

# Learn Photoshop CC With Pictures

*The visual & fast way  
to Learn Photoshop*



Monia Mier

First Edition

# **Learn Photoshop CC With Pictures**

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## Preface

I have read many Photoshop books, while many of these books were written by great Photoshop users, and many of those definitely are better than me at using it, the problem with many of these books, in my opinion, is that they are kind of boring to read, and they tend to require you to fumble around to do things like finding a button or icon the book is talking about. I have also noticed that these books takes too much time to read, they talk too much, and they try to cover the tools in a logical way, not the order you will need these them. For example, when they cover the user interface, they talk about all Photoshop tools, including the ones that you won't need to know about until much later, and some of these tools are ones you may never use. In a similar fashion, they talk about every single thing in details that you will need to read hundreds of pages before you get to see results (though that's not a bad thing for some people).

Photoshop is already a vast program that is boring to learn, yet very fun to use, one has be brave to wade through one of these books to cross the boring learning curve to the fun world of Photo-editing.

## Getting results from the very beginning

What I tried to achieve using this book is the opposite of all that, I wanted to create a bunch of chapters that allows you to achieve results from the very beginning, you will start to notice that from the second chapter "Getting Started with the Brush Tool". If you are familiar with Photoshop user interface, you could skip the user interface chapter, which I wrote for the absolute beginners. After the second chapter, I will start building gradually on what you have learned earlier so you could achieve more things, even if you read part of this book, you will still be able to create many things using Photoshop. The order of chapters in the book a little weird for some, but I believe it will make the learning process smoother, because of the results you will achieve from that

# Less reading, more learning

The second thing I wanted to achieve using this book is to make it kind of fast & easy to read, which is why I heavily depend on pictures to convey the concepts, which won't only make it fast to read, but pretty much clear too. The average of words in each pages of this book is less than 100-200 words; and some pages have way less than that.

For the most part, I will depend on picture for teaching you the concepts. Which I hope will make this book appealing to read, especially for visual learners. I also hope that will make it much faster to read, because I am pretty sure you want to spend your time using Photoshop instead of wading through walls of texts.

## Learn Photoshop on the go

To some degree, this book can be read without having an access to Photoshop, this is nice in case you have a tablet or some portable device, and wanted to make a use of your time, but bear in mind that some Photoshop concepts are much easier to learn if you tried them yourself. And you will get the best results if you do some experimenting of the concepts every now and then

## Clear Instructions

I did everything I can to make the instructions easy to read, taking into account that many of the readers are not fluent in English, and for that very reason, I tried as much as possible to cut back on the vocabulary amount & idioms that are used.

Another thing I avoided in this book is to tell you to do things without making sure they make sense to you. For example, I will never tell you to "Click button X that is located between the oval button and the OK button". Instead of that, I will show you a picture of where the button you have to click is. Especially that making you fumble around unnecessarily is something that can be easily avoided. Also, I will never give you vague instruction like "Set X value to 34.5 then click OK". Something many books do, sadly speaking. Instead of that, I will make sure that I will let you know where I got the value from, and what that value actually does.

One of things you will notice about the screenshots in the book is that they are all taken with my Photoshop installation is set to the Light color theme, which, in my opinion, make them easier to read (According to a research made by Bauer, D., & Cavonius, C., R. (1980). Improving the legibility of visual display units through contrast reversal). So unless you changed your interface color to be like mine, your Photoshop user interface is going to be black, but that won't hinder your ability to distinguish between the options. I am fully aware that there is some amount of repetition in the contents of this book, but I intentionally didn't try to lower that. Because I believe that repetition is a very powerful learning tool. It won't only make it easier for you to remember the concepts explained in this book, but it will also help you understand the parts you find confusing at first, something that can't be avoided when it comes to some Photoshop concepts. To make the repetition less of a problem, many of these repetitions will be explained using different wordings to avoid getting you bored by them

# Chapters Layout

Instead of walking you through some fictional projects you probably don't care about, each chapter will teach you the tools directly, without wasting any of your time, then it will proceed to a summary sections. For most of the chapters, there is going to be an examples sections that will show you some good ways to use the tools you learned. Some chapters don't have examples section, mainly because there is no viable examples to provide other than what is explained in the chapter.

Every time you have to encounter a Computer Graphics term, I will take a little detour to explain that concept to you before proceeding, so you don't have to worry about having a prior background about graphics in order to read the book.

Some of the most important aspects of Photoshop, like Layers & the Pen tool, will be taught to you much earlier than some Photoshop courses do, because these concepts are so important, and because many other concepts are built on them. Plus, learning these concepts pretty earlier will give you a sense of achievement J

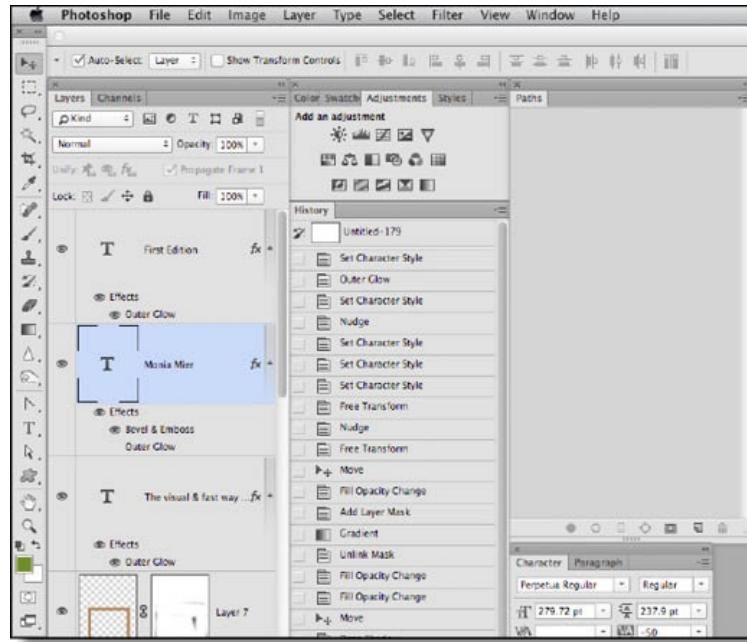
## The future of this book

This is still the first edition of the book, I still plan to make many improvements to it, add more information, and fix any possible methods of teaching I have used. If you have any suggestion, don't hesitate to send me an E-mail [Mie@SweetMonia.com](mailto:Mie@SweetMonia.com)

While I will try my best to cover as much of the options you encounter, there are time when I won't really cover everything about a certain tool, this to avoid loading you with Information you probably won't need (You don't really need to worry about learning every single Photoshop feature to work efficiently with it), but I will try to add those in the upcoming edition of this book, maybe in their own chapters, so that the original book will stay the same

If you liked this book, please recommend it to a friend or tweet about it, it will be a big help, as it will give me more motivation to add more and more chapters to it. And thank you in advance for supporting this book J

# Photoshop user Interface



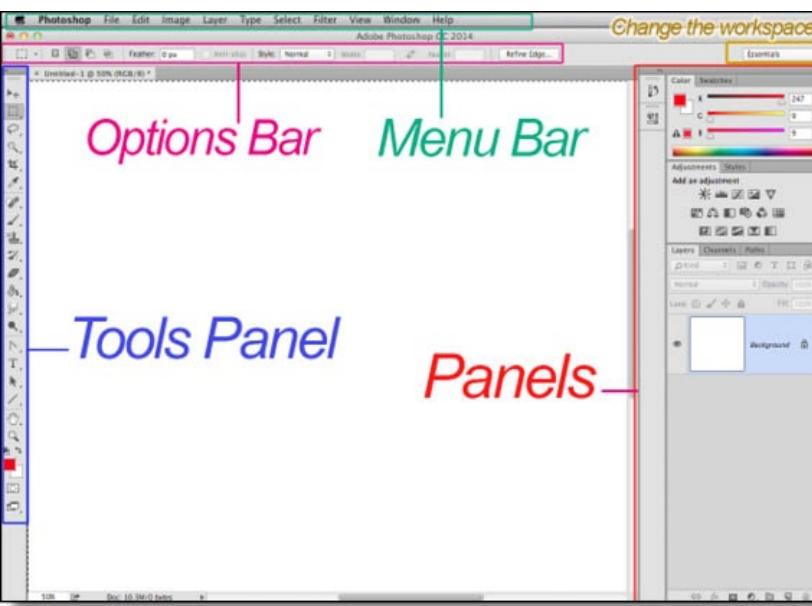
This chapter will give you a very good idea about the user-interface of Photoshop. If you are already familiar with that, you can skip this chapter and return to it later when you are in the mood for it.

## In this chapter

- A brief look on Photoshop user interface
- The options bar
- Working with Photoshop panels
- The Tools panel
- Working with workspaces
- Creating new documents

## A brief look on Photoshop user interface

Getting to know the main elements on Photoshop user interface will make it easier to follow all the instructions of this book. It will also help you use Photoshop more efficiently.



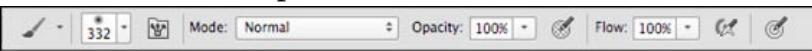
The main elements in Photoshop user interface are:-

- **The Options Bar:**- Contains options that change depending on the tool you are working on.
- **The Menus Bar:**- which exists in all computer programs. The menu bar contains all Photoshop options, many of these options are also accessible through Photoshop panels. We won't say much about the menu bar in this chapter. But many of the main menu options will be explained in details in the upcoming chapters.
- **Panels:**- Panels are a convenient way to access many of Photoshop tools and options. And they are a good way to streamline your workflow
- **Tools Panel:**- While it is considered a panel itself, it deserves to be mentioned on its own, this panel contains all the main Photoshop tool. If you mastered using these tools, you will be able to do a lot of things

## The options bar

The options bar display options related to the tool you are using. The options shown change dynamically every time you change the tool you are working on.

Here is how the options bar looks like w~~B~~hen the brush tool is selected:



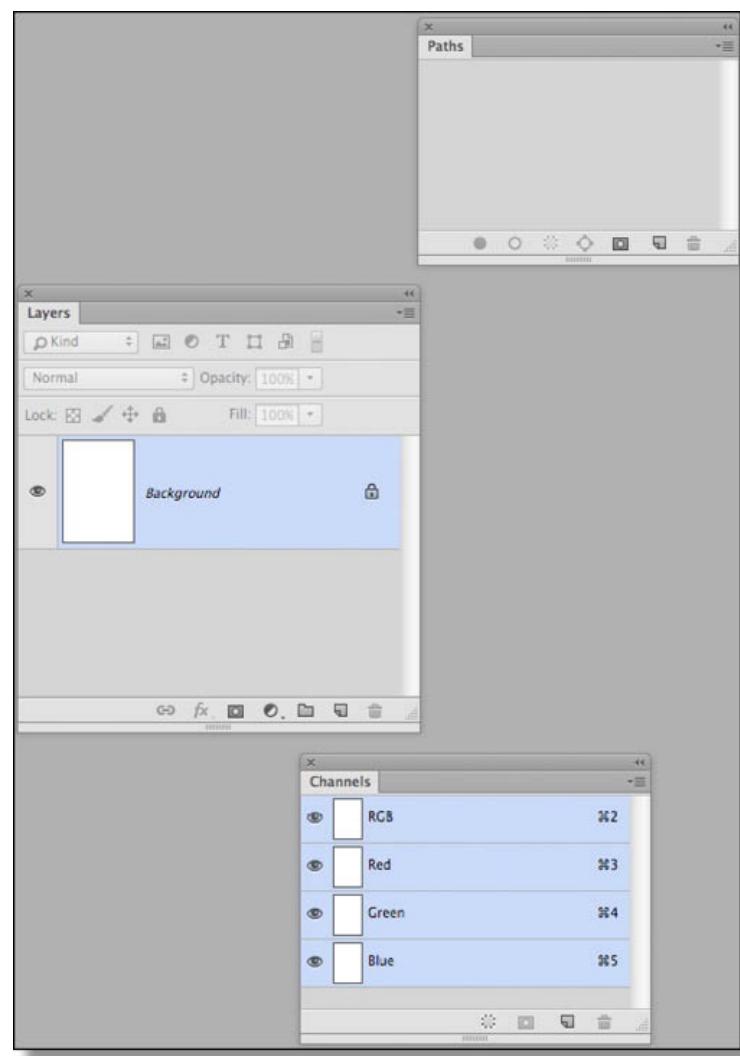
And here is how it looks like for the text tool:



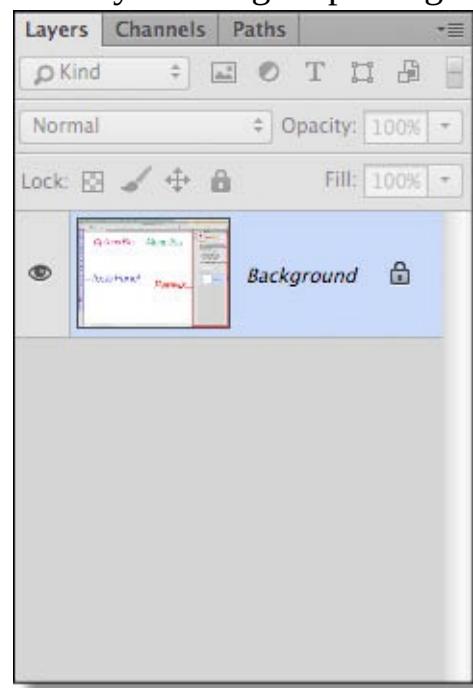
We will take a more detailed look at the Option Bar options each time we cover any of Photoshop Tools.

## Working with Photoshop Panels

Panels provide a great way to access the various tools and options in Photoshop. Arranging the panels to suit your needs is essential to ensure you have the best workflow possible. Panels can be floating on the middle of the screen, like this:-

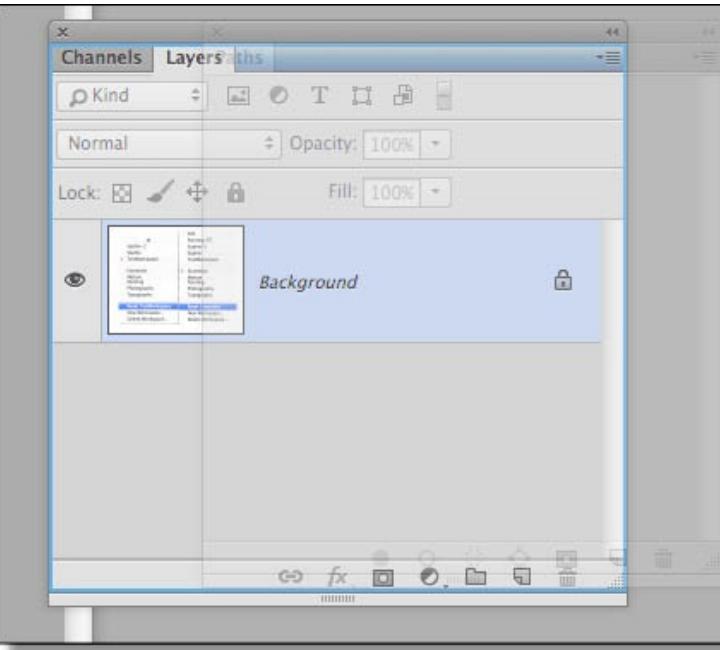


Or they can be grouped together, along with other panels, which is how they are by default:-



- To move a panel, whether it is grouped or not, simply click on the title of the panel, then drag the mouse cursor away.
- The panel will be moved along with the cursor. If you want the panel to be grouped with any other panel or group of panels. Simple drag it over the panel(s) you want to group it with. And

until the panel you are moving becomes transparent, like this:-



Release the mouse button. And the two panels will be grouped together

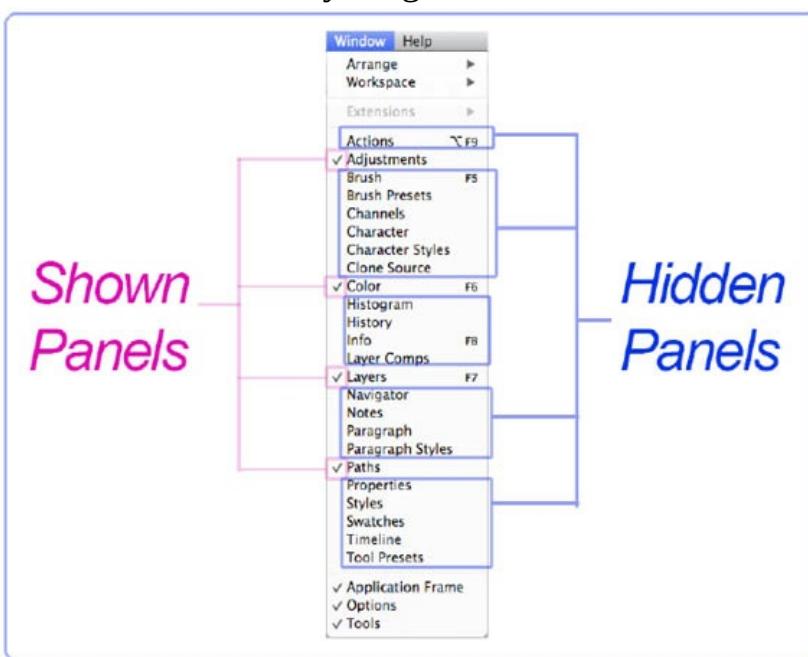
## Showing and hiding a panel

To show a panel that is hidden, or to hide a panel that is displayed, simply choose the panel name from the Window menu



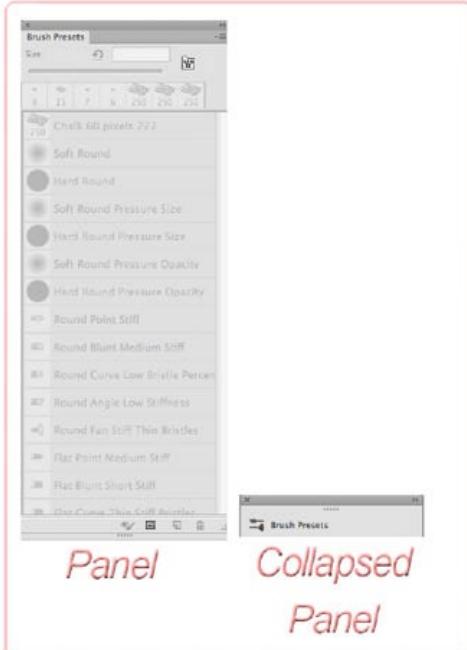
If you selected a panel that is hidden from the Window menu, then Photoshop will display it for you. And if you selected a menu that is displayed, then Photoshop will hide it instead. You can toggle/switch between hiding and displaying panels this way

Note that the panels that are already displayed have a ✓ mark besides of it, and the panels that are hidden don't have anything beside them:-

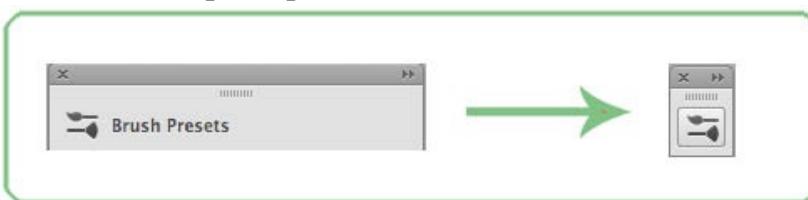


## Collapsing Panels:-

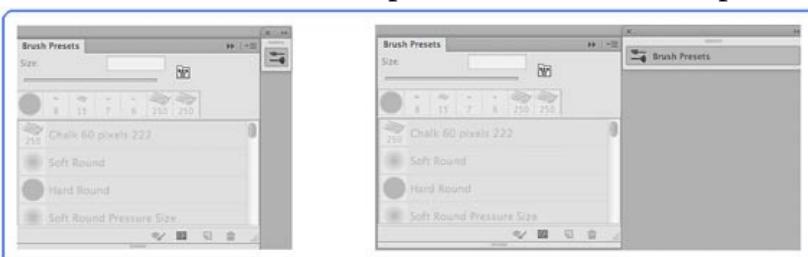
Panels can be collapsed/shrink into tiny rectangles, which is a useful way to save you some screen space when you don't need them :-



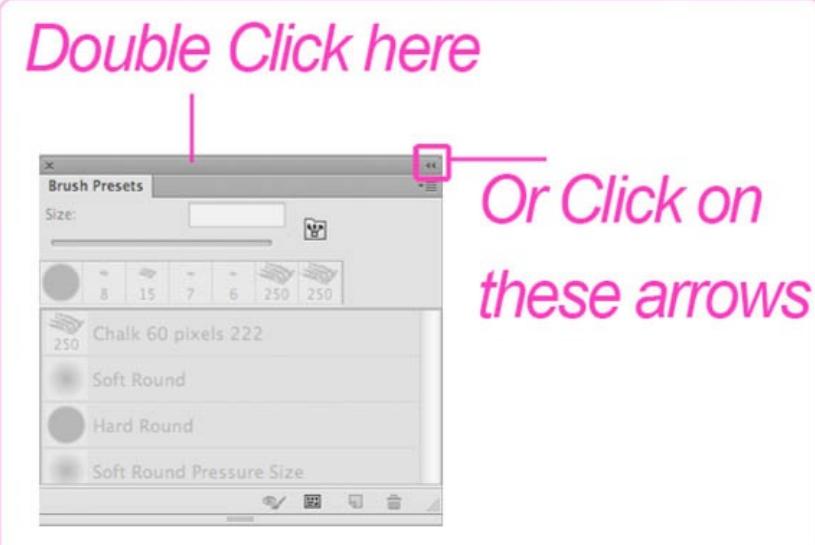
And the collapsed panel could be resized even further:-



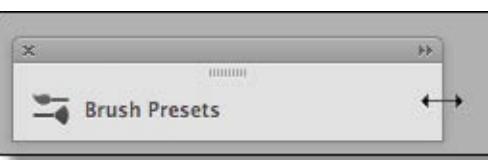
You can still access the options in the smaller panel by clicking on the icon or panel name:-



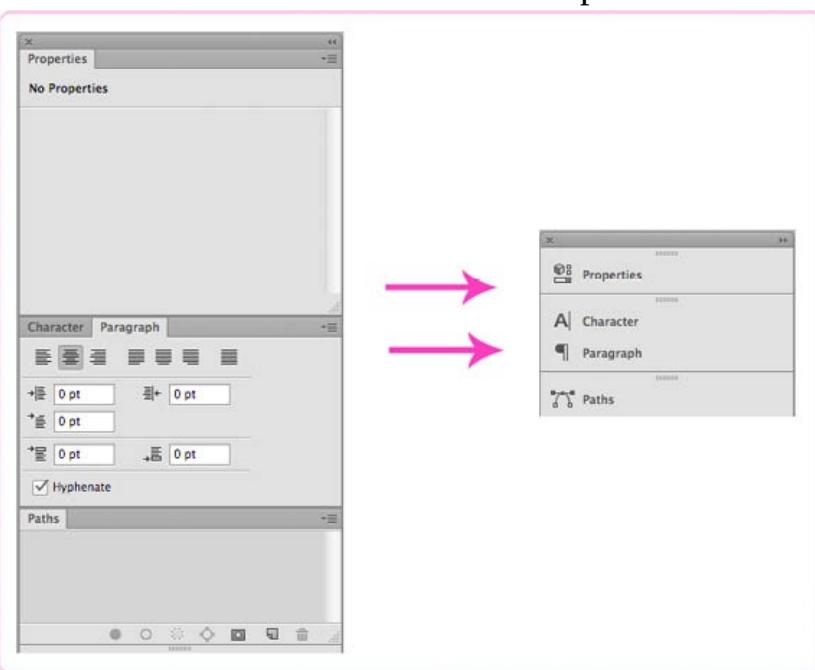
There are two ways to collapse a panel like that:-



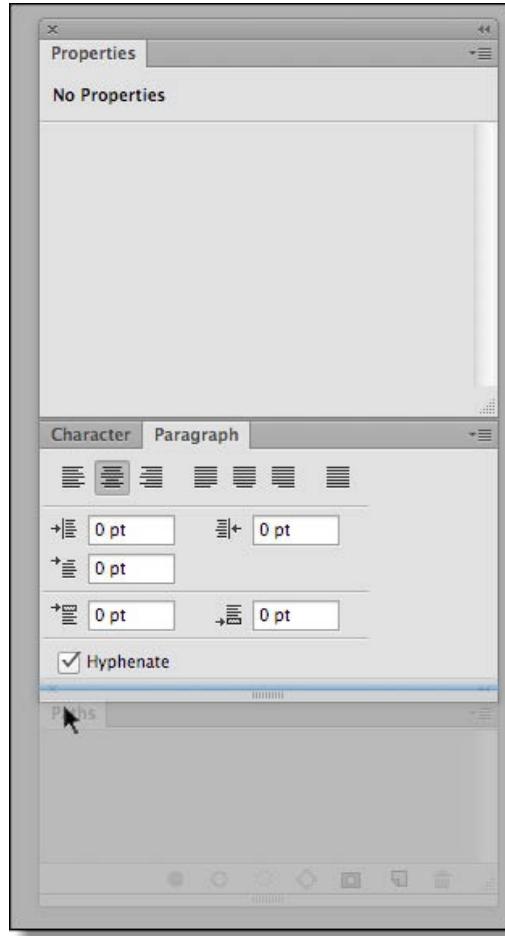
To resize the collapsed panel, hover your mouse over the edge of the collapsed panel, then the cursor turn into . Click and drag the panel to the left or the right:-



The nice thing about collapsing panels in Photoshop is that, when you have more than one panel docked below each other. The whole panels will be collapsed together:-



As I said, for this to happen, the panels should be docked below each other, but how to do that? This is done the same way you group the panels together, except that you hover the mouse at the button of the panel(s) rather than its title, like this:-

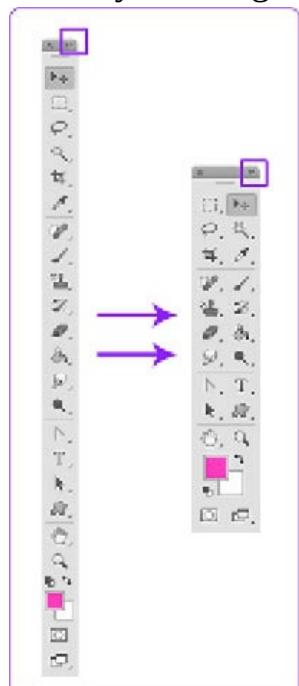


# The Tools Panel

The Tools panel is similar to the other panels in Photoshop, but because it is an important panel. It deserve to talk about it in details

Don't worry; I won't annoy you by stating every tool that exists in the panel. You will get to know many of these tools in the future. For now, I will tell you how to work with the panel.

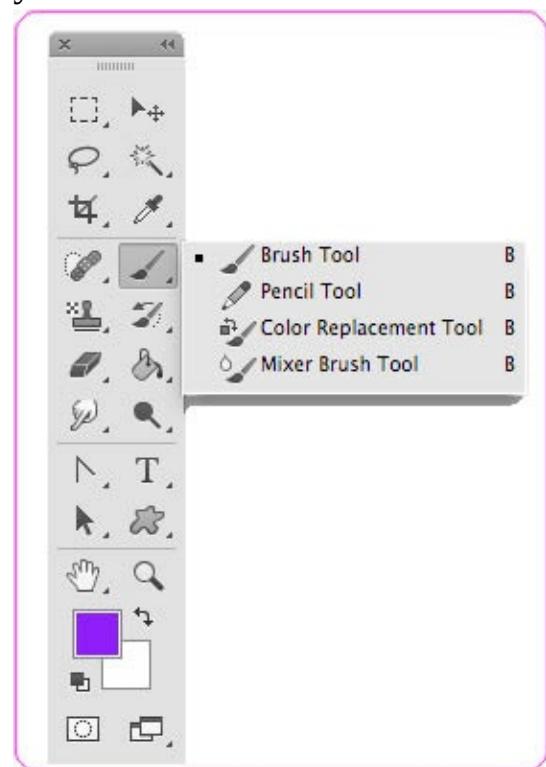
Just like the other panels, the Tools Panel can be collapsed to save you some screen space, which is done by clicking on the double arrow button at the corner of the panel



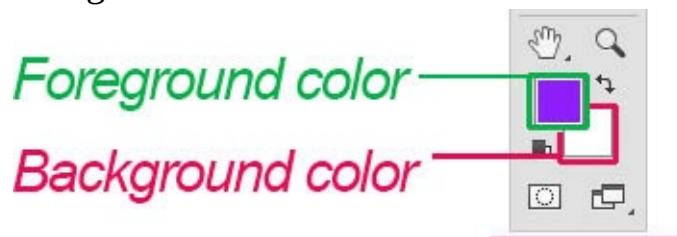
Some tools are hidden below others. The tools that have hidden tools below them have a little arrow on the corner of its icon:-



To access these hidden tools, simply click and hold on the icon of the tool, and Photoshop will show you the hidden tools:-



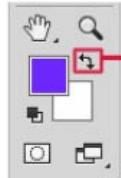
At the bottom of the Tools Panel, there are two color icons. The foreground color, and the background color



The foreground color is the color you will use most of the time. When you paint with the brush tool, you will see the foreground color applied on the picture. Other tools, like the eraser tools applies the background color instead. The difference between the two colors will be more obvious once you learn more about all Photoshop tools.

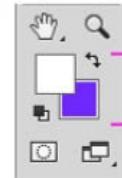
The little two arrows button besides the foreground & the background colors will reverse the colors:-

1.



*Reverse The foreground  
And The background colors*

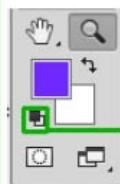
2.



*The colors have  
been reversed*

And the two black & white squares reset the foreground & background colors to black & white. Which are the default colors. In other words, this little button set the foreground color to black, and the background color to white.

1.



*Reset The foreground  
And The background colors*

2.



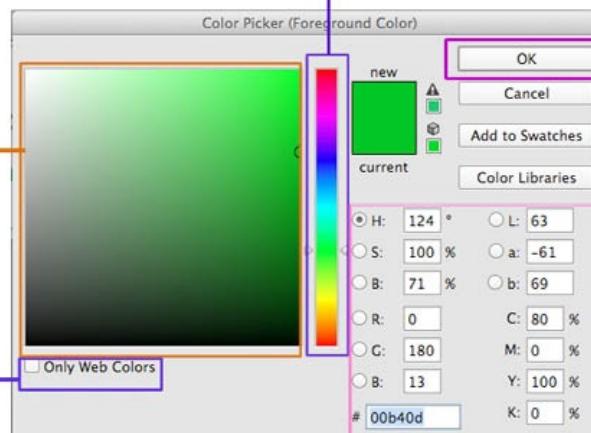
*The colors have  
been reset*

Clicking on any of the foreground or the background colors open the color picker dialog. Which allows you to choose the color you want:-

*Choose the color you want from here*

*Specify how bright or dark the color is from here. In this case, you can choose between bright green or dark green.*

*Show only the colors that are guaranteed to be displayed correctly for Web. And across all kinds of screens click here*

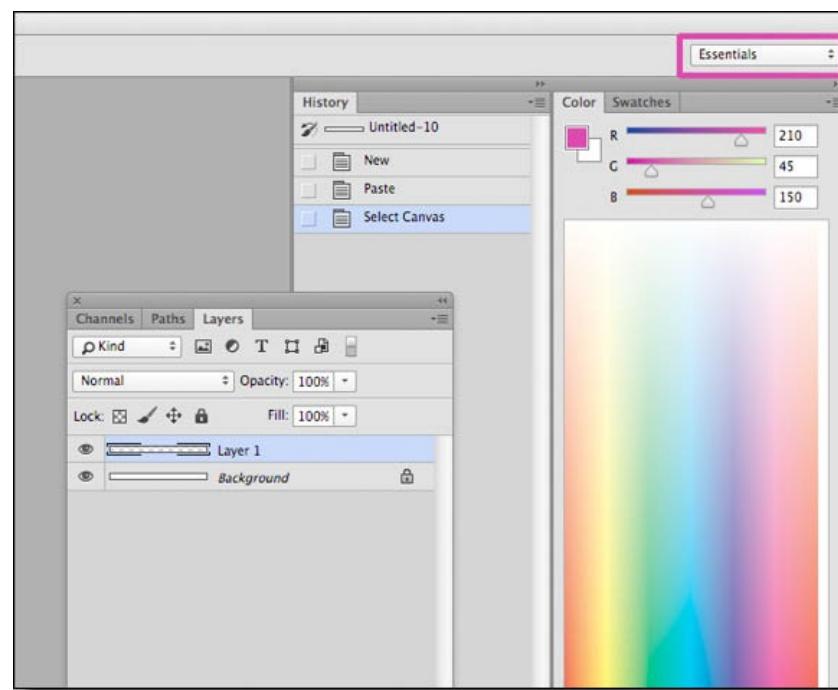


*Click ok after you are done*

*You can also enter the values of the color you want. In any colors system, like RGB, CMYK Lab, HSB, or even the Hex Value of the color*

## Working with workspaces

Workspace is a way to save the placement of all the panels arrangements you have made. You may want to have a workspace to use when you adjust your photos, and another one for when you paint, and so on. Having a workspace saved is a good way to switch between different arrangements so that you won't have to re-arrange the panels each time you want to work in a certain way To switch from a workspace into another , click on the menu at the upper-right corner of the screen:-



Which will display the workspaces available for you:-



You won't see some of the workspaces shown here, like "Sophie" or "Painting-RT". These are workspaces I created to suit my own workflow.

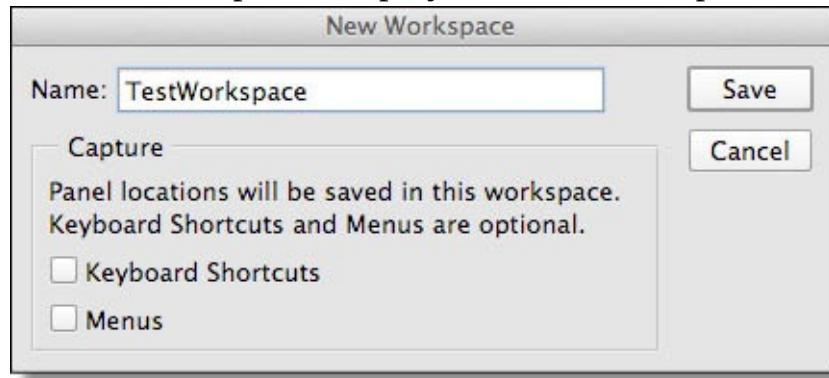
Clicking on any of the workspaces will make Photoshop switch to the workspace in an instant. Try it on your computer and see how it goes~

## Creating A New Workspace

To create a new workspace, simply arrange the panels the way you want, and then choose the "New Workspace" from the workspaces menu



And Photoshop will display the New Workspace dialog:-

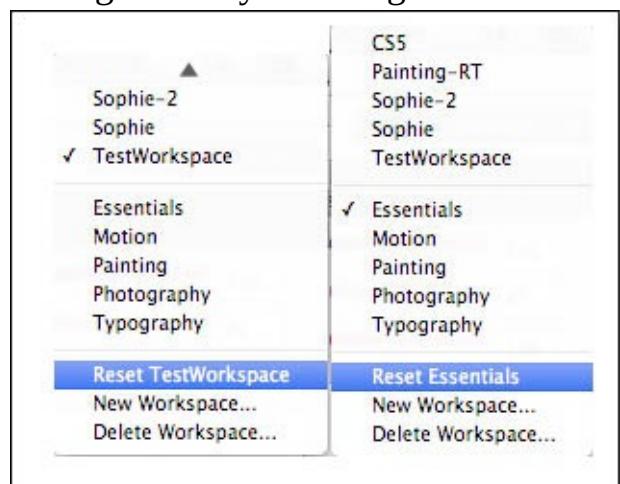


Type in the name you want for the workspace, in this case, I named the workspace “TestWorkspace”. You also have the option to save the Menus or the Keyboard Shortcuts in additional to the panels. Click “Save” to save the workspace.

And the new workspace will be available for you to switch into at any time you want:-



In case you changed the panel arrangement your workspace too much, you can revert to the original arrangement by selecting “Reset Testworkspace” from the same menu:-



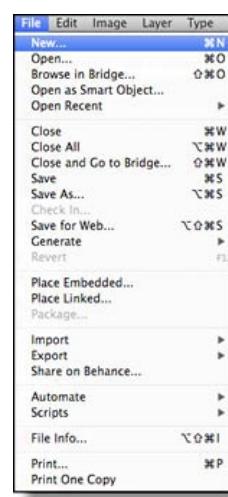
Of course, the name of the option change depending on the workspace selected.

## Creating New Files In Photoshop

If you have worked with art program other than Photoshop, then you have a good idea on how to create files in Photoshop. If you are not, then don't worry, as I will explain how to do that right away. Don't worry if some of the options in this dialog seemed confusing to you, they will become much more familiar with the most important options the more you get to work with images in Photoshop

To create a new file in Photoshop, follow these steps:-

- Select File->New from the main menu

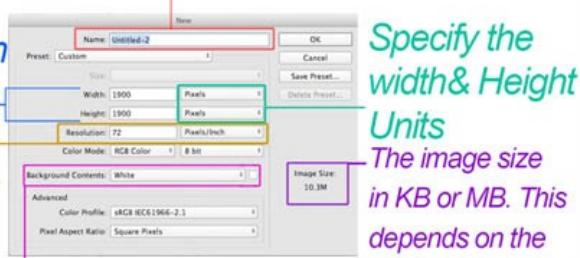


## Creating A New File In Photoshop

Type the filename here

Specify the  
pictureWidth  
& Height

Choose the  
file resolution



Specify the  
width& Height  
Units

The image size  
in KB or MB. This  
depends on the  
file width & height

Choose the background color of the picture

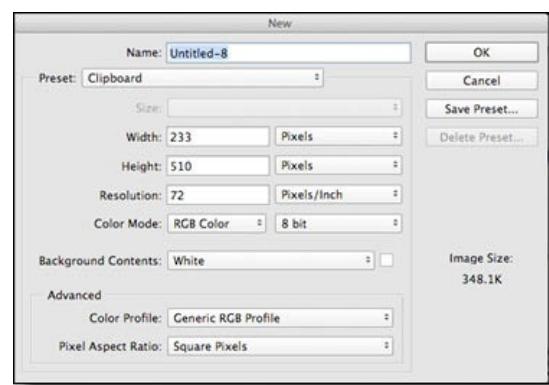
You can choose:-

- White
- Transparent (no color)
- The background color.
- Other, which will open the color picker so that you could choose another color.



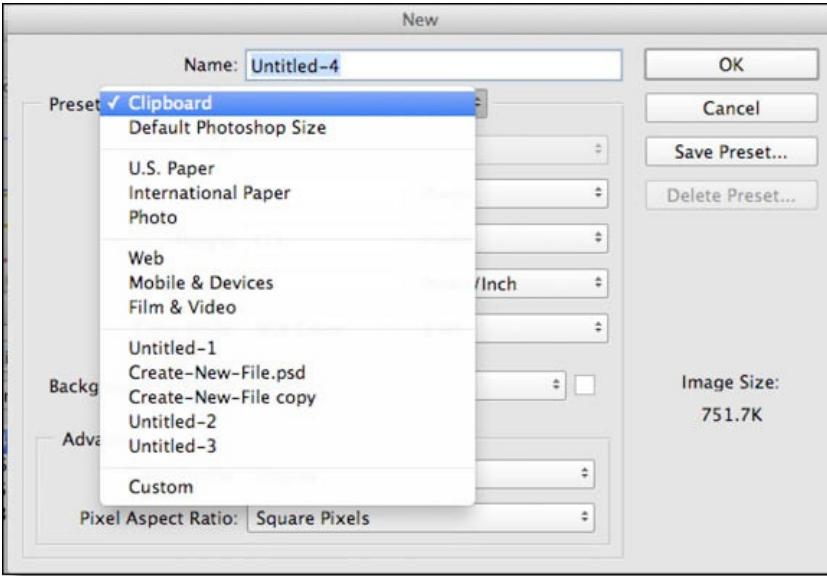
Clicking the square besides the menu is another way to  
open the color picker

- The New file dialog Appears

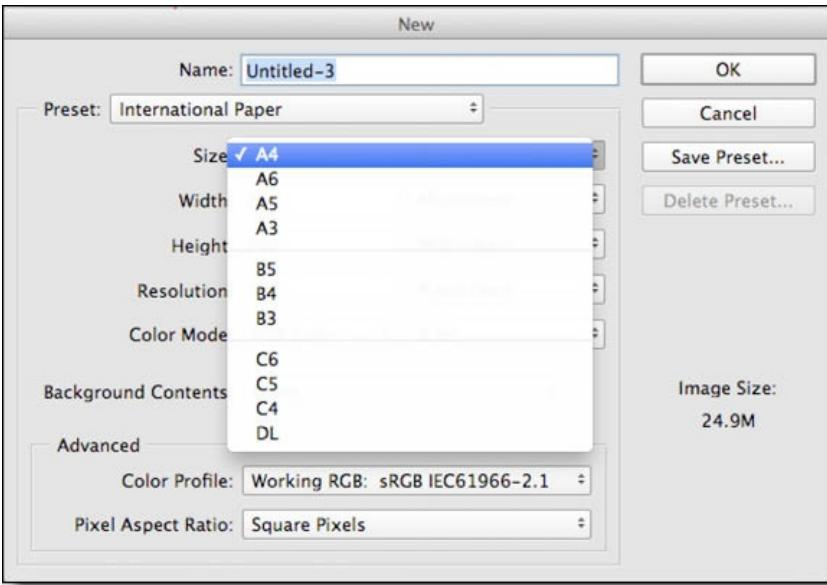


Photoshop provides you with a lot of options for creating a new file. Many of these options are the same across art programs, and not just Photoshop:-

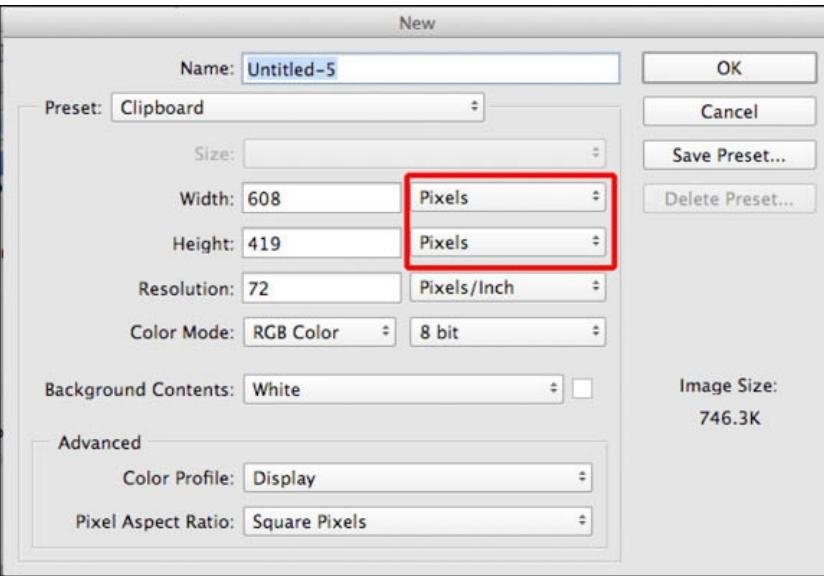
- **Name:-** Here is where you can specify what the file you are creating will be called. You can type whatever name you want here.
- **Preset:-** Presets are a way to save a certain settings so that you could use them later. For example, you could have an A4 preset so that you could create A4-sized pictures, instead of typing the height & width each time you want to create pictures of that size. Photoshop already comes with some presets, like US Paper, International Paper, and Web.



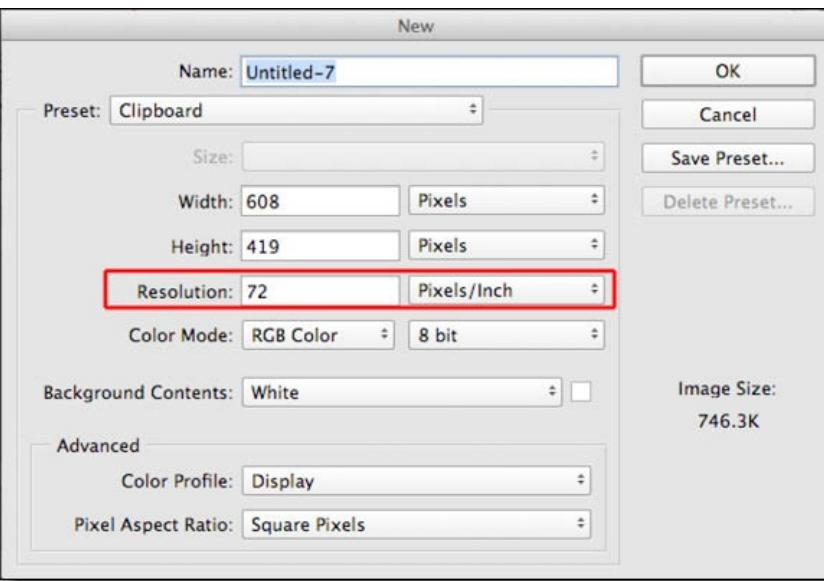
- **Size:-** Unless you choose a predefined preset from the Preset menu, this menu will be grayed out. Meaning that you won't be able to select anything from it. The Size menu determines the size of the document. For example, if you choose International Paper, then you will get to choose between different paper sizes, like A3, A4 or A5:-



- **Width & Height:-** These fields are self-explanatory; this is where you specify the picture dimension. The bigger the dimensions, the bigger the image you will create will be.
- **Dimensions units:-** Here you can determine the Width & Height unit, which is pixels by default. Other available units are Centimeters, Millimeters & Inches



- **Resolution:-** Determines how many pixels are there per inch or per centimeter; this can be a useful option in case you want to print the file. In most cases, leaving the resolution as 72 is fine in most cases.



