



## INTRODUCTION TO GRAPHICS

# Illustrating from sketches in Photoshop

Information Sheet No.

PS806

Creating illustrations from existing photography is an excellent method to create bold and sharp works of art when you have the appropriate materials to trace from. However, what do you do when you lack photographic resources, and all that you possess is an idea of what you wish to create? The answer to this question can be found at the end of any pencil: start with a sketch. Quickly sketching onto paper is a tried and true method for recording visual ideas, and an integral starting point when it comes to illustrating. However, as much as sketching is an integral part of the illustrating process, it is what you create from that sketch within Photoshop that will transform your basic idea into a professional piece of finished art.

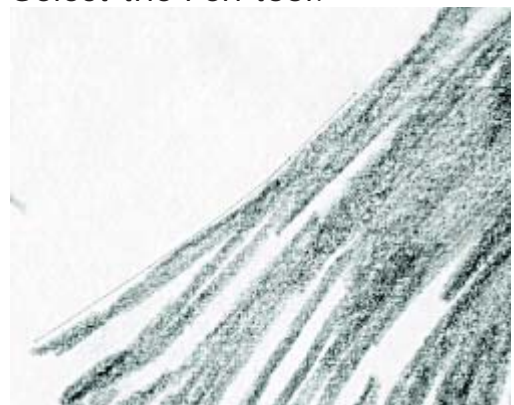
As with tracing photography, we'll be using the Pen tool to create the regions and define the outer edges of our artwork. However, when working from a sketch, it is necessary to refine the artwork as you go. You'll need to not only trace the art, but also create smooth line work of a uniform thickness, add sharp areas of detail, and define regions of varying color. Whereas, when tracing photography, the idea is to simplify, reduce detail, and use what is already there in a stylized manner. Also, when working from sketches rather than photography, your subject matter is not limited to your available photographs, you're only limited by your imagination.

When working with a sketch, always remember that it is merely a starting point. Photoshop provides all of the tools necessary to improve upon and embellish the artwork along the way. Using Photoshop to create artwork from sketches allows you to create

finished art that is true to your original idea in terms of concept, but vastly superior when it comes to execution.



Begin by downloading and opening up the sketch.psd file. This is the scanned drawing we're going to use as the basis for creating the illustration at right. As you can see here, the basic idea exists within the sketch. However, when you look at the finished art on the opposing page, you can see that a lot of refinement and embellishments were made to transform the sketch into a finished piece. The first step in the transformation is to carefully define the outer shape of the figure. Select the Pen tool.



In the tool options bar, set the Pen tool to create paths, not shape layers, and enable the add to path area function. Zoom in closely on the figure and click once on the outer edge of her to create an anchor point,

starting a new path component. Start at the left-most corner of her hair, because this is a sharp corner, it is an ideal place for a corner point. Follow the outer perimeter of her hair upward a little, then click and drag to create a smooth point. Keep the mouse button down as you drag, this will move the direction handles, which defines the curvature of the line on either side of the point.

## Embellish As You Go

Your path doesn't have to follow the sketch exactly, remember the idea here is to improve upon the drawing. Use the sketch as a guide, but create your paths however you think they work best. Don't worry about tracing the sketch exactly, you'll get a much better result if you focus on creating clean line work and smooth curves.



Release the mouse button and move upwards, further along the outer edge of her hair. Click and drag to create another direction point, when you are happy with the approximate curve of the new line segment, release the mouse button. Use this method to work your way around her hair, creating a curved path component. When you get to a sharp corner, simply click and then move on to the next point, creating a corner point instead of a smooth point. Work your way around the entire perimeter until you get to the place where her chest meets the bottom of the canvas.

