

INTRODUCTION TO PHOTOSHOP

By Antonio Mendoza

Objectives

To learn the basics of Photoshop so you can create, edit and composite images that can be used on Web sites and as graphics for movies.

Textbook

Visual Quickstart Guide to Photoshop For Windows & Macintosh

by Elaine Weinmann and Peter Lourekas

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Make sure to get the edition for Photoshop CS, which will be the version of Photoshop we'll be using.

Activities

- Explore the Photoshop desktop.
- Learn how to read and use the menu, the palettes, and the Photoshop window.
- Open and save images.
- Digitize images with a scanner and/or digital camera.
- Select, copy, paste, resize, edit, transform and composite images in Photoshop.
- Optimize images for the Web, print and videos.

Things to Remember

The best way to learn Photoshop is by using it. Don't be scared, try it out, you can always undo whatever you mess up.

You can undo your last adjustment to an image by pressing Command-Z. You can undo going back several steps using the History Palette and/or the History Brush Tool.

Keyboard shortcuts will make your life much easier. Learn the ones that you would use the most.

Choose the lowest possible resolution and dimensions for your image given your output requirements. If you're working on an image for the Web, work at 72 dpi (dots per inch). If it's for a newspaper, then work at 150 dpi. If your output is a glossy magazine or a poster, then work at 200 to 300 dpi.

Pixels and Vectors

Images in Photoshop are made out of **pixels** and **vectors**. A pixel is a little rectangle of a solid color. The image on your monitor is made out of **72 pixels per square inch**. Higher resolution images have more pixels per square inch. If an image is 72 dpi (dots per inch), that's the best resolution for that image. If you

double the image in size, the pixels will double in size, giving it a distorted (pixilated) look. All images meant for the Internet should be 72 dpi.

Vectors are lines and shapes that are mathematically defined and resolution independent. That means that however much you increase the size of the image, the vector lines and graphics will remain sharp. The Text Tool in Photoshop uses vectors to draw out fonts, so all text will look great even after you resize the image.

Color Modes

The two main color modes in Photoshop are **RGB** (Red, Green, Blue) and **CMYK** (Cyan, Magenta, Yellow and Black). RGB is the color mode used to display a color image on a monitor. The RGB mode is additive, so when the three primaries are combined, they produce white.

CMYK are the color modes used for printing. They are subtractive, so when they are combined, they produce black.

You should always work in RGB, especially if you're making Web graphics. If you're planning to print your image, switch to CMYK before printing and adjust the color accordingly.

File Formats

The most common file formats used in Photoshop are **JPG, GIF, PSD** (Photoshop's native format), **TIFF** and **PICT**. The only two formats that retain layer information are PSD and TIFF. The most common file formats used for Web design are JPG, GIF and PNG. Images saved as JPGs can be compressed really well while retaining color information. The GIF file format restricts color information and retains transparency. Files saved as PNG can both retain color information and preserve transparency. PICT files tend to be used with multimedia applications.

File Browser

The best way to access and organize your images is through the **File Browser**. To open the file browser, click on the file icon to the left of the palette well (the darkened area on the right of the options bar), or select "Browse..." from the File menu. In the File Browser you can select and open several images at once. You can also sort your images according to rank, file size, name, height, width, etc. To open several files at once which are continuous in the file browser, you can select them by Shift-Clicking the range of images. If they are not continuous, you can select several images by Command-Clicking each individual image.

Guides

Guides are non-printable markings that you can use to align elements in your images. If you set "Snap To," then "Guides" in the View Menu, the edges of the image elements you move in your images will snap to the guides. To make a

guide, you pull from the ruler on the sides of the window and you'll see the guide (a blue vertical or diagonal line). The guides can snap to ruler increments as you move it across your window by holding down the shift key as you drag. You can temporarily disable the snapping to guides by holding down the Control key. If you hold down the Command key the guide will switch from horizontal to vertical and vice versa.

The Toolbox

The Toolbox has 22 visible tools to select from. The tools that have a little triangle on the lower right side have related tools that can be displayed by clicking and holding on the tool to make them visible. To select a tool simply click on it or use the shortcut key.