- **Color mode:-** Determines the color mode for the picture. The choice of the color mode depends on what you plan to do with the final image. You can convert between these modes even after you create the picture file
  - **Bitmap:-** Bitmap pictures can only contain White or Black. But no other color at all
  - **Grayscale:-** Grayscale pictures contain only black, white & gray pictures, similar to how old movies were before the invention of the colored cameras. Grayscale images are useful to use in digital painting to accurately assess how the values are distributed in the picture.
  - **RGB Color:-** In RGB mode, much more colors can be in the picture. This is the mode you will work on most of the time. In the RGB Color, colors are represented by the value for each of the colors **Red**, **Blue** & **Green**. For example, a pure Red has 255 for red, 0 for Green, and 0 for Blue. RGB mode is the most suitable mode to use for web

pictures. 8-bit RGB colors can contain 256 different colors, 16-bit RGB contains 65536 different color, while 24-bit RGB can contain 16.7 million

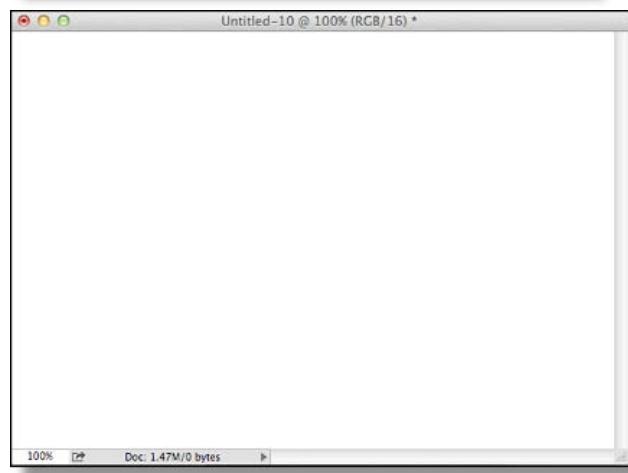
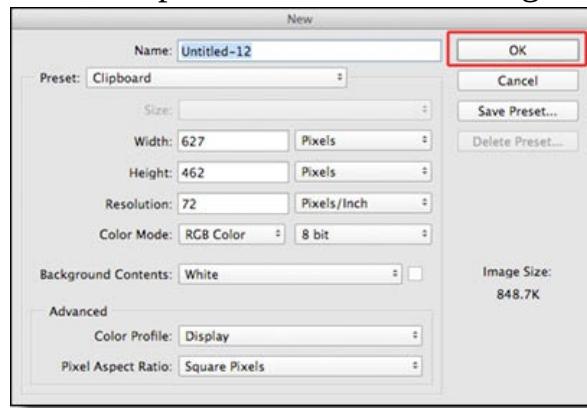
- **CMYK Color:-** In this mode, the colors are represented by the values of **Cyan, Magenta, Yellow And Black**. CMYK is a common mode to use for printing
- **Lab Color:-** the LAB color mode depends on how humans see the color. It describes the colors in a similar way that we humans do. Which makes the Lab mode suitable in adjusting the colors of any given photo

For the most part during this book, it will be enough to know how to create a new file by specifying the width, height and the background color of the image. But knowing about the other options early will help you a lot the more you get into computer graphics

- **Background Color:-** This is self-explanatory, it determines the background color the picture has by default. You can choose between white, transparent, the Tools panel background color, or other, which opens the color picker dialog for you to choose any color you want

Most of the time, you will be creating pictures with white or transparent backgrounds.

After you are done with specifying the options for the new file. Simply press the OK button, and Photoshop will create a new image file for you:-

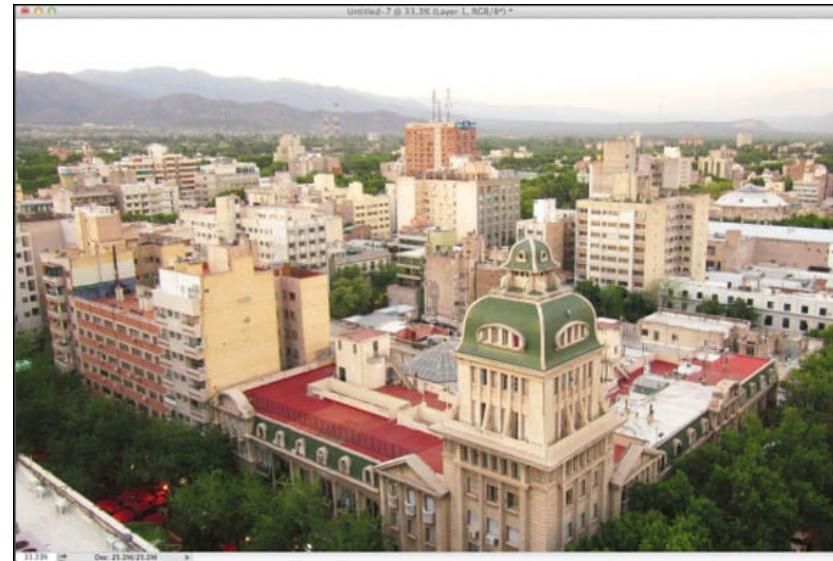


## Using the Zoom Tool to take a closer look on your picture

The zoom tool is one of the most intuitive tools in Photoshop, if you have used another drawing application, like MS Paint, then you have a very good idea about this tool.

The Zoom Tool allows you to zoom in & out to see a certain part of your picture more closely,

suppose we have the following city picture opened in Photoshop:-

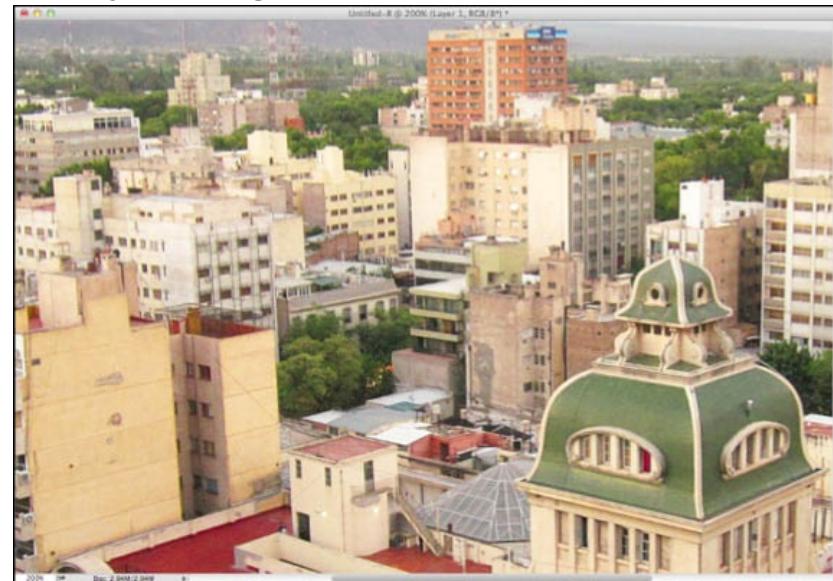


Everything in the picture can be seen right now, suppose we want to take a closer look on the picture, to do that, we use the Zoom tool

Select the Zoom tool from the Tools panel:-



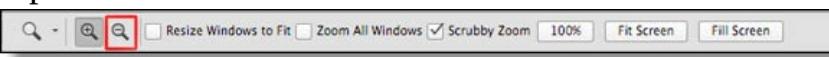
Now click on the picture where you want to zoom, and Photoshop will zoom in to the part, which pulls it out closer to you, here is how the picture window looked for me, depending on where you click, you will get a different result:-



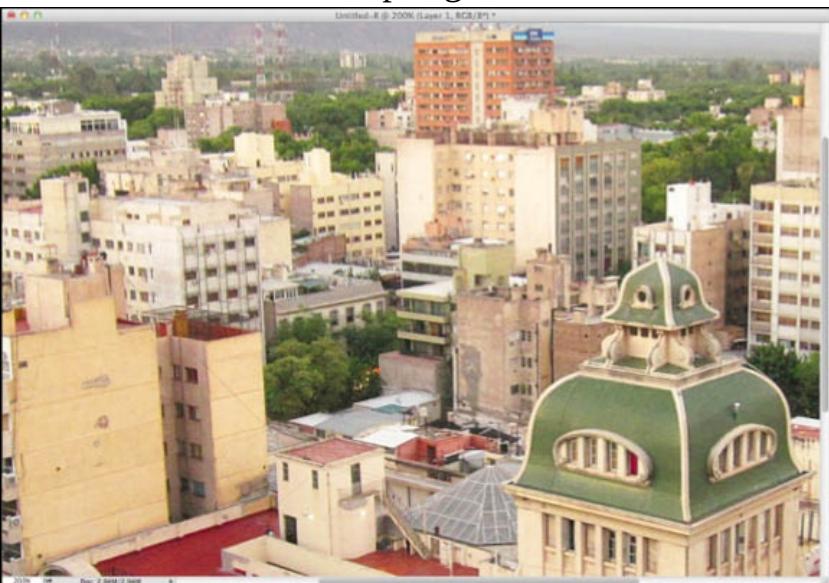
Of course you can keep clicking until you are zoom to the part you want, here is how the picture looked like after I zoomed in a second time



Now suppose you want to zoom out, zooming out works the same way as zooming in, except that you have to switch to the zoom out mode, which is done by clicking on the zoom out icon  in the Options Panel:-



Now clicking on the picture will zoom out of it instead of zooming in, which will get you back to where we were a few steps ago:-



You could temporarily switch to the zoom out mode by holding the alt/option key on your keyboard. When you do that, the + in the zoom tool cursor will change into -. Which indicates that you are in the zoom out mode

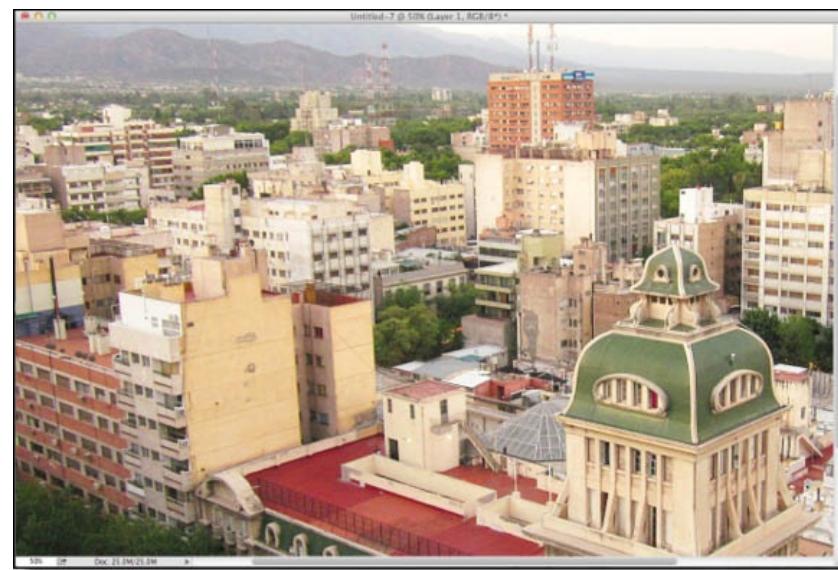
Another interesting way to use the zoom tool to zoom on a certain part of the picture is to click and drag your mouse on the part you want to zoom to, depending on your Photoshop preferences & Photoshop version you have installed, you will either zoom in dynamically or Photoshop will let you draw a rectangle over the area you want to zoom into

## The Hand Tool

The hand tool is used to change the part of the picture that is displayed while zoomed in, this is called

“Panning”.

Suppose we have our city picture right here, and then we zoomed into the picture using the Zoom-Tool:-



Suppose we want the green building to be on the center of what is viewed on the picture, instead of being near the edge of the window, here is how to do that:-

- Select the Hand Tool from the tools panel:-



- Click on the picture and then drag to the direction you want. As you do that, you will notice that the part that is shown in the picture is changing. Here is the picture after I made the green building right on the center:-



**Note:-** You can switch to the Hand Tool temporarily at any time by holding the Space key, this will save you the time & hassle of switching to the Hand tool every time you want to use it

## Summary

- Photoshop user interface has 3 major elements, The Menus bar, Panels, and Options Bar
- The Options Bar displays contextual options depending on the tool you are using
- Photoshop Panels provide an easy way to access many of Photoshop tools
- Photoshop panels can be docked somewhere, or they can be floating in the middle of the screen
- Panels can also be grouped together, they can also be docked below each other, which makes it easier to arrange them
- Panels can be collapsed by double-clicking on the bar on the top of it, or by clicking on the double arrow on the upper-right corner of the panel
- When you collapse a panel, any panel that is grouped or docked with it gets collapsed as well
- The Tools Panel contains all the main Photoshop tools.
- Many tools are hidden below other tools. Tools that have a little black arrow in the corner of its icon have at least one tool below it.
- There are two colors that are selected at any given time, the Foreground Color and the Background color
- The Foreground Color is used by the Brush Tool, while the Background Color is used by the Eraser Tool
- You can switch the Foreground & the Background colors at any time by clicking on the little arrows besides them
- You can also reset the Background & Foreground colors to black & white by clicking on the little white & black square that is also besides them
- The color picker is an intuitive way to change the color you are working with. You can choose a color using the mouse cursor, or you can enter the values of the color using any of the known color systems.
- Workspaces is a great way to save the arrangements of panels, so that you don't have to arrange them yourself every time you want to work in a certain way
- Photoshop comes with a few Workspaces out of the box. And you can define any number of workspaces you want too.
- Creating New files in Photoshop is easy and straightforward. Photoshop allows you to create pictures by specifying their dimensions, in pixels, inches, or many other units
- You can also specify many other options while creating the document, like the background color, or the color systems that will be used in the picture

- The zoom tool allows you to zoom in and out a certain part of the picture, which is useful in case you want to modify a certain part of the picture more precisely
- The Hand tool allows you to change the part that is shown on the picture that is zoomed in, which can be helpful in case you want to move to change the part you want to edit.

## Getting Started With The Brush Tool



The brush tool is the ultimate tool of Photoshop. If you mastered this tool on a lone, you will be able to do a lot of things. And it will help you to understand many other Photoshop tools, like the eraser or the stamp tool. As they all work the same way. Which is why I am going to start with it.

### You can use the Brush Tool to:-

- Imitate many real life brushes easily, like wet brushes and pastels.
- Create patterns and textures like sand or snow with a little skill.
- Change the colors of all or parts of a picture.
- Create pictures from scratch using graphics tablet (Or using the mouse, but I don't recommend that, for many health concerns).

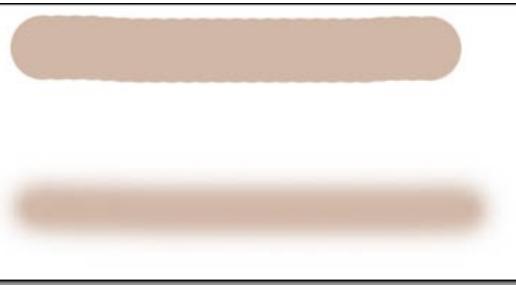
Of course more that could be created with brush tool. Actually, one of the things that make the brush tool really powerful is the amount of customizability it provides. You can download additional brushes online, or even create your own. Which allows you to do unlimited number of things, and that's using only one tool. Isn't that great? :D

### The basics of the brush tool:-

There are seven things you could adjust to get immediate results from the brush tools. Master these and you have made your first step into creating great designs.

### Soft VS Hard brush tip

Hard Brush:-

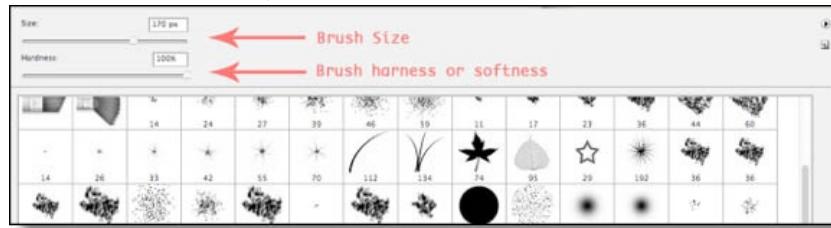


Soft Brush:-

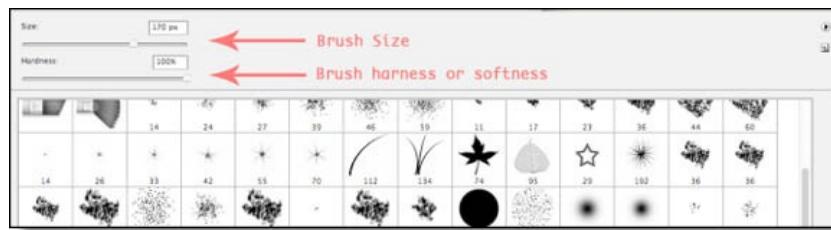


Brushes in Photoshop can be either soft or hard, soft brush fades away and blends better with its surrounding, while hard brush is the opposite of that

Adjusting the brush hardness or softness is easy, right click anywhere on your canvas and adjust the hardness slider (the less hard a brush is, the softer it is).



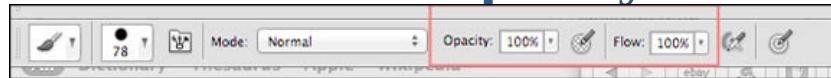
## Brush size



Brush stroke size can varies from one pixel diameter to 2500 Pixel, to change the pixel size, right click anywhere in the canvas, and adjust the brush size using the size slider

**Candy Tip:-** You can change the brush size using the "[" & "]" keys on your keyboard

## Brush flow and opacity



Now come the most important features of the brush tool, the flow and the opacity. Both are ways to create transparent or partial strokes. Flow & Transparency are technically the same thing, but they work differently. Understanding and exploiting the differences between the two is one of the things many Photoshop users often miss. And they don't know how much they are missing.

## To get the difference between the two, do the following:-

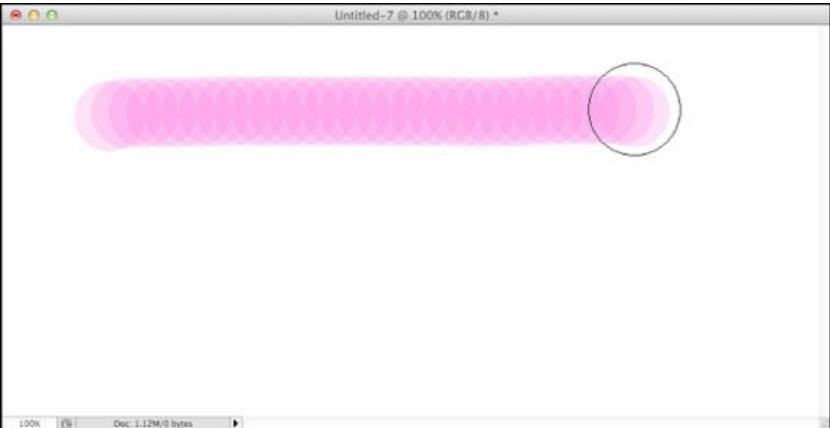
~I used a brush with %100 hardness for the sake of clarity here, but a soft brush can work as well~

- Create a new Photoshop image (Chose File->New. Then click OK in the dialog that appears before you)
- Select the brush tool Brush from the Tools Panel
- Set the flow to %25 fro the Tools panel:-

**Set the Flow to 25%**

Opacity:  Flow:

- Click and drag your brush to the right, you see an overlapping brush strokes get created in front of you. Don't release the mouse button yet



- Now, drag the brush to the opposite direction. You will notice how the stroke became more opaque



- Set the Flow back to %100

**Set the Flow back to 100%**

Opacity:  Flow:

- Now it is time to examine opacity. Set the opacity %25, as seen in the picture:-

**Set the Opacity to 25%**

Opacity:  Flow:

- Drag the same way from the left to the right, without releasing the mouse button. You see a soft & transparent line get created.



- Now, without releasing the mouse button from the last step, drag on the opposite direction of the stroke we started in the last step, What do you notice?

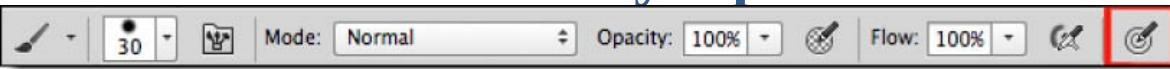
As you have seen, when you paint with low opacity, painting over the same area over and over won't make the strokes any darker

- Now release the mouse button. And drag the mouse over the same stroke we started. What do you see now?



- Seeing how the stroke is becoming darker and more opaque with the second stroke. You now know the main difference between flow & opacity.

## The Pressure Sensitivity Option



This option works only

if you have a graphics tablet, like those produced by Wacom, graphics tablets allow you to draw much easily & precisely than any mouse can do.

Another key advantages of graphics tablets is that they are pressure-sensitive, meaning that the more you press the pen on the tablet, the bigger the brush size will be, and this is what the Pressure Sensitivity option does



Wacom Tablet

Following are a couple of strokes (or lines) I made using my Wacom tablet, and with the pressure sensitivity option enabled, the brush size is the same for all the strokes, but the amount I pressed on the tablet was different with each stroke:-



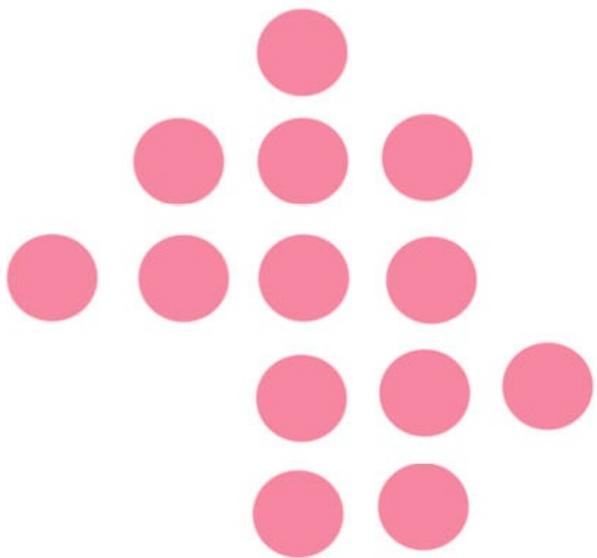
In general, graphics tablets are ideal if you want to use Photoshop for drawing & painting, but even if you want to use Photoshop for other purpose, like Photography, getting a graphics tablet can greatly boost your productivity

## What can you achieve using what you have learned so far?

To give you an idea on how much you have learned. I will show you a good number of things you could do using your new knowledge.

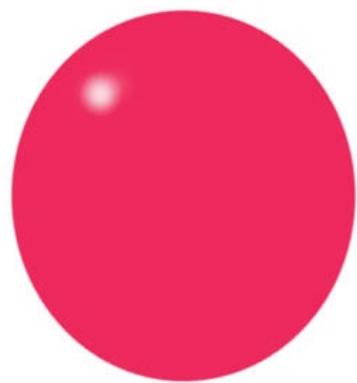
### Creating a simple Logo

This is a simple logo I created using the brush tool, using a hard brush. With the flow & opacity all set at %100, I painted few circles beside each other. I tried to make them look as much parallel to each other.



## Drawing a 3D ball

You could also create a 3D ball as well, created a circle with a soft brush, then with the flow set to low. I added the highlight at the corner to give the 3D look.



## Turn a cat into blue

Changing the color of pictures is easy if you know how to change the brush tool settings. Again, using a soft brush with low flow, I made this gray cat turn into blue. While there are many other methods to change the colors of picture, this method is very effective due to its simplicity.



## Applying blush on Anime girls

My favorite example so far, with very low flow (and low opacity, if you wish). You could add blushes to Anime girls (And real-life girls too). You drag the mouse where to want to have the blush once. Then you make few “dabs” at the middle of the blush to make it look more gradual.



## How to choose the right values for your brush:-

I am sure you are wondering how I choose the values of the settings in this chapter. The simple and quick answer is:- by experiment. Choosing the brush size is straightforward. Deciding if you need a soft or hard brush is the easiest decision you will learn. It can be a bit tricky to choose between opacity and flow at the beginning. But since you already know the difference between the two, you have an advantage over many artists who spent a lot of time before getting to learn that.

## Summary

- The brush tool is the most important tool in Photoshop, it can imitate real brushes, and many effects and results can be achieved the easiest way by knowing how to manipulate its options.
- The brush can be resized so that you can cover more or less areas with each stroke you make
- Brush opacity & flow allows you to make some transparent strokes, flow adds more to the stroke even if you didn't release the mouse button. While opacity only adds to the stroke after you release the mouse button and then make another stroke above the original stroke

## Blending modes of the brush tool



Now you have a basic idea on how to use the brush tool. I am going to add to the knowledge you learned by explaining a useful feature in drawing and creating effects. Which is the blending modes of the brush tool. Blending modes is a useful way of mixing colors & creating many effects in Photoshop. This chapter is a bit long because there are many modes I need to explain, so bear with me a little bit please~



Here is where you can change the blend mode  
of the brush tool

To make blending modes easier to understand, I will only explain the general idea how each mode works. Experimenting with the mode will help you understand them even better, as is the case with many things in Photoshop.

To use Photoshop blending modes, you select the mode you want to use from the drop-down list and you paint away with the brush tool. As long you know the general difference between the modes and how the colors get mixed, you will be fine. Don't worry about the math behind these modes right now. Just think of them as special effects used in painting.



Photoshop blending modes of the brush tool. Divided into 6 parts for the sake of simplification

There are many Photoshop blending modes to choose from, about 29 of them to be precise. We will take a look at each of them. And as I said, I won't explain everything about them in full details. But I will make sure you will be able to be able to use them effectively. Because while it is certainly useful to understand the precise difference between all these modes. It is better that you get an idea on how to use them first. The goal of learning these modes is to get to create the effect that you want to. Which in many cases can be done using more than one mode.

In short, I want you to spend less time learning how the color blending modes work and more on how to apply these modes on your pictures. Because that's what you are learning Photoshop to do, right? ;D

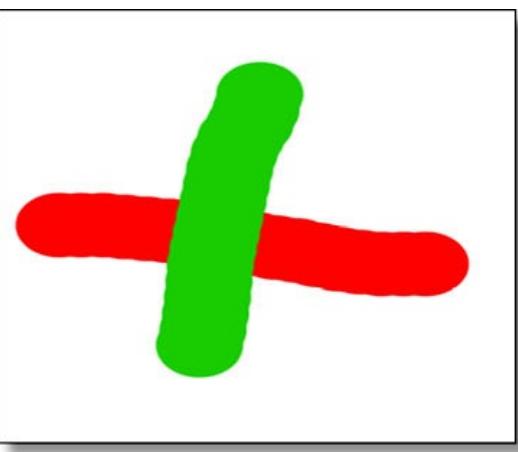
If you found yourself confused during this chapter, don't worry much about it. The concepts I am explaining are confusing to anyone new to them. You will find yourself familiar with them after you play with them for some time. These modes are not always straightforward to understand mathematically. So try to understand the close as possible how the end result usually is

## The Normal Group

### Normal Mode

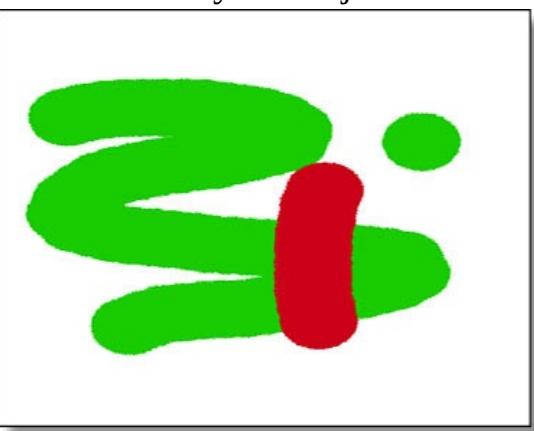
The normal mode is the default blending mode. When you paint with this mode, the color you paint will cover any color below it. Assuming all the brush tool settings like flow & opacity are set to

%100.



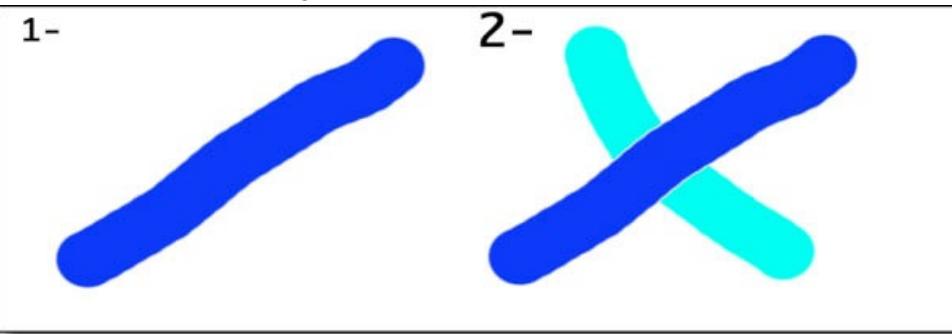
## Dissolve

Another straightforward mode, when you use this mode, the edge of your strokes will become “fuzzy”. And just like the normal mode. Your strokes will cover the ones below them.



## Behind

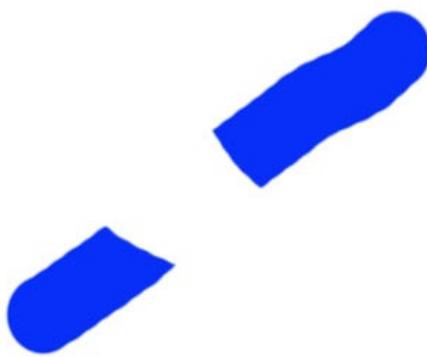
The Behind mode is special to the Brush tool, and is not applicable to the other modes that support blending modes. Usually, when you paint with the brush tool. The color you add covers the existing strokes, but with the behind mode. The new strokes appear behind the ones that are already there, like this:-



Simply speaking, the behind mode only covers the pixels that are transparent and ignores the ones that are not.

## Clear

Another mode that is special to the brush tool. That mode simply turn your brush into an eraser:-

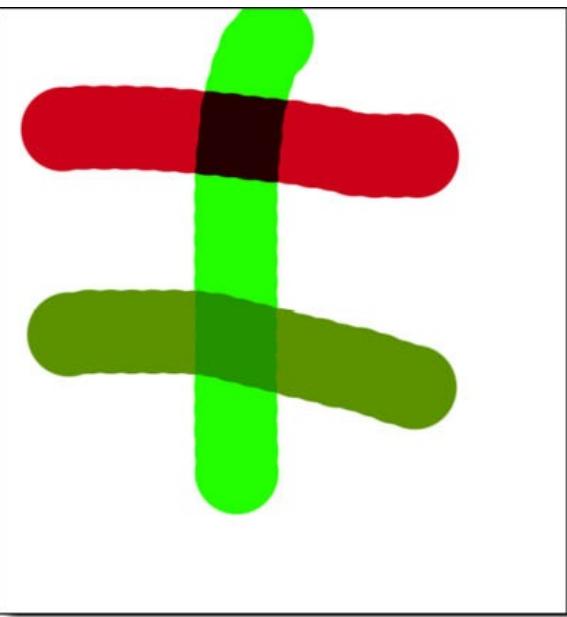


## The Darken Group:-

Think of this group as the group that mixes two colors and always produce a darker color than the two colors we mixed. The results are a little different with each mode, but as long you embrace the “it produce a darker color” idea. Everything about these modes can be understood.

### Darken

Just like the name implies. The darken mode darken the color you paint on. It does that by selecting the darker color of the two you are mixing (The new color and the one you are painting on). And it does that on the red, green and blue color components separately, so the results may not be exactly what you expect.



### Multiply

Multiply works in a similar way to Darken, in that it also produces a darker color of the two, except that it multiply the numerical values of the two colors instead of selecting the darker values of the green, red and blue.

It is tricky to differentiate the difference between Multiply and darken, as you can see in the picture below this section, the Multiply blending mode always produces the darker color.



## Color burn

- This mode literally burns the colors by increasing the contrast in them, and this is why the end result is usually too strong
- Painting with white using this mode produces no changes



## Linear Burn

- Similar to color burn, in that it seems like it burns the colors. Except that it does that in a nicer way
- Linear Burn decrease the brightness of the darker color to achieve the end result.
- Using white with this mode produces no changes

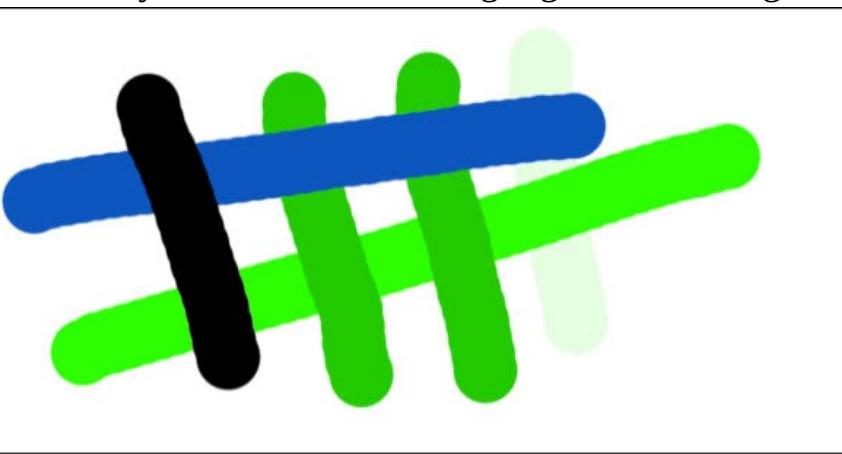


Color burn (At the left) VS Linear Burn (At the right)

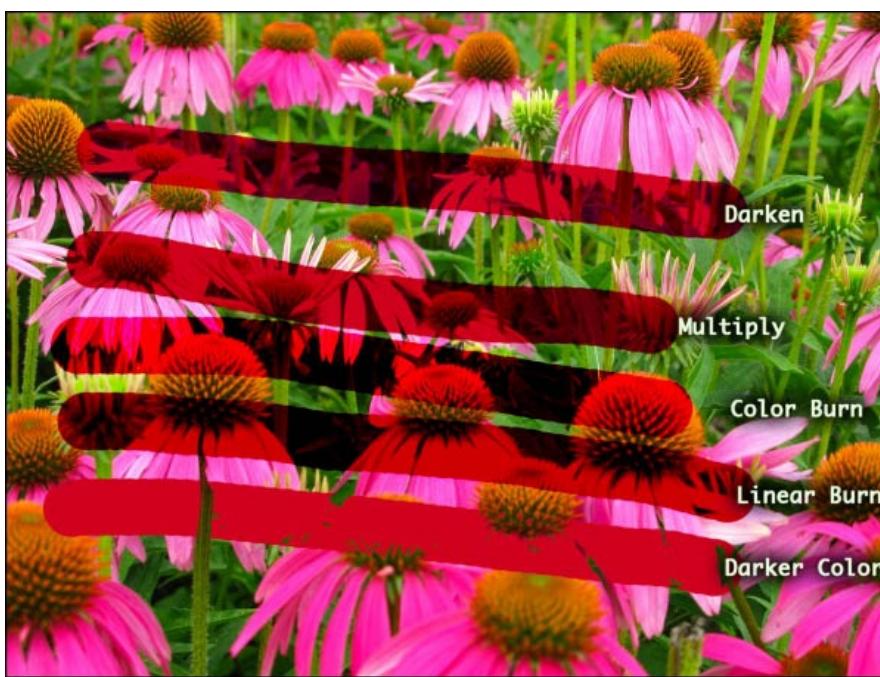
## Darker color

Works similarly to the Darken blending mode, but instead of using the red, green and blue components of each color. It simply chooses the darker color of the two. This is one of the easiest blending modes to understand in my opinion

Here are a couple of strokes created using the darker color. It doesn't matter which stroke is made first. As the darker color will always choose the darker color of the two all the time. Notice how black always wins. While the bright green to the right is placed below all the other colors.



**Here is the darken group modes side-by-side:-**



The darken group side by side. The darken and multiply work very similar to each other. It is easy to see how the Color Burn the color with a lot of contrast. Linear burn do the same but in a gentle way. Because the red I used to paint in this picture is darker than almost all the colors of the picture. It almost dominated all the colors of the pictures when I used it with Darker Color.

## The Lightening group

This group is does opposite of the darken group. These blending modes mix two colors to produce a lighter one.

### Lighten

The Lightening group equivalent of the Darken mode, it chooses the lighter color of each of red, green and blue components of the two mixed colors. Which results in a lighter color



The lighten mode using light green, red, and blue colors, the translucent effect is obvious here

## Screen

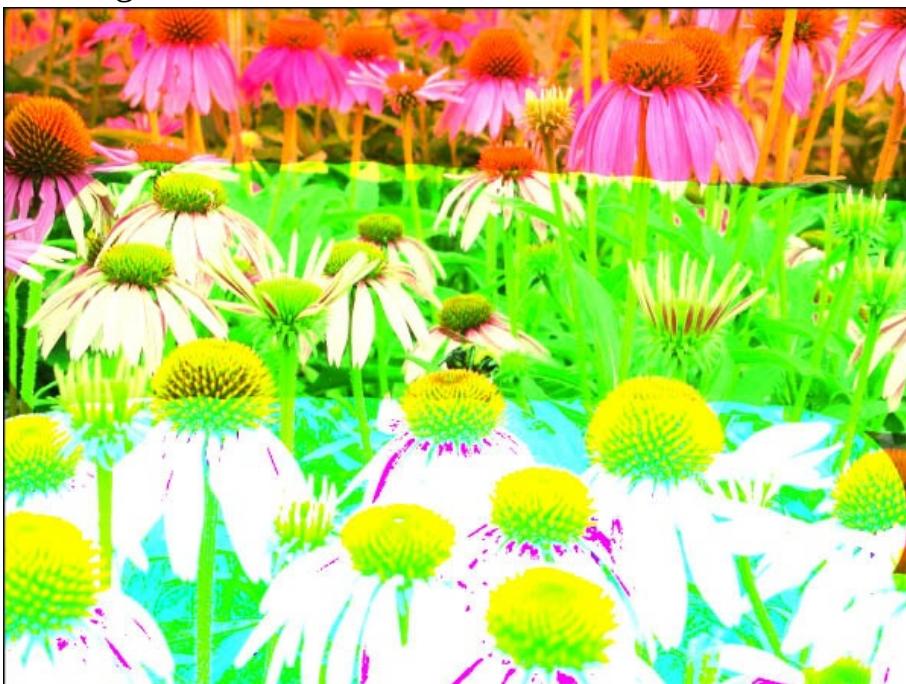
While I am not sure why this mode was called by this name. Its name is a good way to understand what it does. Think of this mode as looking through a tinted glass that makes colors lighter. Black has no effect on the picture on this mode. The brighter the color you use is, the better the lightening effect.



The Screen Blending mode using the red, green and cyan

## Color Dodge

The lighten group equivalent of the color burn mode. It lightens the colors of the picture by “burning” its colors. The result is a color with a lot of contrast



The Color Dodge after applying multiple colors on it. It is easy to see the contrasting this mode produces

## Linear dodge

Similar to color dodge in that it burns the picture colors. But it produces a more gentle result. This is the lighten group equivalent of the Linear Burn mode.

Using black with this mode doesn't have any effect on the picture



## Lighter Color

One of the easiest modes to understand, it simply chooses the lighter color of the two you are mixing. This mode works in a similar way to the Darker Color mode.



Applying green on the picture using lighter color covers almost all of it. But a little of the yellow and pink colors escape the change because they are lighter. Applying a dark red on the lower side on the picture doesn't change much of the colors because many colors are lighter than it

## The Contrast Group

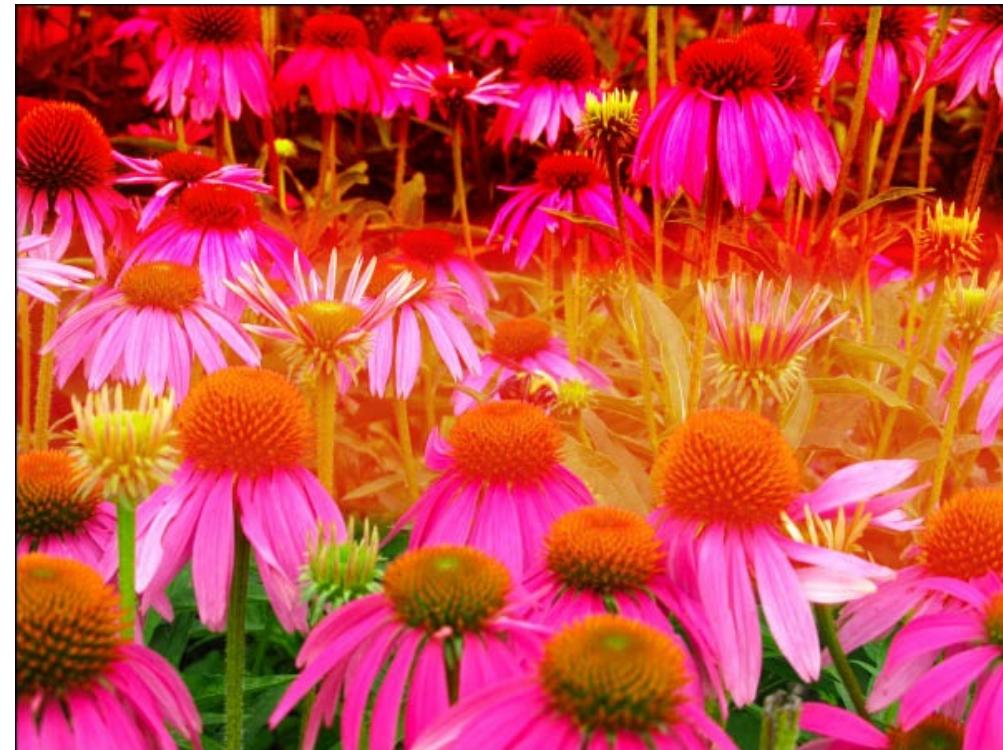
The contrast group works by manipulating the contrasts between the two mixed colors. I personally call it the lights groups. As I think of them as a way to create different kind of lights in my pictures.

The contrast group increases the contrast by lightening the lighter colors and darkening the darker one of the two colors you are mixing

## Overlay

Another mode that works as if you are looking at the picture through a tinted glass, one that brightens the picture. The effect this mode produces is similar to the Screen mode. But the effect it produces is stronger. The following picture shows you the difference between the two modes:-

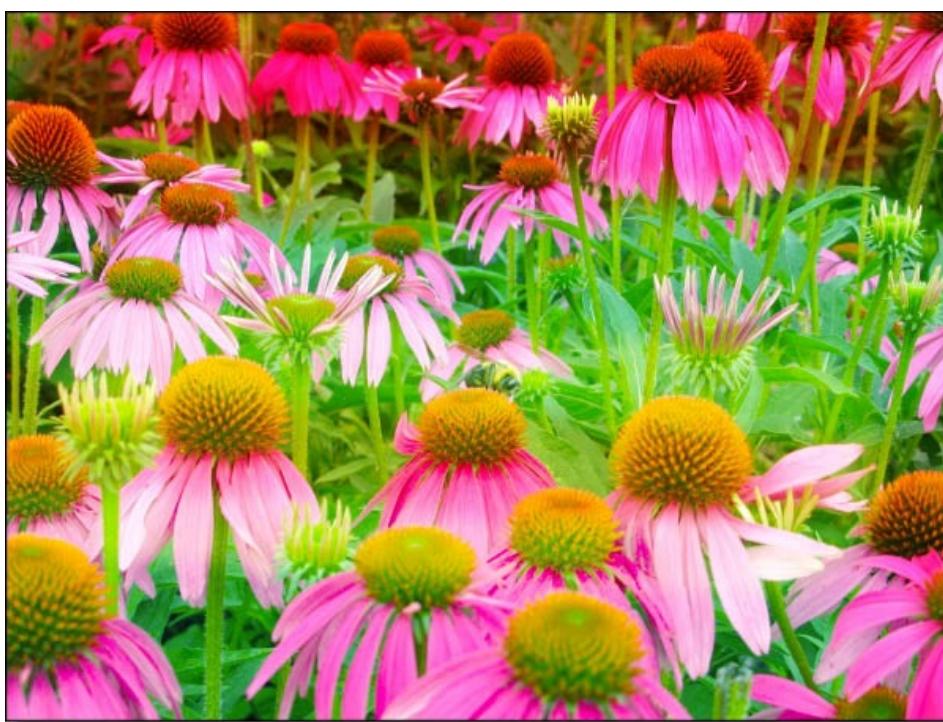
The reason these two are similar because Overlay uses both Screen & Multiply on the pixels, depending if they are darker or lighter than the color you are applying.



The Overlay and the Screen modes, the Overlay is applied on the top and the Screen below it. The Screen mode produces similar results than the Overlay mode, but with a stronger effect.

## Soft Light

This is one of my favorite modes. It is easy to understand thanks to its name. It produces a soft light on the picture; The effect is so gentle and nice to look at.



Multiple colors applied on the flowers picture. See how it is nice to look at the end result~

## Hard Light

The stronger version of the Soft Light mode. It is useful mode to create spotlight to your pictures



## Vivid Light

Think of this mode as you are applying a very strong light to the picture, to the point that it, again, burns the colors. Along with the Hard Mix mode. This is the strongest way to burn colors among blending modes



## Linear Light

This mode also applies an intense light to the picture. To the degree that the details of the underlying picture can barely be seen behind it.



## Pin Light.

From the look at it, the pin light is like a mild version of the linear light. It sheds a strong light you can barely see the underlying details of the picture, but it produces a more transparent light, and many of the details of the underlying picture can be seen through it.

Pin light selects the darker or lighter color of the two colors you are mixing, depending whether the color of the picture is above or below %50 gray levels.



## Hard Mix

Similar to Vivid Light, this mode works by adding the red, green and blue of the two colors you are mixing, it creates a unique light that's easy to distinguish from the other modes



## The other 4 modes

So far, I don't have an accurate name to use for these 4 blending modes. So I called them "The Other 4". Think of them as the color invert group if you like, or the group that takes the color away from the picture you are working on, because that's kind of what they seem to do.

## Difference

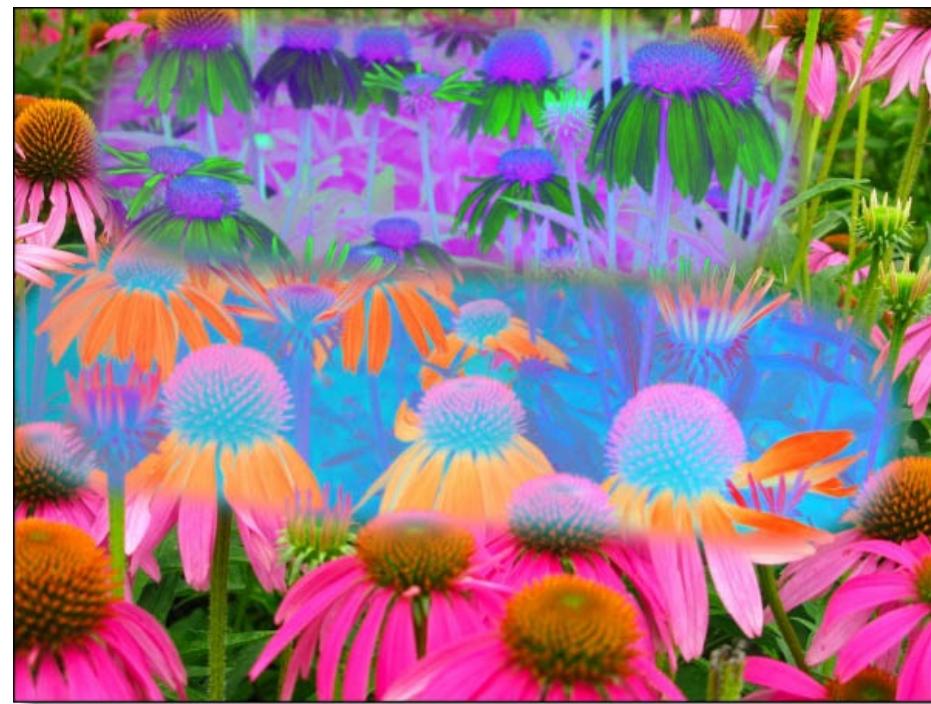
This mode takes the smaller color of the two you are mixing, and subtracts it from the greater one. The result is a color that is the difference between the two. Without doing the math, it is hard to

predict what color(s) this mode will produce.