## Screen Modes for Panning

In order to work beyond the edge of the canvas, you'll need to be working with a

screen mode that allows you to see the area beyond. Selecting either Full Screen Mode with Menu Bar or Full Screen Mode from the options available at the bottom of the toolbar are your best options. Although Maximized Screen Mode will allow you to see and work with the areas beyond the edge of the canvas when you're zoomed out far enough, you cannot move the canvas around with the pan tool when you're zoomed out that far. You can toggle through screen modes quickly by simply pressing the 'f' key on the keyboard.



Continue to draw your path upwards, back onto the canvas, tracing the outer contour until you reach your original point. Click on the first anchor point you created to close the path component. This is the outer perimeter of the woman. If we were to load this path as a selection and fill it with black, like we're going to do shortly, the result would be a solid black shape like a silhouette. What we really want is an outline, this is achieved by drawing additional path components that will subtract when the selection is eventually loaded. Ensure that your closed path component is not selected and then choose the subtract from path area function in the tool options bar. Mouseover to enlarge the image at left.



## Editing Paths

Use the direct selection tool to select individual points of your path components and edit them. You can move anchor points by clicking on them and then dragging. When you click on a smooth anchor point, the direction lines will appear. Clicking and dragging on a direction handle at the end of a direction

line allows you reshape the curves on either side of the direction point.



With the subtract from path area option enabled, carefully trace the inside areas of the woman, creating numerous, closed path components that will subtract from the outer path when we load it as a selection. Use the sketch as your guide to trace all of the white regions that exist inside the black outline of the sketch and within the outer perimeter defined by your first path component. Trace her skin, the fabric of her shirt, hair highlights, the inside of her glasses, etc. And remember, if you accidentally create a path component using the wrong path area operation, simply select it with the path selection tool and change the path area function in the tool options bar. Mouseover to enlarge the image at left.

## Converting Points

You can access the convert point tool within the expanded pen tool button in the tool bar, or by holding down the alt(PC)/option(Mac) key when using the pen tool. To convert a corner point to a smooth point, simply click and drag on it using the convert point tool. Direction lines will appear, curving the line segments on either side of the point as you drag. To convert a smooth point to

corner point, click on it once with the convert point tool and the direction lines will disappear, removing the direction lines and the curvature from the line segments.



When you close your last path component, there should be no single component currently selected within your path. If for some reason, you have a single component selected, use the path selection tool or the direct selection tool to click on an area of the canvas that contains no path. This will deselect any selected path component(s). Ensure that your new path is targeted in the paths palette, then click on the Load Path as a Selection button at the bottom of the palette. With the selection active, return to the layers palette and click on the create a new layer button at the bottom of the palette. Mouseover to enlarge the image at left.

## Auto Add/Delete

When using the Pen tool, by default, the auto add/delete option is enabled. When this option is enabled, points are added to, or removed from any selected path depending upon where you click. If you click on an existing point, it will be removed. If you click on a line segment, a point will be added.



## Fill the Remaining Areas

Repeat this same method to add a variety of colors to different outlined regions of the artwork, as shown in the next three steps.

Target your outline layer in the layers palette and use the magic wand to select her face, neck, and hand regions that are surrounded by black outlines. Leave the selection active and then target the underlying layer. Expand the selection by one or two pixels.



Press the 'd' key to set the foreground color to black if it isn't already. Ensure that your new layer is targeted and your current selection is active. Type alt(PC)/option(Mac)-delete to fill the active selection with the current foreground color on the new layer. Type Control(PC)/Command(Mac)-d to deactivate the selection. Select the magic wand tool. In the tool options bar, ensure that the contiguous option is enabled, sample all layers is disabled, and that the tolerance is left at its default setting of 32. Click on her shirt area contained within the black outlines to load it as a selection.



Select a yellow foreground color and fill the active selection with it. Deselect and target the black layer again. Use the magic wand to select her hair highlights. Return to the underlying layer and expand the selection. Select a blue foreground color from the picker.