The most commonly used tools are the Selection marquees, the Move tool, the Crop, the Lasso, the Magic Wand, the Clone and the Eraser. The Marquees, Lasso and Magic Wand are all selection tools. The Clone Stamp, Eraser, Paint, Assorted Brushes, Dodge, Burn and Blur tools are used to manipulate pixels. The Shapes tool, Text and Pen tools are used to create and manipulate vectors.

Selection Tools

The Magic Wand is a quick way to select areas that have the same color. The Lasso, Polygonal Lasso and Magnetic Lasso are used to quickly select an area in a picture, like a face or a building. To use the Lasso tool just click and drag around the section you want to select. The Polygonal Lasso works best on images with straight lines. The Magnetic Lasso is good for images with clear edges.

Pixel Tools

The pixel tools are basically used to paint on the image. The Brush and Pencil tools are pretty straight forward. Click and move the cursor around the image and you'll see how they work. The Pencil works basically like the Brush, but it paints hard edges. You can choose the size, type, color and style of brush using the Brush and other respective palettes or the Option bar that appears when you select a painting tool. The Blur, Sharpen, Smudge, Dodge, Burn and Sponge tools work like the Brush or Pencil tools, but instead of painting pixels, they distort, darken, lighten, sharpen or blur.

The Eraser Tool

The Eraser works like a painting tool but instead erases the pixels to the color of the background (or transparent, if you're erasing pixels on any layer except the background layer). You can define how well the eraser works by changing its opacity. To erase the background layer to transparency, you have to use the Background Eraser tool. The Magic Eraser works like the Magic Wand.

The History and Art History Brushes

These brushes "paint" on the last saved state of the image on the current image. The art history brush does it in a stylized way.

Cloning Stamp

One of my favorite tools is the Cloning Stamp. This tool can be used to "clone" sections of an image. For instance, if you have a picture of a person with a big pimple on his cheek, you can get rid of the pimple by cloning an area of the other cheek over the pimple. To use the cloning stamp, you first have to select the area you want to clone. This is done by holding your cursor over the area and option-clicking. Then click and drag over the area you want to cover. You'll see the cursor appear over the area you're cloning. The Healing Brush and the Patch Tool are refinements of the Cloning Stamp.

The Pen Tool

The best way to select part of an image is by using the Pen tool. The Pen tool draws a vector path or shape using Bezier curves that can then be turned into a selection. At first it's hard to understand how the pen works, but once you get the hang of it, you'll see what a useful tool it is. The best way to learn how to use the Pen tool is by trying it. The Pen tool has five different states that complement each other in their functionality. The Path and Direct Selection tools and the Shape tools are also related to the Pen tool and work in conjunction with it.

The Text Tool

If you want to start new type layer on top of, or very close to, another type layer, hold down Shift before clicking on the page. That way you won't automatically begin working on the existing type layer.

With the Type tool, hold the Option key and click in your document. The Paragraph Text Size dialog box will appear, allowing you to enter the exact size you'd like for the column.

To create a paragraph, click and drag with the Text tool before writing to determine the boundaries of your paragraph. To create point type (type that will keep going horizontally until you type in a return), just click on the window before starting to type.

You can use a clipping path to fill text with imagery without first having to rasterize the text.

To screen an image using type, turn the type into a vector mask and use the mask with an adjustment layer.

Another cool effect is to make a brush using type. Then "paint with it."

Gradient Tool

The Gradient tool shares its spot on the tool bar with the Paint Bucket. To use the Gradient tool, select it, then click and drag your mouse across the image. You can choose the type of gradient you want from the corresponding Gradient tool options bar. There are 5 different types of gradients: linear, radial, angle, reflected and diamond. As with other paint tools in Photoshop, you can also choose a blending mode for your gradient.

You can also use different gradient presets from the Gradient tool pull-down menu on the options bar. To access the pull-down menu, click the arrow next to the gradient chip on the center left side of the options bar. You can change the gradient presets by Control-Clicking on your window with the Gradient tool and choosing a new preset.

