize an image. For example, if you have an image scanned at 150 dpi, which is 2000 pixels wide and you want to make it a 72 dpi image, 1000 pixels wide, just type 72 into the "Resolution" field (note: the pixel size will change) then 1000 into the "Pixel Dimension: Width" field and click OK.



## (Scaling, continued...)

Note the two checkboxes on the bottom of the dialogue.



“Constrain Proportion” ensures that the width and height remain proportional to the original image. If this is checked, when you enter a new value for one dimension, the other will adjust accordingly.

“Resample Image” controls whether, in changing the document size or the resolution, you’re actually scaling the image or not. If “Resample Image” is checked you can increase or decrease the actual number of pixels in the image, if it is not checked, changing the resolution will only affect the document size, and changing the document size will only affect the resolution.

TIP: Be careful about scaling *up* an image. If you increase the pixel dimension, Photoshop will interpolate new pixels (inventing new pixels based on surrounding ones) giving you a bigger, but fuzzier, image.

TIP: In most Photoshop dialogues you can reset your values before applying them. Hold down the [option] key and the “Cancel” button will turn into a “Reset” button. This works in Image Size, Curves and other dialogues.

TIP: You can quickly jump from one fill-in field to another in any Photoshop dialogue by pressing the [tab] key. [shift+tab] will jump your cursor backwards.

## IMAGE ADJUSTMENT—SHARPENING, DUST BUSTING & COLOR CORRECTION.

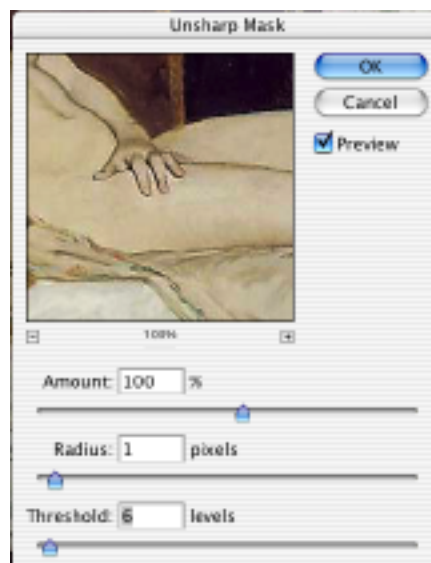
### Sharpening

The most powerful sharpening tool in Photoshop is the oddly-named “Unsharp Mask” Go to **Filter > Sharpen > Unsharp Mask...**

Unsharp Mask has three variables: Amount, Radius and Threshold. You can experiment with the desired settings on each—the window will reflect the effect of your current setting.

I like to keep my Amount between 80% and 150%, the Radius around 1.0 and the Threshold between 6 and 10.


Hit “OK” to apply the effect.

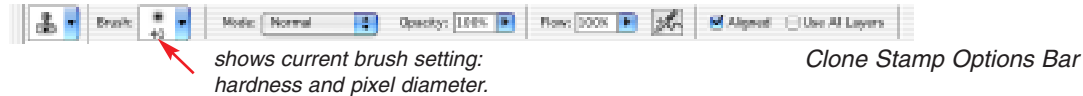


TIP: An ellipsis in a menu choice indicates a further stand-alone dialogue box. *Unsharp Mask...* will give you a set of options for adjusting the sharpening, while *Sharpen* will apply a preset effect with no options you can control.

## Dust Busting & Image Editing


You'll often see specks of dust, hairs or other imperfections that you want to get rid of in a scan. The best tools for this are the Healing Brush tool (J) and the Clone Stamp (S).

 The Clone Stamp works by copying the image data at a reference point and pasting it over a new point. The key is the brush you use. A soft-edged brush will copy and paste a soft edged selection, blending it in to the surrounding image better.



To use the Clone Stamp or the Healing Brush

- *Select a reference point first:* Hold down the [option] key and your cursor will change shape. Click on the area you want to take color from.
- Then release the [option] key, move your brush to the area you want to fix, and click. Try to match the texture of reference point to the target point. You can also click and drag, and you'll be able to paint over one part of the image with another. (This is how a lot of retouching is done, and it's this operation which is most commonly referred to as "Photoshopping.")

 The Healing Brush tool is like a smart Clone Stamp. Instead of simply dropping a selection from one part of the image onto another, it blends the selection with what's already there at the point you're editing, often making for a smoother transition. Use the Healing Brush the same way: chose a reference point, then paint over the area of the image you want to edit.