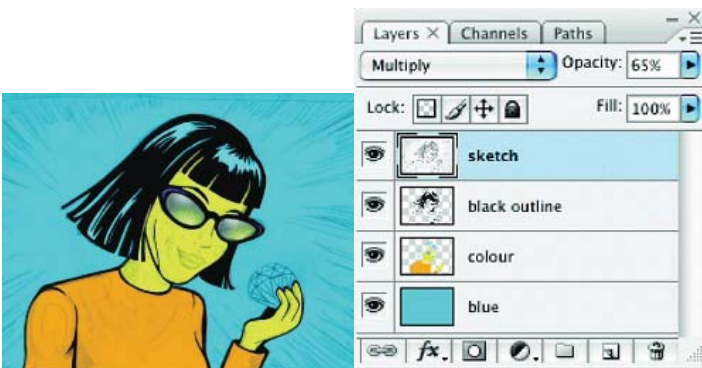


Hold down the shift key and click on her sleeve area as well, adding it to the currently active selection. Click on the foreground color swatch in the toolbar to open the picker. Select a bright orange color from the picker and click OK to specify it as the current foreground color. Create a new layer in the layers palette and drag it beneath the black outline layer. With the selection active, choose Select > Modify > Expand from the menu. Expand the selection by a single pixel or two and then fill the active selection with your new foreground color on the new layer. Deselect.

Fill the active selection with your new foreground color. Repeat this method to add some purple into the highlight areas of her glasses frames. Finally, repeat the process again to add some gray into the lenses of her glasses. Keep this selection active.



Select the gradient tool. Choose the foreground to transparent preset and enable the radial method in the tool options bar. Set the foreground color to white and set the opacity of the gradient tool to 75%. Click and drag once, starting at the top edge of each lens selection border and dragging outwards slightly, to create white highlights at the top of each lens. Next, switch the foreground color to green and add larger gradients into each lens near the bottom. Finally, choose a very light yellow foreground color and create two smaller gradients over top of the green ones you just created.



Deactivate the selection and create a new layer. Target the new layer and choose a new, light blue foreground color from the picker. Type alt(PC)/option(Mac)-delete to fill the entire new layer with the foreground color. Drag the layer to the bottom of the stack in the layers palette. Then drag the sketch layer to the top of the stack. From now on, we'll enable and disable the visibility of the sketch layer as required, making it visible only when it is needed as a guide. Change the blending mode of the sketch layer to multiply and reduce the opacity to 65%

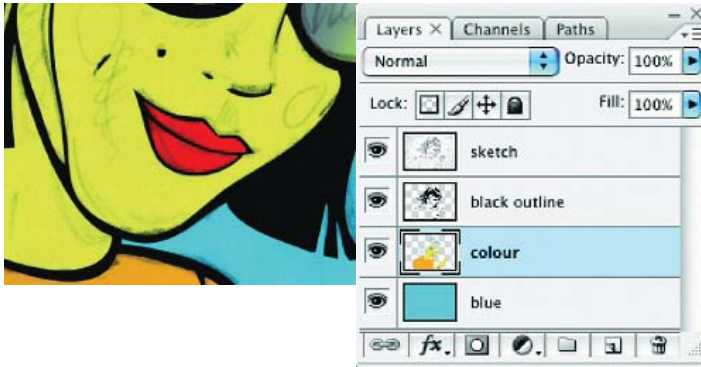
## Create an Action

When repeating the same task over and over again, like expanding a selection, create an action to save you time in the long run. To begin, ensure that you have a selection active. Then, in the actions palette, click on the Create New Action button. Name your action, assign a function key, and click Record. Expand your selection and then click the stop recording button in the Actions palette. The next time you want to expand a selection, all you need to do is click on the assigned function key to play the action, which will automatically expand your selection.