For more control over your gradient, click the Gradient Chip on the options bar to open the Gradient Editor Window.

Gradient Editor Window

In the Gradient Editor window you can customize your gradient by clicking and dragging the color arrows on the key points of the gradient. You can change the key colors of the gradient by clicking on the individual color chips under the arrows under the gradient and choosing a new color. You can change the position of an individual stop by clicking and dragging.

The top arrows on the gradient represent the opacity of the gradient. The bottom arrows represent the color. You can delete the key points by clicking on them and then clicking delete in the bottom right of the Gradient Editor window. (Notice that the delete button on the opacity arrow appears on the top of the delete point for the color arrow.) You can add new colors and opacity settings by clicking on the top and bottom of the gradient. You can also choose the gradient type--solid or noise. I personally like solid more than noise.

You can store your custom gradients by clicking on "Save..." before applying the gradient. You can then access the gradient by clicking "Load..." on the Gradient Editor window. You can also save your custom gradient as a tool preset, then access it from the Tool Preset Palette or the preset pull-down menu on your Gradient tool option bar. To save as a Tool Preset, select "New tool Preset..." from the Tool Preset Palette's pull-down menu.

Gradients are powerful tools, especially when used in conjunction with masking.

Palettes

There are 18 palettes in Photoshop. Palettes can be grouped together, opened and closed, or docked in the Palette Well. The Palette Well is on the right side of the option bar on the top of the Photoshop desktop. Several palettes, like the

Color and Swatches, are pretty useless. For color information, just double click on the foreground and background color chips on the Toolbar.

All palettes have a pull-down menu on the top right side to access the different options associated with the palette. Most also have several icons on the bottom (like a trash and a file icon) to quickly perform certain actions related to the palette. The palettes we are most concerned with are the Layer, History, Brushes, Character, Paragraph and Paths Palettes.

History Palette

Use the History Palette to return to previous states of your image. You can also undo your editing of an image by pressing Option-Command-Z. Similarly, you can redo your actions by pressing Shift-Command-Z. However, you cannot retrace your steps after performing a new change on your file.

You can choose to use the History Palette in a linear or non-linear fashion. Linear means that when you return to a previous state, you lose everything that you did after it. If you use the history palette in a non-linear fashion, you can remove individual history states from your image.

To use the History Palette in a non-linear fashion, go to the “History Options” in the History Palette pull-down menu and check “Allow non-linear History.” To remove a history state, highlight the state, then click on the trashcan icon on the History Palette or Control-Click on the history state and choose “Delete” from the Pop-Out Menu.

You can also take snapshots of a history state that will remain in the History Palette even when you remove all other history states. You want to clear all history states regularly so that you don’t run out of system memory. To take a snapshot, select the history state, then click on the camera icon on the bottom of the palette or Control-Click on the history state and select “New Snapshot...” from the Pop-Out Menu. For the time being, I recommend that you don’t clear your history states.

Note: When a menu item is followed by three dots (...), it means that you’ll open a window with options when you select item.

Layers Palette

Layers are like sheets of acetate that are stacked together to form a composite image. You can add new layers, reshuffle them, turn them on and off, add effects, blend them, mask them, merge them, etc.

Active Layer

As you click on a layer in the Layer Palette, it becomes gray, which means that it’s presently the active layer. Whatever transformations you make will only affect the active layer. You can move up and down the Layer Palette by pressing

Command-] and **Command-[**. To get to the top, press **Command-Shift-]**. To get to the bottom, press **Command-Shift-[**.

Usually, if you're trying to do something on an image and nothing happens, it's because you're not doing it on the active layer. To make a layer active, click on it on the Layer Palette or Control-Click on the image, then choose the layer by name.

Background Layer

The top layer is the top of the image and the bottom layer is the background. As the background layer, you cannot move it or manipulate it like the other layers. Also, it cannot have any transparent pixels. To change the background layer into a normal layer, double-click on it and then give it a name. To turn a layer into the background layer, highlight the layer in the palette, choose "New," then "Background From Layer..." from the Layer Menu.