## Exclusive

Similar to the Difference mode, but creates a result that has less contrast



## Subtract

This mode subtracts the value of the color you are applying from the color of the picture, regardless whether the color you are applying has greater values or not, unlike the difference mode, which takes the greater color and subtracts the smaller one from it



## Divide

Another mode that does what its name says. It divides the color of the picture with the one you are applying



On this picture, I applied red (resulted in green), green (resulted in red), and blue(resulted in yellow), on the flowers picture using the divide blending mode

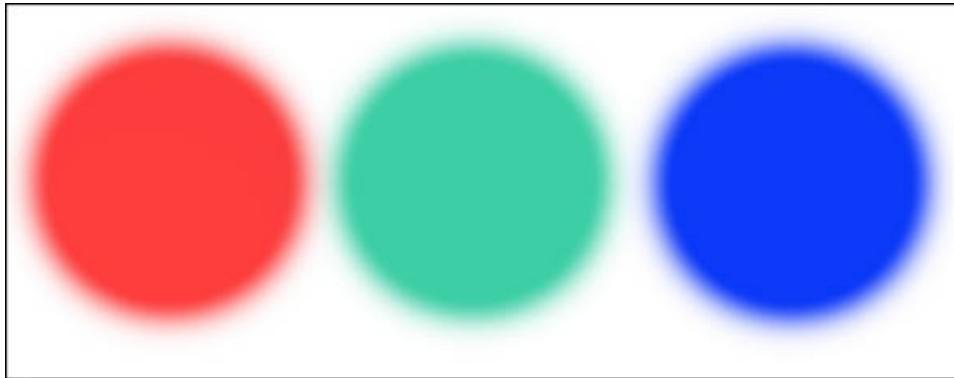
## The color components modes

The last 4 modes work on the 3 components of the color, the Hue, Color, Saturation & Luminosity, instead of green, red and blue. For the sake of making this chapter easier to understand, I will assume that you have no idea what the Hue, Saturation, Color and Luminosity mean. So I am going to give you a brief description on them here, if you already know about these four. You can skip this part if

you like :)

## Hue

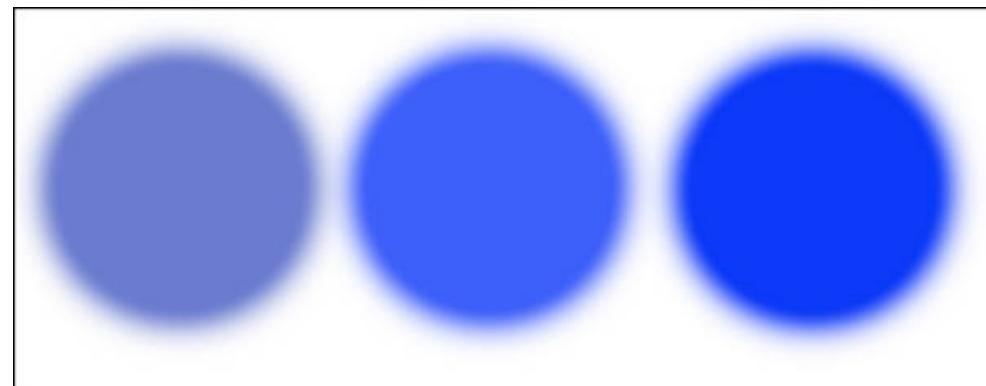
Hue is color, when you look at some color, we tend to classify it as red, blue, green, yellow, orange, purple, or any other color, disregarding whatever the color is light or dark. This is the Hue component of the color.



Three colors with different Hue values, it is easy to classify these colors as red, green and blue just by looking at them, even though the green at the middle is not the best green you could think of.

## Saturation

Represents the intensity of the color, the bluer a blue is, the more saturation it has.

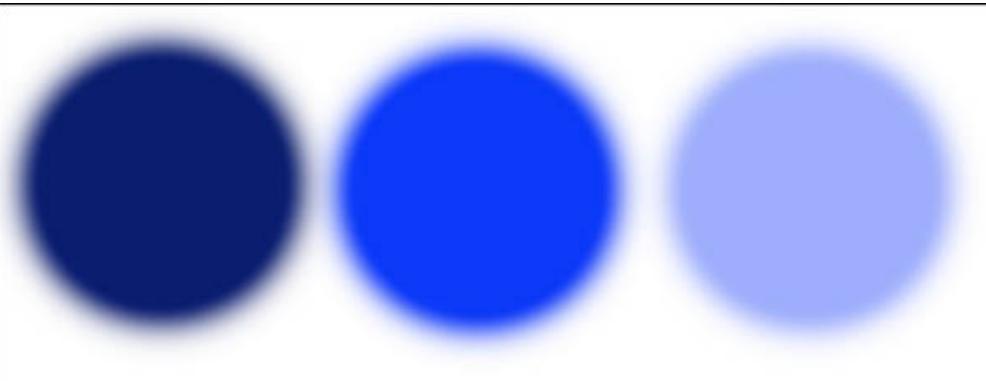


Three blue circles with different saturation level.

The blue at the right has the most saturation, the one at the left barely has any saturation, which makes it kind of dull. We could still classify the three colors as blue because they have the same hue.

## Luminosity

This component determines the amount of light the color receives, or how much light or dark it is.



Now you are familiar with the HSL

terms (short for Hue, Saturation and Luminosity). Let's get to the color modes of them~

## Hue Blending Mode

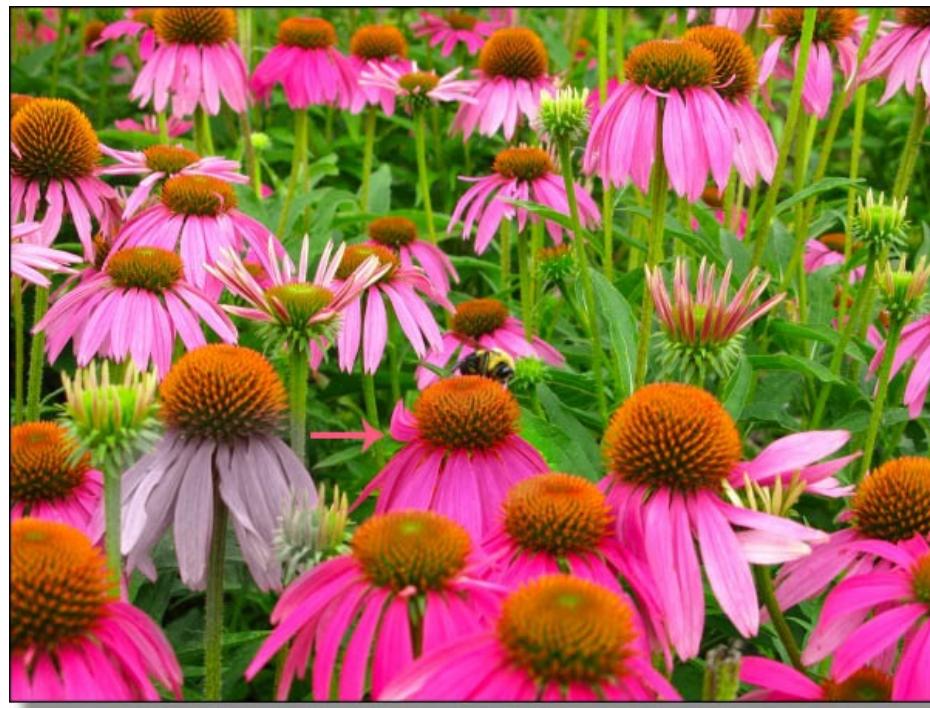
Applies the color of your brush on the picture while keeping the brightness and luminosity of the picture pixels. This is one way to change the colors in your pictures

Here, I changed the color of part of one of the flowers at the left by applying some red to it:-



## Saturation blending mode

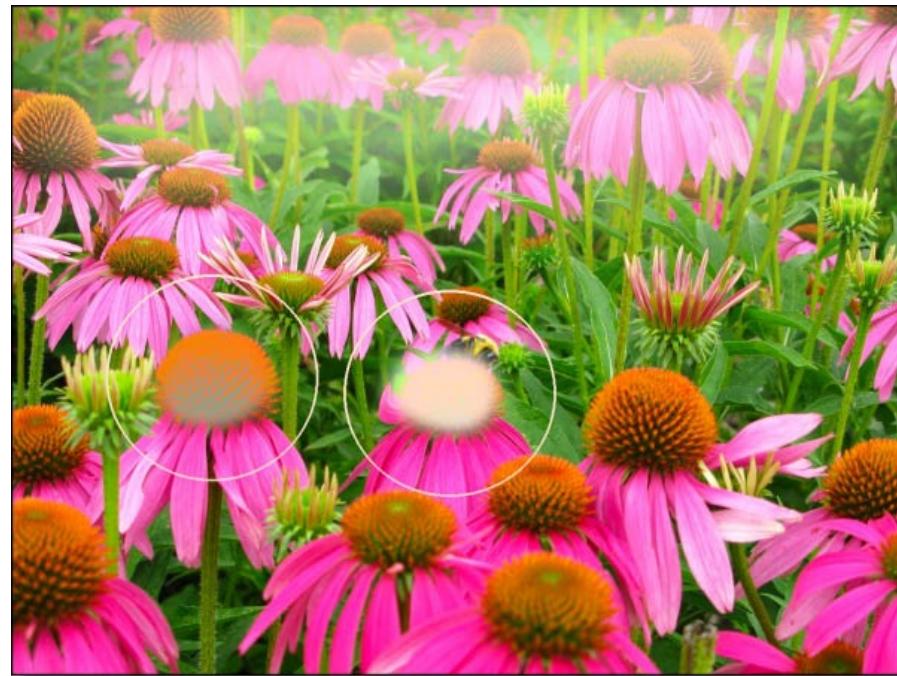
Applies the Saturation of the color of your brush while keeping the Hue and Luminosity



If you looked at the flower at the middle (the one an arrow pointing at it), you will notice its color is more saturated than the others. It is because I applied an intense red on it. On the other hand, the flower on its left became so pale after I applied a color with low saturation on it

## Luminosity Blending Mode

Applies the Luminosity (or Light you could say) of your brush color to the picture. This is a good way to add light to your pictures by using a brush with low flow value



I added some bright light to the upper part of the flowers picture by applying luminosity using a brush with low flow value. At the bottom of the picture, I applied a bright color to the flower at the right, resulting in covering it completely. I also applied a dark color on the left flower, which made it less distinguishable.

## Color

Applies Both Hue and Saturation of your brush color and keeps the saturation of the picture color. This is a very common way to change the colors in your pictures



If you don't like the color of the flowers here, feel free to change them. To get the best results, choose colors that are not so bright and not so dark. Using a soft brush with low flow or opacity can help you a lot here as well.

## Examples

We are finally done with all the modes, it is time to show you more examples of how to play with these modes on your pictures. There is virtually unlimited ways to do that. But giving you a head-start will help you see how great it is to be able to use them effectively:-

## Make them both blue:-

- By using blue on the cat yellow eye, I managed to turn it into blue by using the Color blending mode. I made sure to set the flow low enough so I won't get to add more blue than necessary, which would make the end result looks so unnatural. More manipulation of the eye shades can make the end result even better



## Turn Day Into Light

- Turn the day into night by using Hard Light blending mode with and apply blue on the entire picture



## Make your images brighter

Make your images brighter by applying overlay on them with a bright color.



## Create a sunlight

Bask your image in the sunlight by applying white on your picture using the soft color. You will need to apply more than one stroke to create a similar effect to this one.



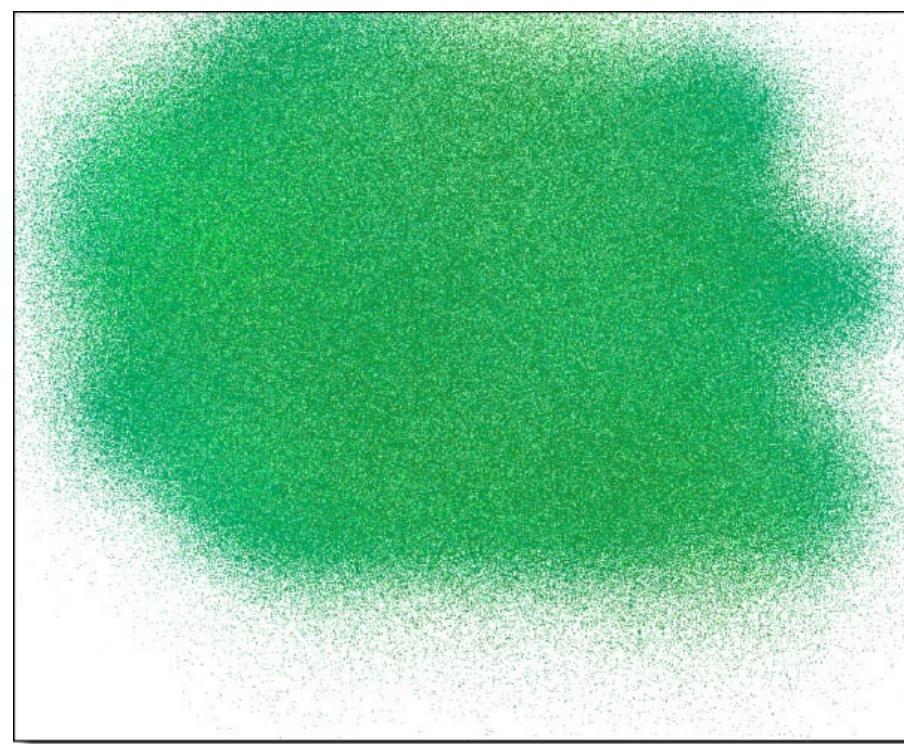
## Use Dissolve as an effect

The dissolve mode can make interesting effect on its own. I bet every gang that has Photoshop uses it :D



Make  
Me  
Believe

Still with the Dissolve mode, I created a simple grass effect by applying various degrees of green on top of each other using that effect. Various things can be created that way in Photoshop



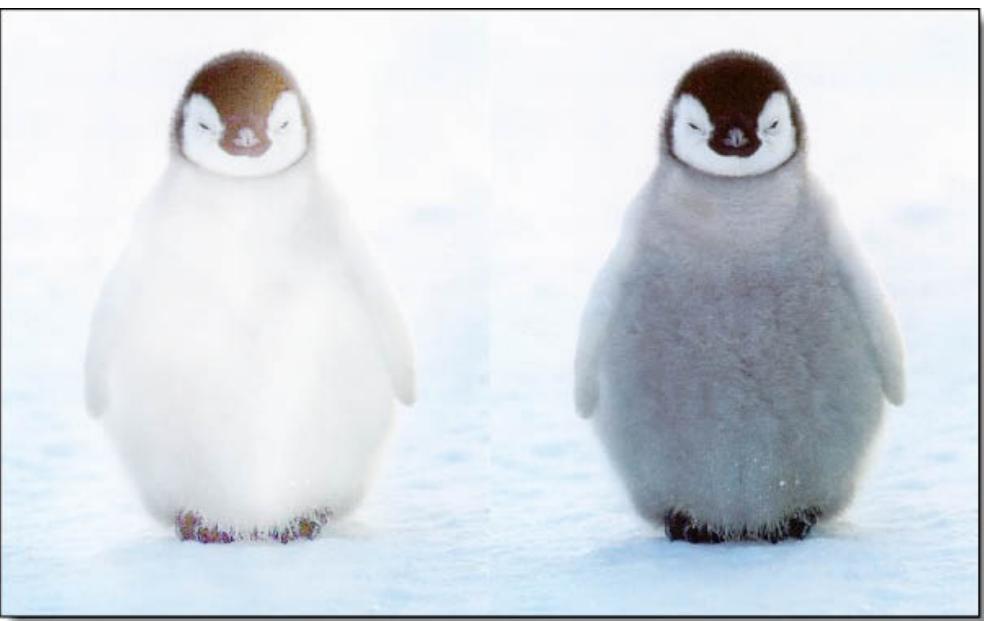
## Create Geisha girls

I turned this cute Japanese girl into a Geisha by darkening her lips with red. Darkening her eyebrows with black, and applying white over her skin with Overlay. Doing things like that is easier with layers, which we will get to learn soon



## Make white penguins

I turned this penguin to white by soft light on it many times. He looks a little bit like chicken now.



## Conclusion

I am aware that this was a hard & confusing chapter, but this is probably the hardest chapter in the whole book, blending modes can exist in more than one place in Photoshop, and they are a relatively easy way to create effects. Which is why I thought you should learn them as soon as possible.

## Blending Modes Resources:-

I couldn't have wrote this chapter without some external help. Here are two articles that were very useful in filling gut gaps in my knowledge about these modes, you could refer to them to learn more about these modes if you like:-

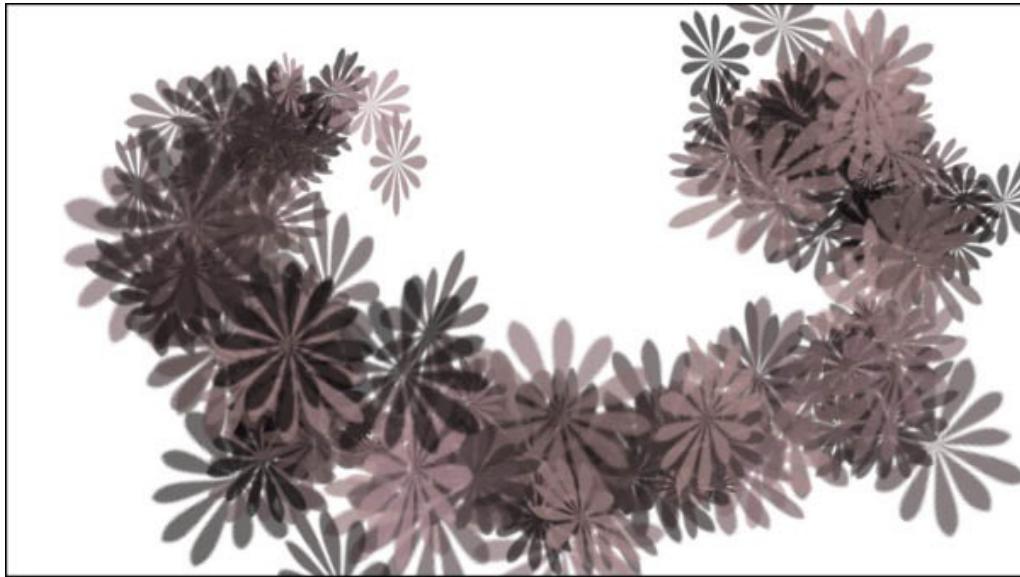
- [The official Adobe website](#):- which helped me more than anything~
- [This page](#) explains the math behind the blending modes in details. Something I kind of avoided. But you may find this very useful if you want to learn more about Photoshop blending modes later

# Summary

- Blending Modes is one of the most powerful yet confusing aspect of Photoshop, but because they are useful in multiple of ways, it is important to get to know them as early as possible
- It is normal to feel confused about Blending Modes, at first, and it is okay if you still feel so right now, but you will get used to them the more you experience working with them
- To make them easier to understand, I divided Blending Modes into 5 groups, depending on what the modes in each group do
- The Normal Group is the most straightforward among the blending modes, as they do simple but useful things, like making fuzzy strokes or going behind the current pixels. The Behind & Clear Modes are only available to the brush Tool
- The darken group mix the two colors and produce a darker color along the way
- The Lighten group does the opposite of that, it mix the two colors to produce a lighter one
- The contrast group produce different types of lights, while this may not be an accurate way to describe them, it does the job very well.
- The other 4 modes takes the color away from your pictures by subtracting or dividing the color and the like

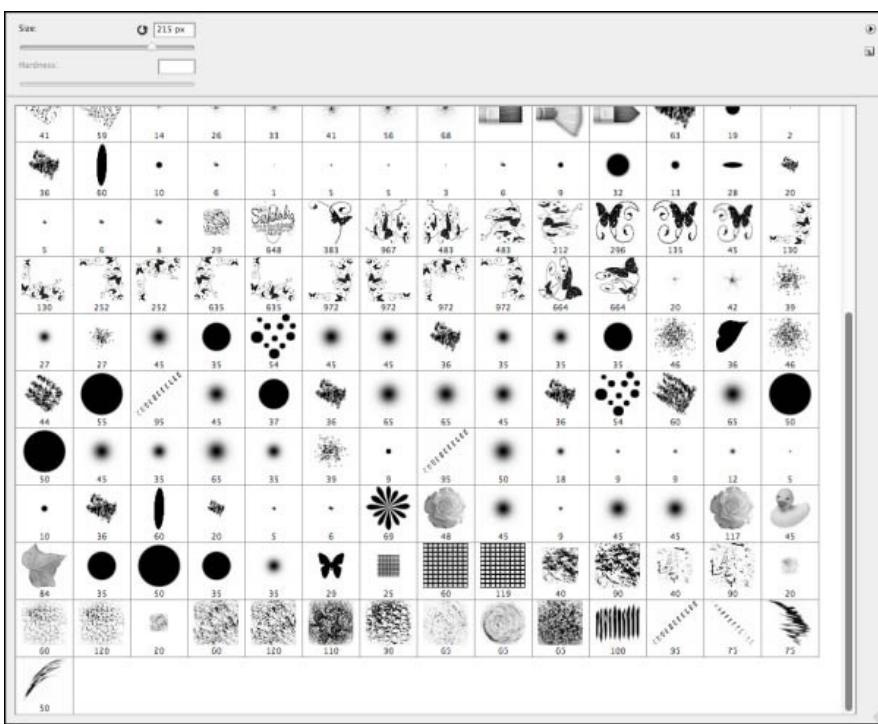
- The color components group allows you to apply certain parts of your colors on your picture, for example, the color blending mode allows you to change the colors of your picture to the one of your brush

## Loading new brushes In Photoshop and creating new ones

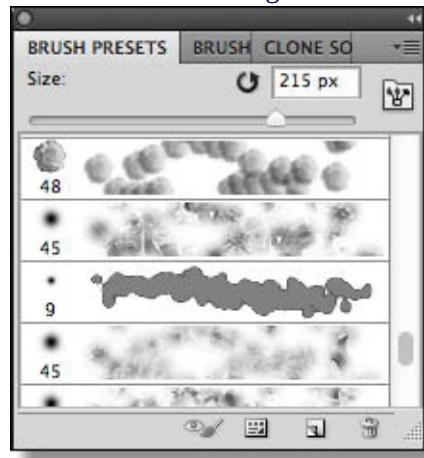


One of the best features of the brush tool is the ability to change the brush you are using. And choose from various brushes available in Photoshop. And if those were not enough, you could download more brushes online and even create your own. Making your brushy world unlimited in space and capabilities.

To change the brush you are using, just right click anywhere on the canvas, and then select the brush you would like to use. You could also do that by opening the brushes preset panel by selecting Window->Brush Presets.



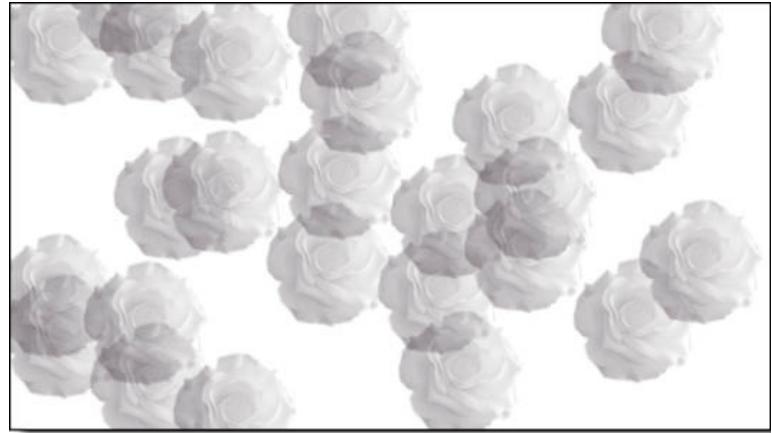
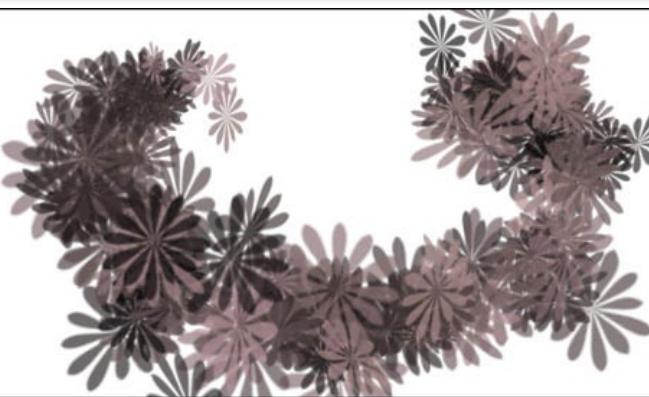
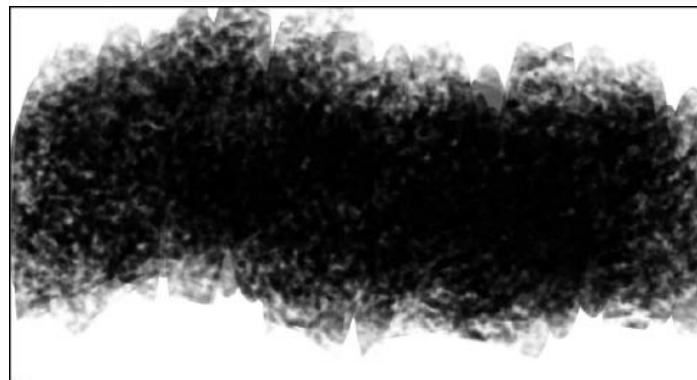
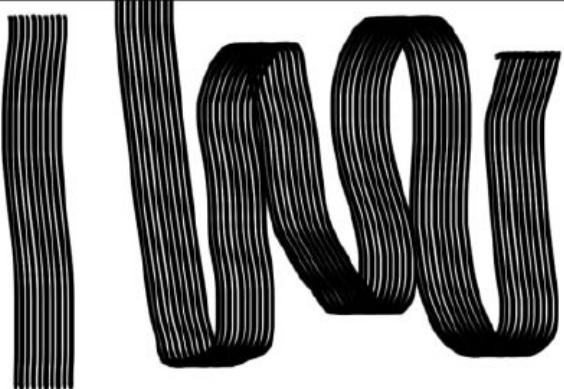
The brushes dialog, where you can change the brush you are using



The brushes presets panel

Play around with the various brushes to see how they look like. Here are 6 examples of some of the brushes that come with Photoshop:-



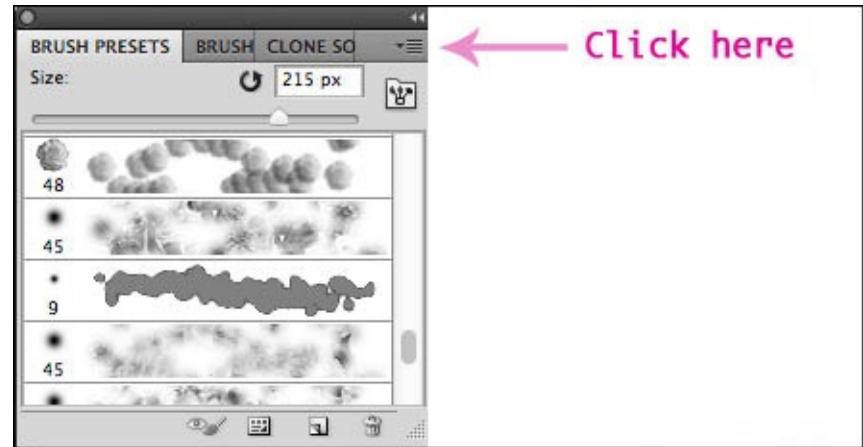


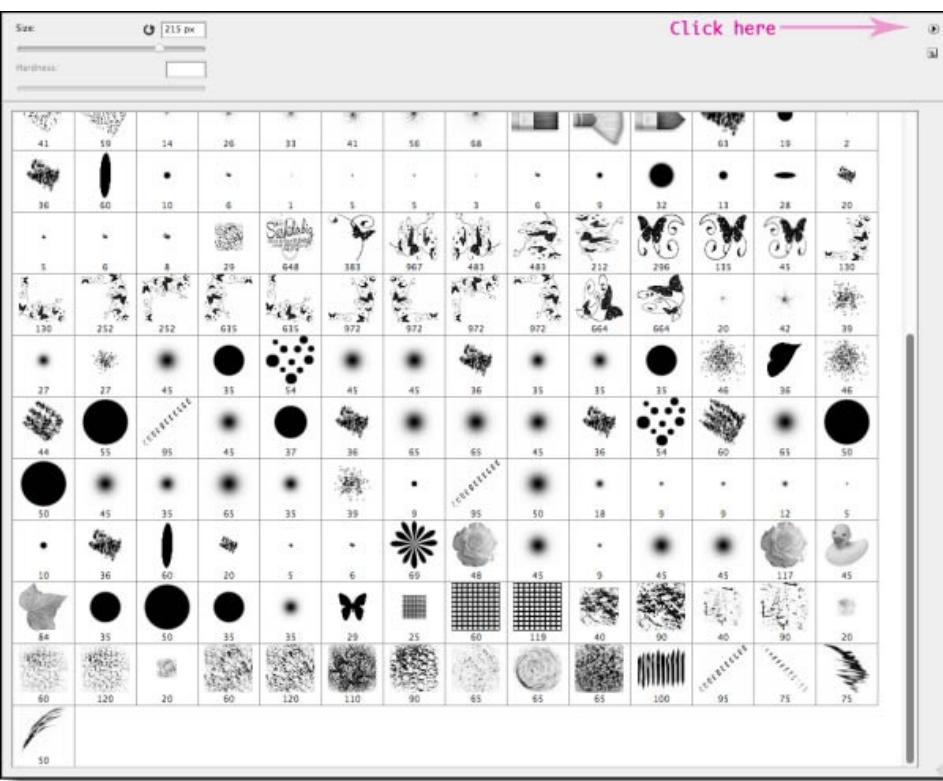


## Loading new brushes to Photoshop from presets.

Photoshop comes with more brushes than displays in the brushes option dialog or the brush preset panel. But you have to tell it to load them for you.

- Click on the triangle at the corner of the brushes option dialog or the brushes preset panel. You see a various set of brush presets you could load.





- Select the preset you want to load, I selected the M Brushes preset myself

New Brush Preset...

Rename Brush...

Delete Brush

Text Only

Small Thumbnail

✓ Large Thumbnail

Small List

Large List

Stroke Thumbnail

Preset Manager...

Reset Brushes...

Load Brushes...

Save Brushes...

Replace Brushes...

Assorted Brushes

Basic Brushes

Calligraphic Brushes

DP Brushes

Drop Shadow Brushes

Dry Media Brushes

Faux Finish Brushes

M Brushes

Natural Brushes 2

Natural Brushes

Round Brushes with Size

Special Effect Brushes

Square Brushes

Thick Heavy Brushes

Wet Media Brushes

- Photoshop will ask you if you want to replace the current loaded presets with the one you are loading. If you choose “OK”, Photoshop will unload all the brushes you have and only keep the ones in the new preset. Which is not what we want to do. So select “Append” to load the new preset to the brushes panel, while keeping the ones we already loaded.

Adobe Photoshop



Replace current brushes with the brushes  
from M Brushes?

Append

Cancel

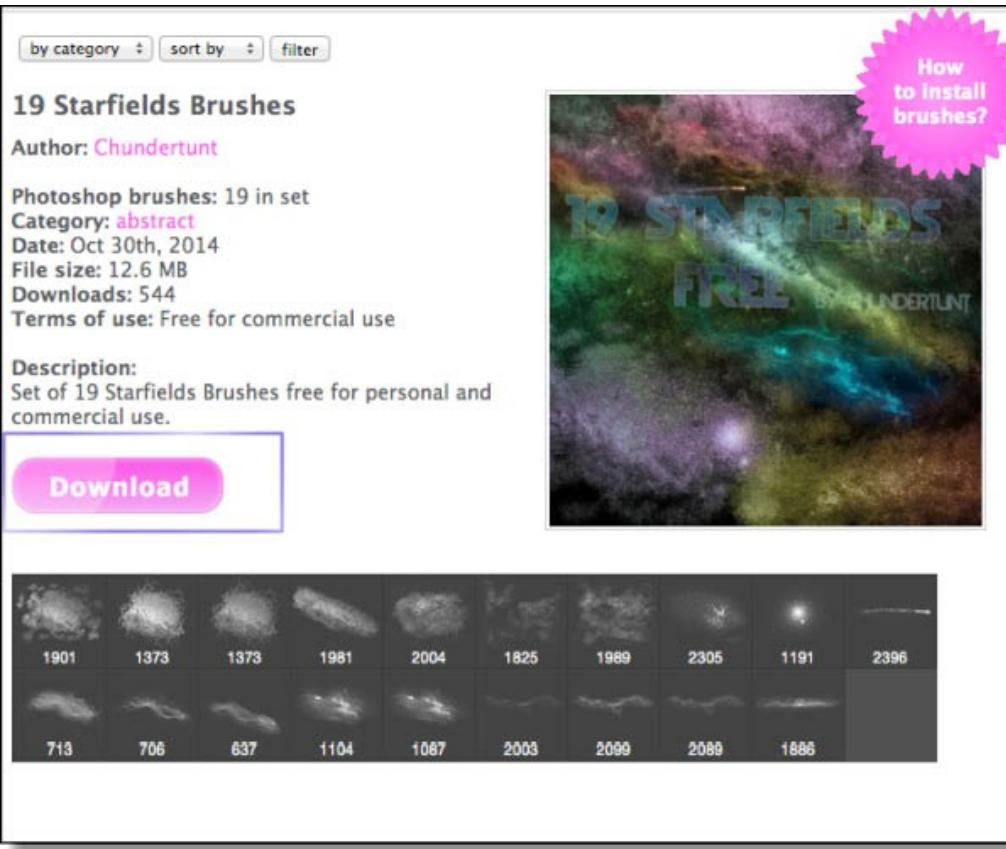
OK

Et Voilà, the brushes will be there in the brushes dialog or the brushes panel. Ready for you to use~

## Loading new brushes in Photoshop after downloading them from the web

The online world is full of brushes you could download and use, usually for free. And there are many sites specialized in brushes where you can download from. For this part of the chapter, we are going to download and add the Starfields Brushes from [MyPhotoshopBrushes.com](http://MyPhotoshopBrushes.com)

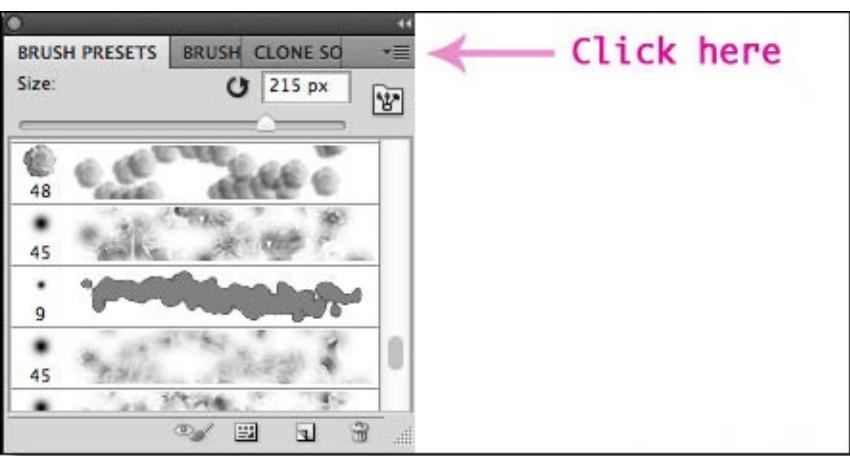
- Go to the following URL, which is where I found the StartField brushes:- <http://myphotoshopbrushes.com/brushes/id/3390/>
- Click on the download brush bottom. Marked by the blue rectangle in the following picture:-



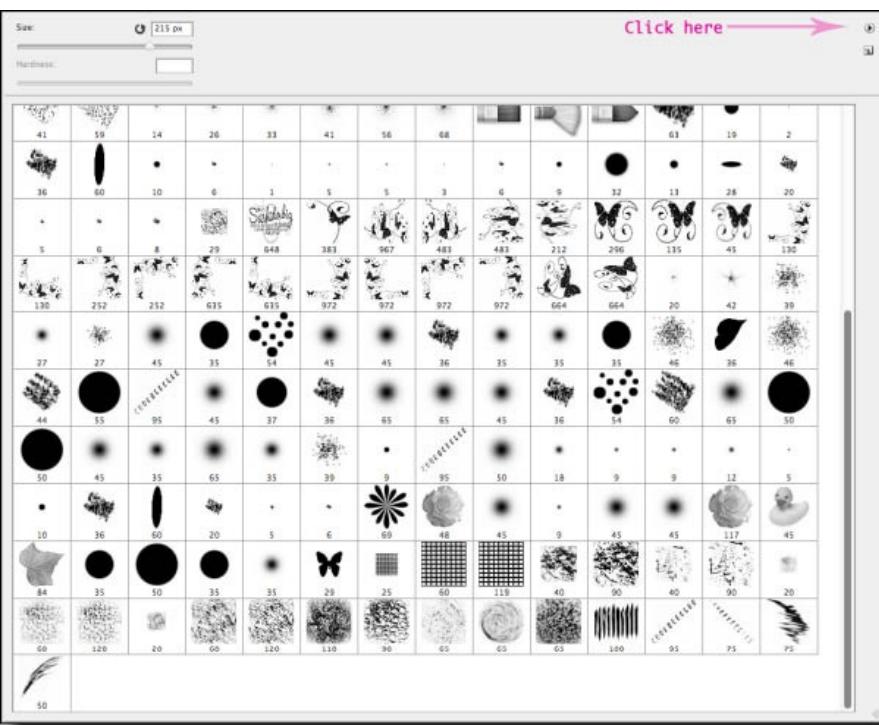
- Unpack the zip file you downloaded, for instructions on how to do that, [click here](#)
- On my computer, simply clicking on the resulting unzipped file adds the new brushes to Photoshop. But just in case, I will explain how to add the brushes to Photoshop manually



- Click on the triangle at the corner of the brushes option dialog or the brushes preset panel

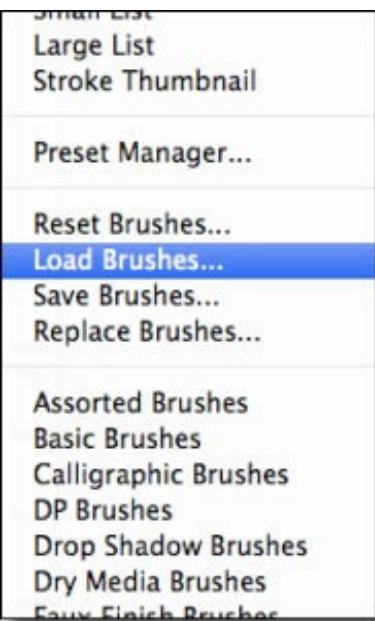


Click here



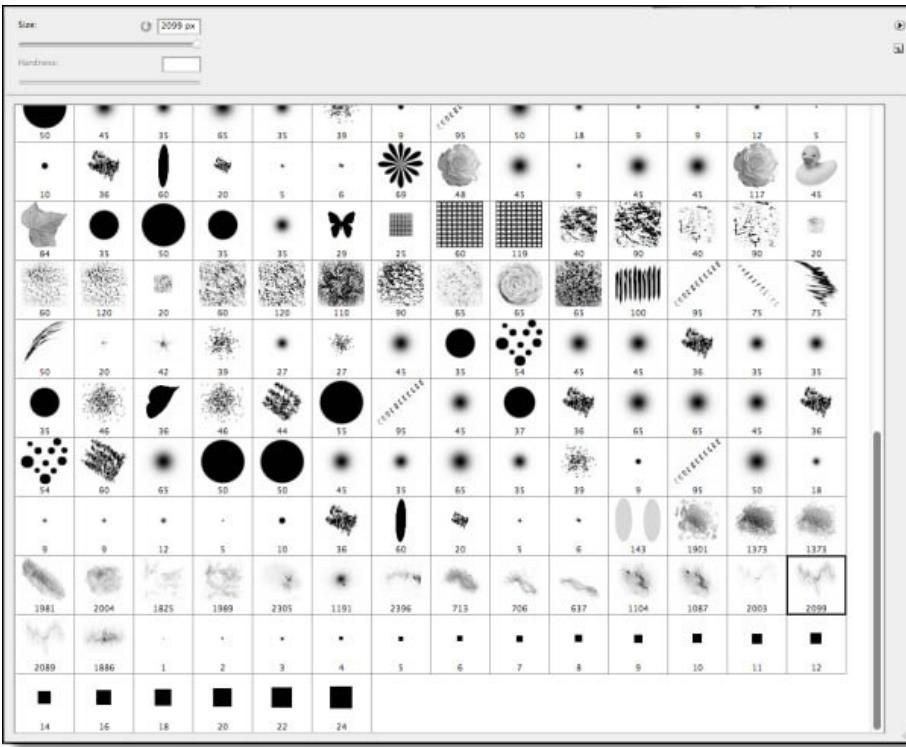
Click here

- Select Load Brushes from the menu, which will open the Open dialog



- Locate the brushes you downloaded in the file system, and then press OK.

- And we are done; the brush(s) will be available to you just like any other brushes, ready for you to use them.



**Here are some sites where you could download more brushes:-**

- [Deviant art](#)
- <http://www.brusheezy.com>
- <http://myphotoshopbrushes.com>

## A Word About downloading brushes online and copyrights issues

I am not a lawyer and can't really give you a legal advice, but it is important to give you a word about what you could do with the brushes you download online

The person who created the brushes is the one who chooses where the copyright terms goes. He can give it away or sell it for a certain amount of money. The terms are different based on what the author states in the brushes description. Some are free to use for non-commercial purposes. But you will have to pay to be able to use them commercially. Some requires you to give attribution to the author when you use them, and without having to pay anything. So make sure you read the brushes description carefully before using them:-

## Free Christmas and Winter Wallpaper and Brushes

By EezyPremium in Brushes



[Download](#)

[Favorite](#)

g+1 [Like](#) [Pin it](#) [Tweet](#)  
Views: 2546  
Downloads: 1648  
Version: CS6  
Number In Set: 3  
License: [Show Info](#)

Need more Winter Wallpapers and Brushes? [See the full pack here](#)

Now's the time to start planning for the holiday season! These Free Christmas and Winter Wallpapers and Brushes, courtesy of [Eezy Premium](#), will have you craving hot chocolate in no time. Whether you are creating a party invite, a company newsletter or preparing for a Christmas blog post, these high res holiday wallpapers and brushes will do the trick. The files in this free mini-pack are just like all of our other Premium files - they are professionally-designed and come with a license with no royalties!

Brusheezy term for a certain brush, the creator states that the brushes are free of royalties, meaning you won't have to pay to be able to use them

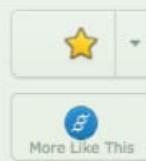


## FUR BRUSHES - PHOTOSHOP CS3

by [KeepWaiting](#)

Resources & Stock Images / Application Reso...

©2008-2014 KeepWaiting



Fur Brushes for **Photoshop CS3+**.

Completely original brushes.

Download here: [dirt2.com/photoshop-brushes/fu...](http://dirt2.com/photoshop-brushes/fu...)

To use these brushes properly simply apply the 3 furry brushes in a clockwise motion; each follow your cursor so it can create layers and layers of fur in the same direction.

The leopard brush is a soft brush that overlaps leopard skin texture.

These brushes are for non-commercial use, For commercial use please donate \$5.00 through PayPal to services@dirt2.com ~ Thank You!

Goodluck and enjoy, Post in this submission if you use it. Would like to see what you create out of it.

**I love comments so let me know what you think or what I can improve on for my next brush set.**

Some brushes more terms associated with them,

like having to pay for them for use in commercial purpose. So you have to check the site you download the brushes from just in case

by category sort by filter

## 19 Starfields Brushes

Author: Chundertunt

Photoshop brushes: 19 in set

Category: abstract

Date: Oct 30th, 2014

File size: 12.6 MB

Downloads: 544

Terms of use: Free for commercial use

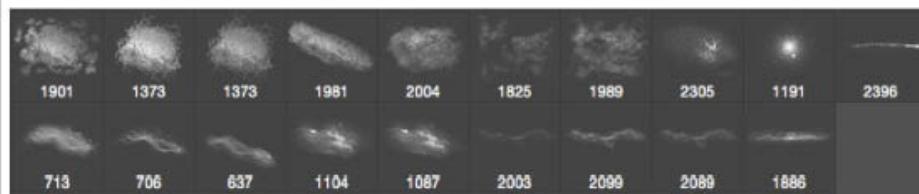
### Description:

Set of 19 Starfields Brushes free for personal and commercial use.

[Download](#)



How  
to install  
brushes?



The Starfields Brushes we added to Photoshop just now are free for both personal and commercial purpose.

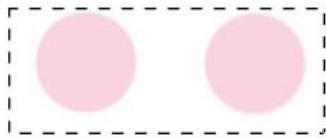
## Creating your own brushes in Photoshop

One of the best things about brushes in Photoshop is the ability it gives you to create your own brushes, which gives you an unlimited range of abilities. Right now, we are going to create a double brush. A brush that simply creates two parallel strokes instead of one.