Select the pen tool and ensure that the add to path area option is enabled. Draw a closed path component around the perimeter of her lips, using the same method you used to draw your first path component around the entire woman. Now examine the details of her face that are indicated by the sketch. Create a few thin, closed path components that will add lines of detail to her face. Next, select the subtract from path area option and create two closed path components, surrounding her lips, inside the outer lips

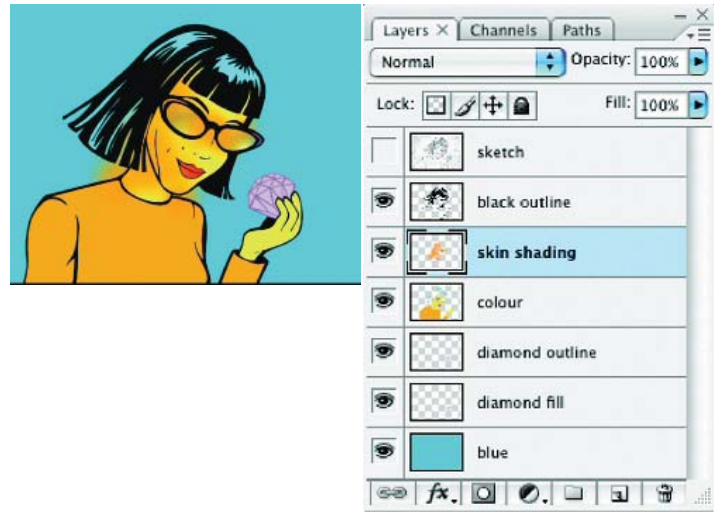
path component. Load the entire path as a selection. Mouseover to enlarge the image at left.



Target the layer that contains your black outline art in the layers palette, and fill the new selection with black on that layer. Deactivate the selection and select the magic wand tool. Using the same settings as before, use the magic wand to target both empty areas inside the lip outlines. Expand the selection slightly using the Select > Modify > Expand menu option and target the layer that contains your other solid colors in the layers palette. Fill the active selection with red on this layer and deselect. Select the Pen tool and ensure that the add to path area option is enabled.

### Breaking a Curve

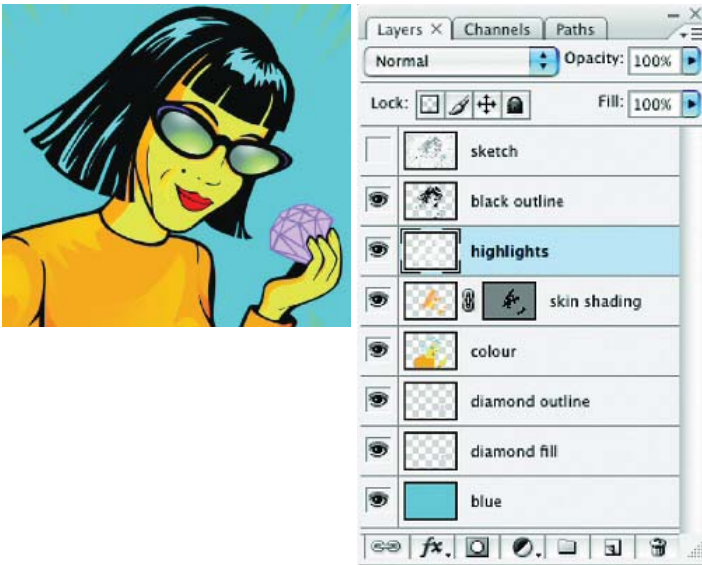
When you click and drag on a direction handle with the direct selection tool, it moves the direction lines on either side of the direction point, altering the curves of both line segments. However, if you click on a direction handle with the convert point tool, it will convert your smooth point to a corner point with independent direction lines. This means that the direction lines do not affect the line segment curve on the other side of the point when moved, only the curve on the same side of the point is affected.