Show/Hide Layers

If you click on the eye on the left of each layer, you will hide the layer. However, that doesn't mean you've deleted the layer. If you Option-Click on one eye, you'll show/hide all the other layers. You can also Control-Click on the eye and choose "Show/Hide Other Layers" from the Pop-Out Menu. You can also drag and hold the mouse over the eyes to show/hide the layers.

Lock Layers

You can lock the transparency, pixels and movement of each layer by clicking on the three icons on the top left of the layer palette. When you do that, you'll notice a lock appearing on the right of the active layer. You can lock all three (transparency, pixels and movement) by clicking on the lock. By locking transparency, you will not be able to fill any of the transparent pixels of the layer. If you lock pixels, you will not be able to paint on or manipulate the opaque areas of the layer. By locking movement, you will not be able to move the opaque areas of the layer. You will still be able to move the layer up and down in relation to the other layers. If you want to lock all three, click on the lock icon next to them. To unlock, click on the icon again.

Blending Modes

You can also select the Blending Modes between layers from the pull-down menu on the top left of the Layers Palette. Try the different blending modes and see what they do. It's the same blending modes you would see in the Fill Window or in the options for the Brushes. Next to the blending modes you can determine the Opacity of the layer (except for the Background Layer). The opacity determines the transparency of the layer. Under the Opacity you can choose the Fill of the layer. The Fill is the same as the Opacity except that it doesn't affect the opacity of any effects you might have added to the layer.

Linking Layers

Two or more layers can be linked. To link a layer to the active layer, click on the square to the right of the eye of the layer. You'll see a little chain icon appear in the square. If you now move or resize one of the linked layers, the other layer will move with it. To unlink, click on the chain icon and it will disappear.

Layers and linked layers can be dragged from one image to another. Using the Move tool, you can drag the layers from the image window to the target window. You can also drag individual layers from the Layers Palette to another image. If you drag from the Layers palette, you can only drag one layer at a time. To move a layer from one image to another, drag the layer onto the target window until you see the edges of the window turn black, then release.

Merge Layers

You merge two or more layers together to combine into one layer. You can merge layers together from the Layers Palette pull-down menu or the Layer Menu. There are four ways to merge layers: You can "Merge Down," in which the active layer would merge with the layer immediately under it; "Merge Visible" merges all visible layers; "Merge Linked" merges all linked layers; and "Flatten Image" merges all layers into the Background Layer.

New Layers

You can make a new layer by clicking on the Layer icon on the bottom of the Layers Palette, or by choosing "New" then "Layer..." from the Layer Menu, or choosing "New Layer..." from the Layers Palette pull-down menu. You can delete a layer by dragging it over the trash icon at the bottom of the Layers Palette, select it and click on the Trash icon, choose Delete from the Layer Menu or the Layers Palette pull-down menu, or by Control-Clicking on the layer on the Layers Palette and choosing Delete from the Pop-Out Menu.

Adjustment Layers

Next to the New Layer icon on the bottom of the Layers Palette is the icon for Adjustment Layers. You can make an Adjustment Layer by clicking on this icon or by choosing "New Adjustment Layer" from the Layer Menu. Adjustment Layers are Layers that make pixel adjustments on all the layers that are underneath it. The adjustments are the same as the ones you can do on an image from the "Adjustments" on the Image Menu. The difference is that as an Adjustment Layer, you can turn it off and on (by clicking on the eye), or move it up and down the layer stack. The Adjustment Layer shows up as two rectangles on a layer. You can change the parameters of some of the effects by clicking on the left rectangle of the adjustment layer, or selecting "Layer Content Options" from the Layer Menu .

Fill Layers

A fill layer is a layer made out of solid color, a gradient or a pattern. You can also make Fill Layers from the Adjustment Layer icon at the bottom of the Layers Palette or by selecting “New Fill Layer” from the Layer Menu.

Layer Sets

To the left of the Adjustment Layer icon is a folder icon. You can make folders in your Layers Palette and group layers together in folders. You would do this for peace of mind and to keep an organized Layers Palette. To put layers in a folder, just drag the layer over the folder. When you release, you’ll see the layer is indented under the folder. You can switch off and on layer sets by clicking on the eye of the folder. You can also link all the layers in the layer set together by clicking on the link square next to the eye.