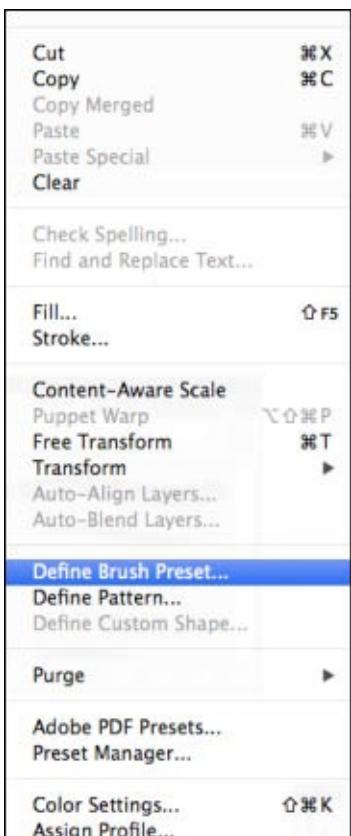
- Create a new Photoshop document (select File->New from the main menu)
- Select the brush tool from the Tools Panel
- Add two strokes that are side by side, like what you see here:-



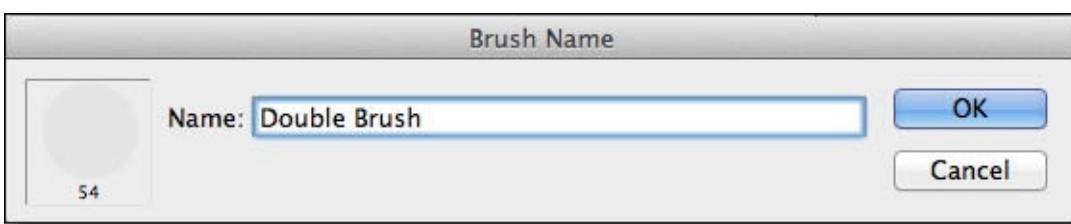
- Select the two strokes using the Rectangular Marque Tool



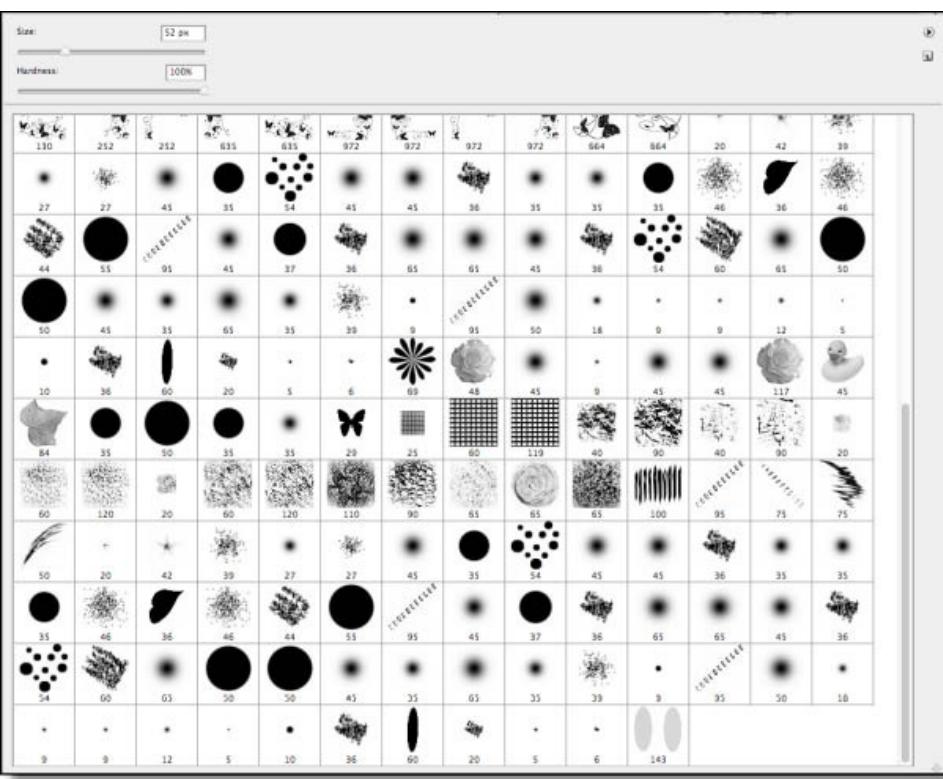
- Select Edit->Define Brush Preset from the main menu



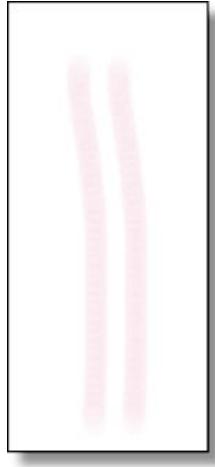
- A dialog appears asking you to name the brush, let's call it “Double Brush”



- Click OK And we are done, and the new brush will be available in the brushes dialog or the Brushes Presets Panel



- Now let's try the new brush, as you can see, it creates two parallel strokes instead of one :D



## Examples

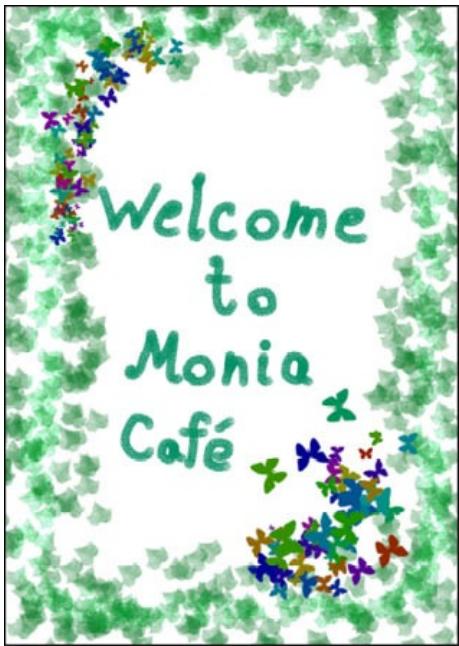
### Drawing a space

Creating a space using the star field brushes, I did two examples, one that's simple that represents a simple and tranquil space. And the other which represents a glamorous one.



## Creating a banner

For those learning Photoshop to create signatures and banners, I created this simple banner using few brushes that represent plants. And also used some butterflies brush. If you looked carefully, you will notice that I applied the color dodge at the middle of the border to make it a bit lighter. More tweaking of the banner, plus applying a bit more of other Photoshop tools (like the Type tool), can make this banner look even better :D



## Grasses Owl

With the grass brush, I hid this cute owl behind some grasses; The contrast between the colors in this brush is what I like about it



## Adding grasses to a pictures

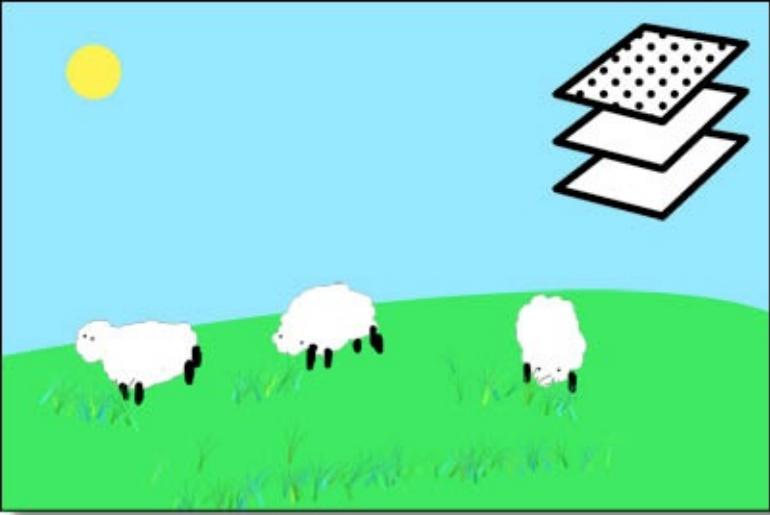
In this seemingly complex example, I added new grass on each side of the road. To give the grasses a more natural look, I drew simple shades on them using black with small flow value of the brush, and I applied the Hard Color blending mode on them frequently. I also applied a little white using the soft Light Blending mode to brighten the entire picture a little bit.



## Summary

- The benefits of the brush tool doesn't stop at adjusting its properties or having a lot of blending modes to use, but it extends to being able to use from many brushes as well
- There are more brushes that Photoshop doesn't show to you by default, but you tell it to load them for you with few easy steps
- Beside being able to select from many of the available brushes, you can also make your own as well
- And to make things even better, you can download even more brushes from the Internet, there are virtually an unlimited number of those out there, and many of those are free to use
- Just to be on the safe side, it is important to read the Brush license before you download it, especially if you plan to use it for a commercial purpose

## Working with layers and manipulating them



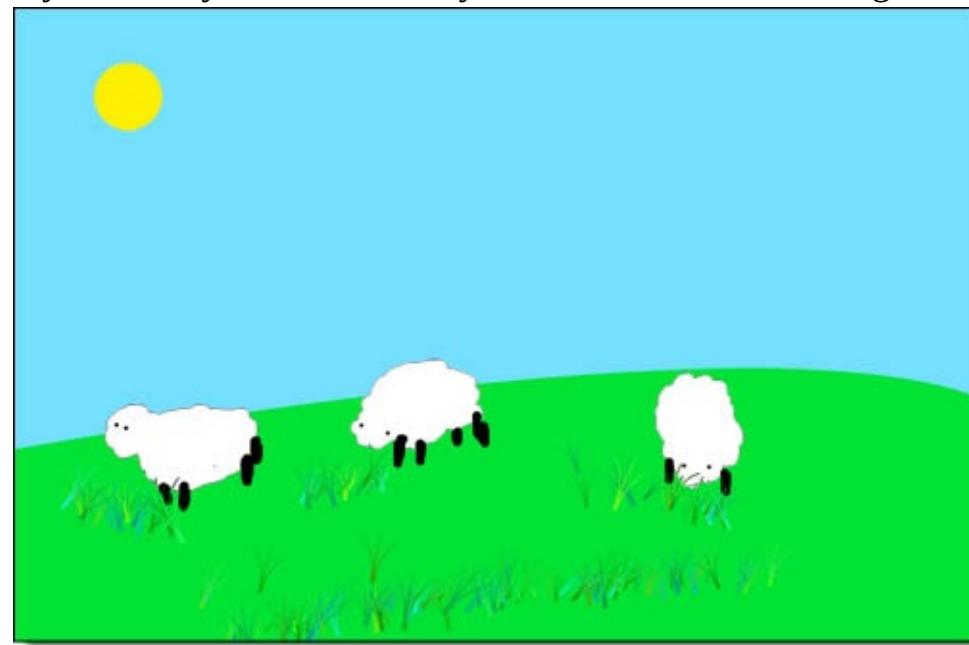
Layers are an essential part of Photoshop. They are one of two features that make it easy to create and edit pictures in Photoshop (Besides the selection tool, which we will cover in the next chapter). In this chapter, I will teach you a wide range of layer options. I will focus only on the basics of layers right now. But I will consider adding more contents that explain the more advanced options of layers in upcoming editions of this book.

Photoshop layers haven't changed at all since forever in Photoshop, so whatever you are using one of the later versions of Photoshop like CS5, CS6 or CC, or an old version like Photoshop 6 or 7, most

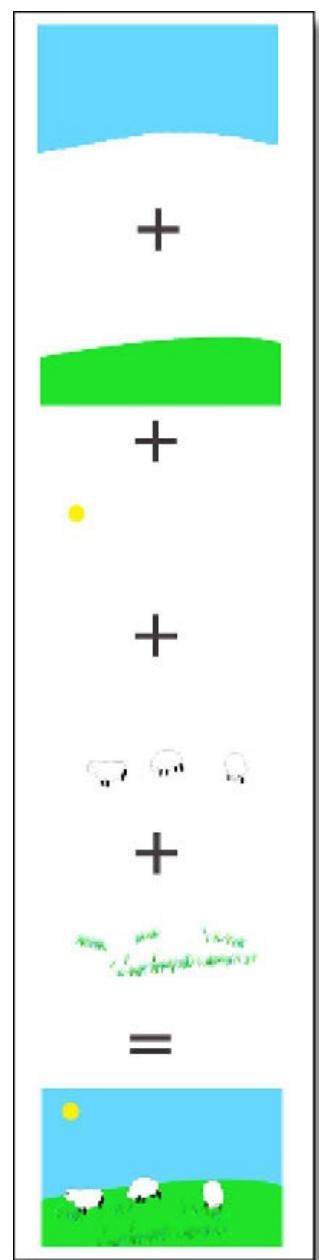
of the instructions here will apply to your version.

## What are layers?

In any Photoshop file, Each layer can be considered a picture on its own, and Photoshop creates the final picture you are working on by piling up all these pictures/layers on each other. For example, take a look at the following sheep picture. Each element in the picture is drawn in a separate layer, the sky is in its own layer, so is the meadow, the grass, the sheep, and the sun~



The final sheep image is made by putting all the layers one over the other, like that:-

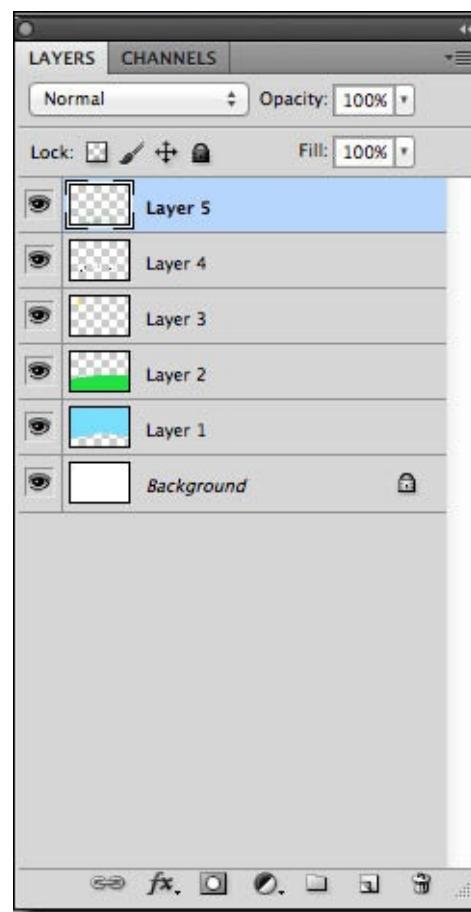


Simpler drawing programs like Microsoft Paint don't have layers. So it is safe to say that in Paint, the picture consists of only one layer. Which makes it very hard to create many things that are easy to create using Photoshop or any other program that supports layers.

## Working with Photoshop layers

Now you understand how layers work. It is time to explain how to work with them. Like how to create, delete and arrange layers, and a few other things. I will focus on how to do that from the layers panel. But all these things can be done from the layer menu (in the main menu) as well.

### The layers panel



The Layers Panel is where you work with layer, this is where you can create, arrange, and delete layers.

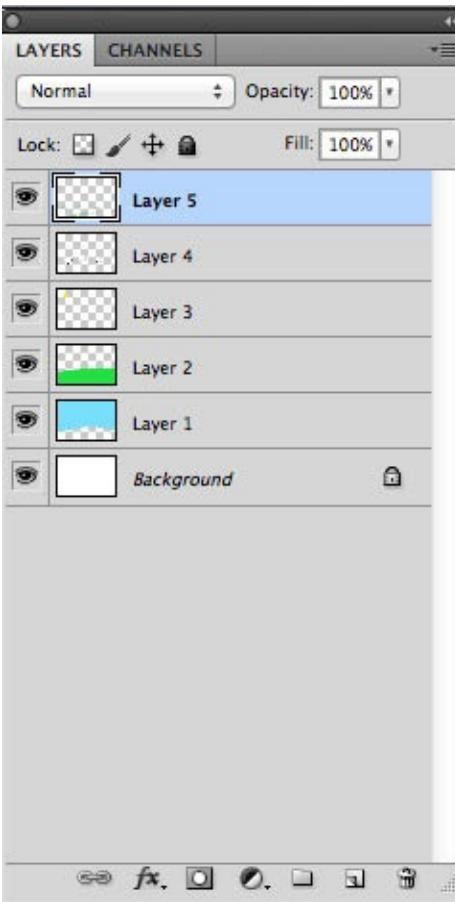
~If you can't see the layers panel, choose Window->Layers from the main menu to display the panel~

## To change the layer you are drawing on:-

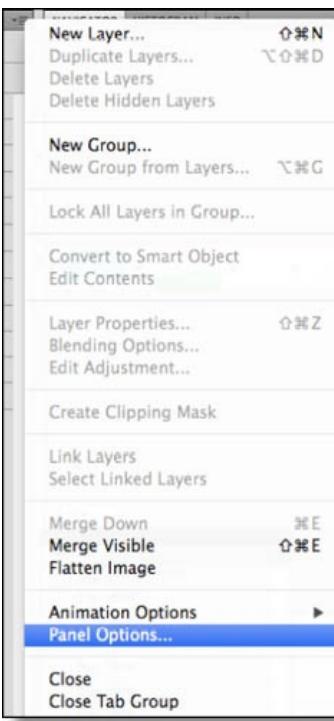
Simply click on the layer you want to edit in the layers panel, and then draw on your canvas, anything you draw now will be added to the layer you selected

## To change the size of the thumbnail of the layers:-

- Click on the triangle at the corner of the layers panel



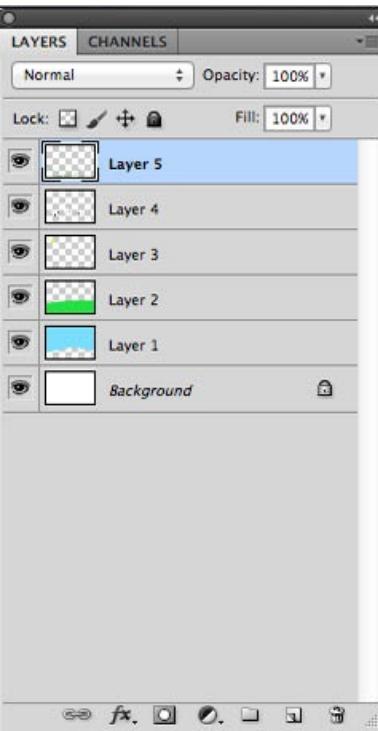
- Select Panel Options from the menu



- The layer panel options appear, where you can select one of the four options sizes for the thumbnail of the layer. You can either have no thumbnail. Small, medium, or big one. Select the size you want then click OK.

## To create a new layer

- Click on the create new layer button in the layers panel



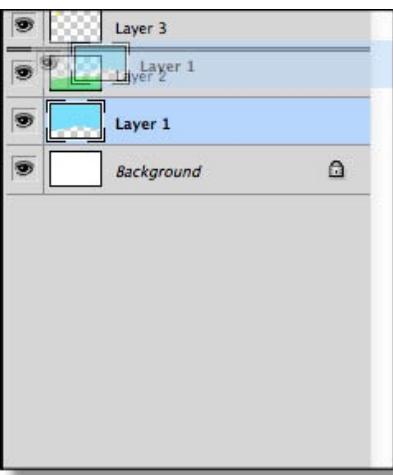
- A new layer will appear in the layers panel above your currently selected layer.

## To arrange layers in the layers panel

Sometimes you want a certain layer to be above another, you probably created a new layer, and it was not in the position you wanted it to be. Or you are experiencing with different kinds of effects.

Rearranging layers in Photoshop is easy, all you have to do is:-

- Click on the layer you want to change its place. And keep holding the mouse bottom
- Drag the layer up or down where you want it to be. Photoshop will mark where the new layer will be after you release the mouse button, like you see in the following picture:-



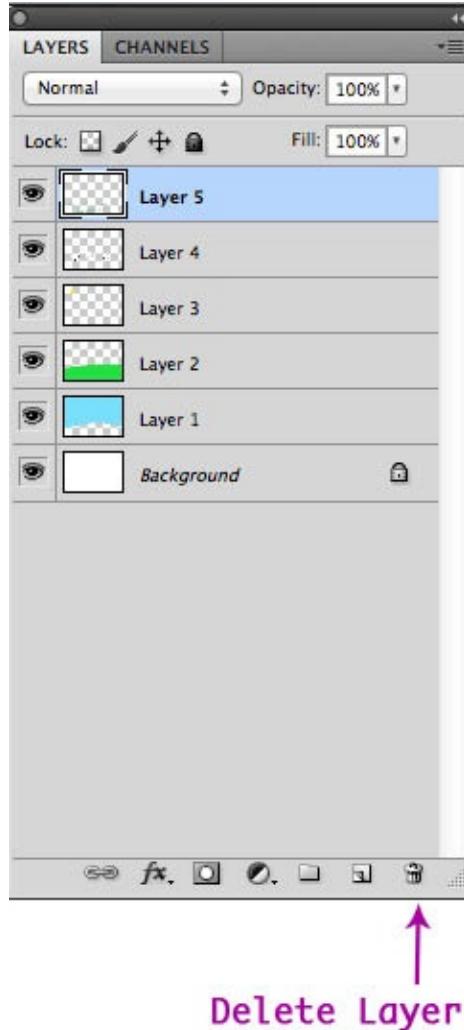
If you found it a bit hard to place your layer where you want it, you can [change the size of the layer](#)

thumbnail like I explained above.

## Deleting Layers

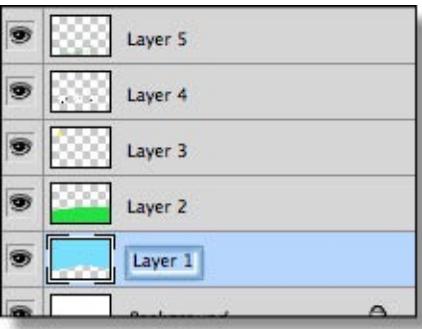
Sometimes you create layers and end up not using them at all. And sometimes you realize that a certain layer is totally unneeded. You can easily delete a layer by:-

- Selecting the layer you want to delete from the layers panel
- Then pressing the delete button at the bottom of the panel



## Renaming layers from the layers panel, the fast way

- Double click the name of layer you want to rename. Make sure you don't click outside the name of the layer, which opens the blending options dialog.
- Type the new name of the layer that you want
- Press Enter, and the layer name will be changed~



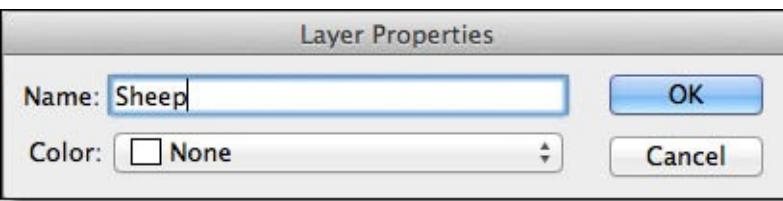
## Changing the name and color layers from the layers properties dialog(Photoshop CS5 and earlier)

The layer properties dialog allows you to change the name and color of the selected layer. Choosing colors for your layers is a helpful feature that makes it easier to organize your layers; this is especially useful when you have a lot of layers in your picture.

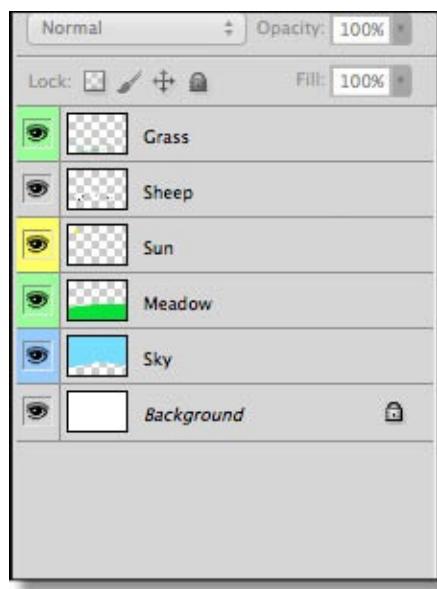
- To display the layer properties dialog, simply right-click on the layer you want to change its name or color. Then select “Layer Properties” from the context menu



- The Layer Properties dialog appears.

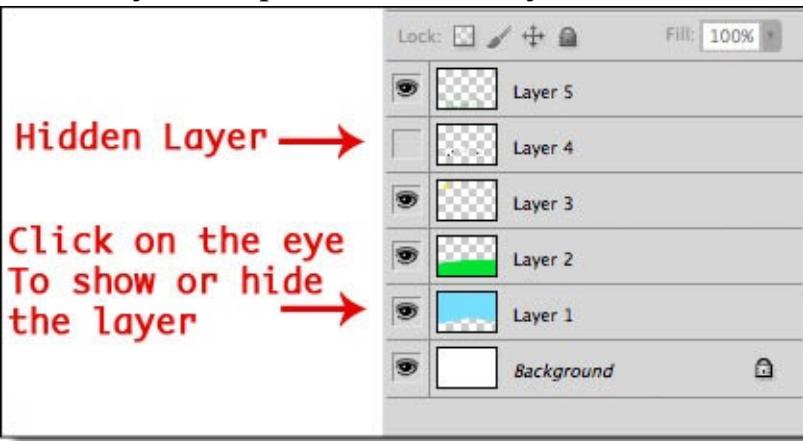


- Now feel free to rename your layer and select a color for it. Here is how the layer panel looks like after I chose a color for all the layers in the sheep picture

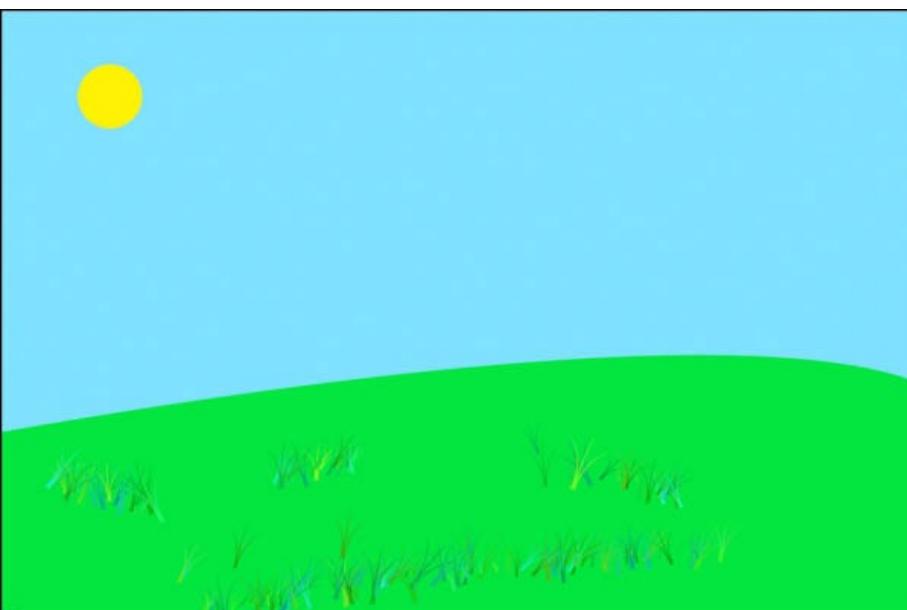


## Hide and show layer

You can hide any layer at any time; This is useful to see the picture without one of the objects of it. To hide a layer, simple click on the eye icon besides the thumbnail of the layer, as shown here:-



- To display the layer again, click again where the eye icon was. Here is the cute sheep picture after hiding the sheep from it:-

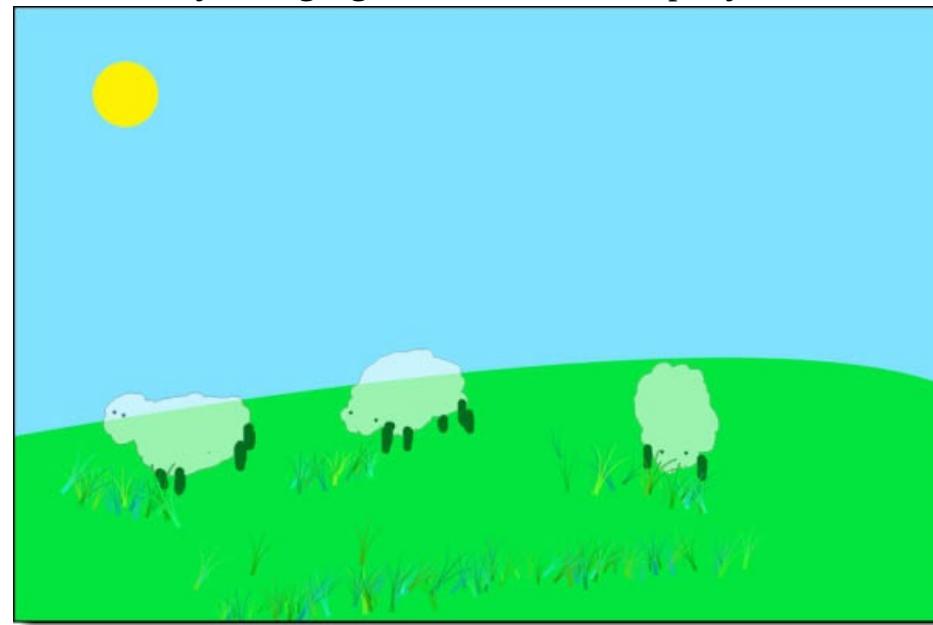


# Your old friends are here as well, fill, opacity and blending modes applies to Photoshop layers as well

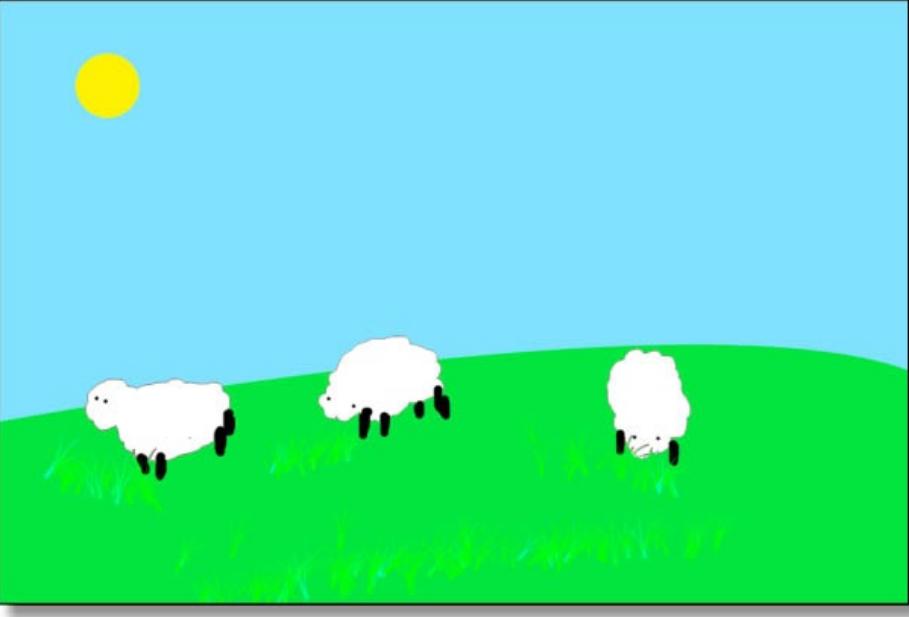
I focused on these features in the first few chapters because they are available in more than one place in Photoshop. Which means that if you became used to working with them, you will be able to use them many times over.

- For detailed explanation about opacity and fill of the brush tool. You can refer to “Getting Starting With The Brush Tool” chapter
- For blending modes explanation. You can read the “Blending Modes Of the Brush Tool” chapter
- The good thing about layers blending modes is that you can change them however you want, and if you don’t like a certain blending mode, you can change it to another without any problem.

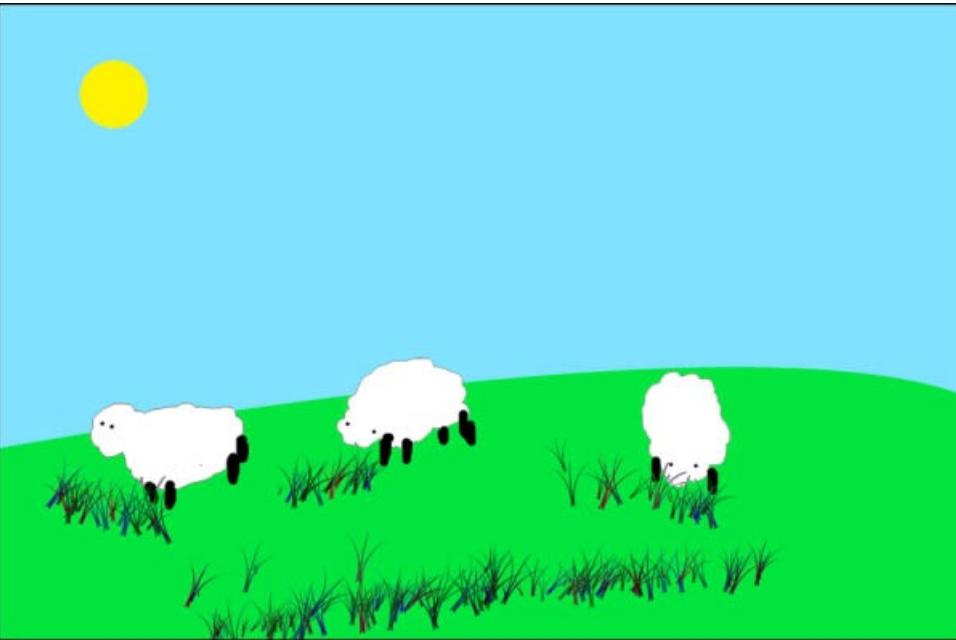
Let’s start by changing the fill of the Sheep layers, which turned them into ghosts~



- Here, I changed the blending mode of the grass layer to linear light, making it so bright



- Then I changed it into difference, which made them look so dark



Changing the blending mode of layers is one of my favorite tricks that I always use when I edit and create pictures. In the examples section at the end of the chapter, I will show you a few more ways on how to use that.

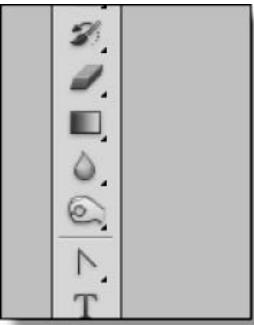
## Some useful tips & tricks about layers

The chapter is officially done. But I felt that these tricks should never be omitted, and the earlier you learn them in your journey to learn Photoshop, the better.

### Selecting layers quickly

Sometimes, selecting a certain layer from the layers panel can be tedious and time consuming. Especially when you have too many layers in your document to choose from. Fortunately, there is a little trick on how to choose layers quickly using the move tool.

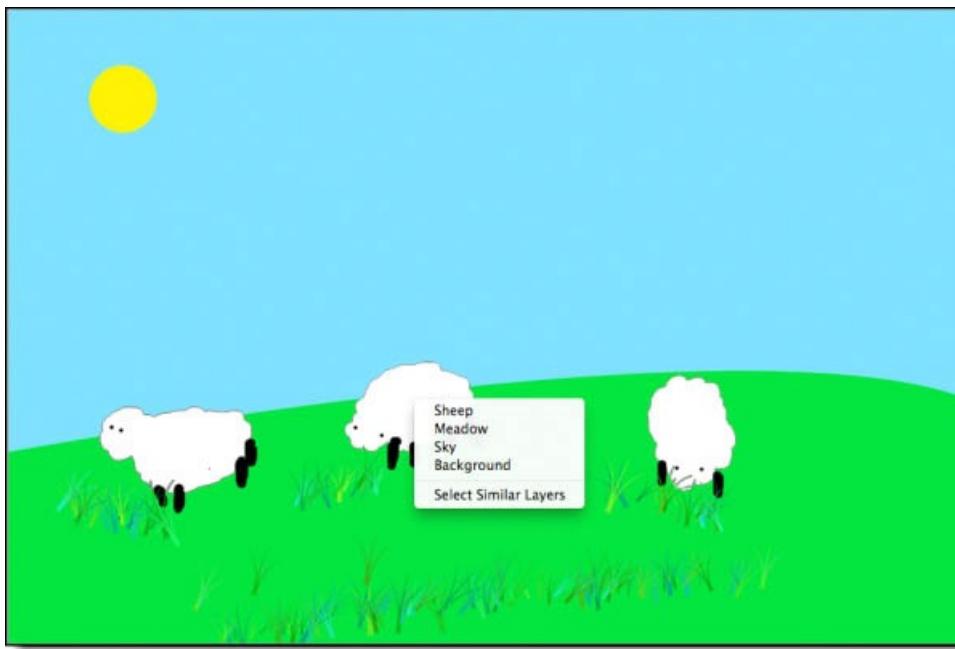
- Select the move tool from the tools panel:-



- Make sure that the Auto-Select option is selected from the options panel



- Now, click on any object on the picture and Photoshop will automatically switch to the layer of that object. In our sheep picture, clicking on one of the sheep will select the sheep layer. And clicking on the sun will select the sun layer, and so on.
- Also, you can Right-click on the object you want to select and Photoshop will display a list of the layers that has pixels where you clicked. This is useful when it hard to select a certain layer, especially if its contents are hidden below another layer:-



## The layer lock modes

Lock modes is a way to prevent you from accidentally modifying a certain aspect of a layer. If you locked one of these aspects, you won't be able to modify that aspect until you unlock it again. This is useful when you want to protect your layers from being changed accidentally. This can also be used as a trick to edit picture in certain ways.

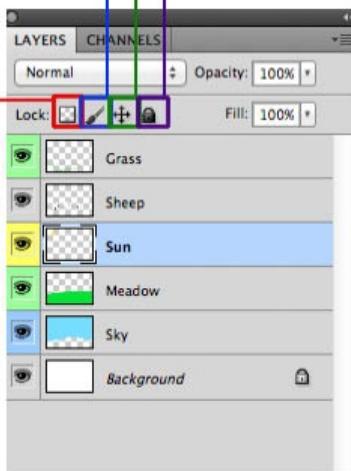
There are 4 lock modes available to each layer, which we will take a look at below.

Lock All

Lock position

Lock Layer Pixels

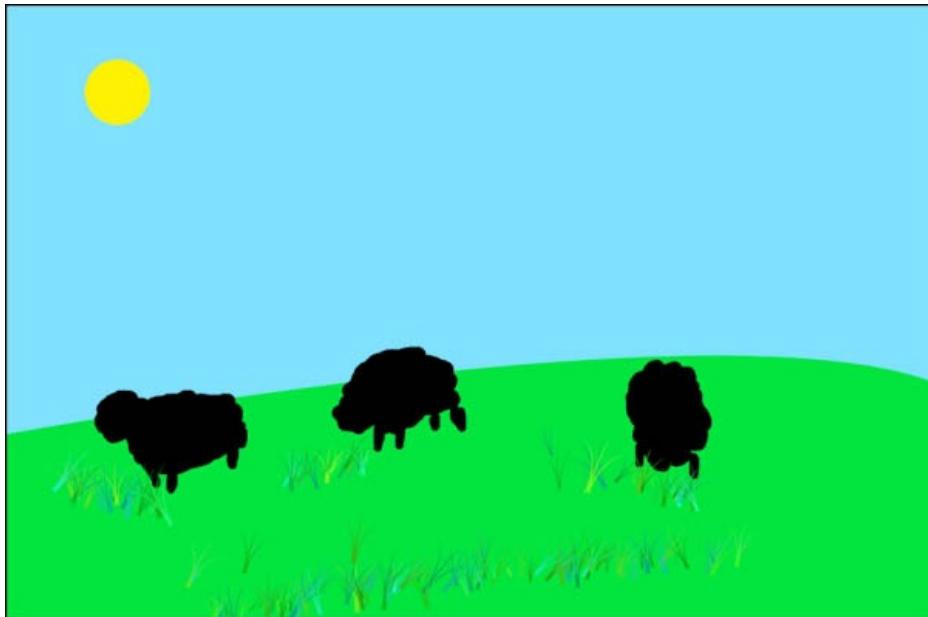
Lock Transparent Pixels



The 4 lock modes available to each layer are:-

- **Lock Transparent Pixels:-** If you locked the transparent pixels of a certain layer (the empty pixels in the picture), you won't be able to paint on them. And only the pixels that are already there will be editable until you unlock the transparent pixels again.

Let's say I wanted to change the sheep in the pictures to be black instead of white. So I go on and lock the transparent pixels. Now that I can't add any new pixels to the sheep layer, I simply paint over the sheep with black to change their color:-



- **Locks Image Pixels:-** Locking the image pixels means that you won't be able to paint on that layer at all. The only thing you could do to the layer is to move it using the move tool or other

moving tools

- **Lock position:-** If you locked the position of a certain layer, it means that you won't be able to move the objects inside of it using any of the moving tools. But you will be able to paint on it.
- **Lock All:-** Lock everything in the layer:- Meaning that you won't be able to neither paint on the picture or move the objects in it

## The background layer

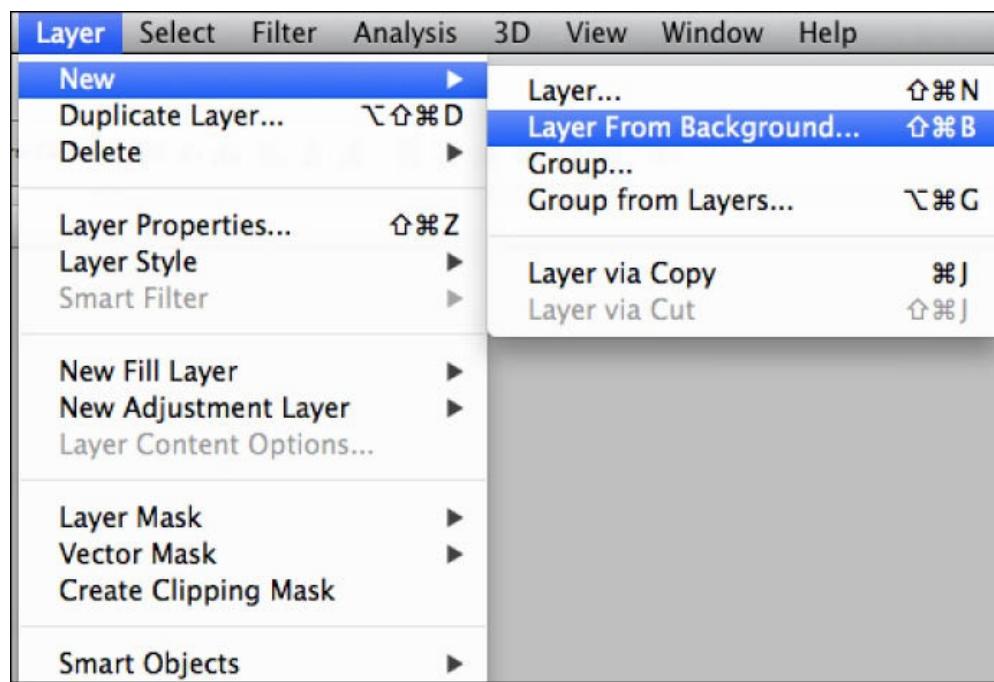
Have you ever wondered what is this background layer you see every time you create a new image in Photoshop? The background is a layer just like any layer except that:-

- It can't contain any transparent pixels. A transparent pixel simply means that there are no pixels in that certain part of the layer. Or empty pixels you could say, and that you can see the pixels of the layer below it (if there is a layer below it).
- You can't move it, rotate it, or resize it.
- The background layer is always at the bottom. There can't be any other layer below it.

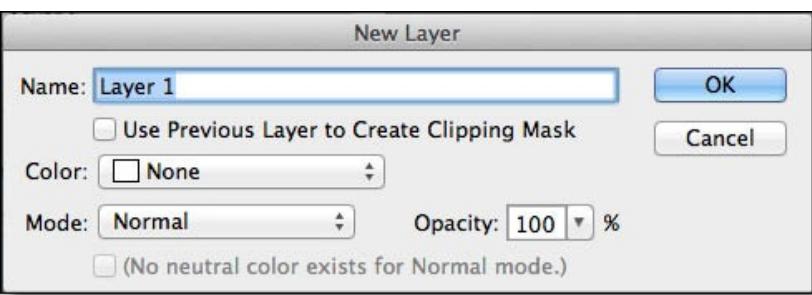
To put it simply, the background layer is a layer that is all locked, and can't be unlocked using the lock buttons in the layers panel. It can't have transparent pixels. So unless you converted the background layer into a normal layer, which is useful if you want your final picture to have transparent pixels, you can only paint on that layer and nothing else.

## To change the background layer to a normal layer, do the following:-

- Select Layer > New > Layer From Background from the main menu



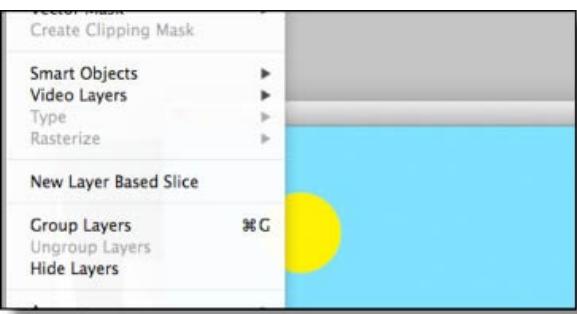
- The new layer dialog appears. Type a name for the new layer, and then click on the OK button



- The background layer became a normal layer now, which can be treated just like any other layer in your Photoshop file.

## To make the selected layer a background layer, do the following:-

- In the layers panel, select the layer you want to turn into background layer
- Select Layer->New->background From layer from the main menu

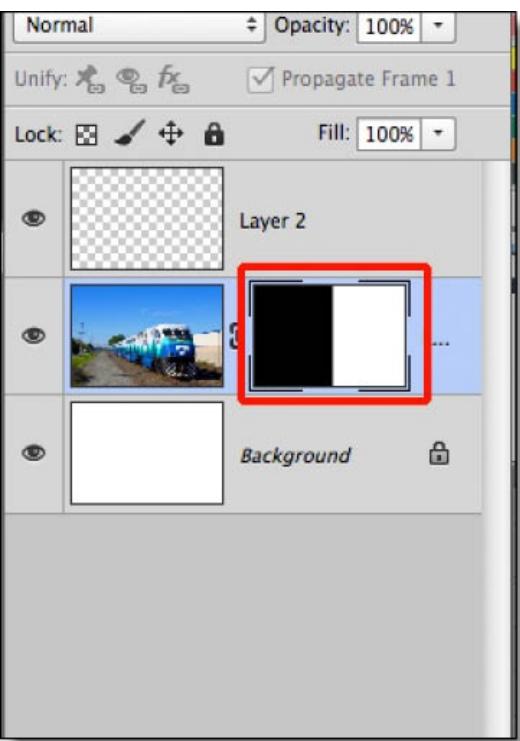


- The current layer is converted into a background layer and is placed below all the other layers

## Understanding Layer Mask

Layer Mask is a way to hide or conceal some of the pixels in a given layer, but without actually deleting them. This means that by modifying the mask, you can determine which pixels are visible in the layer and which are not.