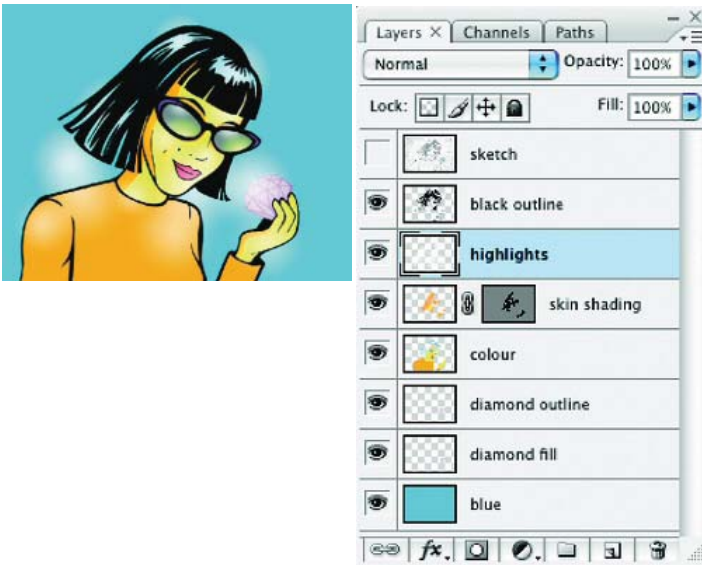
Use the Pen tool to draw a closed path component that surrounds the outer perimeter of the diamond shape. Next, enable the subtract from path area function and create a closed path component for each facet on the inside of the diamond shape. Ensure that no single path component is selected and then load the entire path as a selection. Create a new layer and place it above the solid blue layer. Select a purple foreground color from the picker and fill the active selection with it on the new layer. Disable the visibility of the sketch layer to see the illustration clearly.

### Refine Edge

CS3 offers another method for expanding selections, amid a plethora of other features in the new Refine Edge option. When you have a selection active, click on the Refine Edge button in the tool Options bar. Drag the Contract/Expand slider to the right to enlarge the selection boundary, expanding the selection. Or, instead of dragging the slider, you can enter a numeric value in the field.



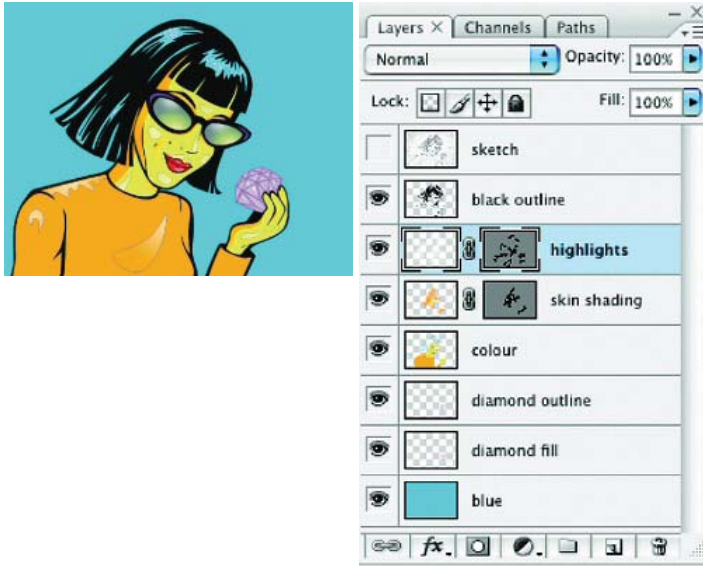
Worry not, all unwanted areas of gradient will be hidden in a moment. Right now, continue to add orange gradients over areas of her neck and hand that will require shading as well. When finished, select the Pen tool and enable the add to path area option. Draw a series of closed path components around only the regions of her skin where you want the orange gradients to be visible. Ensure that no single path component is selected and then choose Layer > Vector Mask > Current Path. This will constrain the visibility of your gradients to the areas within the vector mask's path components.



