

## Photoshop Layers

This is an attempt to describe what layers are all about – bear with me.

- An analogy can be seen in the sheets of acetate that used to be used in overhead projector presentations. If each sheet of acetate has an image on it, when they are placed on top of each other they are projected as a single blended image.

Layers work like that with lots of useful attributes to make them work better.

- It's possible to do lots of work on a single layer, so why use different ones?

Working on a single layer means that you can only amend what you've done by either going back in history, or by starting from scratch - when different layers are used there is far more room to manoeuvre, because individual layers can be selected to make amendments.

While the concept of layers is critical to the whole operation of Photoshop, it must always be remembered that each layer increases the file size – copying a layer doubles the size of the file, etc. etc. If it's too big it may become too much for the computer to handle.

Some actions create a layer automatically, e.g. Using the type tool; dragging an image (or part of one) onto another layer.

Photoshop gives each layer a name (Layer 1, layer 2 etc). They can be renamed or colour coded as required, by clicking on the name. It's good policy to name them as you go along, especially if you're going to have a lot of them in one image.

Other types of layers we use are adjustment layers and fill layers:

Adjustment layers allow changes to the colour balance, contrast, saturation etc. Using these layers gives the opportunity to go back and make changes later.

Fill layers can be used to give a solid colour, or a gradient, or a pattern.



### **The Layer Palette**

We need to get to grips with the various symbols and appearance of the layers in the palette and how to manipulate the layers.

The order of the layers is important. The one at the top of the palette stack is the top layer of the image. The bottom layer is usually the background image (where you started), unless it's been converted into a layer (by double clicking on the background text). Layer order can be rearranged by dragging the layers up or down.

An active layer – the one being worked on – has an inverse colour. It also has a paintbrush symbol to the left its name. It's easy to get confused when working with multiple layers, so make sure you've got the right one selected before you start making changes.

You can only work on the active layer. If you need to do something on another layer you must select it first, by clicking on its name.

The 'eye' icon to the left of the layer displays the layer, or hides it. It's an easy way to see the effect that a layer has on the finished image.

If a chain link is shown, the layer is linked to another, which means that any movement of any of the linked layers will cause an identical movement in the other.

When a layer is selected there are various options available at the top of the palette. Remember that these options only affect the selected layer.

At the top right of the layer palette there's a button with a chevron, which gives a drop down menu of options for the layers, which we'll go through later.

On the next line the blend mode box is located. This has a drop down menu which is used to change the blending mode of the active layer, to alter the way it blends with the layer below. The way the different modes work are suited to individual images and will be addressed at a later session.

To the right of the blend mode box is the opacity setting box. This can be used in many ways, but is particularly useful if you want to work on the layer below and see the upper layer at the same time. It's also a useful way of reducing the effect of the active layer. It allows the layer below to show through the active layer.

On the line below the locking options are shown:

- By locking the transparent pixels of the layer, any adjustments on that layer will only affect the parts with coloured pixels.
- By locking the image pixels (paintbrush icon), painting or editing in the layer is prevented – you can still select areas, move and transform them.
- The lock position option prevents the image from being moved around, but you can play around with the other options to your hearts content.
- The lock all option prevents all the above, but still allows selections to be made.

To the right of the locking options is the 'fill opacity' setting box. The effect of this is similar to the 'opacity' setting box, but only affects the colours of the layer, not all the effects.

At the bottom of the palette are some useful short cut icons:

- The link icon is used to link two or more layers together – press Ctrl while you select the layers to be linked, then press the icon
- The layer style icon allows various styles to be used on the selected layer – shadow; glow; bevel / emboss etc.
- Add Layer Mask – really useful for working on specific parts of an image. The mask is created on the selected layer. Make sure you have the correct part selected (image or mask) before making any adjustments. By painting with black onto the white mask, that part of the image isn't shown and if you change your mind just paint it with white again. You can add gradient, filter

effects etc to a layer mask and easily undo any part you don't like. This is something we'll have to look at in a later session.

- New fill or adjustment layer – This is one which we'll spend a bit of time on as the adjustment layers especially give so much capacity for amending the colour, contrast, saturation etc, and allow you to go back and readjust them later. Fill layers can also be used to good effect, whether it be solid colour, pattern or gradient.
- Create New Group – this makes it possible to group several layers into one group, so with several different groups (which can be all shown or hidden) the layer palette can be tidied up and the different groups merged with each other as required. The default blending mode for a group is 'pass through' which means it has no blending effect of its own.
- Create New layer – just what it says. A new blank layer is created above the selected layer. Also by dragging a layer onto this icon, a duplicate of that layer is created.
- Delete layer – either select the layer and then push the trash can, or drag the layer into it.

We've now covered the main parts of the layers palette, so now we'll look at some bits in more detail. First the drop down menu at the top right of the palette:

This listing refers to Photoshop CS2. If you're using a different programme, all items may not apply. The drop down menu on the option bar Layer target also has many of these items.

- Dock to Palette Well – this moves the layer view to the options bar where it is then accessed by touching the tab. To restore it to its standard position, drag it down from the options bar.
- New layer, duplicate layer and delete layer speak for themselves.
- Delete hidden layers deletes all layers which aren't made visible (the eye icon showing)
- New group and new group from layers we've already talked about. To make a group from layers you must first select which layers you want to group together (using Ctrl or shift) then select the option from the menu.
- When a group has been created, the 'lock all layers in group' option becomes available.
- The layer properties option allows you to rename the layer, but this can also be done by simply double clicking on the name of the layer. You can also colour code the layer if you wish.
- Blending Options brings up the layer style dialogue box.
- Create Clipping Mask – this is available in Photoshop CS. It enables a layer (typically a text layer, but not solely) to be used as a mask, to clip an area from the layer above which then floats above the layers below.
- Link Layers – the same operation as described in the shortcuts above.
- Select linked layers – this would be useful when creating groups etc.

The next three deserve a lot more attention:

Merging puts several layers into one, so it saves a lot of memory. Once this merged layer has been saved, there's no going back, so this should only be done when you've finished all the work required on the individual layers.

- Merge down – This command merges two adjacent layers or groups into one. The data of the new merged layer is taken from the original top layer (note that an adjustment or fill layer can't be used as a target for the merge). More than two layers can be merged, by selecting them and then 'merge down'.
- Merge Visible – This command merges all the visible layers / groups. The data of the new merged layer is taken from the original top layer (note that an adjustment or fill layer can't be used as a target for the merge).
- Flatten Image – This command merges all the visible layers and discards the hidden ones, so you're left with only a single background layer. This should be done when the image is ready for printing – no more work is going to be done on this image.

Stamping of layers is another way of merging layers, without losing the original ones – be aware that it increases the overall file size, but it gives the opportunity to go back and make changes to layers. The best way to do this is to make the required layers visible (hide those not required); select the top layer that is to be merged; hold down the Alt key and press 'merge visible'. A new merged layer is created on top of the one selected.

- Animation – this opens the animation options settings – not one we're going to be looking at.
- Palette preferences – gives the option to increase or decrease the thumbnail size of the image in the palette.

The 'Layer' drop down menu at the top of the screen has most of the above selections, plus a few extras. We'll have a quick look at the 'extras' but I don't want to get too involved with them at this stage (enough is enough)

We'll also look further into adjustment / fill layers. These are very worthwhile and deserve more time than we can give at this session.