When you create a Layer Mask, a small rectangle appears besides the layer you added the mask to:-

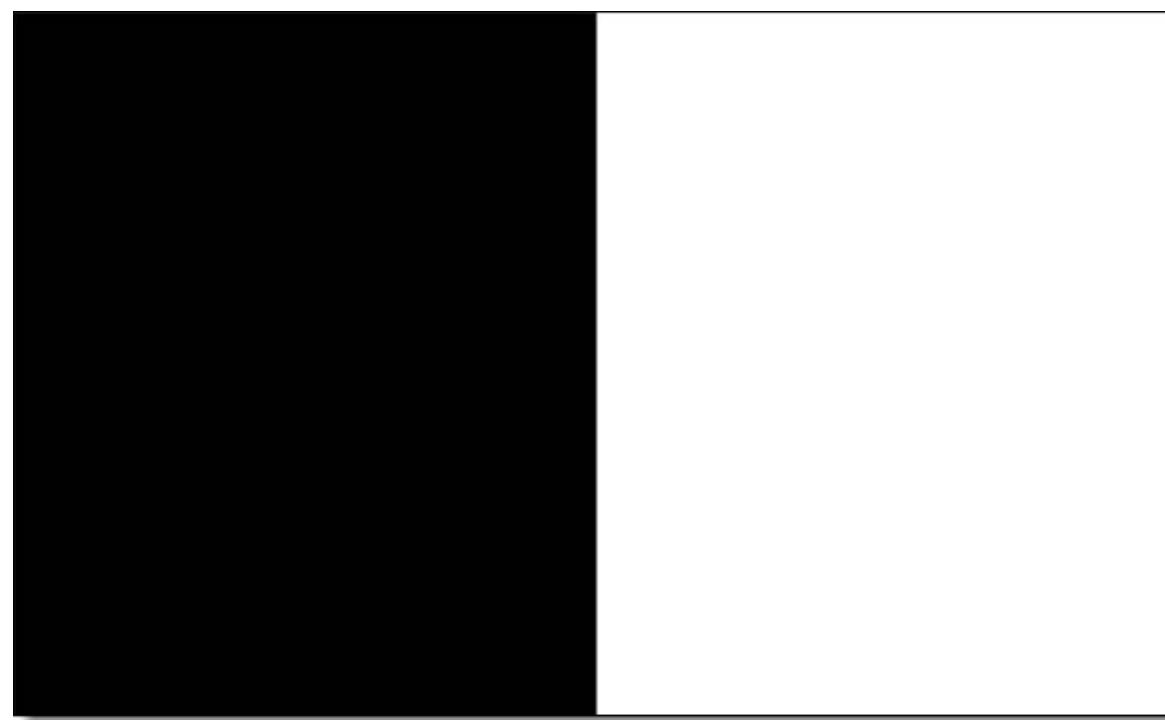


The black areas in the mask, the one you see in the layers panel picture above, determine the areas that are hidden, and the white areas determine the area that are shown (and as you may have guessed, the gray areas become transparent)

To illustrate how Layer masks work, take a look at the following train picture, which has no mask applied to it yet:-



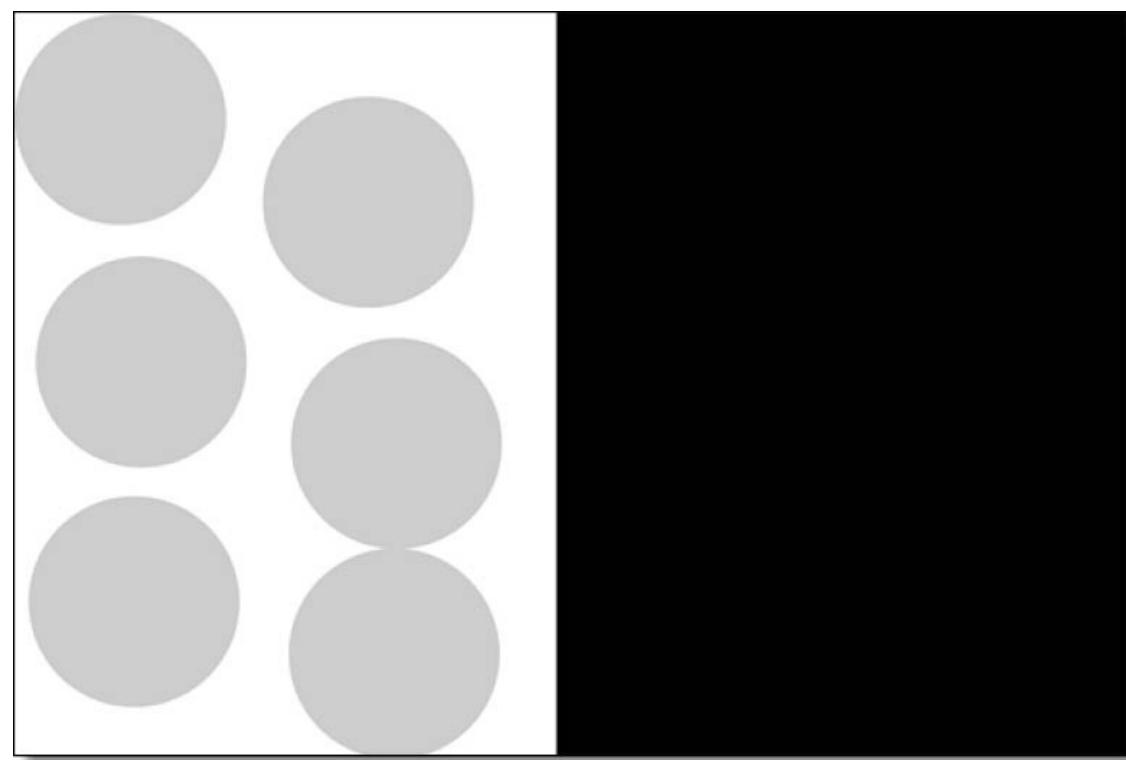
After applying the following mask to it, which is all white & black:-



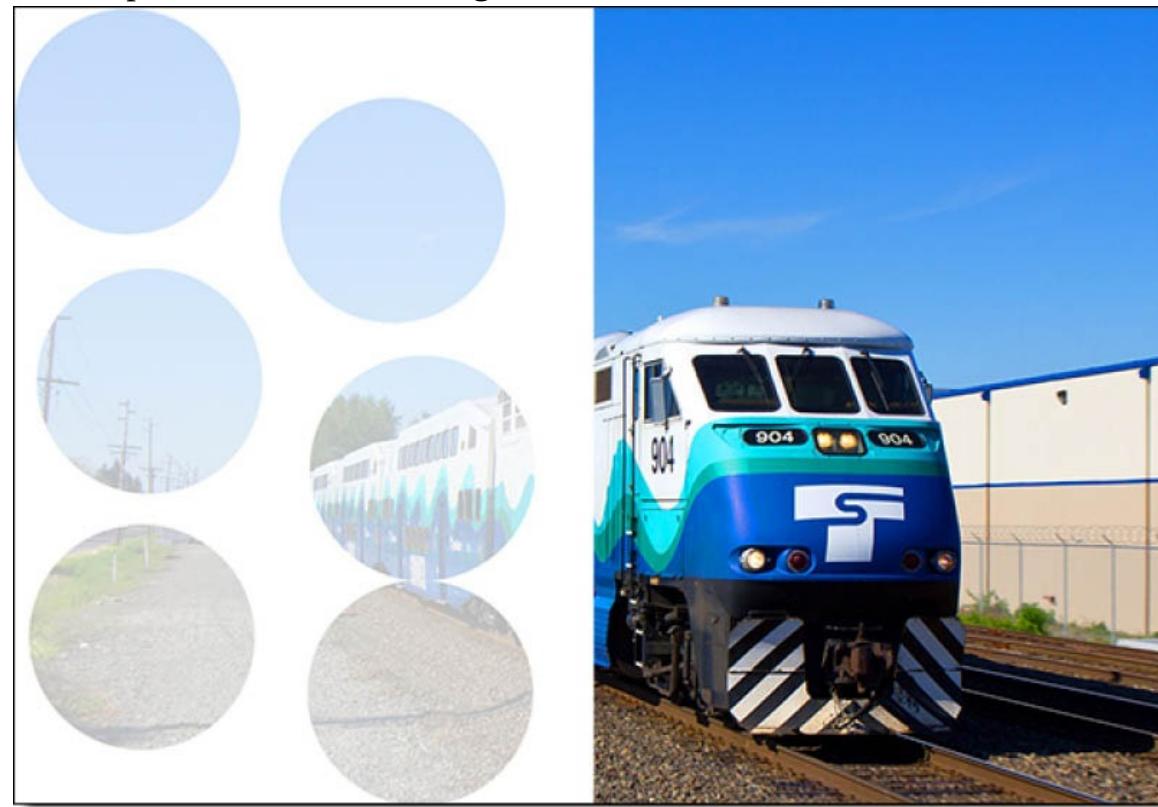
We get the following picture:-



And besides white and black, you can apply gray as well, like this mask:-



Which produces the following result:-



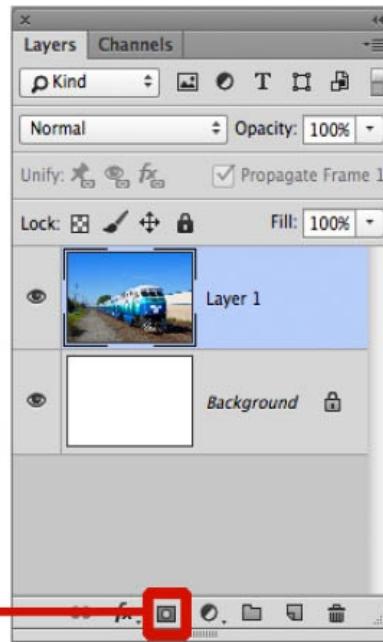
Since you know now how Layers Mask work. Let's get to how to create Layer Masks

## Working With Layers Masks

To create a layer mask, all you have to do is to select the layer you want to add mask for, and then click on the “Add Layer Mask“ button in the same panel

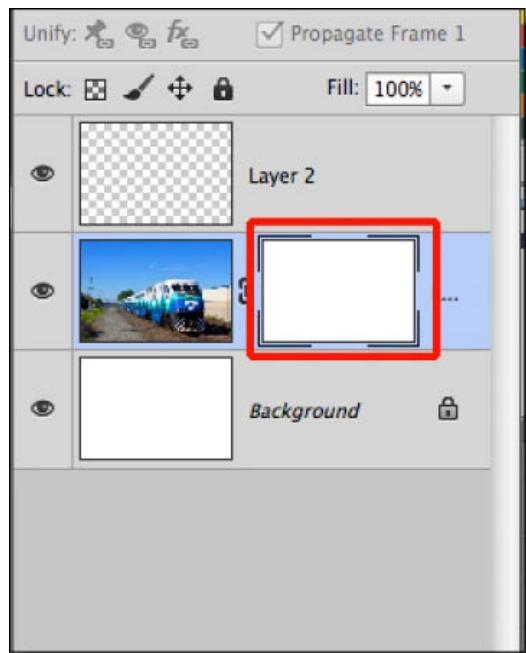
# To Create a Layers Mask In Photoshop

1. Select the layer in the Layers Panel

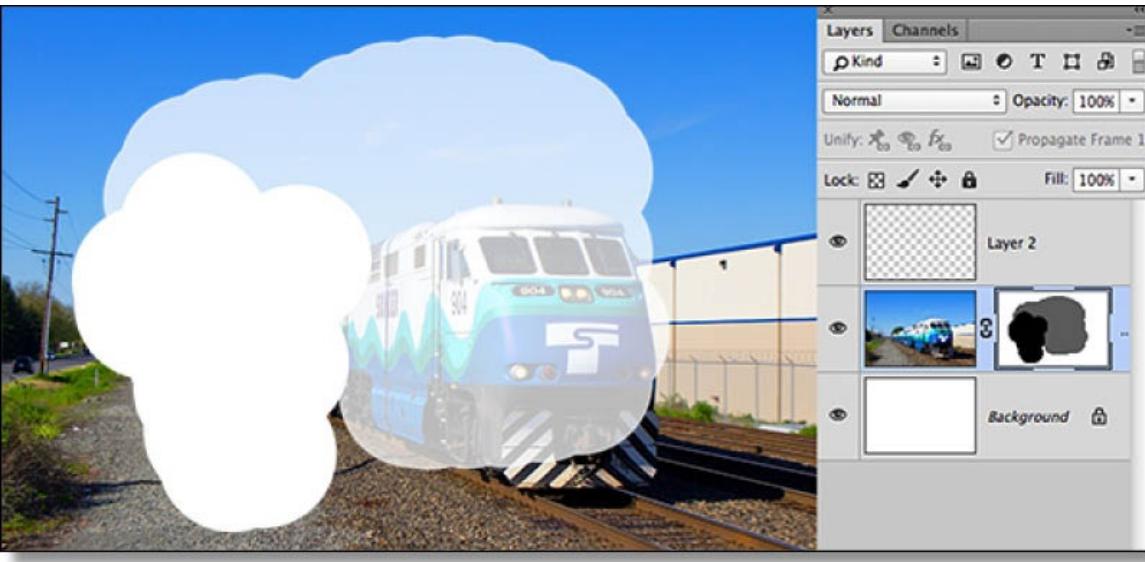


2. Click on the "Add Layer Mask" Button

After you click on the "Add Layer Mask" button, the mask will appear besides the layer int he Layers Panel:-



Now, clicking on the mask then painting on the picture allows you to change the parts of the picture that are shown and those that are not:-



## Examples

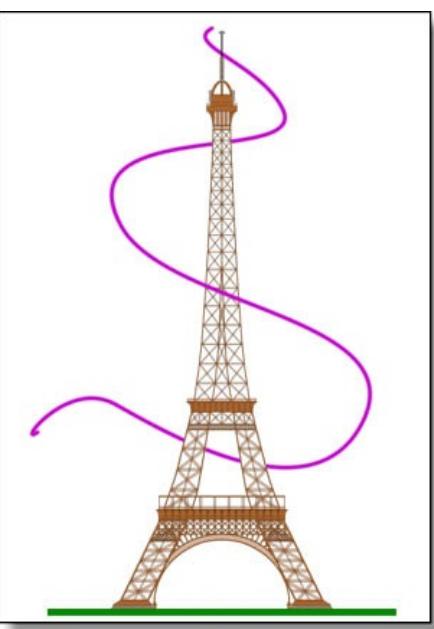
### Make an image brighter

All the tricks you learned in the blending modes chapter can be applied here as well, I made the following penguins picture brighter by creating a new layer above it. Filling that layer with white, then changing that layer's blending mode to Soft Light

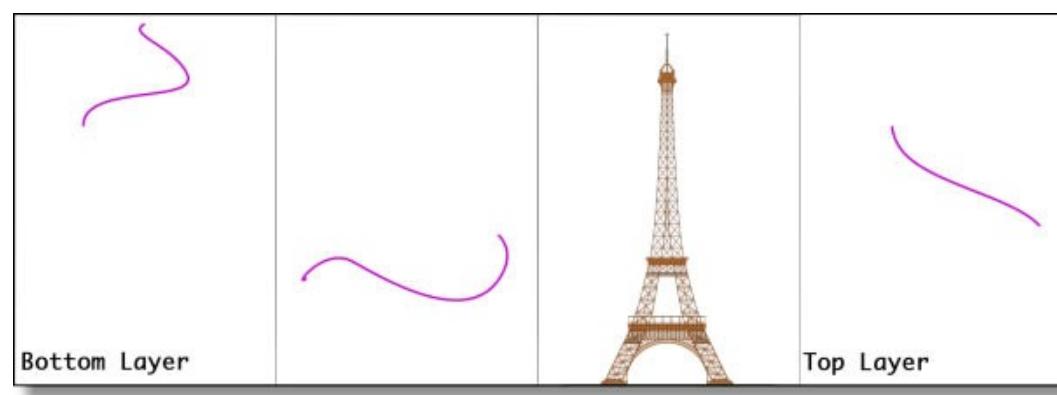


### Surround Eiffel Tower With A Thread

I made the thread in the following picture. Which revolves around the Eiffel Tower by placing it in 3 layers, two that are below the Eiffel Tower layer, and one that is above it



Here are how the layers were made and arranged:-



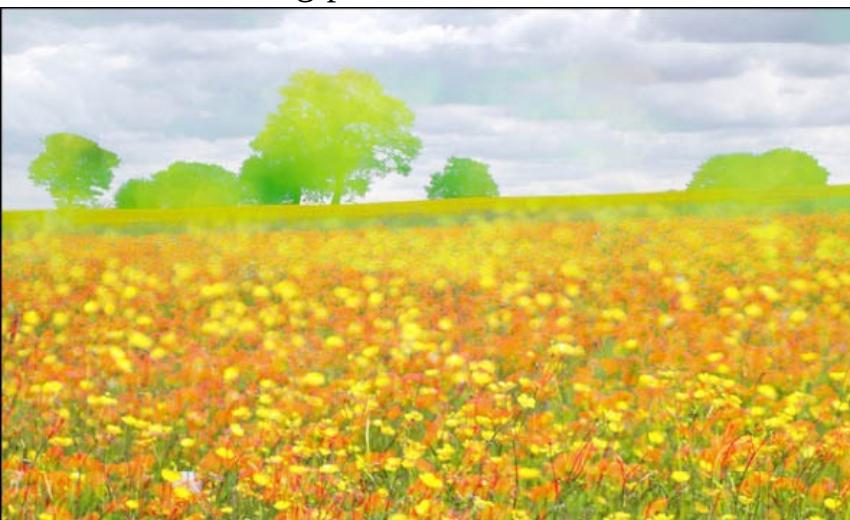
## Blending/Mixing Two pictures together

Blending two different images using blend modes is an easy way to create a various kind of tricks, let's say we have the following two flowers pictures:-





We can mix the two pictures using the Lighten blending mode (or any blending mode you like) to create the following picture:-



And at the end, I would like give a special thank to [Wikipedia](#) for the flowers & penguin pictures I used in this chapter.

## Summary

- Layers are a transparent picture you can draw on. Photoshop produces the final picture by piling up all the layers above each other
- Every time to paint using the brush tool or any other tool, Photoshop will add the newly painted pixels to the currently selected picture in the layers panel
- You can create as many layers as you want, creating layers can be done by clicking the New Layer button in the Layers panel
- And the same can be said about deleting layers, as clicking the Delete Layer button in the Layers Panel removes the currently selected one
- Renaming layers can be done by double-clicking on their name and entering the new layer name
- Prior to Photoshop CS6, you could open the Layer Properties dialog and enter a new name for the layer, as well as changing the name of that layer

- As from Photoshop CS6, you can no longer change the colors of your layers as far as I know :(
- Each layer in Photoshop has its own Blending Mode, which makes it easier to achieve many things compared to doing them using the brush tool only
- Besides Blending modes, each layer has its own fill & opacity settings, which work the same as we have seen with the Brush Tool
- The Move Tool can be used to easily select the layers as long the Auto-Select checkbox is selected
- There are 4 lock mode for each layer, these lock modes prevent you from editing the pixels of the layer, editing the transparent pixels, moving the contents of the layer, or all of those
- The Background layer is a special layer that is always below the other layers, can't be moved and can't have transparent pixels
- The Background layer can be converted to a normal layer if needed, and you can also pick up any layer and convert it into a background layer, in which case it will be forced to become the bottom layer

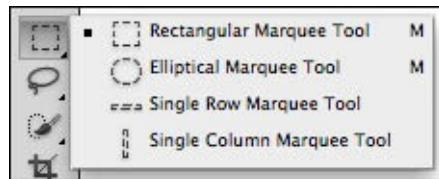
## Photoshop selection tools



Photoshop Selecting tools are among of the most handy tools in the program. Using these tools, you will be able to control which part of the picture can be modified. Which is one of the main features that separate Photoshop from simple drawing programs, like Microsoft Paint

In this chapter, I divided Photoshop selection tools into 3 groups, the shapes group, the lasso/ thread group and the wands group. I won't cover the pen tool right now, because I think it deserves its own dedicated chapter.

### The shapes group



Just as the name suggests, the shapes group makes selections that takes after a shape. The Rectangular Marquee Tool makes a selection of the shape of a rectangle. The Elliptical Marquee Tool makes elliptical shapes. And the Single Row Marquee tool and the Single Column Marquee Tool make a single row or column of pixels respectively. We will take a look at each of them in turn:-

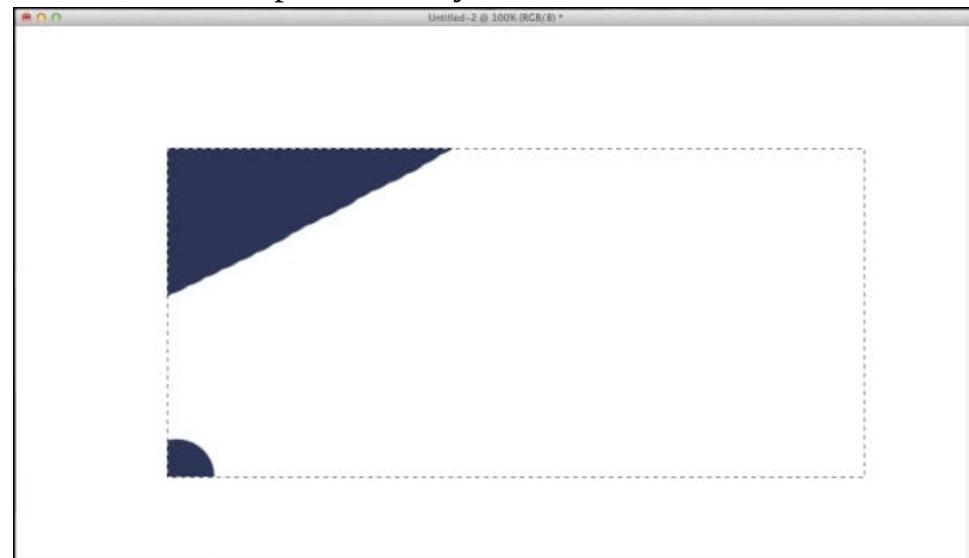
## The Rectangular Marquee Tool

Obviously, the Rectangular Marquee Tool makes rectangular selections. This is useful if the area you want to edit is of the shape of a rectangle or a square. It is also a nice way to draw rectangles by selecting an area, and then filling it with the brush tool or any other tool.

After you make a selection. The area you selected will be surrounded by a dashed lines, like this:-



You are now free to paint inside this area however you want, without worrying whatever any of your strokes will escape the area you selected.



**Candy Tip:-** Hold the shift button while making the selection to create a square selection. You can

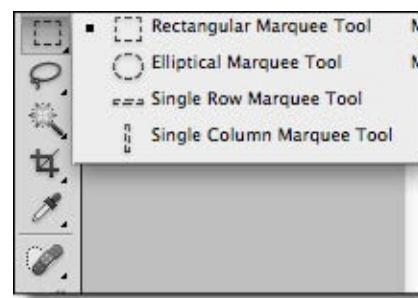
also hold the alt/option button to make the selection center around the point you clicked on to start the selection

## The Elliptical Marquee Tool

Similar to the Rectangular Marquee Tool, the Elliptical Marquee Tool makes elliptical selections. This is a nice way to draw circles in your pictures.



**Note:-** To access the Elliptical Marquee Tool, click and hold your mouse button over the Rectangular Marquee Tool. After a little time, the rest of the shape selection tools will appear, this is applicable to all Photoshop tools that has a small triangle at the corner of their icon. Like this:-



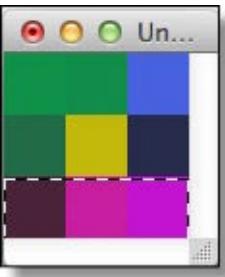
Accessing the rest of Photoshop Selection Tools

**Candy Tip:-** The same trick of holding shift or alt/option while making the selection applies to the Elliptical Selection Tool as well

## Single Row Marquee Tool

The Single Row Marquee Tool selects one full row of pixels with one click. You can make the exact same selection with some effort by using the Rectangular Marquee Tool, and then selecting one row of pixels from your picture. To be honest, this is a kind of a useless selection tool. The only time I used this is when I am working on a very low-resolution picture. Like a forum avatar, and wanted to select one row of the border of the image.

In this low-resolution picture, I was able to select one row of the pixels with one click of the mouse using the Single Row Marquee Tool



## Single Column Marquee Tool

Similar To The Single Column Marquee Tool, the Single Column selects one column of pixels with one. And again, you could also do the same effect using the Rectangular marquee tool.

Here is how I selected one row of pixels with one click of the Single Column Tool



## The Lasso Group



According to [The Free Dictionary](#), Lasso means:-

“A long rope with a running noose at one end, used especially to catch horses and cattle. Also called lariat”.

The lasso tool in Photoshop works the same way, but instead of catching cows with it. You catch the pixels you want to edit.

There are 3 types of Lasso tools. The Lasso Tool, and Polygonal Lasso Tool and the Magnetic Lasso Tools

## The Lasso Tool

If I were to give a name to the Lasso Tool, it would be “The Free Selection Tool”. The lasso tool allows you to draw a curve/thread around the pixels you want to select. This is specially useful way to make selections if you have a graphics tablet. But even with that, the final select tend to be less accurate compared to the other selection tools

Here is a rough selection I made of a cat face using the Lasso Tool:-



## The Polygonal Lasso Tool

The Polygonal Lasso Tool works the same way as the Lasso Tool. Except that instead of letting you freely draw the line you want to. It allows you to draw a polygonal shape around the pixels. This is very useful if the shape you want to select is rectangular or polygonal in general. Like this gift box:-



## The Magnetic Lasso Tool

This is one of the most interesting selection tools. It is one of the reasons you will be happy you learned Photoshop. This tool works like the Lasso tool. But instead of letting you draw the selection completely on your own, Photoshop will simply do the work for you by detecting the edges in the

picture.

To use the Magnetic Lasso Tool, all you have to do is to click somewhere near the edge of what you want to select. Then keep dragging the cursor around it until it is selected. Photoshop will do most of the work for you, but you can control the selection more by adding more anchor points while you are drawing (by clicking on the left mouse button).

I was easily able to select the man in the following picture using the magnetic lasso tool, it took me only a minute or two to do that



Then I pasted the man into another picture. Some other parts of the background were caught in the selection. So I erased it using the eraser tool . Which works exactly like the brush tool in the Clear Blending mode.



## Some of the Magnetic Selection Tool settings



You can adjust the magnetic selection tool settings to make it easier to make your selections with the Magnetic Lasso Tool.

- **Width:**- Determines how many pixels away from the mouse cursor Photoshop examines to look for the edges in the object you are selecting.
- **Contrast:**- Similar to the tolerance of the Wand tool (explained below). This setting determines how much the two adjacent pixels should be different for Photoshop to consider them as an edge.
- **Frequency:**- Determines how many anchor points (the Points of the path you draw to make the selection) Photoshop places while you drag the mouse. The more the frequency is, the more points Photoshop will add to the path you make the selection.

## The Wands Group



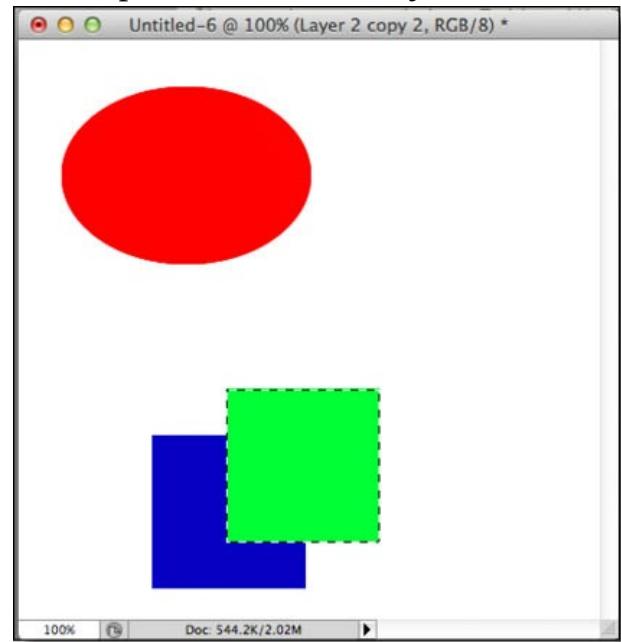
Instead of drawing the selection yourself just like you do using the Shapes or the Lasso group. The Wands group selections are made with one or few clicks. And Photoshop will make the selection by looking for all the adjacent and nearby pixels that are close in color to the pixel you clicked on. This is useful when you want to select a large portion of a picture that looks similar, like the sky.

# The Wand Tool



To use the Wand tool, all you have to do is to click where you want to make the selection, and Photoshop will do the work for you.

In this picture, I was easily able to select the green rectangle with one click of the wand tool

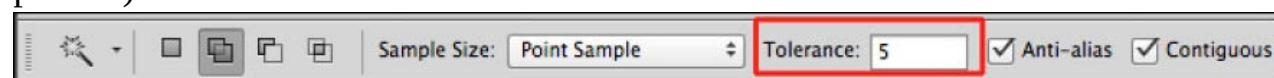


And it was not that hard to select the sky in this picture with very few clicks of the Wand Tools



## The tolerance of the Wand Tool

The wand tool has an interesting setting, called the tolerance. It is found at the settings toolbar (See the picture).



This setting allows you to determine how much the adjacent pixels should be similar to the one you

clicked on to be included in the selection. 0 tolerance means that Photoshop will only select the pixels that are exactly the same as the one you clicked on. The more the tolerance you set, the less similar the pixels have to be. Setting the tolerance to 255 will cause the Wand tool to select all the pixels in the picture.

Experimenting with tolerance level can be useful when you use the Wand tool. A good tolerance level to start with is 30. If you are having a hard time selecting the area you want using that tool Then consider switching to another selection tool.

The following infographic simplify how the tolerance setting works:-

## The Tolerance Setting Of The Magic Wand Tool

In each example, I clicked on this pixel



0% Tolerance



30% Tolerance



50% Tolerance



70% Tolerance



90% Tolerance



150% Tolerance



230% Tolerance

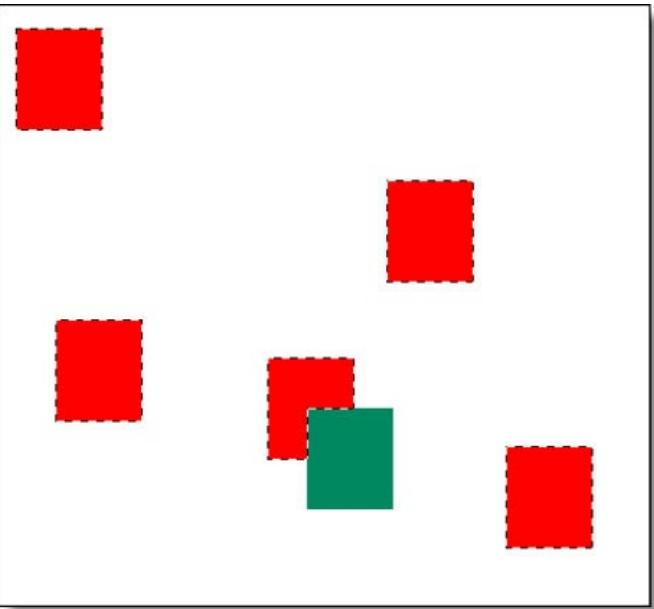
## The contiguous setting of the Wand Tool

Another interesting setting of the Wand tool is the contagious check box:-



When the Contiguous setting is checked, the Wand tool works exactly like we saw before. By examining the pixels adjacent to the one you clicked on until there is no more pixels to select. When this setting is unchecked, the Wand Tool examines all the pixels in the picture. Disregarding where it is or whatever it is besides the pixel you clicked on or not, which results in selecting multiple areas of the picture with one click.

Notice how all the red pixels where selected in the following picture with one click after using the Want tool (with Contiguous unchecked), despite being away from each other



Sometimes, if you tried to select the sky with Contiguous unchecked. Some other elements of the picture can get selected. Like how parts of the river got selected in the following picture:-



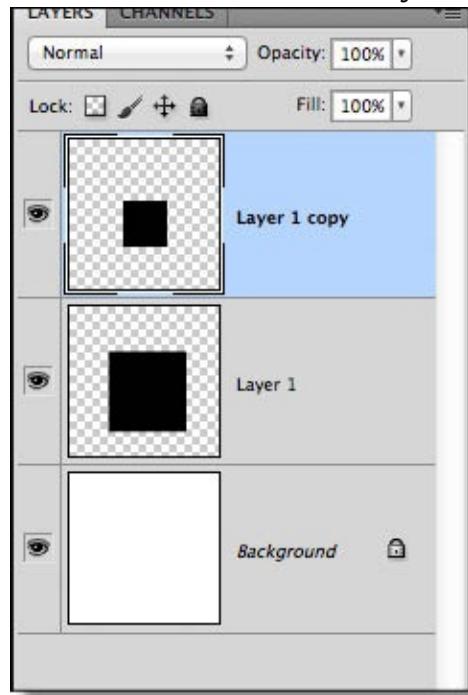
## When to avoid using the wand tool

Generally speaking. I highly advise you not to use the wand tool when the object you are selecting is too blended with the background, an example of that is a picture of a girl wearing a black skirt, and part of the black skirt is blended with a black background (or another black object). Making selections like that with the want tool can be hard and time wasting, but at the end. It is your decision to decide if the Wand tool is best for the job or now.

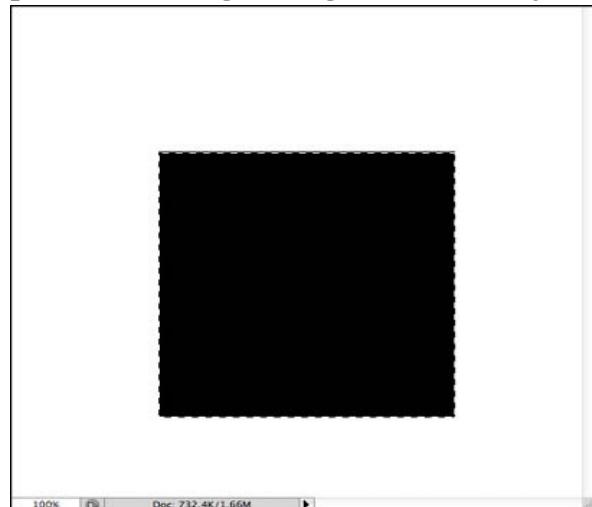
## Sample All Layers

When this option is checked, Photoshop will examine all the visible pixels in the picture you are working on to see if they fit within the tolerance level of the Wand Tool. When you uncheck this option, Photoshop will only examine the pixels in the layer you are working on.

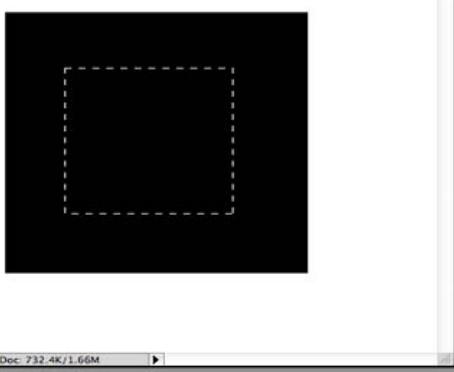
To demonstrate how this option works. I created a picture with a black square on one layer, and another smaller black box on the layer above it. Unless you can see the layer panel, you won't know that the small box actually exists, here is how the layers panel looks like:-



Making a selection with the “Sample All Layers” checked, and clicking on the center of the black box will select all the black pixels of the black box. Because Photoshop is examining all the pixels in the picture, disregarding whether they are part of the selected layer or not.



Now, let's make a selection with “Sample All Layers” is unchecked, and with the small box layer selected. Clicking on the center of the black box will create the following small selection. Which are the contents of the current layer (the one that contains the small box)



## The Quick Selection Tool

Sometimes using the Wand tool won't deliver you the results you wanted with one click. Like when you have a picture where you want to select the cloudy sky. But the clouds won't be selected because they have a very different color from the sky itself. In many cases, clicking using the wand tool again and again (and adding to the selection each time you click. Something I will explain how to do shortly) can work until you select the whole sky. But this can be done easier using the Quick Selection Tool. Which you could think of as a Wand Tool that works like a bush. Instead of clicking on the canvas like you do with the Wand Tool. You drag the cursor while holding the mouse button as if you were painting. And Photoshop will keep expanding the selection for you based on the pixels you are "painted" on.

If you like, try to select the sky in the following picture using the Wand tool and see how easy/hard it is to select it using the it (It is possible, but that is not the easiest way to do so). After that, switch to the Quick Selection Tool and keep "painting" little on the sky. Photoshop will create a very accurate selection on the sky.



Here is how my selection looked like:-



## What about the Pen Tool?

The pen tool is one of the most powerful drawing and selecting tools in Photoshop. I am still not aware why it got such a misleading name, as it doesn't do what a pen is supposed to do, which is to write or draw. But don't let that confuse you.

The pen tool draws virtual lines on the picture, these virtual lines are called vector graphics. After you draw these lines with the pen tool, you can do many things with them, like converting them into a selection.

Because of many of its huge benefits, the pen tool is worth learning, but because all new Photoshop users tend to get confused with it, many of them tend to ignore it for a long time. Which is a big waste for them. Because of the importance of this tool, and because of the amount of explanation it requires. I have decided to talk about it in its own chapter, where I could talk about it in details.

The pen tool may sound boring or confusing to use at the beginning, but you should push yourself to learn it as soon as possible.

## Deciding what Photoshop selection tool to use?

At this point of this chapter, you may be wondering what is the best tool to use in each occasion. To save you the trouble, just use whatever tool you like darling. And don't worry much about which tool is the best for the job. Just try to use as much of them as possible when you are new to them. After working with various selection tools for a while, you will be able to make your own decision on which tool to use, as you already know the basic differences of all the selection tools now you reached this part of the chapter.

## More about Photoshop selection tools

This chapter is officially done here, and now I will go through some useful options that are so helpful. If you like, you can read this part later and go straight to the examples at the end of the chapter.

# New Selection, Add, subtract, intersection selection Options



While using selection tools, you may have noticed some little squares icons at the side of the options panel. These are the options that determine what Photoshop do to the selection you made when you create a new one. I will use the Marquee Tool to show you examples of each one of these modes

## New Selection



By default, every time you make a selection, the old one completely disappears, and the new one replaces it.

With the new selection option is selected. I have the iMac portion of the following picture selected:-



And once I started to make a new selection, the old selection was gone:-



## Add to selection



When this option is selected. Any new selection you make is added to the current one, both the new selection and the old one stay. This is especially useful with the Wand tool to make many consecutive selections to select a certain area in the picture. If the new selection is completely within the original selection, nothing really happens

In the iMac picture, a new selection was made in addition to the first one, increasing the area we can edit in the picture.



Then I made a third selection that is partly inside the original one, which made Photoshop expands the original one to include the new selected area



## Subtract selection

With this option, the new selection is subtracted from the current one. If the new selection is completely outside the original one, nothing happens

I subtracted a part of the iMac selection in out picture using the Subtract selection option.



Then I subtracted more from the selection the same way. Creating a gap in the original selection



## Intersection with selection



With this selection mode, Photoshop creates a new selection that consist of the shared area of the two selections.

If the new area you selected is completely outside the area of the old selection, both selections will disappear, and you will get the following message:-

Warning: No pixels were selected.

Don't show again

OK

I made the new selection intersect with the old one on purpose here, here is how the selections looked like before I released the mouse button



Which resulted in the following selection:-



## Converting a layer into selection

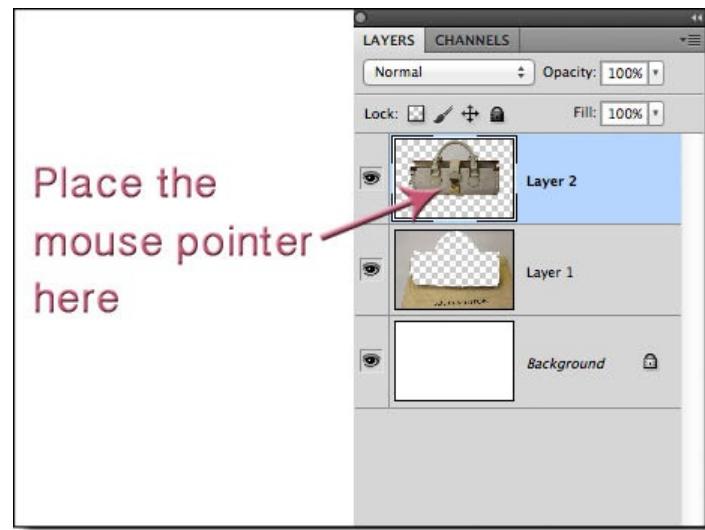
Sometimes you want to create the selection that represents all the pixels of a certain layer, which is

useful in an innumerable number of ways

Using the Magnetic Lasso Tool, I have selected the following Louis Vuitton bag and placed it in a separate layer, so if I want to select the content of that layer- which is the bag- I can simply turn the content of the bag layer into a selection with the following steps:-



- Hover your mouse over the thumbnail of the layer you want to turn into a selection



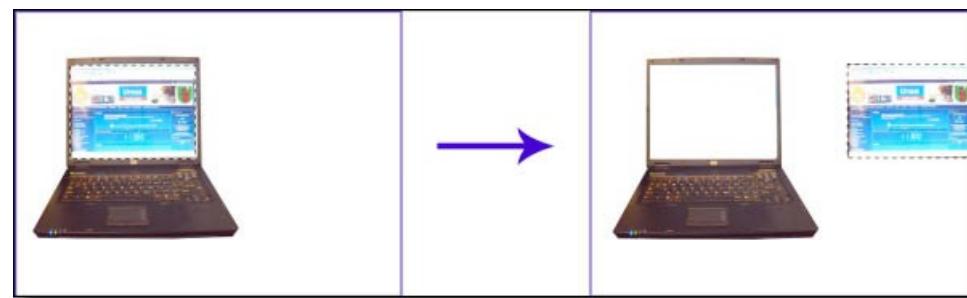
- Hold the Control button if you are using Windows, for Mac users, hold the Command button. The mouse cursor change from a hand to a hand with a selection rectangle alongside it
- Now click on the thumbnail of the layer, et voilà, the layer contents has been turned into a selection



## Moving the content of a selection

You can easily move the selection you made using the move tool, all you have to do is to select the move tool  and then drag the contents of the selection where you want to

In this picture, I moved the contents of the laptop screen after I selected it with the Rectangle Marquee Tool:-



**Candy Tip:-** hold the Alt/Option button before and while you drag your mouse to create a copy of the selection instead of moving the original one.

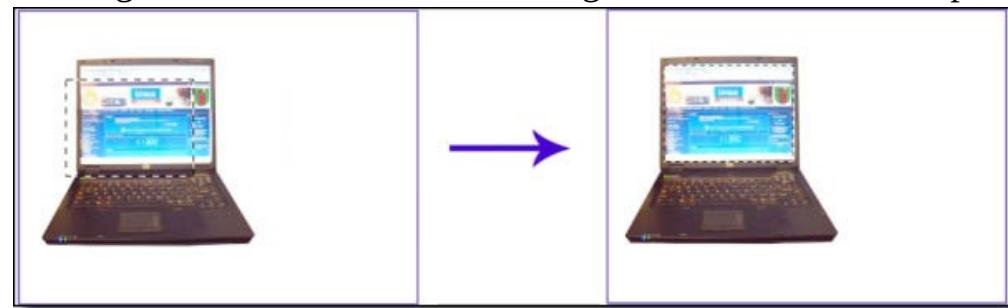
**Candy Tip:-** You can move the contents of the selection using the arrow keys in your keyboard as well, just make sure that the move tool is selected.

## Moving the selection instead of its contents

Sometimes you make a mistake while making a selection, And so you want to move the selection you made instead of making a new one from scratch, to do that, make sure you select any Photoshop tool other than the move tool (It doesn't really matter which one), then move the selection using the arrow

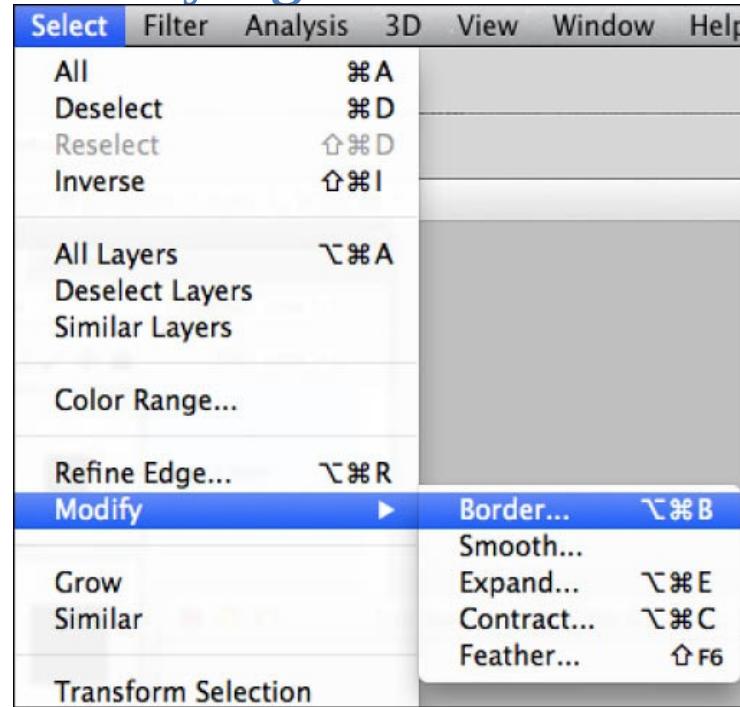
keys in your keyboard

In the following example, I made a mistake while trying to select the laptop screen, but I fixed that by moving the selection a little to the right, and a little to the top:-



**Candy Tip:-** Holding the shift button while moving the selection using the arrow keys makes the selection move faster

## Modifying selections after making them

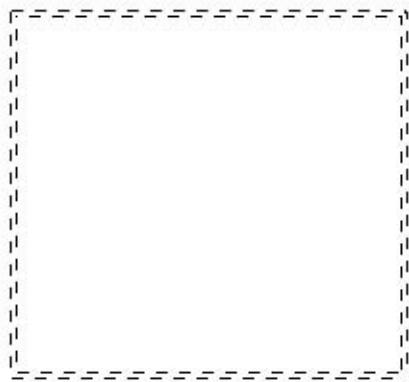


You can make some nice modifications to selections after making them, which is useful in many ways when you create things from scratch or if you use Photoshop for digital painting. Of course, you can use them in more ways than just that. The modifying options I am talking about can be found by selecting Select->Modify from the main menu. To be able to use these options, you have to make a selection or the images will be grayed out

### Border

Border creates a new selection that from the outline of the current selection; this is useful way to

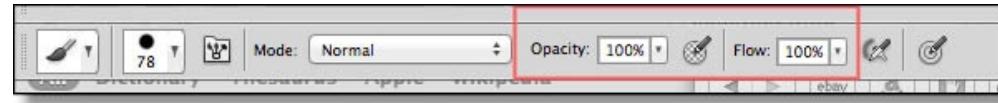
create empty rectangles.



To use Border, choose border from the Select->Modify menu, the Border Dialog will appear, where Photoshop will ask you to select the width of the border selection.



Do you remember all the pictures in this book of chapters where I mark the tool I am talking about with a colored rectangle on them? The ones that look like this:-



All these rectangles were created by making a rectangular selection with the Rectangular marquee tool then using Border to create an outline selection, Which I then paint on using the brush tool^^

## Smooth

Smooth does a very nifty thing, makes the corners of the selection more rounded, depending on the radius you type when you apply this option

Once you select Smooth from the Select->Modify menu, Photoshop will ask you to input the radius for the selection, the bigger the value you enter, you more rounded the selection will become.