The Healing Brush is the best tool for taking out a spot of dust, or making minor adjustments, but it's not as useful for talking disgraced commissar out of your photo of the party officials.

### ASIDE: Brushes

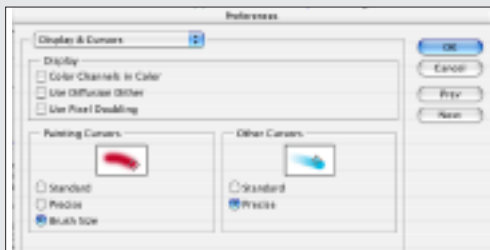
Photoshop has many brush settings, which are used in by several tools (clone stamp, healing brush, paint brush, dodge/burn, erase, etc.) If you select a tool that uses a brush, you'll see your current brush settings in the upper left of your screen. Basic round brushes have two variables: hardness and diameter. Click the little down arrow next to your current brush setting and you'll see a range of brush choices.



### (Brushes, continued...)

In the Brushes palette, you can see which are hard edges and which are soft. Above the brush icons is the “Master Diameter” of the current brush, measured in pixels. As you’re working, you’ll see a little circle indicating how big the current brush is relative to your image.

(If you don’t see a circle for tools such as Clone Stamp, go to **Photoshop > Preferences > Display & Cursors...** and, under “Painting Cursors,” select “Brush Size”.)



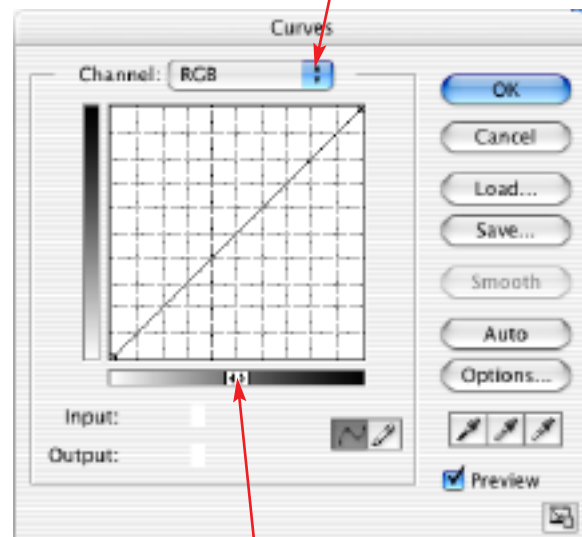
TIP: As you work, you can quickly change the diameter of your current brush with the bracket keys '[' makes the diameter smaller, and ']' makes it larger.

### Color Correction

If your image is too light, too dark, or has a color cast, you can often correct it in Photoshop. Photoshop has many tools for image adjustments, but the most elegant is the Curves dialogue. Select **Image > Adjustments > Curves...** (or press [cmd+M]) to bring up the Curves dialogue.

Each image comprises several channels, one for each color. The Curves dialogue allows you to make adjustments to each color channel, and to the master channel, which controls overall lightness and darkness. For an RGB (red-green-blue) image, there would be four channels to adjust: an RGB master channel, a Red one, a Green one, and a Blue one.

Grab the curve line near the middle of the line and pull in either direction. As you pull down and to the right the midtone gets lighter, pulling up and to the left makes the midtone darker. If you’re working in the RGB master curve, pulling down and to the right makes the whole image generally lighter, and the other way makes it darker.



Look at the bar underneath the curve itself, this indicates which direction is lighter and which is darker. Clicking in the middle of the bar flips the scale. The default position is light on the left and dark on the right.

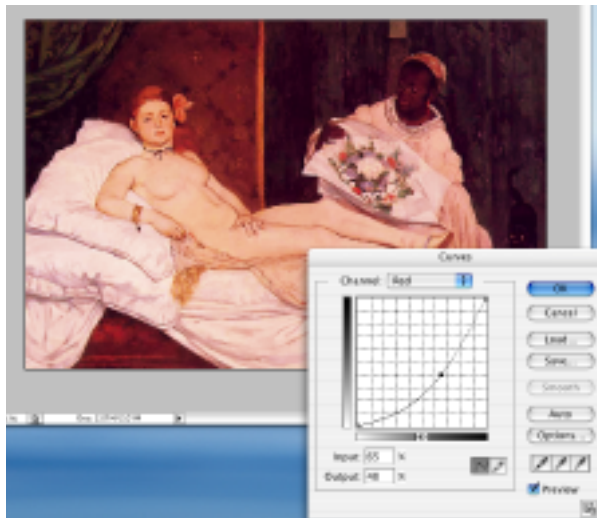
Each color channel works the same way, allowing you to increase the intensity of a certain color, or shift its hue toward the color's opposite.