Next to the Layer Set icon you’ll see the Layer Mask icon. We will be discussing this further during the workshop.

Layer Effects

The last icon on the bottom bar of the Layers Palette is the Layer Style icon. You can add a Layer Effect to a layer by clicking on this icon or by selecting “Layer Style” from the Layer Menu. Layer styles give the layer different effects like drop shadows or glows. Choose a layer effect for a layer and experiment with the different options. For instance, with the Drop Shadow you can adjust the angle of the shadow, the spread, size, diffusion and blending mode. Once a layer has a layer style you’ll see a little arrow to the right of the layer name with the Layer Style icon. If you don’t see the Layer Style indented under the layer in the Layers Palette, click on the arrow to reveal it.

You can add more than one Layer Effect per layer. Like other layer properties, Layer Styles can be turned off and on by clicking on the eye icon on the left of the layer. If you double-click on the Layer Effect name, you can readjust the effect parameters. I suggest staying away from the Contour Properties, which just determines the properties of the edge for the layer effect.

You can also drag layer effects from one layer to another and even from one image to another. To get rid of a Layer Style, just drag it to the trash, or by control-click on the layer style and selecting “Clear Layer Style” from the Pop-Out Menu, or selecting “Clear Layer Style” from “Layer Style” from the Layers Menu.

You can make a new layer out of some of the Layer Styles by selecting “Create layer” from “Layer Styles” in the Layer Menu.

Styles Palette

The Styles Palette is a collection of preset combinations of layer styles that you can use with your images. You can also save particular layer styles combinations in the palette to use in the future.

Actions Palette

The Actions Palette allows you to store a series of commands you perform in Photoshop that can then be played back to use in other pictures. For instance, if you're working on a Web site that requires all images to be 200 by 300 pixels and black and white, you can record the sequence of commands you perform while working on the first image. Then you can automatically do the same sequence to a whole folder using the actions palette in conjunction with the Batch or Droplet commands.

Tool Presets

The Tool Presets Palette stores and saves the parameters of a tool you find you use frequently. For instance, you can save the font size, weight, color and face you're using with the type tool while working on the titles for a Web site. When you need to do a new title, instead of having to remember the specifics of the font you were using, you can click the Tool Preset and you're set.

To save a tool preset, select "New Tool Preset..." from the Tool Preset Palette pull-down menu (the little arrow on the top right side of the palette) after using the tool with the settings you want to save).

You have the option of showing all tool presets in the Tool Preset Palette or just show the presets relating to the tool you're using. To change this setting, check or uncheck the "Current Tool" check-box on the bottom left of the palette. You can also change the setting using the Tool Preset pull-down menu.

Layer Comps

You can save different versions of your composite image using the Layer Comps Palette. Layer comps will remember the blending modes, opacity, fill and layer state of each comp. Any changes in layer stacking, adjustment layer setting or layer placement will change accordingly in all layer comps.

Quick Mask and Alpha Channels

Photoshop's Quick Mask mode and its corresponding Alpha Channels have become somewhat outdated by the more powerful Layer Mask and Vector Mask features. However, they remain useful tools for certain situations when you need to quickly make a mask for your image.

Here's how it works. The Quick Mask mode is a way to make a selection by "painting" the selection area on top of the image. You can activate the Quick Mask by clicking the Quick Mask icon, which is under and to the right of the foreground and background color chips on the Tools Palette. These two rectangles with circles in the middle represent Photoshop's normal and quick

mask editing modes. When you launch Photoshop, you'll see that the left rectangle is selected, meaning that you're in the normal editing mode. If you click the right rectangle, you'll enter the Quick Mask mode. If you then click the left rectangle, you'll exit the Quick Mask mode.