Here is a summary of how the smooth options works:-

## Smoothing Selections In Photoshop



<http://SweetMonia.com>

You can use Smooth selection to make a

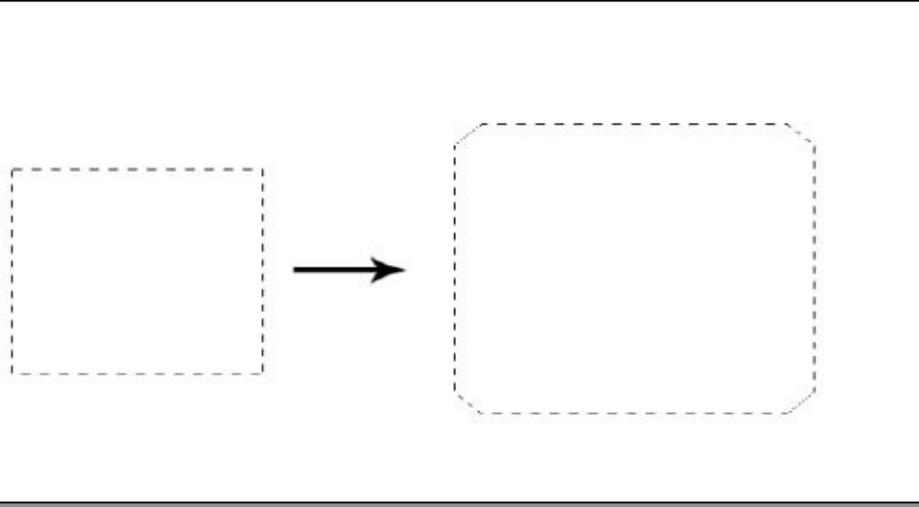
pictures more interesting by making its corners rounder, like this:-



## Expand

Makes the current selection bigger by the amount of pixels you chose

The following selection has been expanded greatly; notice how the corners became rounder because of that

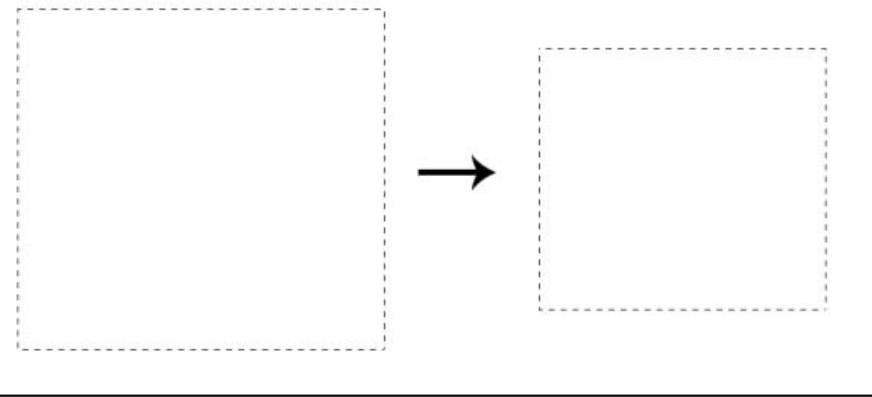


## Contract

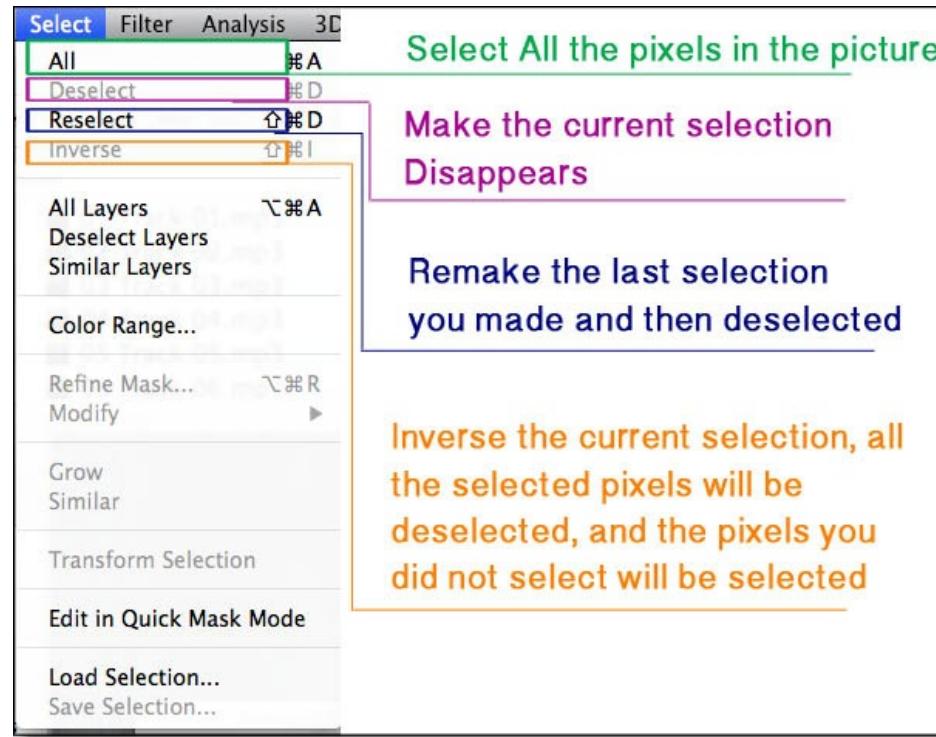
Works in similar fashion to the Expand options, except that it makes the selection smaller instead of bigger

This following selection has been contracted by 40 pixels, notice how the corners have not been

affected by the contraction at all



## The select menu options



The Select menu has 4 nice-to-know features that can make your Photoshop life easier, those options are, All, Deselect, Reselect & Inverse.

### All

Select all the pixels in the canvas/picture; this is equivalent to selecting all whole the picture using the Rectangle Marquee Tool.

### Deselect

Make the current selection disappear; if there is no selection made, this option will not be selectable.

### Reselect

Recreate the last selection you made but then deselected

## Inverse

This option inverse the current selection, it deselects all the pixels included in the selection, and select all the ones that are not.

## Examples

Time to play a little with the selection tools we looked at, like always, I will give a brief explanation how I worked on all the examples below :)

### Creating an army of men

Remember our friend from the Magnetic Lasso Tool Example? I decided to clone him and send him with his clones on a ship to invade the world, here are my troops:-



And at the end, we reached America~



### Drawing a better sky

This is one of the most common tricks done with the selection tools in Photoshop, in the following

picture, where the sky looks cloudy and dull, I selected the sky using the Wand tool (With 30 tolerance). And then pained some blue on it using the brush tool.

To get realistic results, I reduced the fill of the brush tool and didn't paint over some of the pixels at the bottom of the sky, this is because the selection of the Wand Tool was not %100 accurate. If I painted all over the pixels I selected, it will be very obvious that the picture has been Photoshopped.



## The New Model

And here, I added a new model to in the gap between the two at the front. All I had to do is to make a selecting of the model at the front, then Place her in its own layer. And then paste the new model into the picture, which I had to select from her picture the same way too).

After I placed The model in her place, I made a few daps with the brush tool so the Luminosity of the new girl is the same as the others, or else to will be so obvious that the girl was Photoshopped into the picture



## Moving the match somewhere else

Changing the background of images is a common use of selection tools. Here, I selected the background using the Wand Tool. Then I manually erased the pixels the wand tools failed to capture, and then pasted the new background picture, which I made sure it has the same perspective of the original background



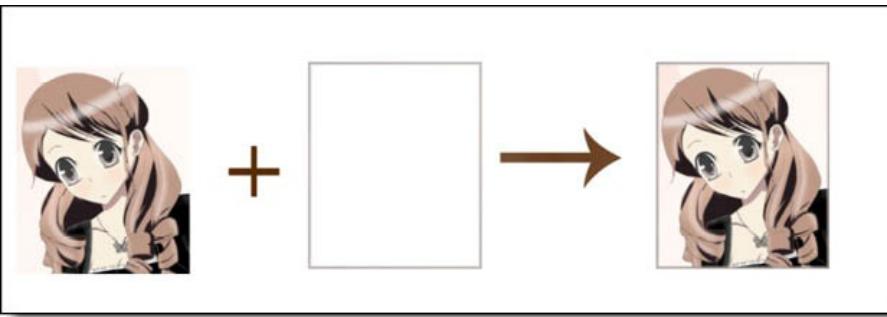
## Superpower

I don't want you to forget about blending modes. As they can be useful in many situations. In this example, I removed the background of Gary Oldman picture, placed him on the sky of the field picture. Blended him with the sky using the Overlay blending mode. And then I reduced the fill of the layer to make him look like that. I made a few strokes of the brush tool using the Soft Light blending mode to create his superpower.



## Creating a simple avatar

And let's not forget, modifying selections is a great way to add borders for images, just like how I did create the following border to Yuina's forum avatar:-



I really hope you benefited from this Photoshop selection tools chapter. As a reward for you for completing this chapter, I would like to tell you that I placed a copy of our magnetic tool man in every pictures in the examples sections, so go over them again and have some lols ^^

## Summary

- Selection tools allow you to select a certain area, and after you make your selection, only that

part can will be editable until you cancel the selection

- The shapes group selection tools allow you to create selections that looks like a shape, like a rectangle or a circular selections. As well as selecting a single row or columns of pixels
- The Lasso group tools allow you to create more kinds of selections, from drawing the selections freely (using the Lasso Tool), to draw a selection by drawing a polygon (Using the Polygonal Lasso Tool), to selecting a certain area by detecting the edges of the object you want to select (Using the Magnetic Lasso Tool)
- The Wand Group tools create selections by comparing all the adjacent pixels with the one you clicked on, and add it to the selection if it falls within the tolerance of the used tool.
- The Wand Tool Contiguous option determines whether the tool will examine all the pixels in the picture, or only those adjacent to the ones added to the selection
- By default, the Wand tool examines only the pixels in the current layer, but by checking the Sample All Layers checkbox, it can examines all the pixels in all the layers of your picture
- And by default, any selection you make replaces the existing one, but you can tell Photoshop to add the selection to the currently existing one, subtract it from the old one, or make a selection that's the intersection of the two
- The contents of each layer can be converted into a selection by holding down the Command/Control button, and then clicking on the layer thumbnail in the layers panel
- Any selection you make can be moved using the move tool to any place you want in your pictures
- And as long the move tool is not selected, clicking and dragging the selection will move the selection itself instead of its contents
- There are 5 selection modifier in Photoshop:- Border, Smooth, Expand, Contract & Feather. And the first 4 of these have been covered in this chapter
- Border creates a selection from the outline of your selections, think of it as a way to select the borders of your selection
- And Smooth makes the edges of your selection rounder or smoother
- Expand makes your selection bigger by the amount you enter, while contract makes it smaller by that amount
- The Select menu has 4 useful options, which are All, which selects all the pixels in your picture, Deselect, which makes sure no pixel is selected, Reselect, which remakes the last selection to deselected and inverse, which deselects all the selected pixels, and selects all the ones that are not

## Using Photoshop pen tool, and an introduction to Bézier curves



I personally can't imagine using Photoshop without the pen tool. It is a common tool you will find in tons of graphics software, like Adobe Illustrator.

Photoshop pen tool draws Bézier Curves. Which are named after their founder, the French Engineer Pierre Bézier. The name Bézier has nothing to do with what the curves do. These Bézier curves have many uses. Like to make selection or to be filled with pixels. We will take a look at each of these functionality in details.

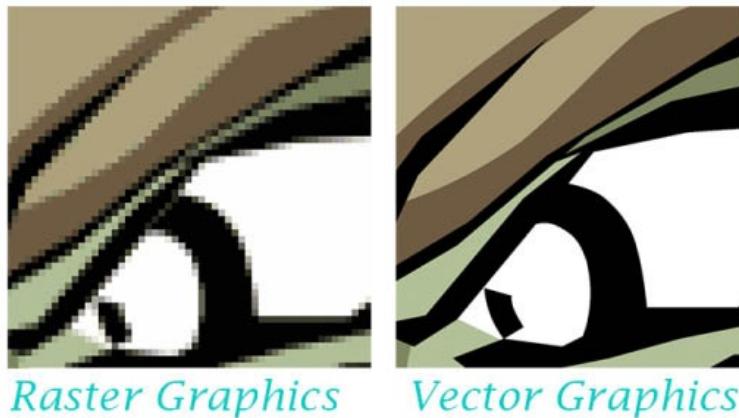
**A Word From The Heart:-** Please take your time to learn Photoshop pen tool. And don't skip this chapter. Photoshop beginners tend to ignore this tool for the longest time possible. Which is quite a loss for them. Giving the amount of things the tool can allow them to do.

## Advantages of Photoshop pen tool over the other tools

- **Gives you lot of control over the lines you draw**
- **Pen tools curves are vector graphics.** Vector graphics is a term that refers to a kind of lines and shapes the computer draw using mathematical equations instead of laying down pixels beside each other (which is called raster graphics. Which is the kind of picture we mostly work on in Photoshop). The advantage of vector graphics is that, no matter how much you resize them, they retain their quality. That is because the computer draws them from scratch when needed (again, using mathematical equations).

## *Vector graphics VS Raster Graphics*

*Vector graphics never loss their quality. No matter how much you resize the picture. Unlike raster graphics. Which tend to become "pixelated" if you resized them too much*



*Raster Graphics*

*Vector Graphics*

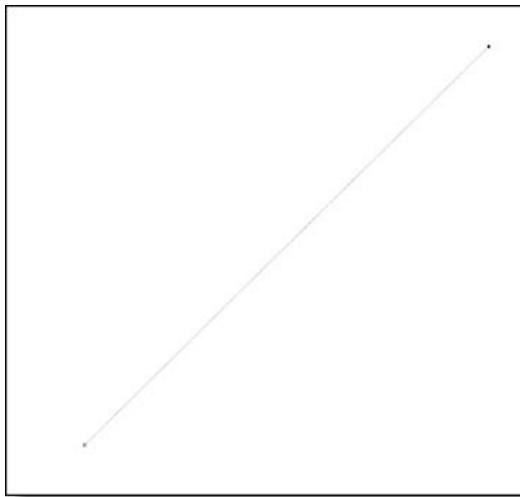
[Http://SweetMonia.com](http://SweetMonia.com)

Comparison between vector graphics & raster graphics,  
picture credit:- Wikipedia

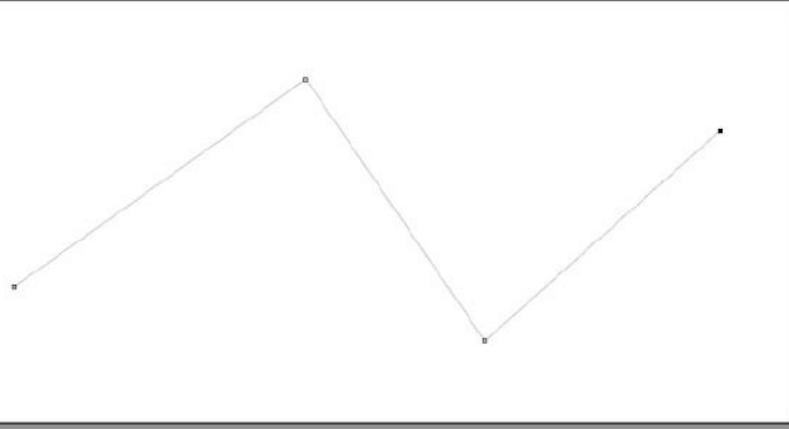
- **The ability to make complex selections:-** Specially in the situations where the other selections tools fail or can hardly make the selection.

## An easy start, drawing straight lines

- Drawing straight lines with the pen tool is easy. All you have to do is to select the pen tool  . Click once on the canvas (where you want your line to start), and then click again where you want it to end. And Photoshop will draw the line for you.



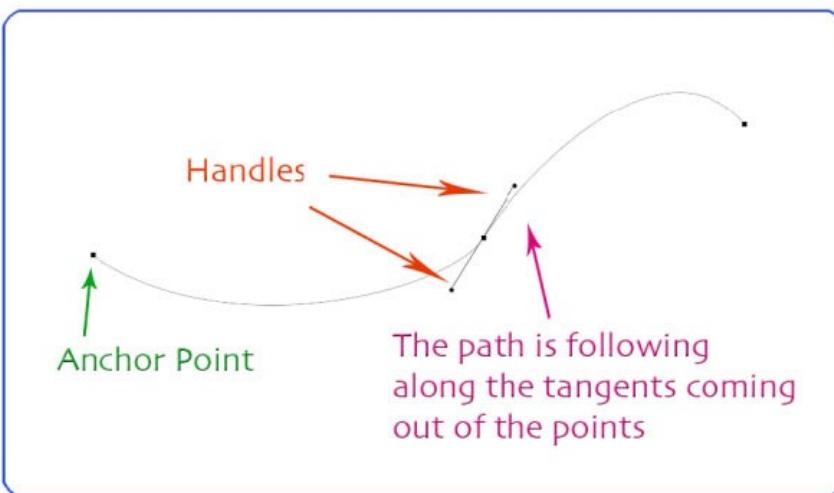
- After that, each time you click on the canvas with the pen tool, you create a new anchor point (the square points that you create every time you click on the canvas). And a new line will be added starting from the last anchor point you inserted.



## Drawing curves using the pen tool

Before I show you how to create curves using the pen tool. It is better to look on how Bézier curves work. Don't worry much about how to create these curves in Photoshop for now. This will be covered shortly. Just focus on understanding the concepts for now.

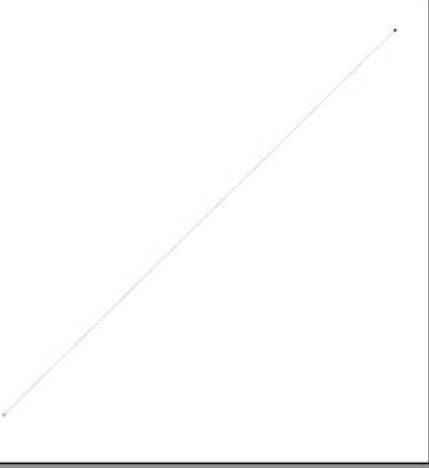
**Note:-** The lines you draw using the Pen tool are called Paths, I used the term “Curves” just for simplification. So when I say curve or Path. I mean the same thing.



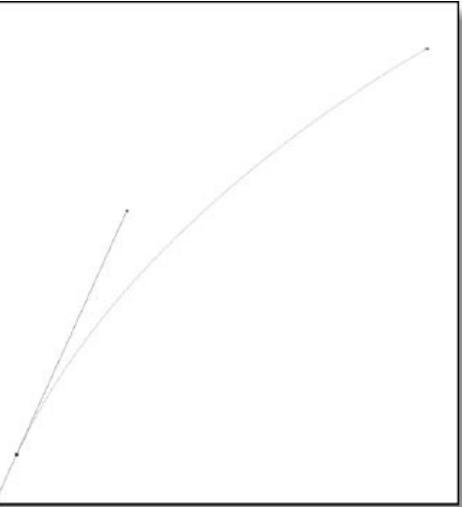
When you draw using the pen tool. You simply draw the tangents of the curve you are creating, instead of drawing the curve itself. And Photoshop will draw the curves for you interactively for you

These tangents. Which you control using the handles (small lines that come out of anchor points), are what determine how the curve looks like

- Let's take a look at the following straight line, which is straight because there are no handles coming out from the anchor points. And the curves goes from the first point to the second one

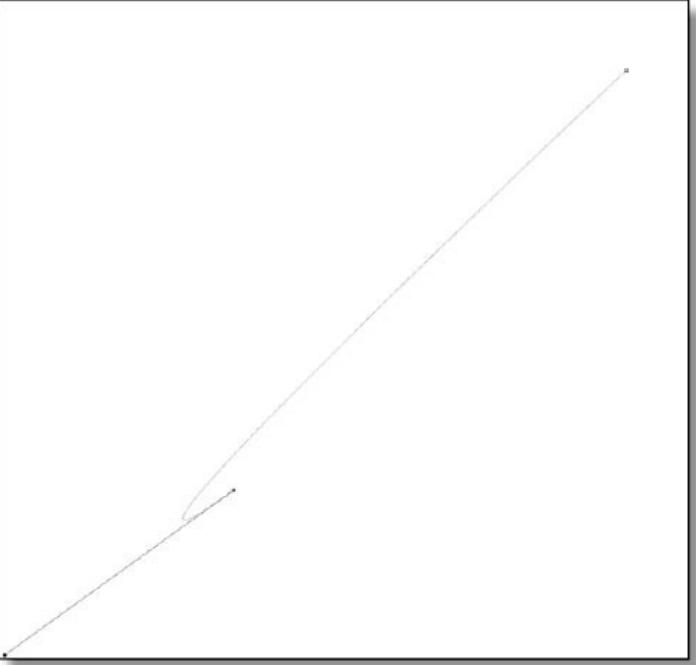


- After I made handle comes out from the anchor point at the bottom (I forced it to come out of the point, more on how to do that soon) The straight line has turned into a curve, notice how the line seems to get attracted to the handle and try to follow it. So by moving that handle, you control how the curve looks like. The good thing is, you come back at anytime and modify the points and their handles, so no need to worry about making mistakes while creating the curves.



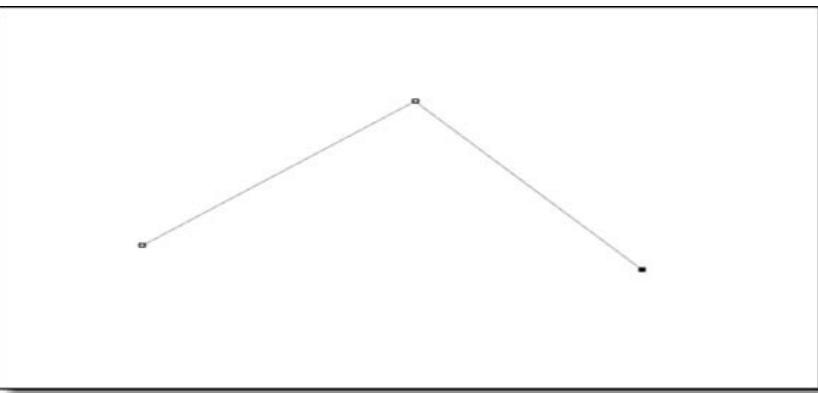
**Note:-** Anchor Points that have no handles are called corner points, and the ones that have them are called curve points.

- To illustrate how the curve seems to follow the handle of the curve, I made an extreme move using the handle, which made the curve arcs sharply.

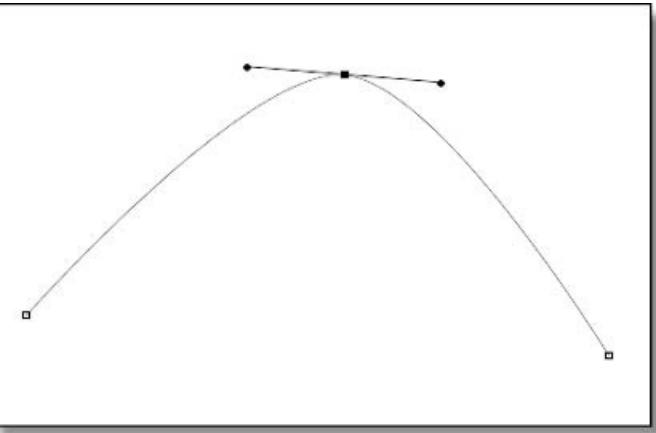


Notice how there is only one handle coming out of the point. It doesn't really matter if the second handle exists or not. Because in this example, the second handle would be useless. Because it controls a line that doesn't exist (it is supposed to control the line on the other side of the point, as we will see shortly) In the next example, you will see how important the second handle is.

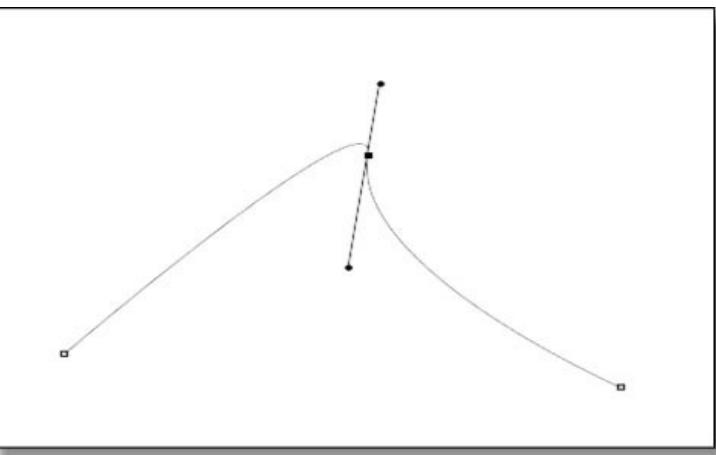
- Moving to another example with three points instead of two, as it may seem obvious now. Having simple points with no handles coming out of them produces a straight line



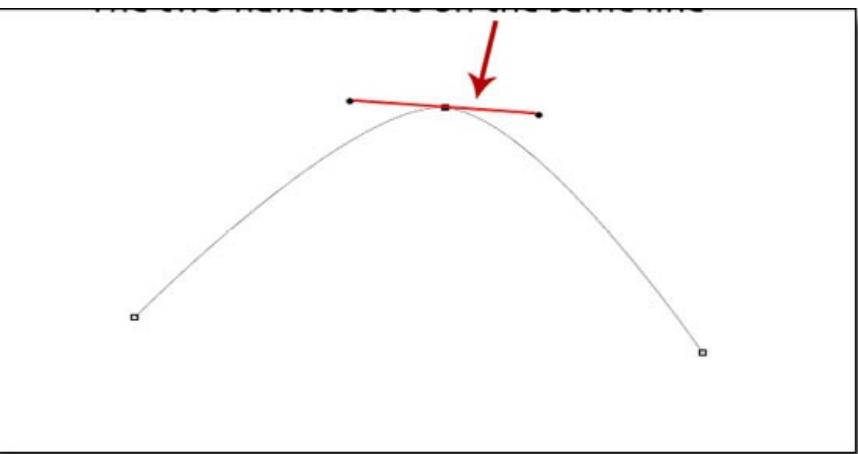
- After creating the handles that come out of the anchor point, the straight line turned into a curve from **both sides of the point**. This is why the second handle point is important, it controls the line on the other side of the anchor point, which did not exist in the first example.



- Again, I will sharply twist the curve to show you how the curve follows the handles of the anchor point:-



- And of course, the two handles don't have to be on the same line, this is just the default way the handles are when they are created in Photoshop.

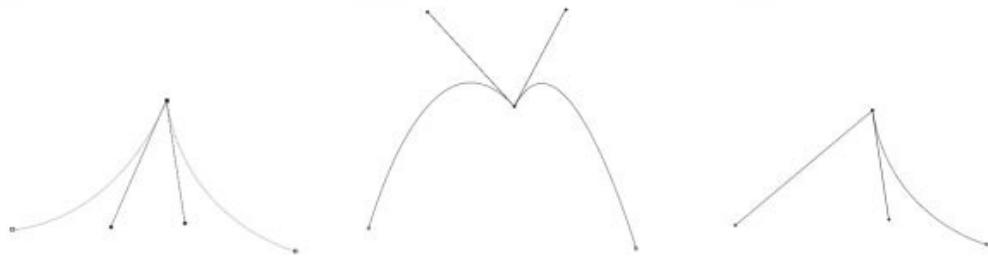


- Here are few examples where the handles are not in the same line, which create curves with a pointy edge. That is because for the curves to follow the handles, they have to meet in such way:-

1 -

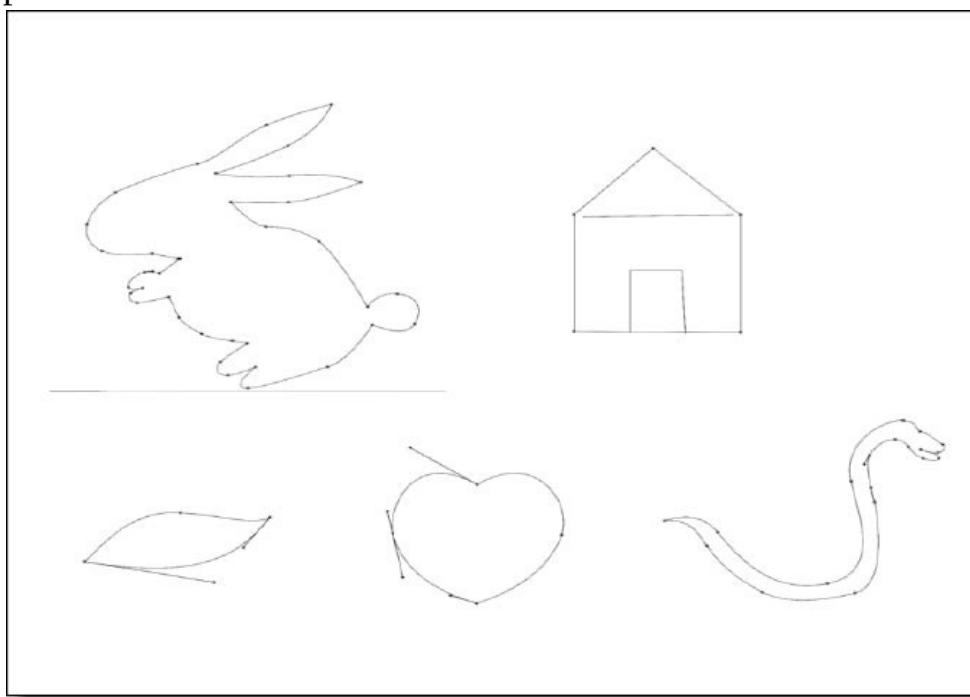
2 -

3 -



**Notice how in third examples the second handle doesn't exists (I placed it inside the anchor point), making the line it controls straight again.**

Once you understand these concepts. You will be able to draw all the kind of shapes using Photoshop pen tools. Which is useful in an innumerable ways. Like making selections, drawing shapes or creating creative brushes & patterns. Here are some of the shapes you could create using the pen tool:-



Various shapes that has been created using

Photoshop pen tool

Even if you don't know how to draw, you could still draw things that way. Since Photoshop will do most of the work for you, though that doesn't mean you shouldn't take a drawing course if you are into drawing. Practicing how to draw shapes like that is important to get used to the tool. If you spent some time working with the tool, it will become intuitive to you, and it will become one of the main tools you use in your photo editing.

**A Word From The Heart:-** If you still feel confused about what you learned so far, don't worry about this. It is normal to feel that way the first way you learn these concepts, but you will get used to them after some time. Many of these concepts will be repeated in the next few paragraphs to

ensure you end up with a good understanding of them.

## Using Photoshop pen tool In Practice

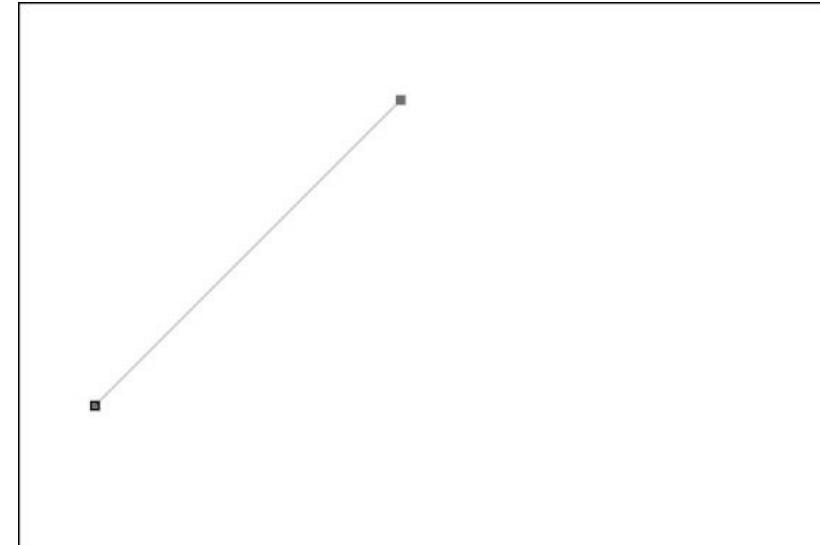
Now is the time to delve into how to use the pen in Photoshop; we will start with straight lines, and then move curves. And while we are at it, I will show you some useful shortcut that will make it faster to work with the pen tool

### Drawing straight lines with Photoshop Pen tool

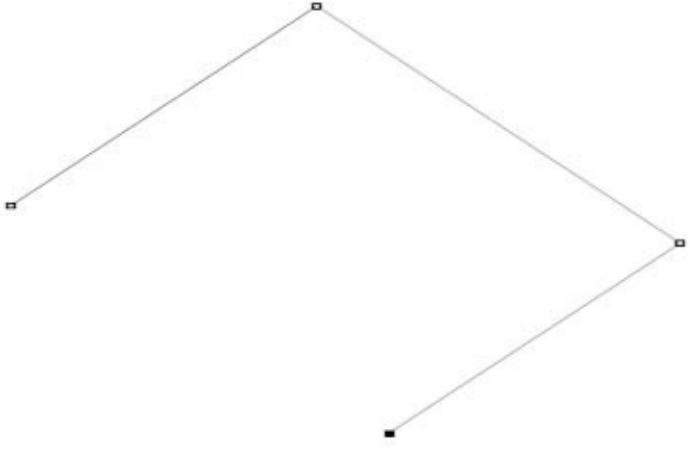
- We first pick the pen tool , which is located in the tools panel.
- Then we click to create the first anchor point



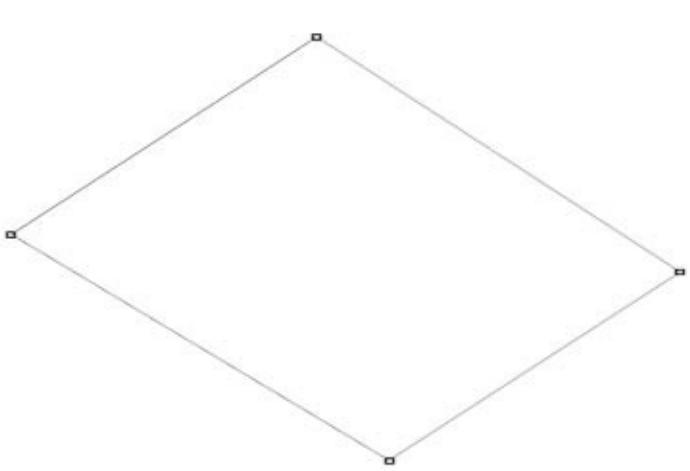
- Then we click again somewhere in the canvas to create the second anchor point. Once you create the second point. Photoshop will draw a line between these two points.



- You can keep clicking until you are done creating the shape we want to



- If you want, you can create a closed shape by clicking on the first point you created when you started drawing the shape. A little circle ° will appear besides the cursor once you hover the mouse over it. Here is the shape after I closed it:-

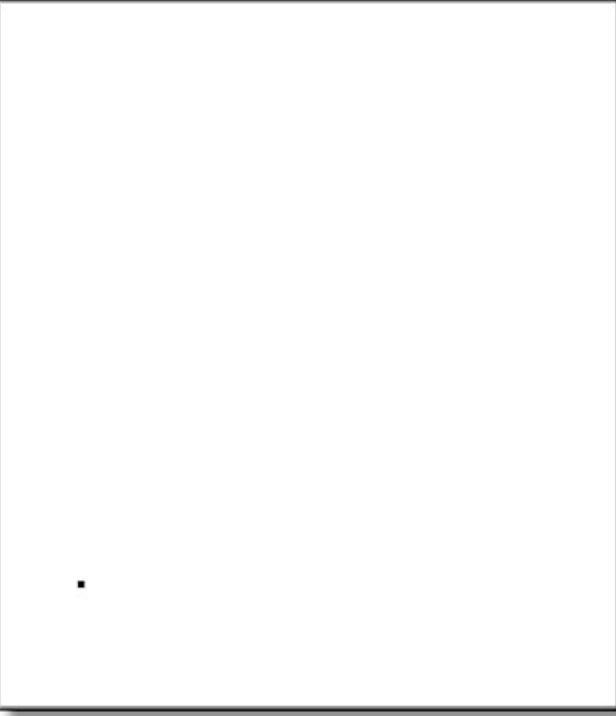


## Getting to draw curves

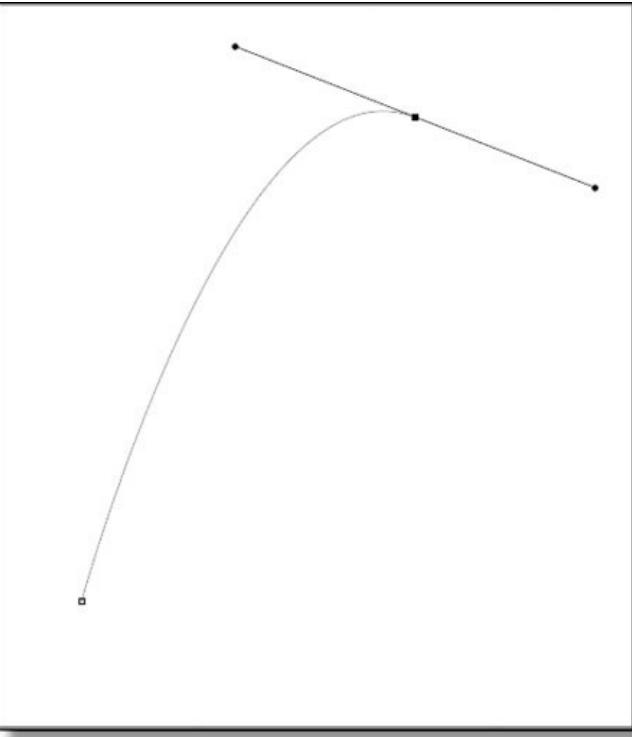
Drawing curves with the pen tool  is similar to drawing straight lines. But because this is the most confusing part about the tool, I will explain it in more than a way.

## Drawing Simple Arc With Photoshop Pen Tool 1

- Select the Pen tool 
- Click on the canvas to create the first anchor point, just like you did when you created the straight lines just now



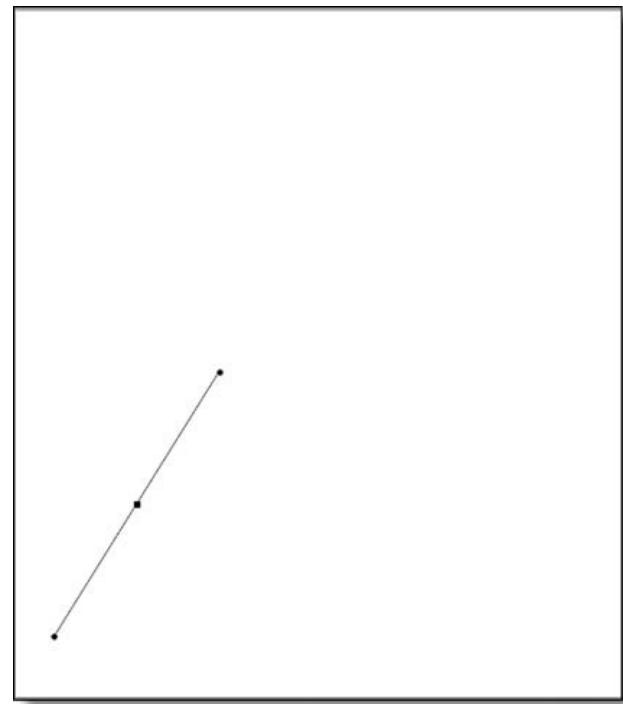
- Now click on the canvas to create the second point anchor point. But this time, instead of releasing the mouse button. Keep holding mouse and drag it in any direction. The two handles will emerge out of the anchor points as you do that. And the straight line will turn into a curve. Adjust the handles however you want then release the mouse button



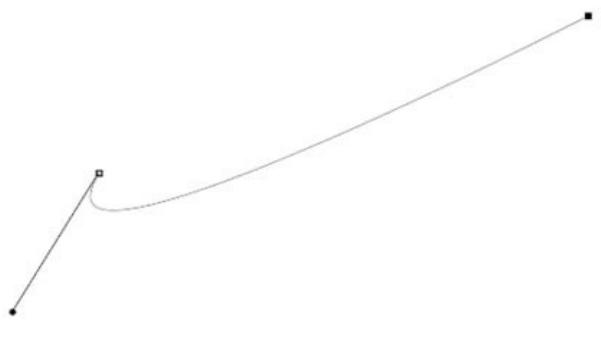
## Drawing Simple Arc With Photoshop Pen Tool 2

These steps are similar to the previous one, but instead of creating handles out of the second anchor point, we will do that from the first one

- Select the Pen tool from the tools panel 
- Click on the canvas to create the first anchor point, but instead of releasing the mouse button, keep holding it and drag it somewhere; The handles will come out of the newly created anchor point. But since you only created one anchor point so far. Nothing will appear on the screen, but that will change right now



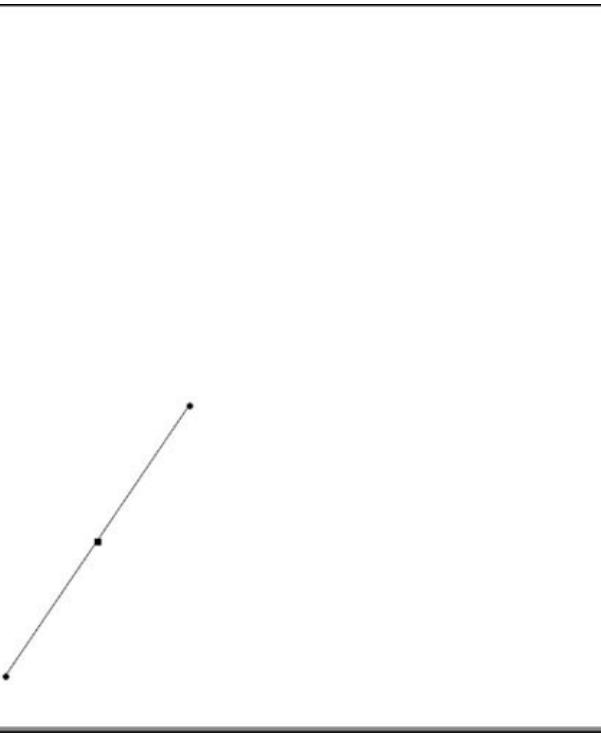
- Click somewhere on the canvas to create the second anchor point. And Photoshop will create a curve that goes from the first anchor point to the other. Depending on how you dragged the handles in the first step



## Drawing Simple Arc With Photoshop Pen Tool 3

I admit that you may have gotten bored by now. But it is important to emphasize on these steps in different ways, because if you understood them well, you can manage anything else in this chapter.

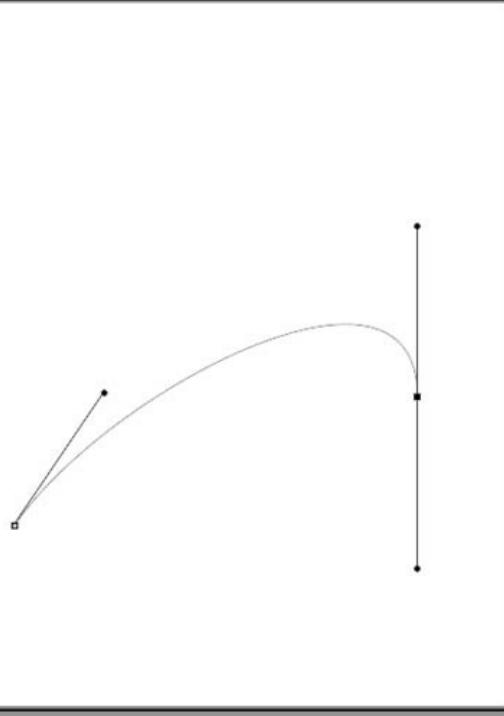
- Select the Pen tool from the tools panel .
- Click on the canvas to create the first anchor point. But instead of releasing the mouse button. Keep holding it and drag it somewhere. The handles will come out of the newly creating anchor point



- Click on the canvas to create the second point anchor point. And again, instead of releasing the mouse button, keep holding it and drag it in any direction. The two handles will emerge out

of the anchor points as you do that. And the curved will be emphasized. Adjust the second pair of handles then release the mouse button

- We now have a curve that is controlled by both the handles of the two anchor points you created.



## Drawing various curves using 3 lines

Now you are familiar with drawing an arc using two anchor points. It is time to move to drawing a curve using 3 anchor points. And while we are at it, I will show you a few tips on how to control the handles of the curve to achieve very nice results. Drawing using 3 or more anchor point is the same as we have seen so far, plus a one or two more things~

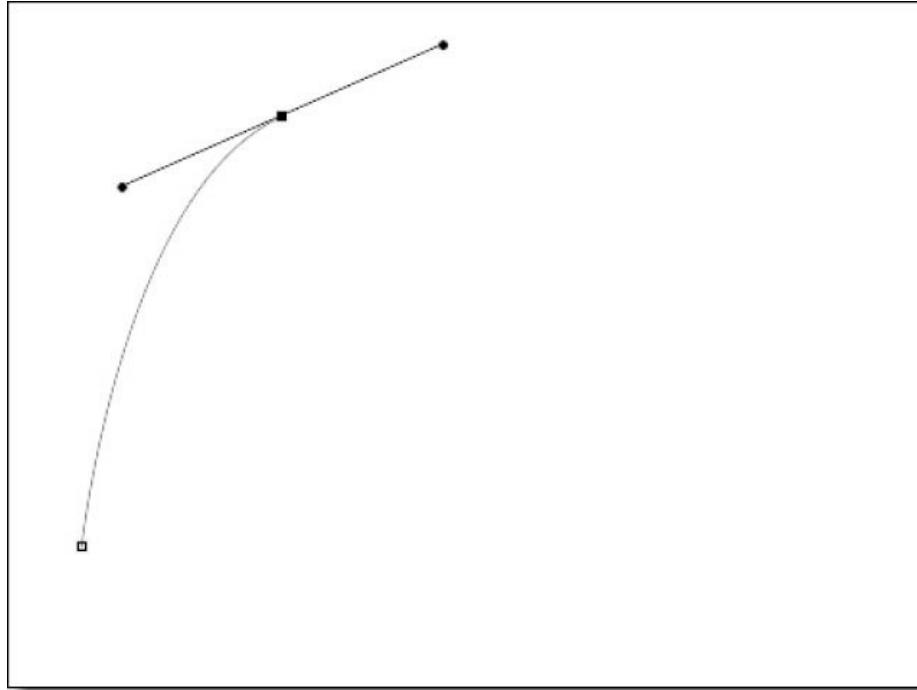
Since you are now aware that you can create a handle from any point you draw, I will stop emphasizing on that from now on~ :)

Candy Tip:- If you made a mistake while you are drawing your anchor point, simply choose Edit->Step Backward and Photoshop will undo the last step you made, this is applicable to anything you do in Photoshop, not just drawing paths

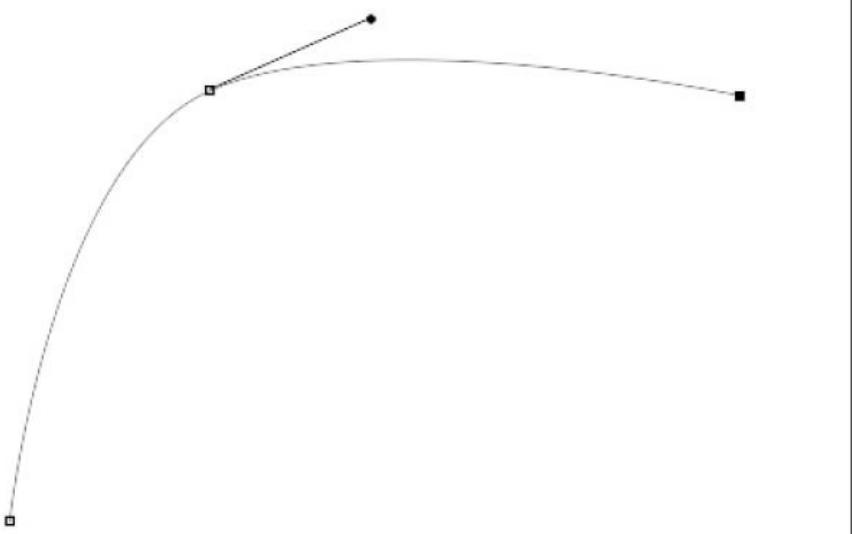
## Creating a simple curve

- Select the Pen tool from the tools panel .
- Click somewhere in the canvas to create the first anchor point

- Click and drag the mouse button to create an anchor point with handles, adjust the handles however you want then release the mouse button



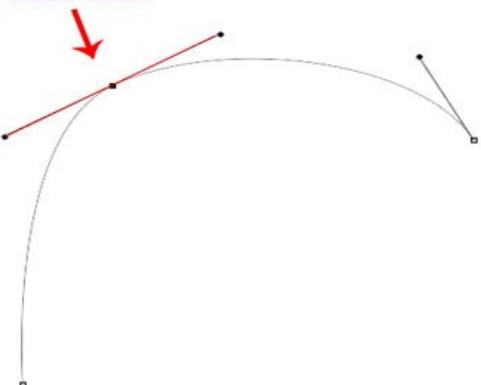
- Click somewhere in the canvas to create the 3rd anchor point.



