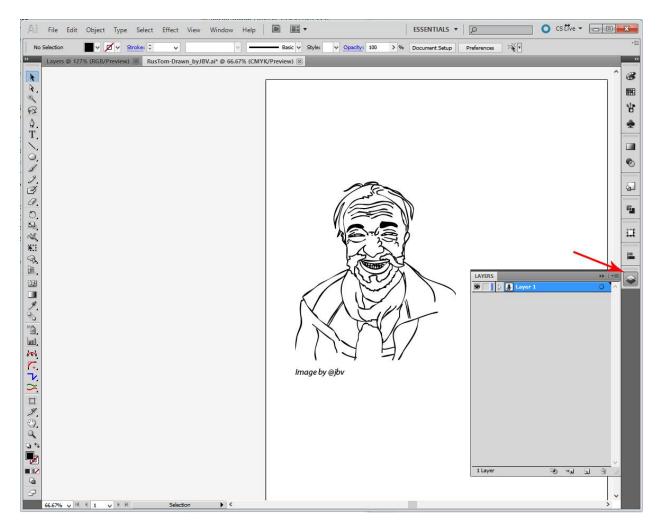
## Adobe Illustrator – Layers

Any time you are dealing with a complex vector image, you might need to work with the layers, adjust the visibility, or lock a layer so that you can select everything else *except* that layer.

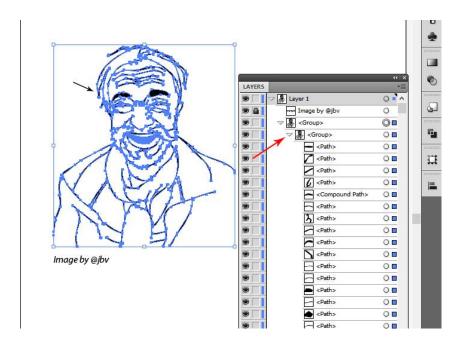
Vector images are nothing more than multiple filled or empty shapes stacked on top of each other. Taken together, they create a picture.

The **Layers Palette** shows you which shapes are on bottom, and which are on top, and gives you the option to shift individual layers up or down in the stack, lock them, duplicate them, delete them and perform other functions.

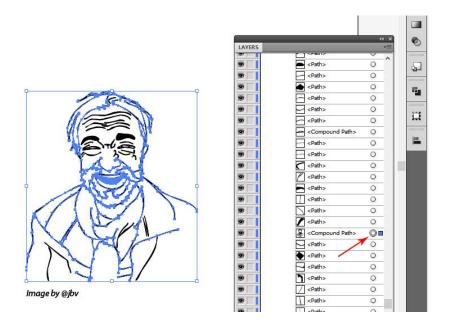


Layers contain a lot of information.....Sub-layers can contain Compound Paths, single Paths, Groups containing multiple shapes........ It helps to know a few tricks for dealing with them.

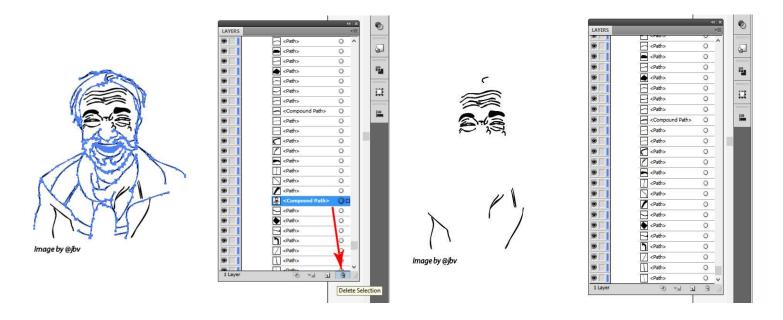
When you click on a Group of paths or shapes on the artboard, all of the parts included in that group are highlighted with little blue squares in the Layers palette. Click the little triangle to expand the sub-layer information. If there are Groups within Groups, those can be expanded as well.



It works the other way as well. If you wish to highlight *only* the Paths that are contained in a **Compound Path**, click the little target circle at the right in the Layers palette. Only those will highlight blue on the artboard.