Once you're in the Quick Mask mode you can paint on the image with any painting tool without effecting the image. Make sure your foreground paint color (top-left chip) is black. If it's white, nothing will happen. As you paint, you'll see that a translucent red coat will cover the image. This red area will be the masked area once you leave the Quick Mask mode. The rest of the image will be the selected area. To get rid of masks, paint over them with white. You'll notice that white erases the translucent red color. Once you're done making your Quick Mask, switch back to the standard editing mode (the other icon on the toolbar to the left of the Quick Mask icon), and the Quick Mask will turn into a selection. If you are in the standard editing mode and you make a selection and then switch to the Quick Mask mode, the unselected areas will have a transparent red coat.

The best use for the Quick Mask mode is to manipulate selections using filters and the painting tools. To save the selection you make with the quick mask (or to save any other type of selection), you can turn it into an Alpha Channel by pulling from the "Select" menu and choosing "Save Selection." This turns the selection into what's called an Alpha Channel. If you want, you can then see your selection as an Alpha Channel at the bottom of the Channels Palette. You can have as many Alpha Channels as you want, but each new channel will make your file size that much bigger. You can load the selection back to your image by going back to the Select menu and choosing "Load Selection."

Clipping Masks

Clipping Masks are somewhat like inverted layer masks. For a clipping path to work, the bottom layer, which is the one you'll be clipping onto, needs to have a transparent area and an opaque area. To make a clipping path, select the layer you want to clip on top of the base layer, then select Layers>Create Clipping Mask. Once you attach a clipping path, the top image will only show in the opaque areas of the clipped-on layer. To release a layer from its Clipping Mask, select the layer then select Layer>Release Clipping Masks.

Like a mask, clipping paths don't work with the background layer. If you want to use the background layer, double click on the background icon on the Layers Palette and change the layer name to something else.

You can also apply a clipping path by placing the mouse icon on the line between the two layers you want to use. When you do this you'll notice the cursor turns into two overlapping circles. When this happens you click on the line and the top layer will shift to the right in the Layers Palette. Also, the top layer will only show in the opaque areas of the bottom layer in the composite image. You can add as many layers as you want to the clipping path by repeating the above procedure

to subsequent layers on top of the top layer of the clipping path . You can remove layers from the clipping path by option-clicking the bottom edge of the layer on the Layers Palette.

Layer Masks

Layer Masks are basically black and white channels that attach themselves to a layer and filter part of that layer. The black part of the mask shows through to the next layer and where it's white, it shows the image of the masked layer. Like Quick Masks and the Alpha Channels, the Layer Masks consist of black and white pixels. You can edit them by painting in black and white areas. You can also use the Gradient tool on masks to make gradient image blends.

To make Layer Masks, you can either go to the "layers" menu and choose Add Layer Mask or click the mask icon on the bottom of the Layers Palette. If you go through the layers menu, you'll be given the option of choosing "reveal all" or "hide all." To hide all from the Layers Palette, you can alt-click the mask icon at the bottom of the palette. If you reveal all, the mask will appear as a white rectangle in the Layers Palette next to the image icon on the layer you're working on. (Remember, you cannot add a mask to the background layer.) If you choose hide all, you'll see a black rectangle in the Layers Palette. Also, the image from that layer will disappear on your composite image. You can make a mask from a selection by clicking on the mask icon on the Layers Palette or by choosing Make Mask from Selection from the layers menu.

You can reverse a mask by clicking the mask icon on the Layers Palette and pressing Command-i to invert the colors of the layer mask. You can also use masking to selectively apply adjustment layers to your image. To do this, paint on the mask icon that appears next to the adjustment layer icon on the Layers Palette. (Remember, if you want to work on the mask, you have to click on the mask thumbnail on the Layers Palette. You'll notice that when you click on it, the thumbnail gets a small edge around it.)

You can move a mask from layer-to-layer by clicking and selecting the layer you want to move the mask to on the Layers Palette and then dragging the mask over the "Make Mask" icon at the bottom of the Layers Palette. You can turn off the mask by shift-clicking the mask icon in the Layers Palette. To turn it back on, you shift-click again on the icon. To see only the mask, option-click the mask icon on the Layers Palette. To return to the image, option-click on the mask again.