For example, if you're working in the Red channel, pulling the line down and to the right makes the image generally more red, pulling it up and to the left makes it generally more cyan.

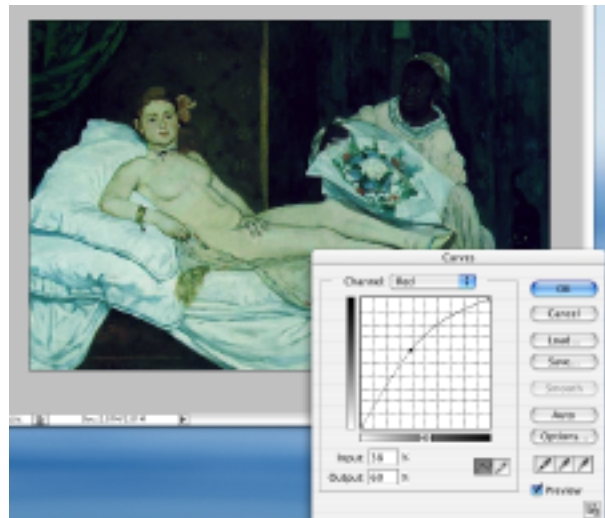
The color opposites are:

- Red <--> Cyan
- Green <--> Magenta
- Blue <--> Yellow

TIP: You can quickly switch between channels by pressing command keys:  
[cmd+`] for RGB;  
[cmd+1] Red;  
[cmd+2] Green;  
[cmd+3] Blue.



*Pull the Red curve down and the image becomes more red.*

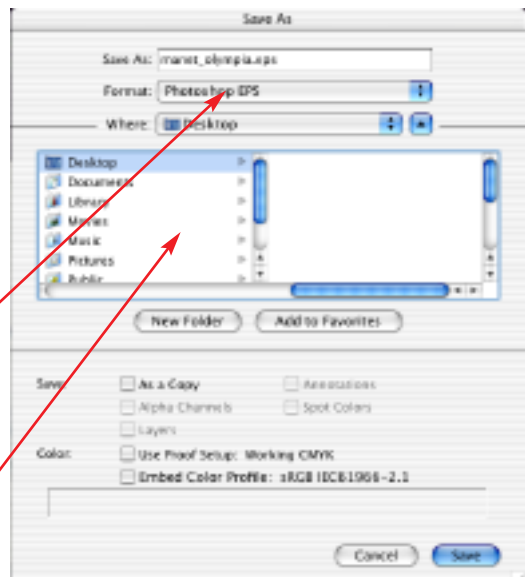


*Pull the Red curve up and the image becomes more cyan.*

### SAVING OPTIONS.

You can save your image in many formats, and each has certain sub-options. To chose a file format, save with **File > Save As...**

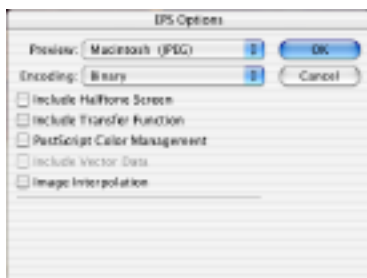
Remember JPEG is a compression scheme, so if you want to save a high resolution version of your image, save it as TIFF or Photoshop EPS.



*Choose the file format you want here.*

*Pay attention to where your image is being saved on the hard drive.*

If you save as **EPS**, you'll have to choose a preview format (JPEG is usually a good choice) and an encoding format (Binary makes for slightly smaller files).



If you save as **TIFF** you'll have to choose a compression scheme (LZW is a non-lossy compression, but for maximum compatibility you might choose none) and a Byte Order (Macs and PCs both can read TIFFs in PC order).



If you save in **JPEG** you'll need to choose an amount of compression, from 1 (most compressed) to 12 (largest file). A compression of about 9 or 10 usually results in a manageable file size with an imperceptible degradation of the image.