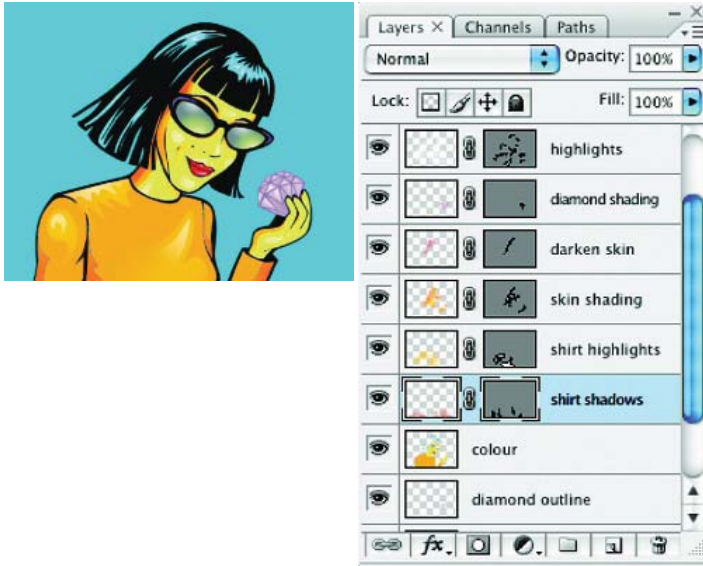
**Create a Series of Masked Gradient Layers**

In the next three steps, use the same method of creating gradients and applying vector masks to add highlights and shadows to different parts of the illustration across multiple layers.

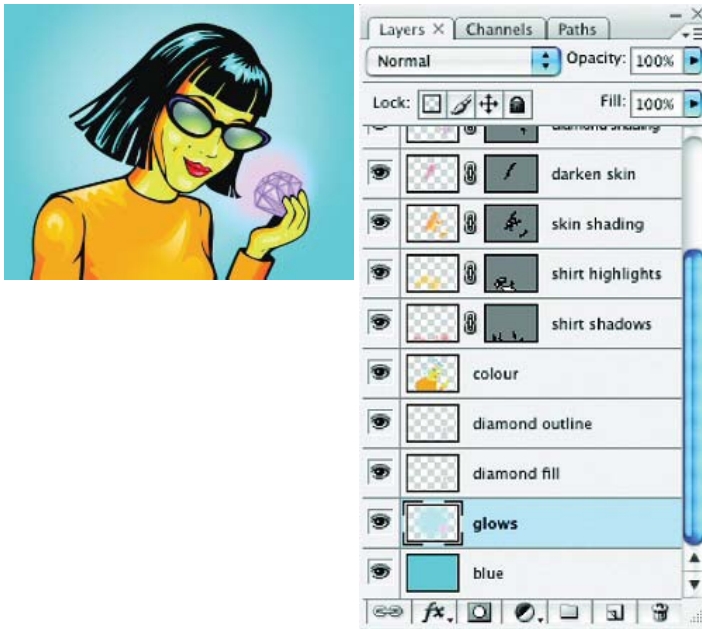
Create a new layer beneath the black outline layer. Target it and create some new radial, white to transparent gradients on this layer, in areas where you'd like to add highlights. For a less drastic result, reduce the gradient opacity in places.



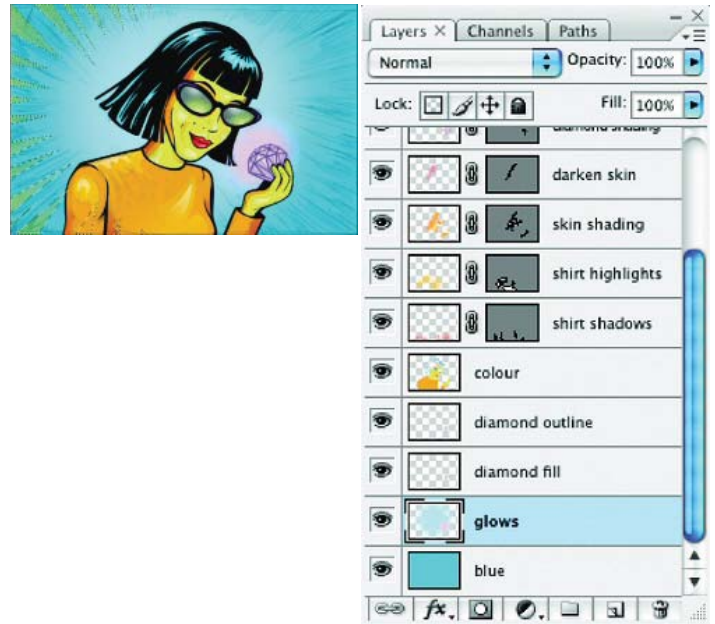
Select the pen tool. With the add to path area function enabled, create a series of closed path components to contain your highlight gradients within specific regions on the canvas. Ensure that no single path component is selected and choose Layer > Vector Mask > Current Path from the menu.