Shape Tool

The Shape tool, like the Pen tool and the Type tool, is vector-based. The shapes made with the Shape tool are essentially color layers with a vector mask outlining the shape. When you activate the Shape tool you'll recognize that the options bar is the same as the one that appears with the Pen tool. For the Shape tool to work properly, you have make sure that the Pen tool options (the three squares on the left of the option bar) is on shape layers (the first of the three squares). If you're

using the Pen tool, you want the second option activated (or your shape will be filling with color as you make your path with the Pen tool).

The six different shapes attached to the options palette of the Shape tool are the rectangle, the rounded rectangle, the ellipse, the polygon, the line and the custom shape. Use each tool to make a specific shape. Each time you make a shape, Photoshop will automatically put it on a new layer. With the line tool you can specify the width of a line. You can also attach arrows to the line by clicking on the arrow to the right of the different shapes. Hold the shift key to lock your line in a horizontal, perpendicular or vertical direction.

You can turn a shape into pixels by clicking on the Fill Pixels button in the options bar. You can also turn a layer shape into pixels by rasterizing it. Select from the Layers>Rasterize submenu and then choose one of four options. Shape will remove the vector mask and turn it into a shape filled with pixels. Fill content will turn the adjustable fill into a solid color area. Vector mask will turn the vector mask into a layer mask. Layer will have the same effect as shape.

To change the content of the shape into a pattern or gradient, select the shape layer, then choose Layer> Change Layer Content.

The Custom Shape Tool

The Custom Shape tool has a number of custom shapes attached to it. You can access the custom shapes by clicking and holding on the shapes pull down menu. You can also make your own shape using the Pen tool and save it in the Custom Shape pull-down menu. To save a shape, make it using the Pen tool, then select "Define Custom Shape" from the "Edit" menu.

Like the other Shape tools, when you make a shape using the Pen tool, Photoshop will automatically create a new layer. The shape will also appear with a path on its edges. You can hide the path by clicking on another layer on the Layers Palette. To manipulate the shape and size of your shape you have to reactivate the path of the shape by clicking on the righthand icon of the shape in the Layers Palette.

Like the vector paths you make using the Pen tool, shapes are, in fact, vector masks and can be resized and reshaped. Resize a shape by clicking the shape mask on the Layers Palette and pressing cmd-t to transform. Handle bars will appear around the shape and you'll be able to resize, distort and rotate. You can add new points to the shape's vector mask using the Pen tool. Place the Pen tool cursor over the path and wait for the cursor to change to the pen with a "+" next to it. To remove points, place the pen cursor over a point in the shape's path and click when a "-" appears next to the pen. You can also move the points using the Direct Selection tool (the white arrow on top of the Pen tool on the tool bar). You can also move the whole path using the Path Selection Tool (the black arrow that shares the spot on the tool bar with the Direct Selection Tool).

Vector Masking

Vector Masks work like Layer Masks but are made using vectors. Vector Masks are resizable, reshapeable and resolution independent. Vector Masks are pretty much the same as the masks used by the Shape tool. You can make Vector Masks from shapes, paths, selections and text.

To make a vector mask from a path, select path, then choose layer>add vector mask>current path. To create a vector mask from type, make a type layer, then choose layer>type>convert to shape. Then select the layer you want the mask on and choose layer>add vector mask> current path.

To reshape a vector mask, use the Direct Selection tool to select the paths. After clicking on the edge of the mask, you'll see the anchor points of the paths. You can move the anchor points and/or reshape the lines of the path. To move the whole vector mask, use the Path Selection tool. Click on the edge of the mask and drag the path when it becomes visible in the image window.

Reverse the mask using the pathfinder buttons of the options bar. Using the Path Selection tool, click the layer that contains the vector mask. Click on the vector mask in the image. When you see the anchor points, click "subtract from shape area" on the options to reverse the masked area.

FILTERS

A filter can be applied to the whole of an image, to a selected area, to a mask or to rasterized text. To apply a filter, pull from the Filter menu and choose the filter. You can then reapply the last filter used by pressing Cmd-F. If you want to reapply the same filter but change the parameters of the filter, press Cmd-Option-F.