## Creating a broken curve

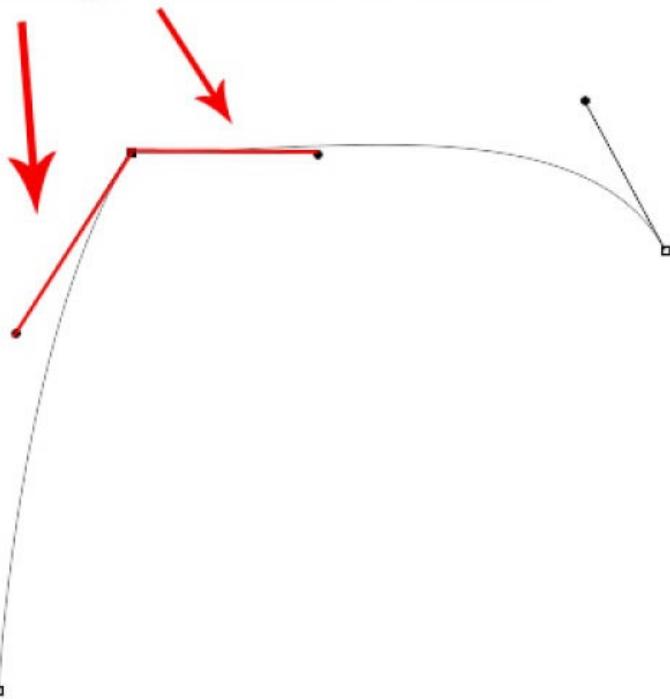
All the curves we have drawn so far are smooth ones, that's because the two handles we learned to create are on the same line, like that:-a

The two anchor points are on the Same line



To create a broken curve, one that has a corner at one of its anchor point, your handles should look similar to this:-

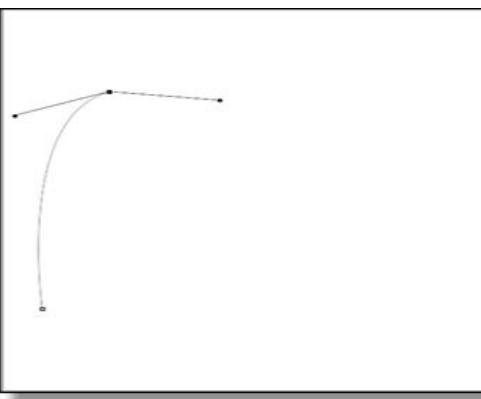
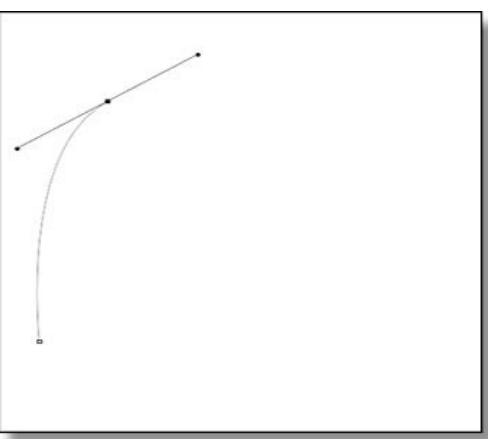
The handles are on a different line causing the curve to break



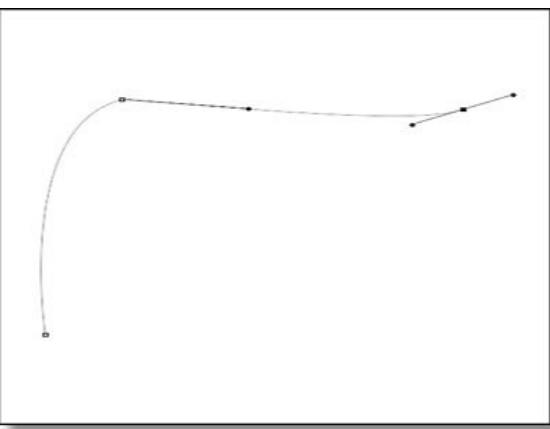
## To create a curve like that, follow these steps:-

- Select the Pen tool from the tools panel 
- Click to create the first anchor point

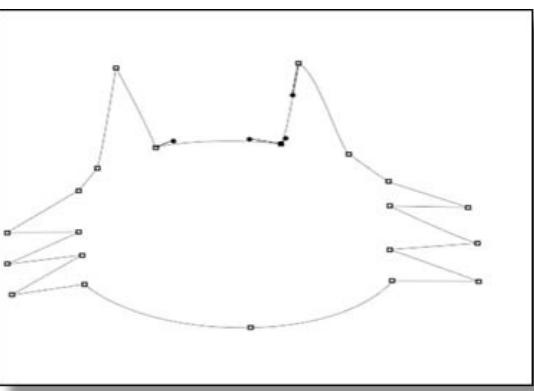
- Like you did when you created the curves. Click and hold the mouse button, then drag the cursor to make the handles appear. But after you adjust the handle. Don't release the mouse button. But instead, hold the Alt/Option key along with it. This will cause one of the handles to freeze in its place, allowing you to control the other one.



- Once you are done adjusting the second handle, release the mouse button.
- You are now free to continue drawing the curve by adding more points to it. I added a third point to my curve after I was done with it.

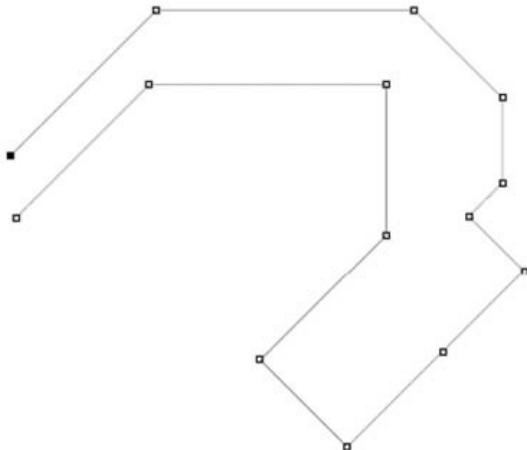
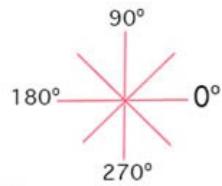


- Drawing curves like that is useful in more than a way, as it allows you to control the curves you are drawing more efficiently. Just like how it allowed me to draw the following cat so quickly:- :3



**Candy Tip:-** Holding the shift button while you draw the anchor points allows you to draw anchor points that are of the multiple 45 degree from each other, like this:-

Holding the shift button while drawing inserting the anchor points will ensure that each point you insert is of the multiple of 45 degree from the previous one



## A Little Summary Before We Continue

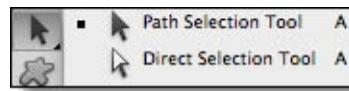
- Anchor points without handles create straight line. So if there is no handles, no curves.
- You can create a curve by creating a handle out of any of the anchor points you are inserting.
- Anchor points without handles are called corner points; the ones with handles are called curve points.
- Handles can be on the same line. Which creates smooth curves. Or they can be on a different line, making the curve appear abrupt or even broken.

## Editing the path after you created it

With the concepts I explained so far. You can draw any curve you want with Photoshop pen tool after some training. But that doesn't mean there are not easier ways to achieve the same things.

Being able to modify your curve after you already drawn it means that you won't have to worry about getting it right the first time you draw it. This is done using the path selection tools and the pen tools groups

## The path selection tools group



This group consists of two tools, the Path Selection Tool , and the direct selection tool . These

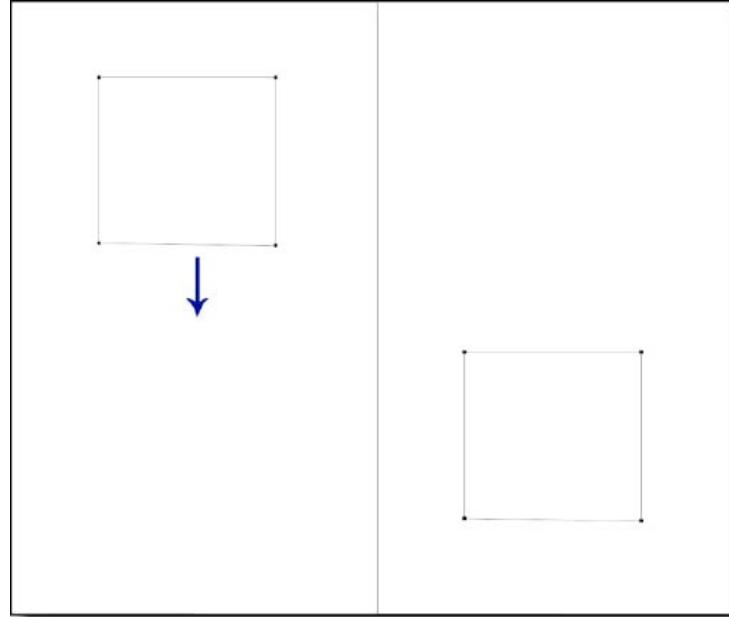
two tools may seem similar at first. But they are completely different actually.

## The path selection tool .

The path selection tool allows you to do one thing. It allows you to select a curve and move it wherever you want. All you have to do is to select the path selection tool. And select and drag the path you want with your mouse.

The Path Selection Tool is very useful when you have a path that consists of more than one curve. Where you could select each of them independently.

## Moving a path with your mouse using the direct selection tool:-

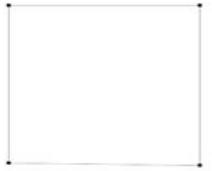


**Candy Tip:-** Holding the Alt / Option button before and while you move the path allows you to create a copy of it instead of moving the original thing

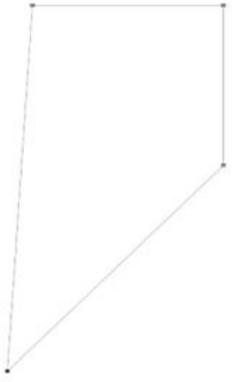
## The Direct Selection Tool .

The Direct Selection Tool is much more interesting than the “boring” Path Selection Tool. It allows you to select and move any of the anchor points you made. Here is how I edited the simple polygonal path of the previous example:-

1~



2~



If the anchor point you selected with the tool has handles, simply clicking on it with the direct selection tool will make the handles appear again, allowing you to edit them again:-

1~



2~



Unfortunately, I don't know any way to make the corner point (a point that has no handles) turn into a curve point (one that has handles) and vice versa using this tool. But that can be done using other tools, like the Convert Point Tool ↗, which I will explain in the next section.

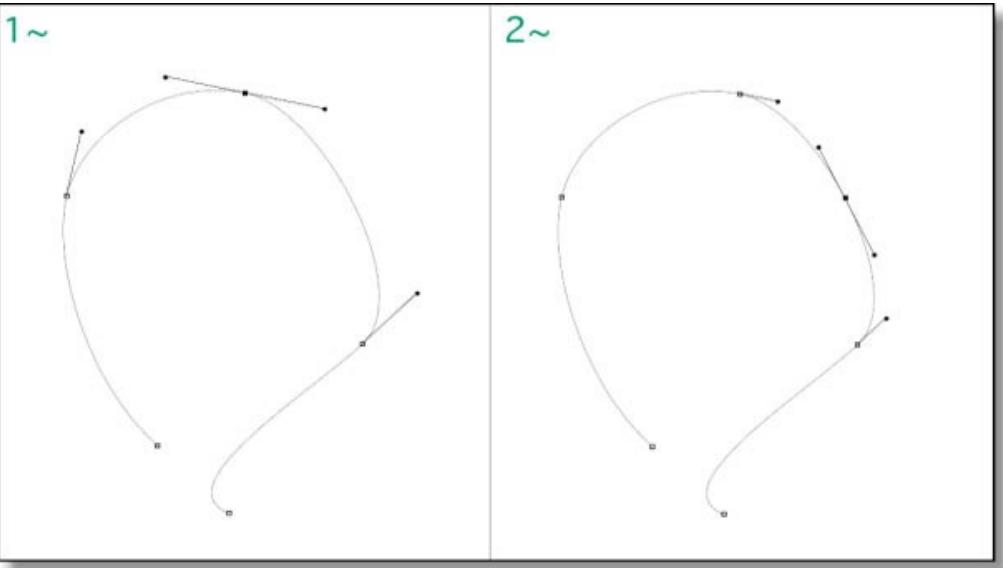
## The Pen Tools Groups



### Add Anchor Point Tool ↗

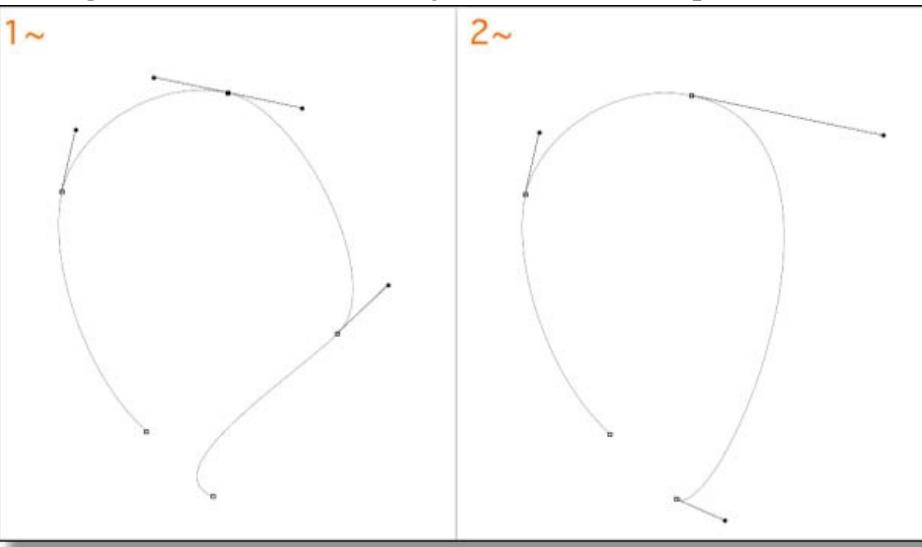
This tool allows you to add new anchor points to your path with one click. All you have to do is to

select the tool and hover the mouse on the part of the cursor where you want to add your point, once you do that. The cursor will have a little “+” sign besides of it. And a new anchor point will be added to the path once you make your click:-



## Delete Anchor Point Tool

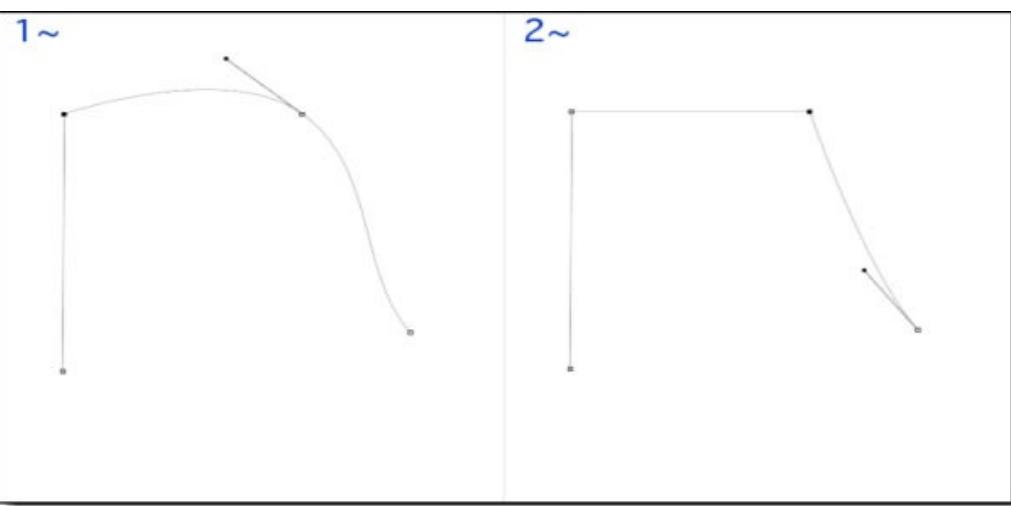
The tool does opposite to the Add Anchor Point Tool, it deletes any of the points you have on the path, all you have to do is to hover your mouse on the point you want to delete, and the cursor will have a “-” sign besides of it. Once you click on the point, it will be gone.



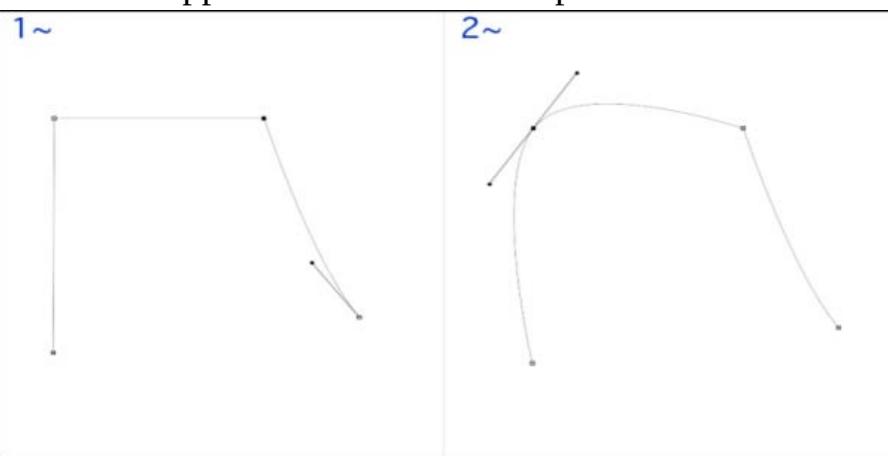
## The Convert Point Tool

The convert point tool is - in my opinion- the most useful tool among the ones in this group, it gives you the ability to convert corner points to curve points and vice versa, and to move each of the handles of the anchor points separately.

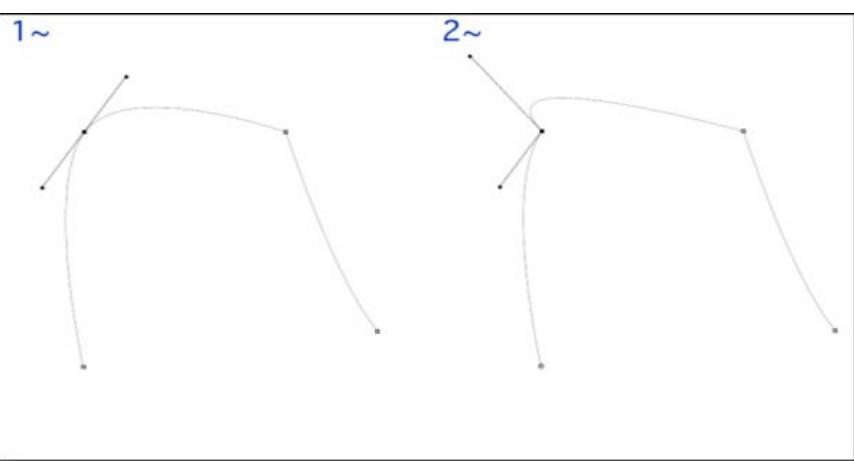
Let's take a look at the following path, which has both corner and curve points. Clicking on the curve point at the right causes the handles to disappear. Thus turning it into a corner point



And clicking and dragging on the corner point at the left using the Convert Point Tool causes the handles to appear out of the corner point



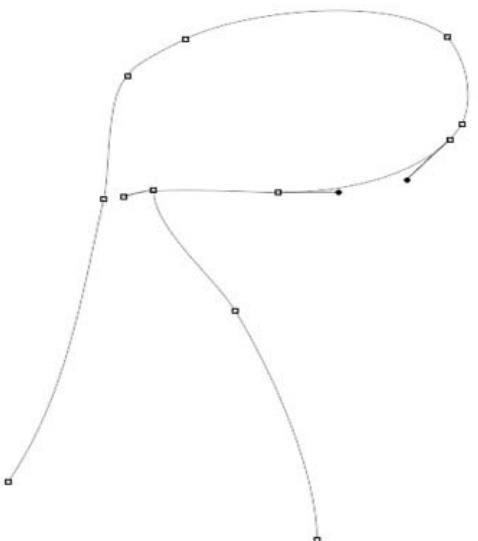
And this nice tool allows you to move each of the handles separately, which is so convenient:-



## Freedom pen tool

Because this tool has nothing to do with modifying curves, I made it the last one to be explained on purpose. The Freedom Pen tool works like the Lasso selection tool. It allows you to freely draw the path you want instead of inserting points and adjusting their handles. This is very useful if you have a graphics tablet and wanted to create a complex shapes quickly. And of course, you could edit the resulting path the same ways we explained above.

It took me only seconds to draw the following “R” using the Freedom Pen Tool:-



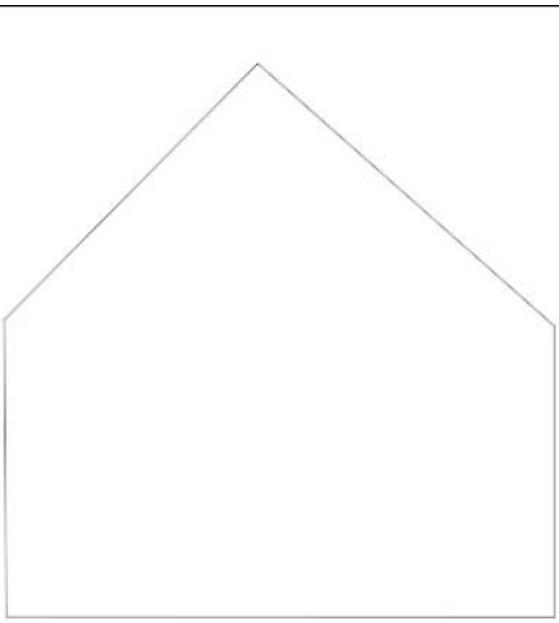
## More on Photoshop pen tool and paths

And like always, the chapter is officially done. But more are explained in a dedicated part of it. If you don't feel like reading this part right now, you can skip to the examples section

### Turning a pen curve into selection

As mentioned in the selections chapter, the Pen tool is considered one of the selection tools. And it is among of the most powerful ones. Any path you create with it can turn into a selection with only one click.

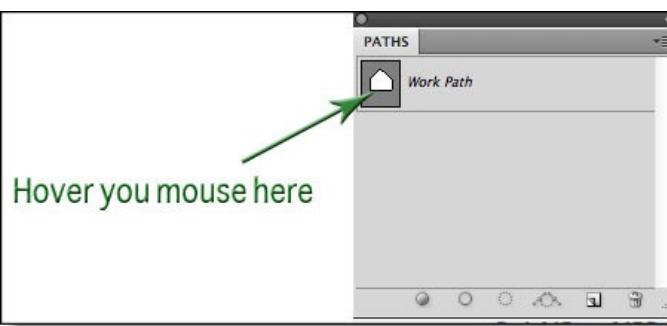
- First create the path you want to turn into selection:-



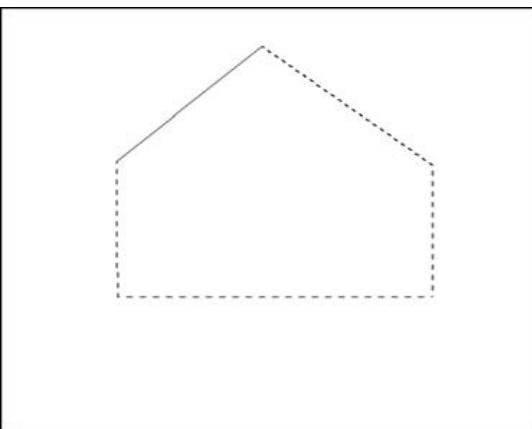
- If you can't see the Paths Panel anywhere on your workspace, choose Window->Paths from the main menu. And the paths Panel appears.



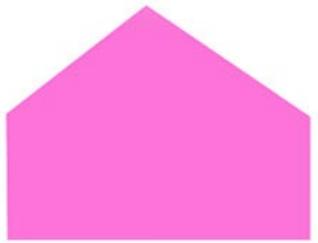
- Hover your mouse over the path you want to turn into a selection, and then hold the Control button (Command if you are using a Mac), and the cursor will have a little square besides of it.



- Now click on the path icon in the paths panel. And the path will turn into a selection right away.



- Feel free to use that selection however you want, I filled the selection to create a house shape:-



Candy Tip:- Pressing Control + Enter (Command + Enter for Mac users) on your keyboard is another way to turn the current path into a selection ;)

## Filling a path with pixels right away

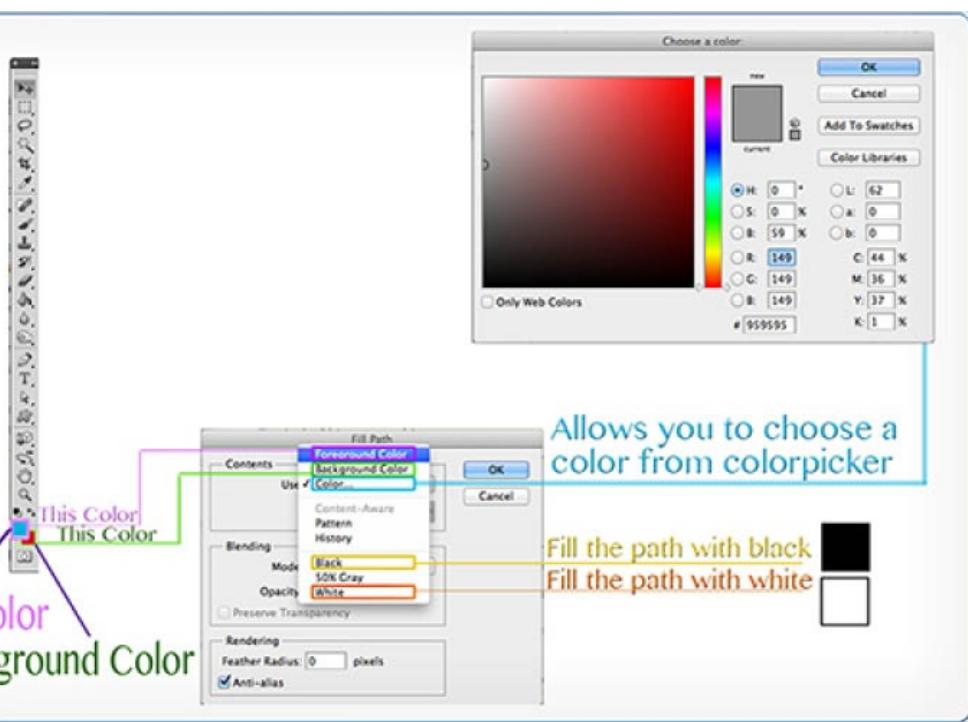
Instead of turning the path into a selection then filling it with pixels like we just did. You could fill the path with one click. To do that, follow these steps:-

- Right Click on the path you want to fill, and then choose “Fill Path” From the Context Menu

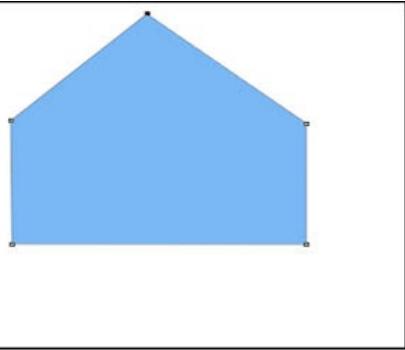


- The Fill Path dialog appears.

Photoshop allows you many options of how to fill the path; some of these options are explained in the Infographic below. And some of them will be explained at a later chapter, but for now, let's focus on filling the path with a simple color.



- After you choose the color you want to fill the path with. Click the OK button. And Photoshop will fill the path for you with the color you chose.

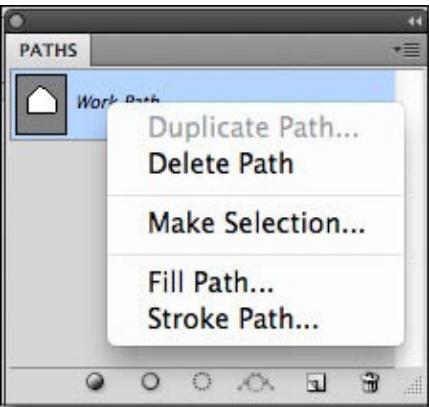


## Stroking the path

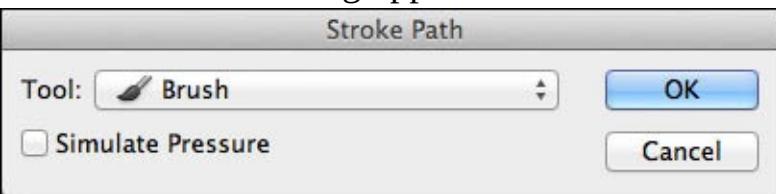
Stroking the path means making it look like you have drawn the path using the brush tool or any other tool. If the path stayed in vector state (not filled with pixels), there won't be much use for it.

### To stroke a any path you created, follow these steps:-

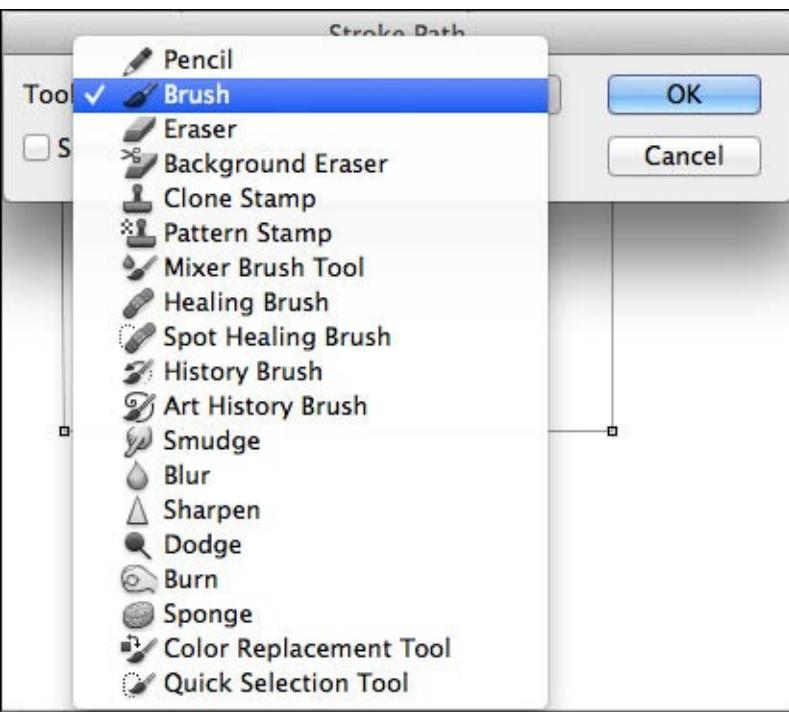
- Right Click on the path you want to turn into a selection, and then choose “Stroke Path” from the Context Menu (If the path has more than one part, you will see “Stroke Subpath” options instead of stroke path).



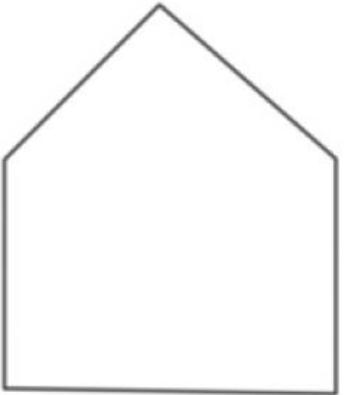
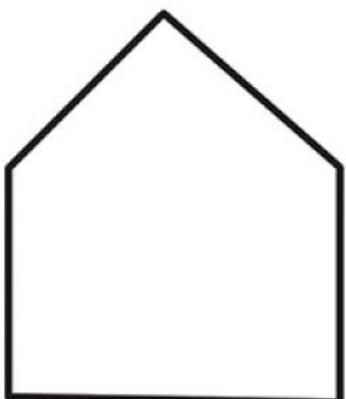
The Stroke Path dialog appears



- The stroke path dialog allows you to select the tools to stroke the path with. The settings of the tool you select depends on how you left them last time you used it. For example, if the last time you used the brush tool you had a soft brush, the path will be stroked with that soft brush, so make sure you adjust the tool you want to use before you use it to stroke the path.



- Once you select the tool to stroke the path with, click on OK on the dialog, and the path will be stroked. Here is the house shape after stroked with two kind of brushes:-



- Stroking paths is a common way to make precise drawings in Photoshop, though if you want to do that extensively, I highly recommend you to use dedicated vector graphics software, like Adobe Illustrator.

**Candy Tip:-** Pressing Enter on your keyboard will stroke the selected path with the selected tool in the tools panel, for example, if you pressed enter while you have the brush tool selected, the selected path will be stroked with the brush tool.

## Creating more than one path in a single Photoshop document

You can have more than one path in your Photoshop document, which you can manage from the Paths Panel (Choose Window->Paths to view it). Creating more than one path is a bit unintuitive for new users. But it is not hard at all.

- Draw a path like we always did so far, I drew a random shape right here. And as you can see, the path will appear in the Paths panel.



- Now, double-click on the path in the paths panel.

Double-Click Here



- The “Save Path” dialog appears. Allowing you to pick a name for the path. I will keep the default name. Press OK after you are done naming the path.

Save Path

Name: Path 1

OK

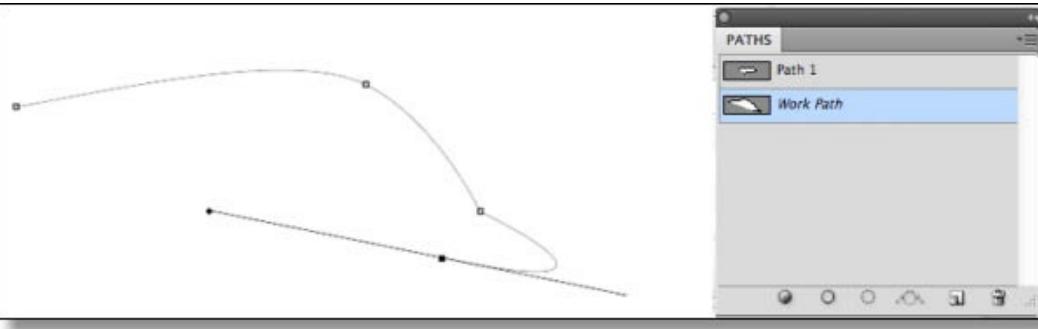
Cancel

- Make sure the path is unselected in the paths panel when the path is unselected. It is unselected when the name of the path won't be highlighted, And the path won't be visible in the canvas, like this:-

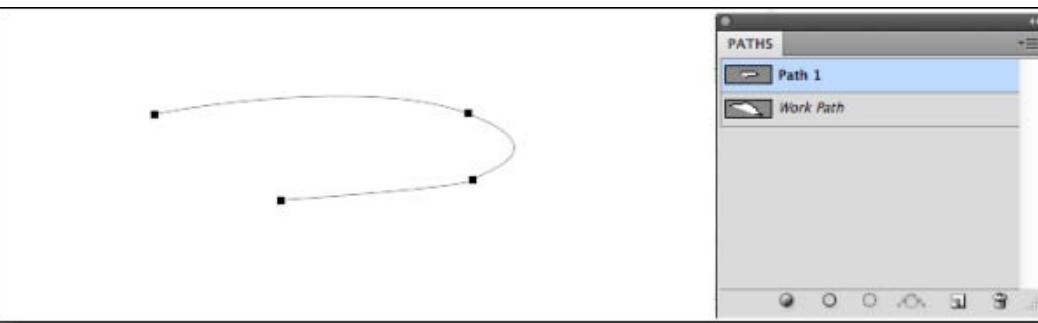


**Note:-** If you forget to deselect the Path, anything you draw next with the Pen Tool will be added to the path. Instead of being made into a newly created path.

- Now choose the Pen Tool and draw another path, the new path will appear in the Path panel. If you want to keep that path to use later, you will have to save it as well by double clicking on its name in the paths panel.



- You can switch between the paths you have by clicking on the path you want to work on from the Paths Panel.

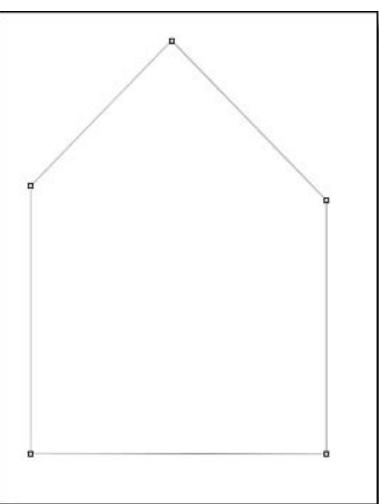


## Creating a path with more than one part / curve

Paths can have more than one part; the house shape we have been working on so far can look more like a house if it had a door or maybe a window. So in this exercise, we will draw the house from scratch, and then add a door to it.

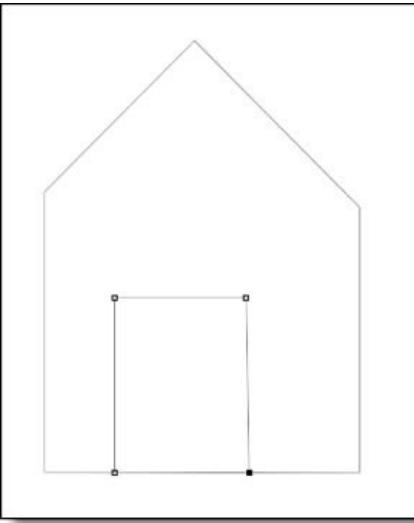
After you draw the house, each part of the house, like the door and the house itself, can be selected and moved using the Path Selection Tool .

- First, draw the path of the house itself. Just like we previously learned before. Holding shift while adding the points makes it very easy to create straight and 45° angles lines.

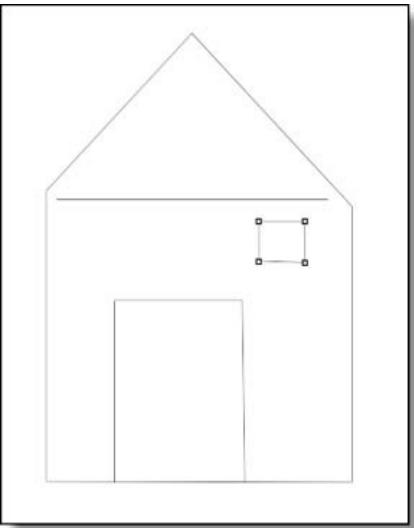


- Deselect the path by switching to the Direct Selection Tool and clicking anywhere in the document.

- Select the pen tool again
- Draw the door part where you want to with the Pen tool.



- You can keep repeating the steps of deselecting the path then drawing another part of the house as much as you like. I added two more parts to the house the same way here:-



**Candy Tip:-** You can switch to the direct selection tool quickly by holding the control button (command in Mac) while you are using the Pen Tool.

**Candy Candy Tip:-** You can continue adding points to a path you already deselected by clicking on the last point you inserted with the pen tool, and then continue draw like nothing happened.

**Note:-** The path you are working on has to be selected in the path panels all the time during these steps. This is especially the case if you have more than one path in your Photoshop document

# Learn Photoshop Pen tool with the Bézier Game

This is a game I found a while ago through Twitter, it interactively teaches you how to use the Pen tool to draw various shapes. And it is a great way to apply many of the things you learned here. The game may sound hard after a few stages. But the more you play it the easier the game will become, [I talked about the game with some details in this post.](#)

To play the Bézier Game, [click here to go to its website~](#)

## Examples.

### Making a hard selection

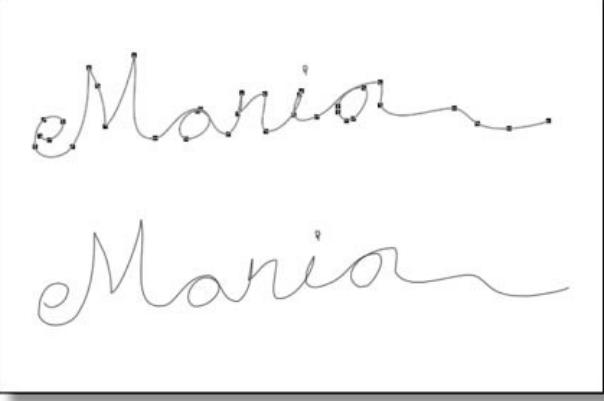
The pen tool is a very capable selection tool, especially in the situations where the Wand Tool and the Magnetic Lasso Tool fail miserably. In the following picture, the picture is black and white. And the man at the middle is wearing a black suit. While sitting among men who are also wearing black suits. All the selection tools we learned about so far will fail to select the man, but the pen tool can easily do the job



Though the lack of details can make the selection process hard, refining the selection after making it can mitigate the problem.

### Creating a signature

The Freedom Pen Tool is a good way to make signatures in Photoshop, specially with how you can easily edit the lines in case you messed things up. I will consider creating a signature with it to end all my posts with it^^



Maria

Maria

## Creating Complex Drawings

With all honesty, this line art has been created in Adobe Illustrator. Which has a much better Vector Graphics capabilities than Photoshop, but I found it a very good way to show you how vector graphics are capable of creating many things.



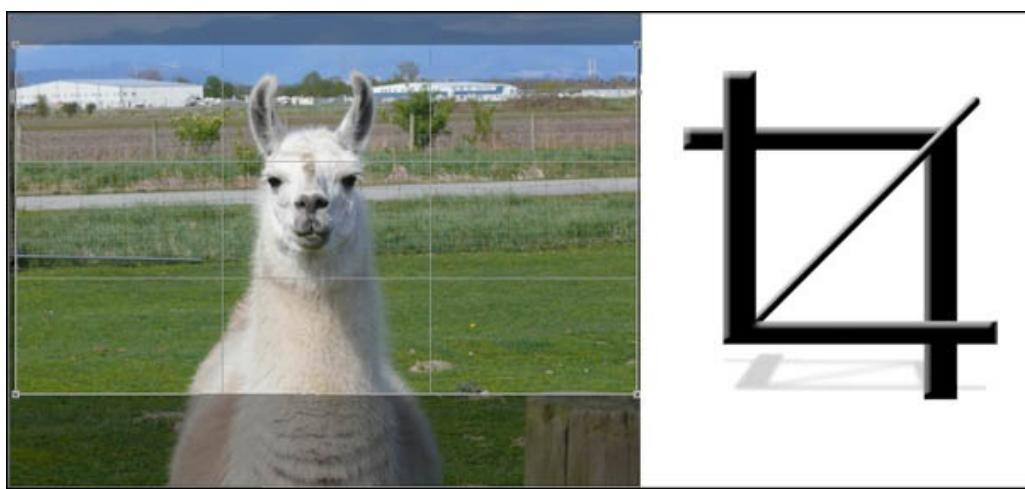
Lolita artwork that has been created using Photoshop pen tool, But can be created using Photoshop pen tool as well. Though that can be harder

## Summary

- The Pen tool is one of the most important tools in Photoshop. And yet it is the tool shunned by most new Photoshop users, which is more the reason to talk about it early in this book

- The Pen tool can be considered as one of the selection tools, and it is probably the most powerful one among them
- The pen tool draws Bézier curves, if you know how this kind of curves work, then you already have a good understanding of how to use the Pen tool
- Each point in the Bézier curve is called an anchor point, and the handles out of it control the curve before and after it
- Anchor points without handles are corner points, as the curve tend to stop abruptly at this kind of points
- Understanding how to work with the anchor points and handles allows you to draw all sorts of shapes
- The Path Selection Tool allows you to select the whole path & move it to anywhere you want
- The Direct Selection Tool selects individual anchor points instead of the whole path, you can use that tool to move the anchor points and adjust their handles
- The Add Anchor Point Tool makes it easy to add a new anchor point to an existing curve, while the Delete Anchor Point Tool removes an existing anchor point from it
- The Convert Point Tool is the most flexible tool for modifying the anchor points, it allows you to convert a corner point to a curve point and vice versa. It also allows you to move the handle of any anchor point
- The Reedom Pen Tool create Bézier curves by allowing you to draw them freely on the canvas, which is similar ot what the Lasso selection tool does
- Any curve you draw using the pen tool can be turned into a selection, which is useful for creating powerful selections in Photoshop
- Besides getting turned into a selection, any path can be filled with pixels or stroked, and all that can be done from the Paths Panel
- Unless you saved the path you created, Photoshop will replace it once you deselect it and start creating another path
- Paths in Photoshop can consist in more than once path, this can be useful in case you want to use the tool to create simple drawings with more than one part, like a house

## Cropping Images in Photoshop using the Crop Tool & Rectangle Marquee Tool. And An Introduction to aspect ratio



Cropping images in Photoshop, and adjusting their sizes of images, are among basic uses of Photoshop, as well as other graphics software. And some Photoshop courses start with how to do that.

In this chapter, I am going to show you different ways of cropping images. I will also explain the concept of aspect ratio and how adjusting the aspect ratio is useful.

## What cropping images means?

According to Wikipedia, Cropping images refers to the removal of the outer parts of an image to improve framing.

In my own definition, cropping is taking part of the picture and get rid of the rest. If that didn't make sense to you, take a look at the following penguins picture, there are 4 adult penguins in it:-



If I only want the penguin at the right and I don't need the rest of the picture. I could crop the picture so that it contains only that penguin:-



There are many techniques for cropping images like that. The simplest way to do it at all is to use the Crop Tool .

## Cropping images in Photoshop using the Crop Tool .

The crop tool is the easiest way to crop a picture, to demonstrate how it works, I will show you how to crop the penguins picture above using it, using the following steps:-

- Select The Crop tool  from the Tools Panel
- Click and drag around the part you want to crop. The same way you make rectangular selections using the Rectangular Marquee Tool:-

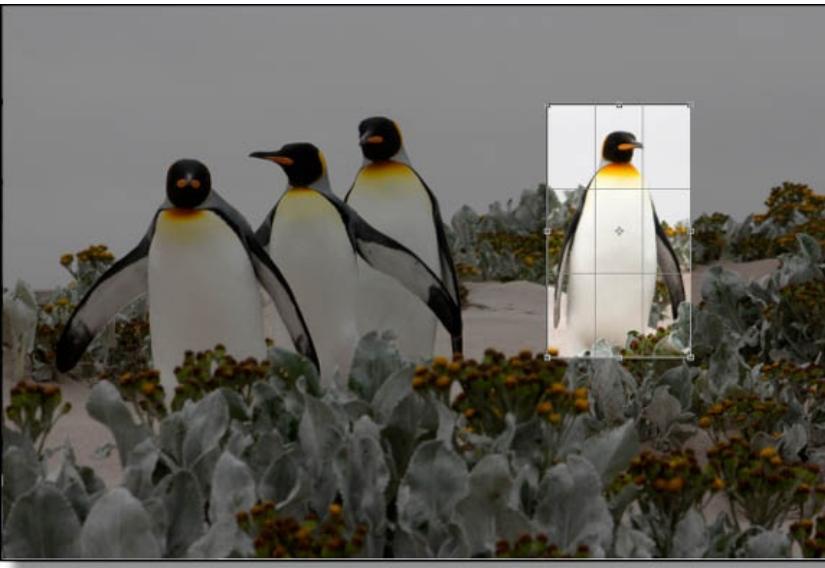


The illuminated area is where the picture

will become like once you are done cropping, and the black area (which is called the “Shield”) is the parts that will be discarded once you are done cropping.

- Using the handles of the rectangle you made, you can adjust the rectangle as much as you want at this stage. So you don't need to worry about making mistakes here. I adjusted the

selection here to contain only the Penguin I wanted and nothing else



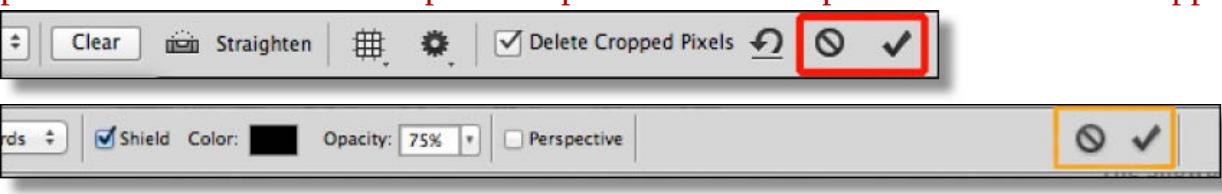
After you are done adjusting the area you want to crop. You can do one of two things now:-

- Press Enter on your keyboard and you will end up with the part of the picture you selected
- Or If you changed your opinion and didn't want to want to cancel the cropping altogether. You could press the Escape button (The Esc button at the corner of the keyboard), to cancel the cropping operation.