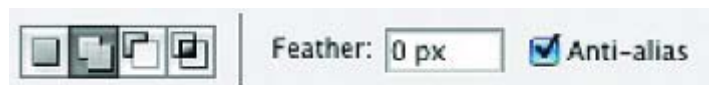
Use this method to create new, vector-masked layers with different colored gradients on them, indicating the different shades within her shirt and the diamond. Also add some darker shading to her face and neck, using the same procedure once again.



Create a new layer and place it directly above the solid blue layer in the layers palette. Select the gradient tool. Leave the options set as they were, except increase the gradient opacity to 100%. Choose a very light blue foreground color from the picker, then click and drag to create a large, light blue to transparent gradient in behind the woman's head on the new layer. Repeat this process a couple of times to intensify the gradient. Then choose a light purple foreground color and repeat the same process to add a glow behind the diamond.



Create a new layer and select the polygonal lasso tool. Enable the visibility of your sketch layer once again. However, ensure that your new layer is presently targeted in the layers palette. Enable the add to selection option in the tool options bar and draw a series of polygons on the left side of the canvas, based on what is indicated by the sketch layer. Select the gradient tool and choose a green foreground color from the picker. Set the gradient opacity to 50%. Click and drag repeatedly, from the edges of the canvas inwards, to create a series of gradients within the polygons around the left edges of the canvas.



## Continuing to Edit Masked Layers

Once you've created your gradients and added a vector mask to a layer, it doesn't mean that your layer contents have to remain that way. Remember, in areas where you added shading within a vector mask, you can edit the layer contents whenever you like. Simply target the layer, not the mask, in the layers palette and edit the layer using any paint tool. You can paint with a brush or add different colored gradients to alter the colors. Paint anywhere on the layer you like, but bear in mind that only areas that aren't clipped by the layer mask will be visible.



Deselect and create a new layer. Disable the visibility of the sketch layer. Target the new layer and again, draw a series of polygonal shaped selections. This time, make them thinner than before, and try to create them in-between the larger polygons that you created previously. Use a dark blue foreground color and the gradient tool to create numerous gradients within this selection on the new layer. Deactivate the selection when you're finished. In the layers palette, click on the layer below while holding down the shift key to target it too. Choose Layer > New > Group From Layers from the menu.

Click on the group in the layers palette and hold down the alt(PC)/option(Mac) key. Drag upwards until you see a very dark horizontal line appear directly above the group in the layers palette and release the mouse button. This creates a copy of the group directly above the original. Target your newly copied group and then choose Edit > Transform > Flip Horizontal from the menu. Select the move tool. Click and drag to the right, while holding down the shift key, until your flipped polygons are moved to the right edge of the canvas.

## Zooming

When creating and editing paths, I often find myself zooming in close to edit individual points, and then zooming out to view the results of these edits within the entire path. Rather than always having to switch back and forth between the zoom tool and any path creation or editing tool, you should familiarize yourself with the keyboard shortcuts for zooming. Type Control(PC)/Command(Mac) '.' to zoom in, or type Control(PC)/Command(Mac) ',' to zoom out.