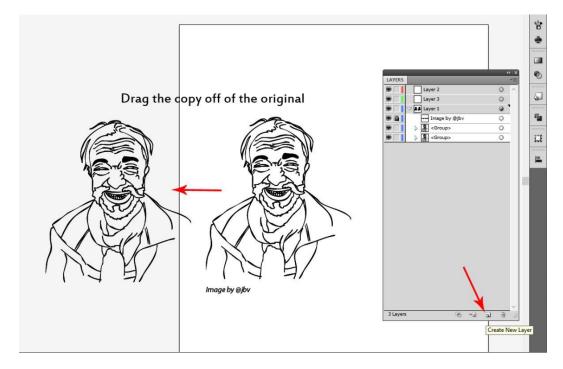


You can use the Layers Palette to **delete** single items contained in a Group, without Ungrouping first. Select the path, drag it down to the lower right corner, and release it over the little **Trash Can Icon**.



To create a new Layer, click the **New Layer Icon** next to the Trash Can. You can also **duplicate** a part by selecting it in the layer stack, dragging it down to the **New Layer** icon, and releasing it.

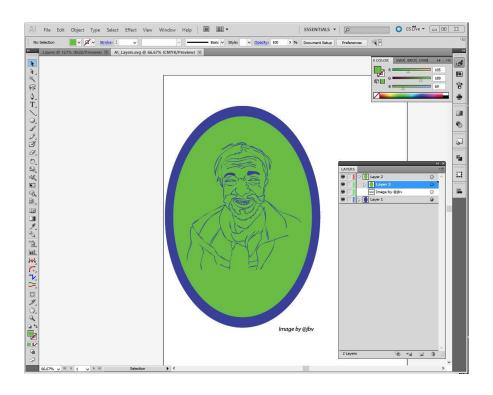
(The copy will be created right over the original on the artboard, and that will come in handy when you need to **Auto-Trace** later. If you need to move the copy off of the original, just drag it off on the artboard.)



You can also change which layers appear on top by selecting the layer in the Layers palette, dragging it down, (or up), to where you want it, and releasing the mouse. Here you see the black sketch on top of a green oval. (So you could engrave the sketch onto an oval cutout.)

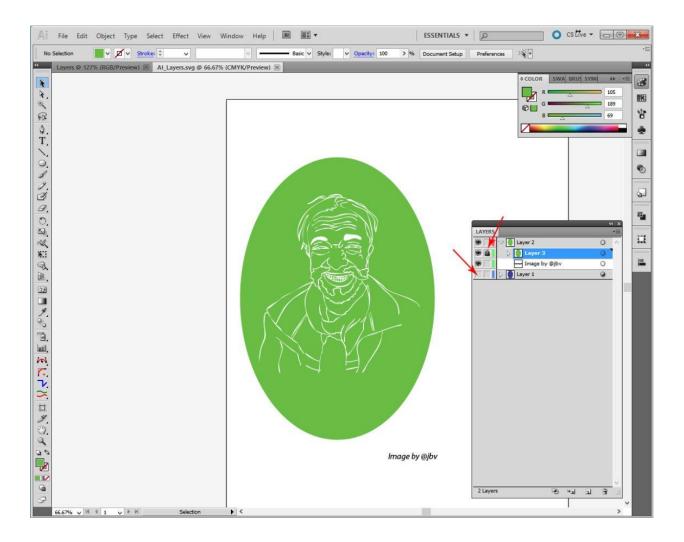


Shifting layers up and down in the stack is very helpful when creating "Island Fill" engrave patterns. (*Discussed in another tutorial*.) In the layer stack below, you can see the green oval, (which has unfilled openings in it shaped like the original sketch), that allow the blue of the oval underneath to show through. (In the example below, the green will be engraved.)



Two last things....you can toggle visibility of a layer, or lock it so that it can't be selected on the artboard and won't shift, by clicking the little **Eye** and **Lock** icons next to each part.

In the example below, the visibility of the blue oval has been turned off, and the green oval has been locked. (Note that you can now see the white background through the green oval cutouts.)



While the visibility is toggled off for a layer it cannot be selected on the artboard. If the **Lock** is used, it will still be visible, but will not be selectable either.