When you use a filter you will usually get two different types of preview windows. With some filters you will only get a simple window with a preview box. Under the preview box there are two squares with a plus and a minus. Press on these squares to enlarge or shrink the size of the preview image. Click on areas of the image to move the preview area.

Other filters use a more elaborate preview window that allows you to add other filters that can be piled on to the image. To smooth the edges of a filter, use a feathered selection or a layer mask. To lessen the effect of a filter, select the Fading command from the Edit menu.

Liquify Tool

Use the Liquefy tool to distort an image. The Liquify tool has its own interface that allows you to reverse the effect, mask the effect, as well as giving you the option of using seven different types of liquification.

By far, it's the most enjoyable tool in Photoshop. The pucker and bloat tool are my favorites. You can undo the liquification by using the Reconstruct tool. You can also mask areas to avoid liquification using the Freeze Mask tool. Use the Thaw Mask tool to remove the masking.

Pattern Maker

A tool designed to make patterns that can then be saved and used by all tools that use patterns. The Pattern Maker also gives you the option to try different patterns made out of the same image. The patterns made are not perfect copies of the selected area. Instead, Photoshop slightly manipulates the edges in an attempt to make the patterns seamless. This doesn't work that well, but it produces interesting results.

Render

In the render category of the filters you'll find the cloud filter. This generates clouds that can be used for all kinds of effects. Also, under render you'll find the lighting effects and lens flare. Both tools are used to simulate photographic effects into digital images.

Extract

The extract filter is yet another way of extracting a section of an image from its background. It's good for wooly animals or hair on a white background. Otherwise, there are better tools to cut out images.

AUTOMATING PHOTOSHOP

WORKSPACE

You can save and name your favorite desktop layout using the Workspace command in the Window>Workspace>Save... command on the top menu-bar. This is useful if you find yourself with a bunch of windows open and palettes everywhere. You can then return to your saved workspace state by selecting Window>Workspace>(My Workspace) from the top menu-bar.

CONTACT SHEET

Contact Sheet will make a page (or several pages) with a group of pictures. It's a great tool to quickly make a visual inventory of a group of pictures. To use the Contact Sheet feature, choose the files you want in one folder, then select File>Automate>Contact Sheet on the top menu-bar. You can also access the Contact Sheet feature through the File Browser.

Once the Contact Sheet Window has opened, first locate the images you want included (which can be all open files, a folder, or images selected in the file browser), then specify how many pictures you want per row, how many rows per page, the resolution, whether the images are flattened or not, and whether or not to use their file names as labels. Click OK and let Photoshop do the work.

PICTURE PACKAGE

The Picture Package feature makes a page with different size versions of the same image. It's perfect for a photographer to make a page with four 4X5 pictures, or nine 2X4s, or two 4X5s and four 2X4s. Picture Package is also perfect to maximize your printing output when you're printing invitations or flyers.

To use Picture Package, select File>Automate>Picture Package from the top menu. Then choose Document Size, Layout, Resolution and Mode. If your image has vector text, it's best not to flatten the images. Then click OK.

KEYBOARD SHORTCUTS

Command-J Copies a selection into a new layer.

Command-Option-J Cuts a selection and makes a new layer

Command-T Transforms image

Command-R Show/Hides the Ruler

Command-H Shows/Hides Guides, Marching Ants and other non-printables

Command-Shift-; Snap/Unsnap to guides

Command-' Show/Hide grid

Command-Shift-S Save as

Command-Click on Layer Selects all opaque pixels

Command-Shift-I Inverts selection

Command-A Select all

Command-D deselect

Command + Increases the image size and resizes the window

Command - Decreases the image size and resizes the window

Command Shift + Increases the image size without resizing the window

Command Shift - Decreases the image size without resizing the window

Tab Hide/Show palettes

F changes window from normal, to window and work area to full screen

M selects marquee

V selects Move tool

L selects lasso

C selects crop

E selects Eraser

W selects Magic Wand

S selects Cloning Stamp