Selections, Masks and Channels and Selection Strategies in Photoshop

This is not a tutorial guide. It presents the essence of what I was trying to demonstrate during my talk of 19th March.

Selection Tools and the Options Bar

You can make selections in Photoshop in a few conceptually different ways:

- By selecting a rectangular or elliptical area using a selection marquee.
- By drawing around one or more objects by hand using the lasso tools. The three lasso tools, lasso, polygonal lasso, and magnetic lasso each have their strengths and weaknesses.
- By drawing out an area using the selection brush. This relies on there being adequate contrast between the object(s) and the background.
- By colour. The magic wand tool is old and relatively crude and a better method is to use the Select/Color Range dialog box.

Each of the tools has a number of settings in the Options Bar. In particular most tools let you choose between making a new selection, adding to a selection, and subtracting from a selection. Learn to make extensive use of these options.

In addition to the selection modes, most tools let you specify Anti-aliasing and feathering. Make use of these options to make smooth selections which will blend well with new backgrounds and avoid edge artefacts.

The Quick Mask

The quick mask is selected by clicking on the rectangle at the bottom of the toolbox. Before using this tool for the first time, double click on the tool to access its Options box and choose Color Indicates / Masked Areas. This is not the Photoshop default, but most photographers will find this easier to understand.

With the default set up, make a selection and then single click the tool. The selection changes to a coloured "mask". You can use the Edit/Transform command to stretch and rotate the mask which can be very useful (for example for off axis ellipses). Clicking on the tool a second time restores the marching ants selection. You can do this as often as you want.

In mask mode, you add to a selection by painting black on to the mask (it appears as the mask colour, not black); you remove from a selection by painting white onto the mask. One of the smart things you can do is to use one of the other selection tools while you are in mask mode. This helps you specify and limit the areas you want to paint on.

Saving Selections

When you have made a selection, always remember to save it using Select/Save Selection. Accurate selections can be time consuming and you don't want to waste them. Moreover, selections are saved with the image so they will be there ready to load when you open an image the next time.
Selections are saved as Channels - Photoshop calls them alpha channels. A channel is just a greyscale image which represents which areas are selected. It is possible to set up channels so that either black or white represents the selected area. Just make sure you know which is which. For the rest of these notes, I will use the convention that white means selected.

A fully white area means 100% selection and a fully black area means 100% not selected. Grey areas represent partial selection. It’s usual to try and get your selections just black and just white. You can load a channel as a selection by Ctrl-clicking the channel. This has the same effect as Select/Load Selection.

You can make multiple selections in an image and combine them using the dialog box in the Select/Load Selection dialog box. In this way you can combine or subtract partial selections to get the exact final selection you want.

Working with Channels

You can use Channels to help you make selections based on colour. Colour based selections are notoriously difficult because colours vary continuously in most photographs. Once an initial selection is made, it’s usual to try and enhance the contrast of the selection channel. You can select an alpha channel and use Image/Adjustments: for example you can use levels or curves to improve contrast. Another way is to use Image/Apply Image to blend a channel with itself. The blending mode Overlay increases contrast the most. A third method is to use the paintbrush tool and change its Mode to Overlay. Painting with white in Overlay mode will make all areas that are whiter then mid grey whiter, but have no effect on areas that are darker than mid grey. Conversely painting with black in Overlay mode will make all areas that are darker than mid grey darker and have no effect on areas that are lighter than mid grey.

The final word

Every image is different. You may need to make many choices during a selection. And you may find it helpful to use several different tools and techniques. You must remember to keep your eye on the Options Bar all the time to choose the best mode and the best degree of feathering. You will find it helpful to switch painting modes between normal and overlay. You may wish to switch into quick mask mode to help with tricky selections.

Practise the various techniques that I demonstrated so that you begin to remember where all the items and options are located.

Good Luck

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