The penguin we wanted, fit as a fiddle~

**Candy Tip:-** Instead of pressing Enter Or Escape to make or cancel the operation, you could press the ✓ or ✘ on the Crop Tool option bar to complete or cancel the cropping.



And the crop tool cropped the image really nicely, but there is a nicer way to do it. Which is to

specify the Aspect Ratio of the area to be cropped, which has many applications, as you will see below.

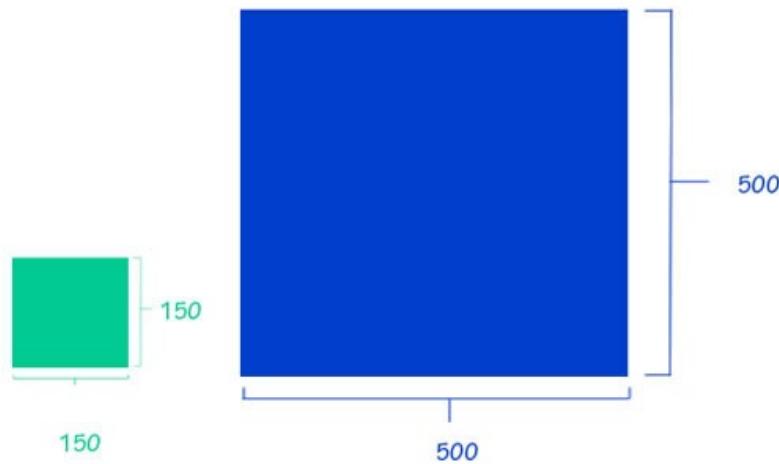
Before I go about how to do that, let me first introduce you to the concept of Aspect Ratio

## About Aspect Ratio

Aspect ratio is the term that refers to how much width a rectangle has compared its height. For example, the Aspect Ratio of a square is always 1:1 (one to one). Meaning that for each Centimeter (or Inch, or any unit really) of the width of the square, there is 1 centimeter of height in it. In other words, if the width of a square is 10 centimeter, it means that the height of the square is also 10 centimeter. Keeping this aspect ratio is important for a square to remain a square, or else it will become a rectangle.

Knowing the aspect ratio means that if you know the width or the height of a rectangle, you can know the other quite easily; can you tell me what is the height of the square whose width is 3.14 cm? :) There is no difference in saying that the aspect ratio of the square is 1:1 or 10:10, what matters is the relationship between the two numbers, not the numbers themselves.

### Aspect Ratio Of Square



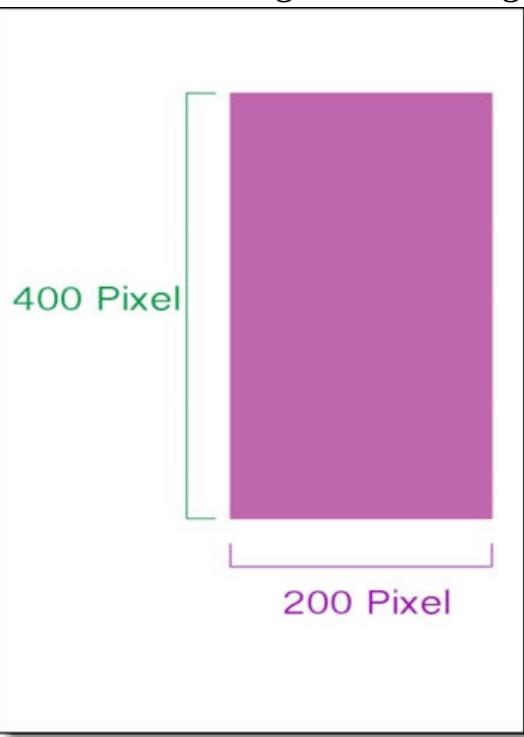
*Sweetmonia.com*

Now let's take a look at the Aspect Ratio of rectangles, when we say that the Aspect Ratio of a rectangle is 2:1 it means that for each 2 Centimeters of the width of the rectangle, there is 1 centimeter to the height of that rectangle. In other words, the width of the rectangle is double its height, and it will look like that:-



The width of such rectangle is double its height, meaning it has the aspect ratio of 2:1, or 20:10. (Or even 30:15, it doesn't matter, as long the first number of double the second one).

And if we said that the aspect ratio of a certain rectangle is the opposite, 1:2 instead of 2:1, it basically means that the height of a rectangle is double its width. And it will look like that:-

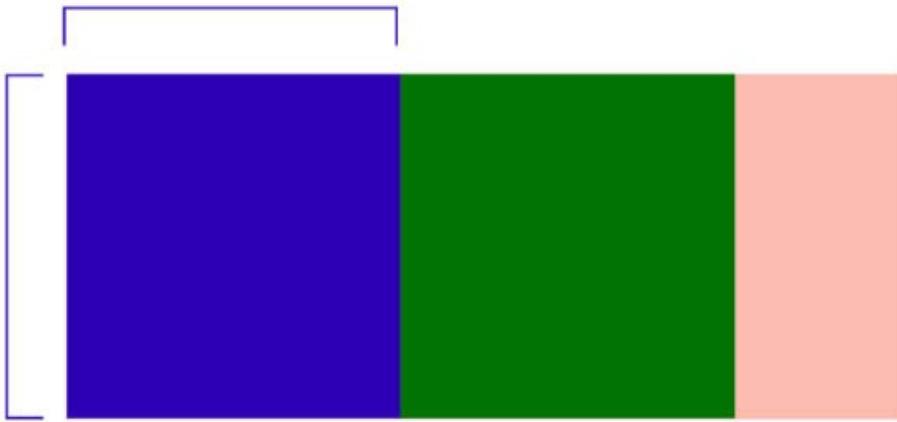


Let's take another example, when we say that the Aspect Ratio of a rectangle is 2.5:1, it means that for each 2.5 centimeter of its width, there is 1 centimeter to its height. To make this aspect ratio easier to understand, I will multiply the numbers by 2, and now the aspect ratio becomes 5:2 instead of 2.5:1. Meaning that for each 5 centimeter of the width of the rectangle, there is 2 centimeter to its height (you could have multiplied it by 3 or 4 if you want, I just choose 2 because it produces the best numbers in my opinion).

The width of the following rectangle is two and half its height. The colors segmentation of the width makes that more obvious.

## A rectangle with an aspect ratio of 2.5:1 (Or 5:2)

Each square is equivalent to the height of the rectangle

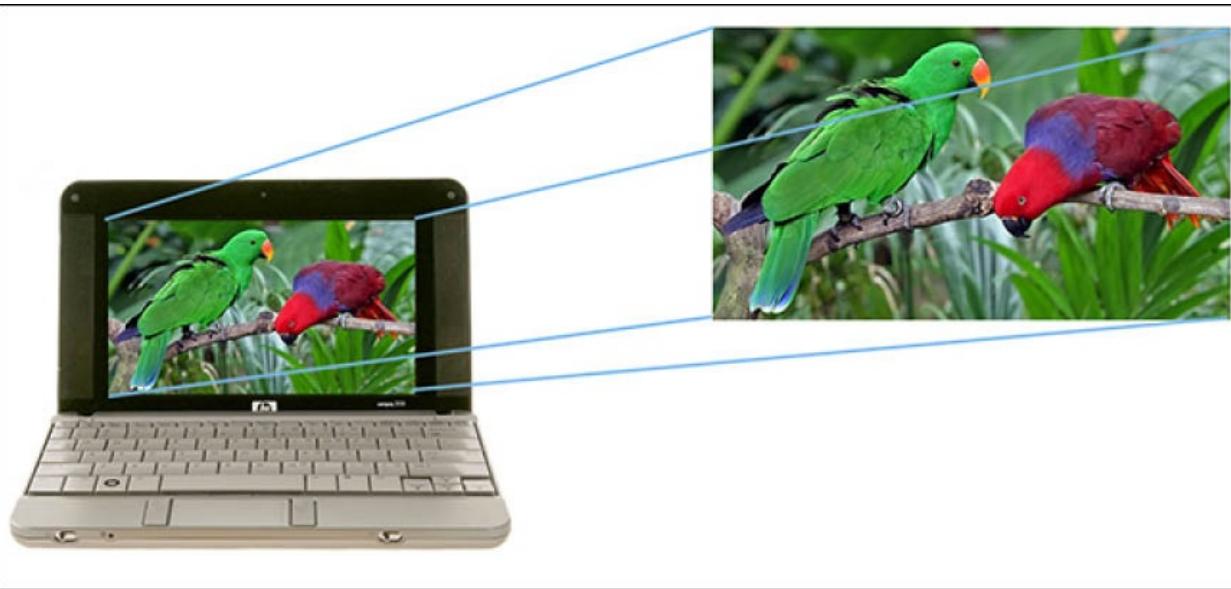


## This is all nice and all, but what use does this really have?

I hope all the repetition of the concept has made you familiar of it by now. And you are most likely wondering how knowing the Aspect Ratio could benefit you at all.

Lets say your screen resolution is 1366x768 pixels (there are many ways to get to know that, one of them is to go to <http://www.whatismyscreenresolution.com/> and it will display your resolution for you). Meaning that the width of your screen is 1366 pixels and its height is 768 pixels.

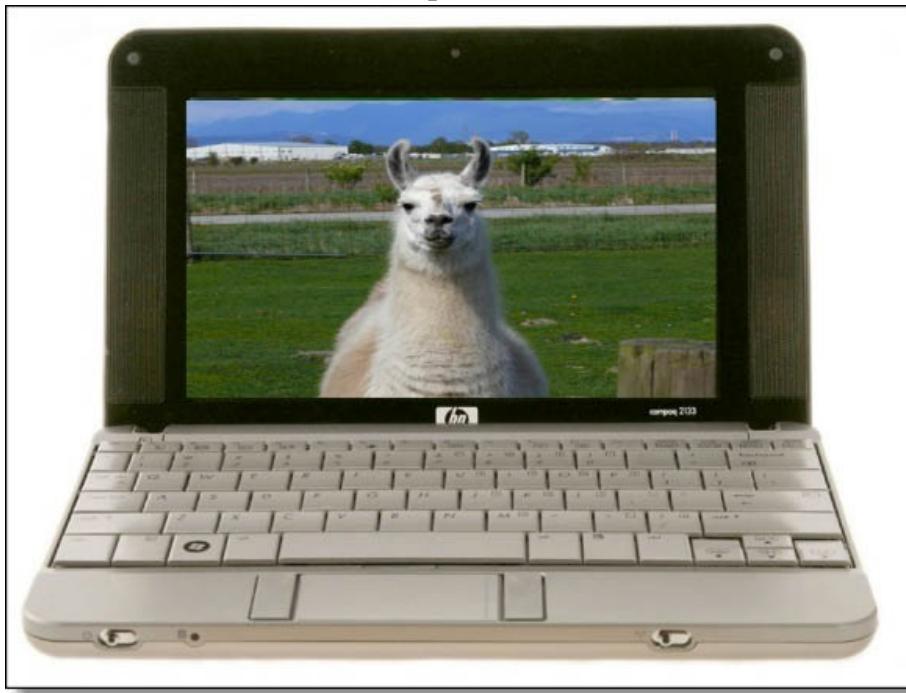
Suppose you want to change the background picture of your desktop. Ideally, if you have a picture that is 1366x768 pixels you are good to go. And the background will fit to your screen right away.



But if your picture is like 2000 X 1500 Pixels, like this one:-



Setting the background to that picture will make it stretch and it won't look nice at all. That's because it has a different aspect ratio than your screen resolution. See how the poor Llama got stretched. Depending on how different the picture aspect ratio from your screen's is, the picture will be more or less distorted than this example



Here, the 2000 X 1500 Llama picture doesn't fit well with the 1366 X 768 screen. And it is all stretched because of the different aspect ratio it has from the screen.

The solution to this problem is to crop your picture so it will have the same aspect ratio as your screen. Which can be done using the Crop tool, as well as your old friends, the Rectangle Marquee Tool.

## Using the Crop Tool to crop a picture to a certain Aspect Ratio

Cropping our 2000 X 1500 image so that it will fit to our 1366 X 768 Screen is very easy to do with

the crop tool. All you have to do is to specify the aspect ratio you want before cropping the image, here is how to do that:-

- Select The Crop Tool  from the tools Panel.
- In the Crop Tool options, select “Ratio” fromt the ratio menu, for Photoshop CS5 & earlier, simply entering the aspect ratio you want in the Width & Height fields will allow you to make selections that abide by that ratio.



Ptohoshop CS5 & earlier has it easy, as they can enter the width & height values directly

- Since we want to crop the picture to fit with our 1366 X 768 screen, I entered these values in the Width & Height fields.



Ptohoshop CS5 & earlier only have to enter the Width & Height values directly in the options panel

- Now drag to select the area you want to crop, you will notice that the size of the rectangle will be restricted in a certain way.
- After you make the selection, feel free to adjust the area you want to crop, and once you are done, press Enter, and Photoshop will crop the picture for you.
- Here is what I got:



- And here is how it fits to the screen of the laptop, without being stretched at all.



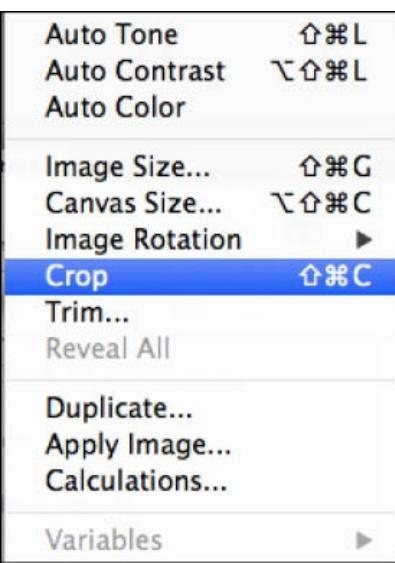
## Using the Rectangle Marquee Tool For Cropping images

The Marquee Selection Tool (And other selection tools as well) can be used as cropping tools in addition to selecting pixels. For a starter, I will show you how to do normal cropping first:-

- Select the Rectangle Marquee Tool from the tools panel
- Select the Area you want to crop in your picture, here I am interested in the having the brownie in its own picture



- From the main menu, select, Image ->Crop, and Photoshop will crop the picture to the part you selected.

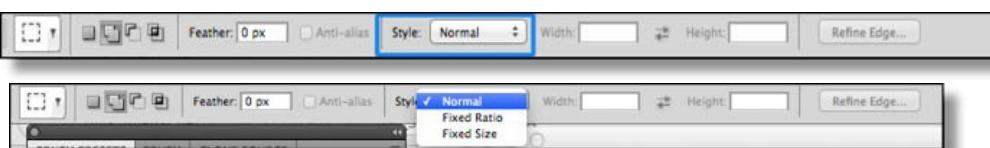


There is not much difference between the Marquee Selection Tool and the Crop tool. And cropping seems easier using the Crop tool, because it allows you to adjust the area you selected before you crop the image. But it doesn't hurt to know both, because you may want to crop an image based on a certain selection you already made, like selecting a man and cropping the image to have only the parts that contains him.

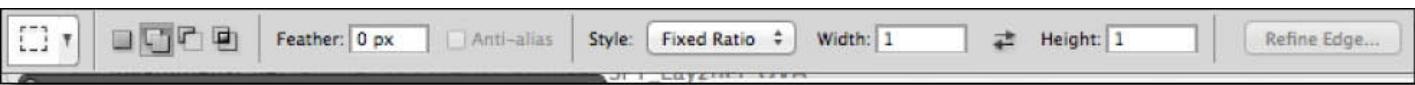
## Using the Rectangle Marquee Tool to crop a picture to a certain Aspect Ratio

Let's revisit the Llama picture and its aspect ratio that don't fit with our 1366x768 screen, cropping the image to fit that aspect ratio using the Crop Tool solved that problem. And here is how to do that with Rectangle Marquee Tool as well:-

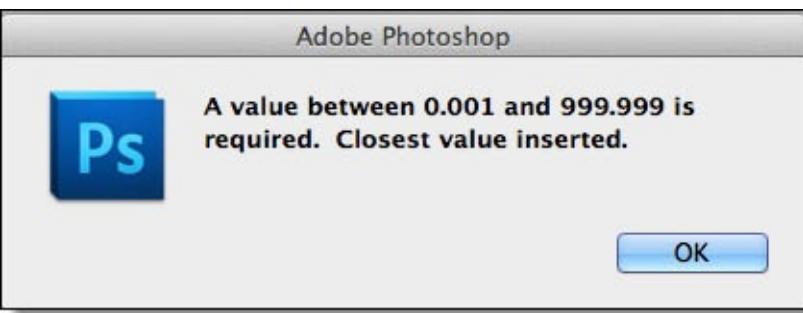
- Select the Rectangle Marquee Tool  from the Tools Panel
- From the Style menu in the Marquee Tool Options, select "Fixed Ratio", this will force you to only make selections of a certain aspect ratio. Based on the "Width" And "Height" options:-



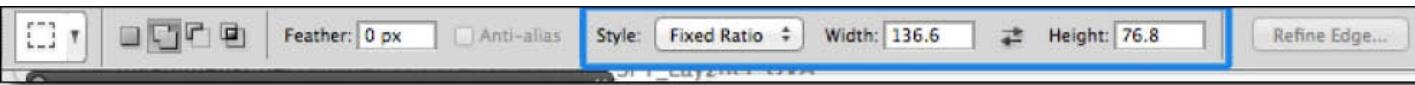
- The Width & Height options makes you specify the aspect ratio to use when you make a selection, the aspect ratio here is 1:1, meaning that it will create a square selection.



- Since we want the cropped picture to abide by the 1366x768 aspect ratio of our screen, setting the width to 1366 and the height to 768 will most likely solve our problem. So let's do enter 1366 into the Width field and 768 in the height field, just like we did with the Crop Tool earlier.



- But it turns out that Photoshop won't allow you to enter 1366 in the width field. As it is the maximum allowed value of 999.99. But that's not a problem; instead of inserting 1366 & 768 into the fields, we will divide both numbers by 10. Which will get us 136.6 & 76.8, which are suitable numbers to be inserted in the Width & Height Fields.



[The Width & Height fields after adjusting the aspect ratio.](#)

- Now we are free to select the part of the Llama picture we want to crop. To do that, click and drag like you make any rectangular selection, the selection size will be restricted to fit the aspect ratio, here is the Llama selection I made:-



.....

**Candy Tip:-** You can move the selection a little bit using the arrow keys on your keyboards, holding shift while you are pressing the keys will make the selection moves faster.

- Now, select Image->Crop from the main menu, and Photoshop will crop the selection for you. The new image I got had the resolution of 1957 X 1000, which fits to the aspect ratio of our monitor. Even though that won't seem obvious right away, here is the picture I got:-



- And here is how it fits to the screen of the laptop, without being stretched at all.

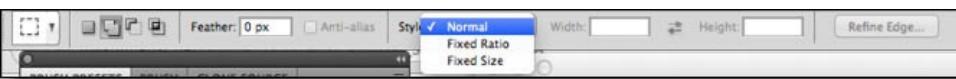


Cropping images in Photoshop is a great way to change the aspect ratio of a picture to fit a computer screen

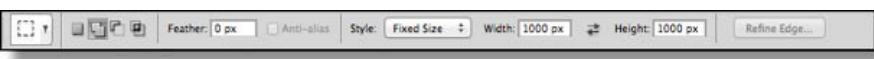
## Making selections of a certain size

Suppose that instead of making selection that abides by a certain aspect ratio, you wanted to select an area with a certain size, say 1000 X 1000 pixel, the Rectangle Marquee Tool allows you to do that:-

- Select the Rectangle Marquee Tool from the Tools Panel
- From the Style menu in the Marquee Tool Options, select “Fixed Size” from the Style menu



- Enter the size of the selection you want to make; I typed “1000 px” in both fields to make a 1000 X 1000 selection.



- Just click on the document where you want the upper-left corner of the selection to be, and Photoshop will make the selection to you

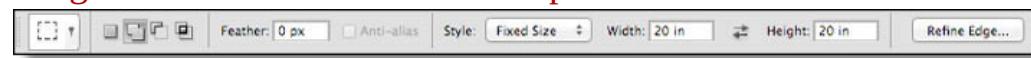


A 1000 X 1000 Selection I made using the Rectangle Marquee Tool

- Now, select Image->Crop from the main menu, and Photoshop will crop the selection for you, here is the final 1000 X 1000 picture of the teapot I got:-



**Candy Tip:-** You can make selections using units other than pixel using the Marquee Selection Tool. To do that, simply type CM or IN or any unit you want after the value in the Width or Height Fields. Here I set Photoshop to make a 20 X 20 inch selection:-



Here are units you could use:-

Unit Name	Photoshop Short Name
-----------	----------------------

Pixels	Px
Inches	In
Centimeters	cm
Millimeters	Mm
Points	Pt
Picas	Pica

## More on the Crop Tool & Cropping

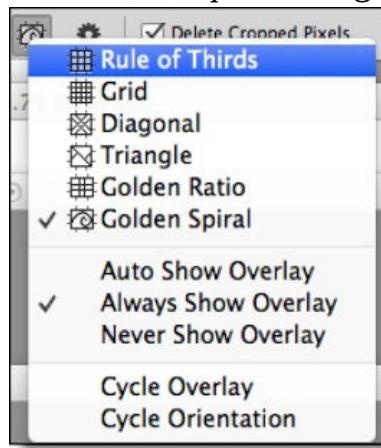
As always, the chapter is officially done. But I still have a few things to talk about, if you don't feel like it right now, feel free to skip to the examples section

## Changing the appearance of the Shield(Photoshop CS6 and later)

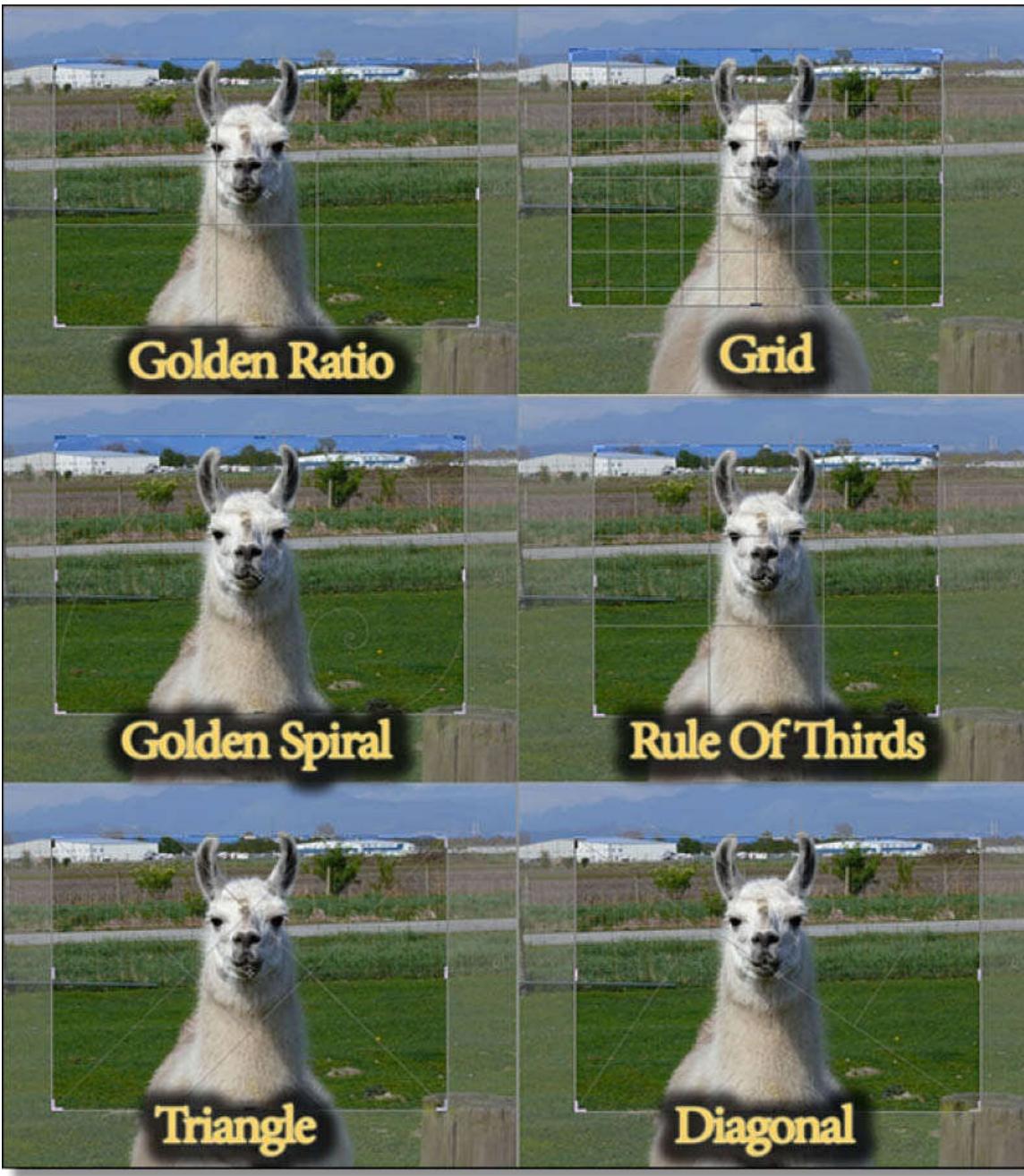
You can choose the way the cropping grid looks like by choosing the grid type from the Overlay options:-



There are quite a few grid types to choose from:-



Here is how each of the options look like:-



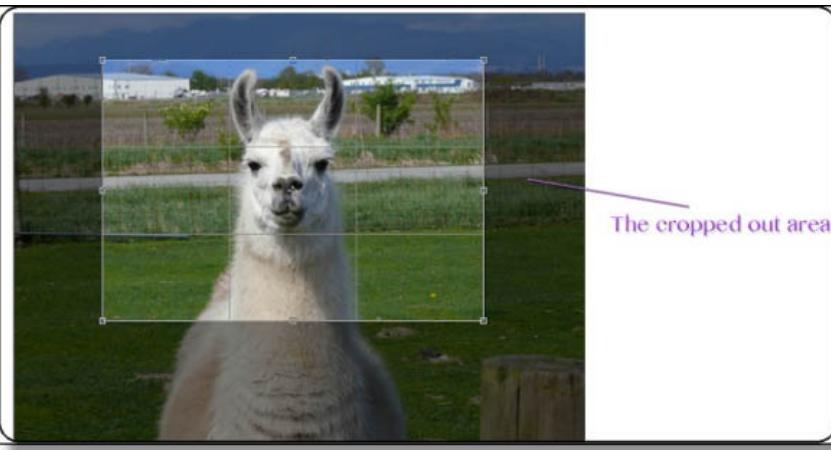
## Changing the appearance of the shield (Photoshop CS5 & earlier)

The Crop Tool allows you to change the color of the shield in more than a way from the options panel:-

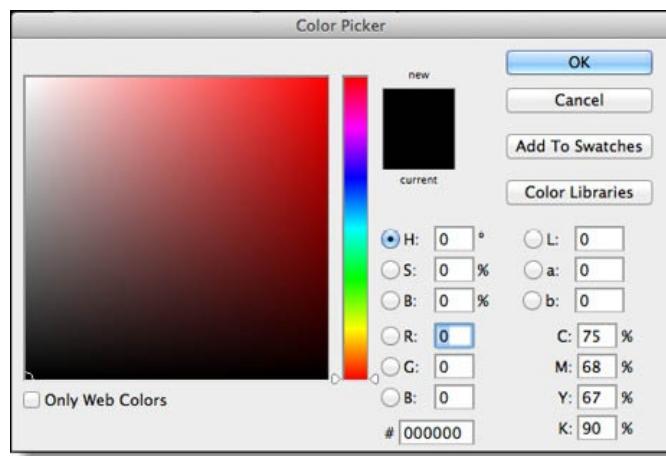


First let's take a look at the Color option, which allows you to change the color of the area that is going to be cropped (the shield), which is black by default





Clicking on this option will open the color picker



Which allows you to choose the color for the cropped out area. Here is how I changed it to green:-



The shield check box determines whatever the shield is visible or not

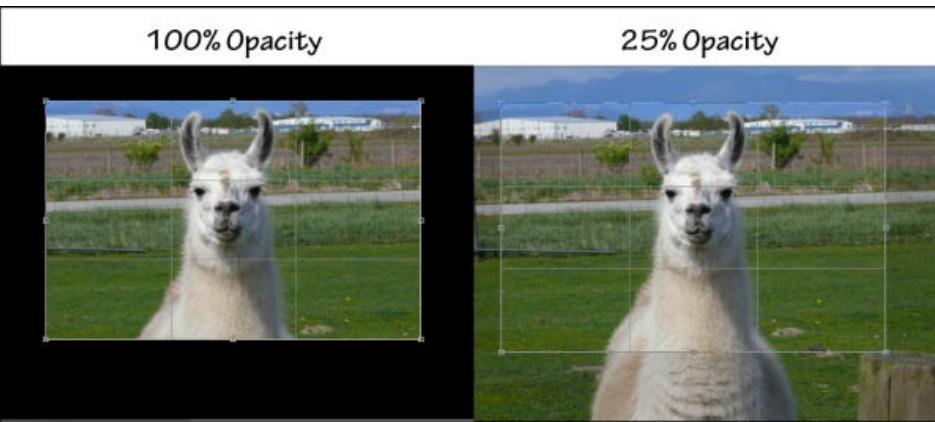


Here is how the crop tool looks like when the option is unchecked. See how the shield is gone:-



And the opacity option determines how much transparent the dimmed out area will be:-

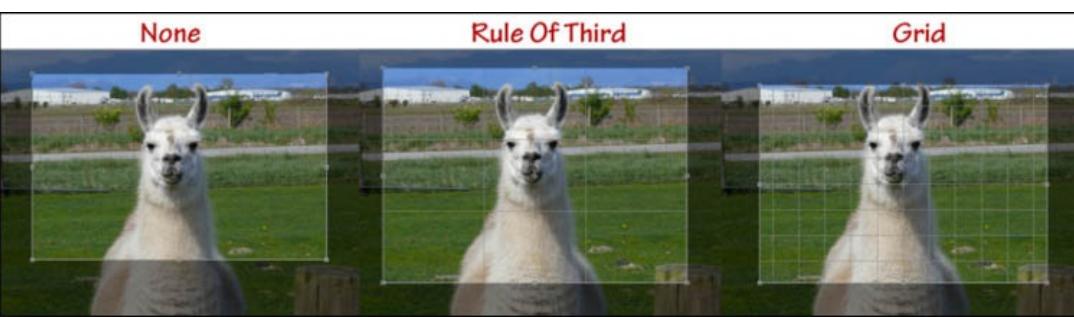
A screenshot of a photo editing software interface showing the crop tool settings. The 'Crop Guide Overlay' dropdown is set to 'Rule of Thirds'. Other options shown include 'Cropped Area' (radio buttons for 'Delete' and 'Hide'), 'Shield' (checkbox checked), 'Color' (black square), 'Opacity' (set to 75%), and 'Perspective' (checkbox unchecked).



And the Crop Guide Overlay menu determines how divided the cropping grid will be

A screenshot of a photo editing software interface showing the crop tool settings. The 'Crop Guide Overlay' dropdown is set to 'Rule of Thirds'. Other options shown include 'Cropped Area' (radio buttons for 'Delete' and 'Hide'), 'Shield' (checkbox checked), 'Color' (black square), 'Opacity' (set to 75%), and 'Perspective' (checkbox unchecked). The 'Rule of Thirds' option is highlighted with a red border.

This option can be “Not divided at all”, “Divided By Third”, Or “Divided By Grid”. Here is how each of the options will look like:-



## Setting The Aspect Ratio Of The Crop Tool from An Existing Image

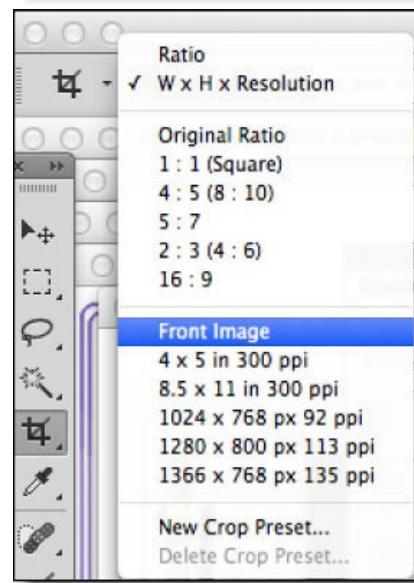
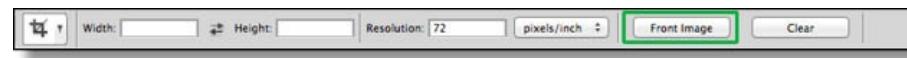
Again, suppose you want to change the background picture of your computer, but instead of going

through all the trouble of calculating the aspect ratio, you could get the aspect ratio from your current background image, and then crop your new background picture right away. Here is how to do that:-

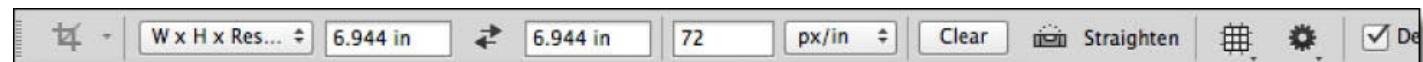
- Open your current background picture, or any picture you want to “capture” its aspect ratio. Let's assume it is this picture:-



- Select The Crop Tool from the Tools Panel
- From the Crop Tools option, simply choose “Front Image“ from the Ratios menu, or if you are using Photoshop CS5 or earlier click on the “Front Image” button



- The crop tool will immediately take the aspect ratio of the image you are working on. Don't worry if you didn't understand what the numbers you got mean, they simply represent the aspect ratio of the image you had at the front the moment you clicked the button.



Now you have the aspect ratio you want, switch to the image you want to crop, and crop your new background image just like we did before:-



## Cropping pictures using a non-rectangular selection

As you have most likely guessed, you could crop pictures using any of the other selection tools. But be aware that you will always end up with a rectangular image at the end, one that best fits around the area you selected.

So, simply cropping the circle in this picture:-



Will produce the following image:-



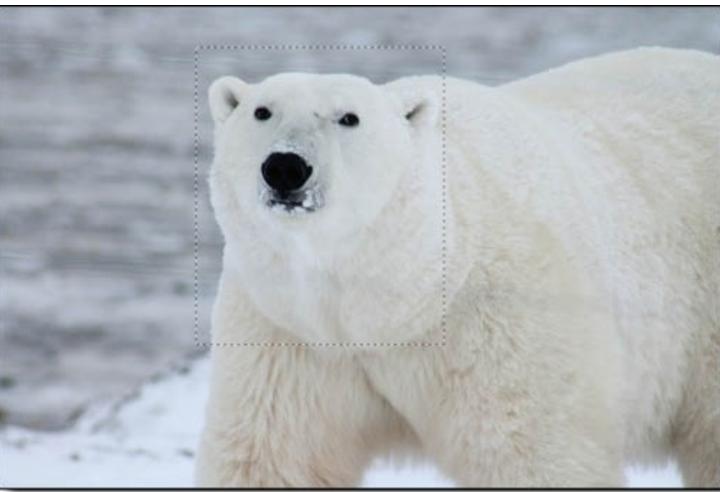
## Examples:-

### Cropping a picture to fit the Aspect Ratio of a forum avatar.

One of the online forums I am registered at has avatar size of 100 X 125, which requires me crop the part I want to create the avatar of to fit that aspect ratio. Let's say we have the following Polar Bear picture. Which I want to create an avatar of the bear face



All I have to do is to set the aspect ratios to 100 X 125, and then select the bear face (I used the Rectangle Marquee Tool here, but you could do the same with the Crop Tool as well)



Then cropping the picture by choosing Image ->Crop got me the following picture:-



Which I now could resize to 125 X 100 easily by choosing Image->Image Resize dialog from the main menu, something that will be covered in the following chapter.

## Summary

- Cropping images allows you to select a certain area of the image, and eliminate the rest of it, or another word, it allows you to cut the part of the picture you want.
- Cropping images can be done using the Crop tool or the Rectangle Marquee Tool
- By default, these tools allow you to freely select the area you want to crop, but sometimes you may want to select an area that abides by a certain Aspect Ratio
- Aspect Ratio is a term that describes the ratio between the width & height in a certain rectangle, Aspect Ratio is important if you want to crop a picture to fit in a specific area, like the background of your desktop
- Photoshop also allows you to crop pictures by specifying the size of the area you want to crop, you can specify the dimensions using more than one unit, like CMs, MMs, Pixels, Inches and more
- Photoshop provides you many ways to change how the Crop tool looks like during cropping, you can change the grid size of the selected tool or the color of the shield

- The cropping tool allows you to crop pictures based on the aspect ratio of another image, while you always have the option to insert the Aspect Ratio manually, getting the Aspect Ratio from another image is so convenient
- Cropping always produce a rectangular image, even if the selection you made is not rectangular

## Resizing Images in Photoshop and Canvas



**Important Note:-** To make it easy for everyone to follow this chapter, this chapter explains Resizing Images in Photoshop for both Photoshop CC & the earlier versions. So there is a dedicated explanation for both Photoshop CC & Photoshop CS6 and older in more than one place.

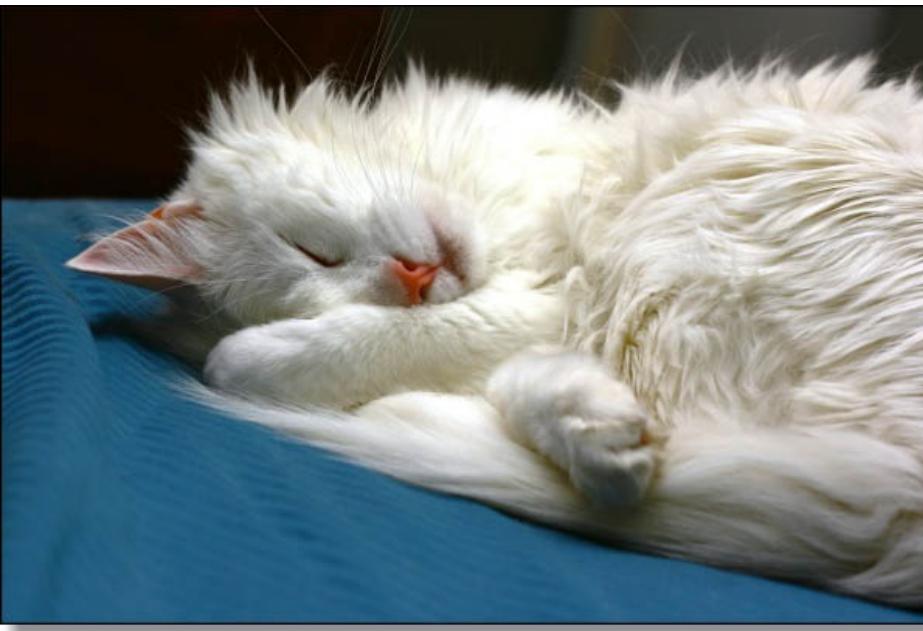
## Why would anyone resize images?

Besides cropping images, resizing them is another common feature found in probably all the graphics applications. Including MS Paint. In case resizing images don't make sense to you. Doing so has many benefits and uses:-

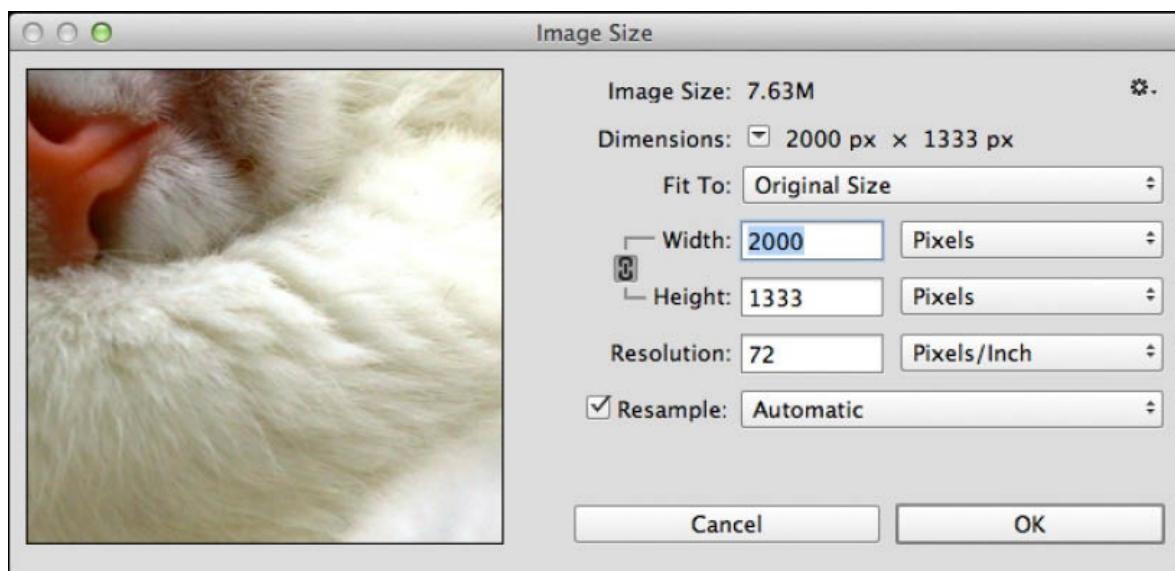
- It allows you to send them faster over the Internet. Specially if the image is too big or your Internet connection is not that fast.
- For web site owners. Resizing the images to the size they will be displayed at on the site makes the site pages load faster.
- If you made a forum or social media avatar. Just like we did in the cropping chapter. You must resize the image before uploading it to the forum server. As forum software pose restrictions on the size & dimensions of the uploaded pictures.

## The basic steps for resizing images in Photoshop

Suppose we have the following sleeping cat picture, whose dimensions are 2000 X 1333 Pixels:-

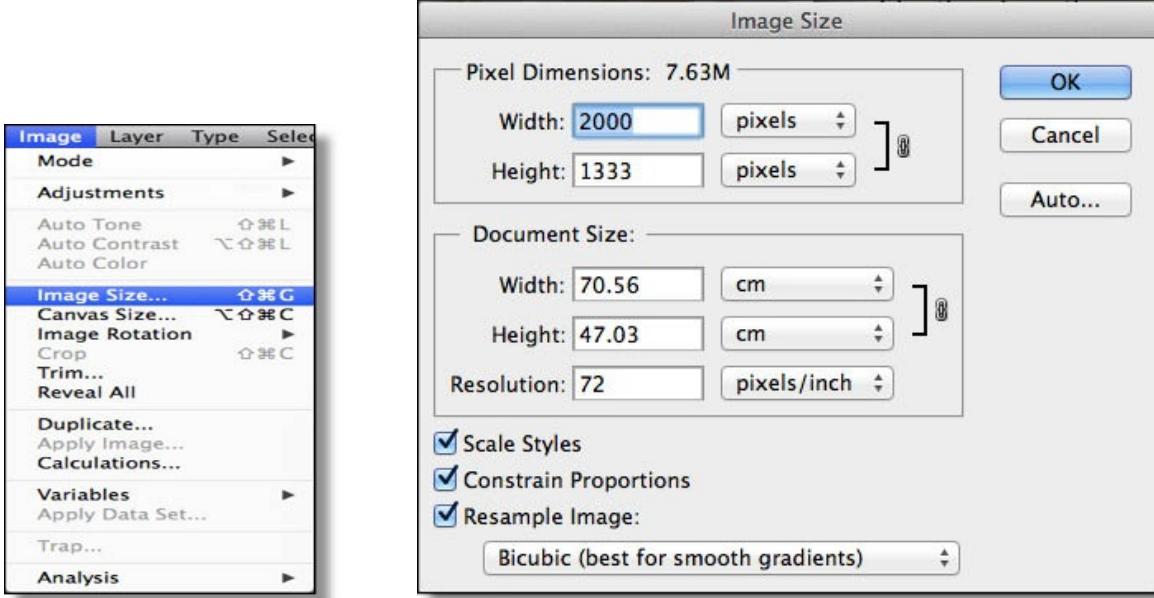


Let's say I want to resize it so that its width is 1000 pixel instead of 2000. To do that, all you have to do is to select Image->Image Size from the main menu. And the Image Resize dialog will appear, the dialog you will see will depend on the version of Photoshop you are using, but the basics on how to use it are the same



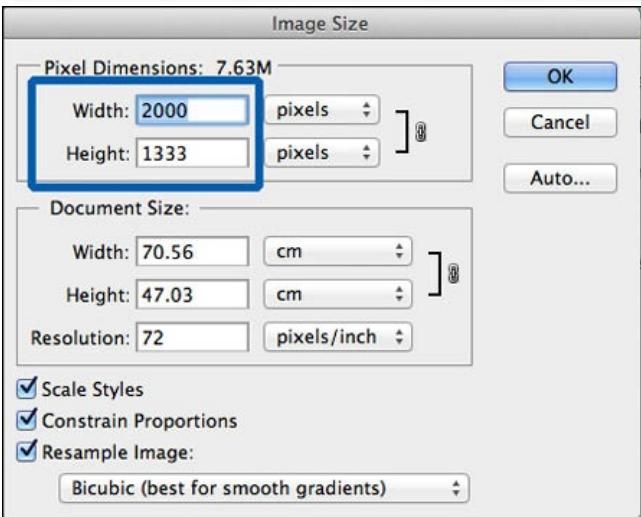
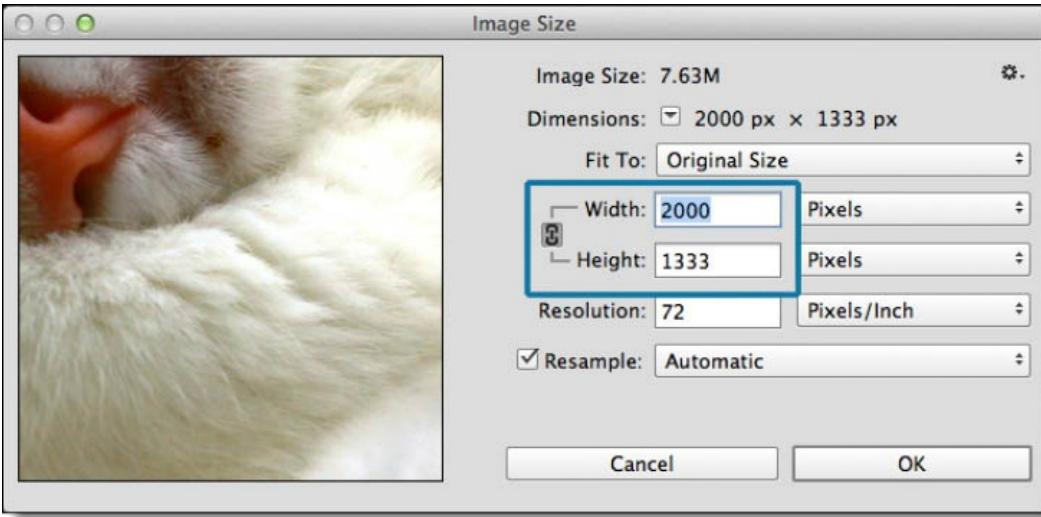
Photoshop CC

The Image Size dialog in

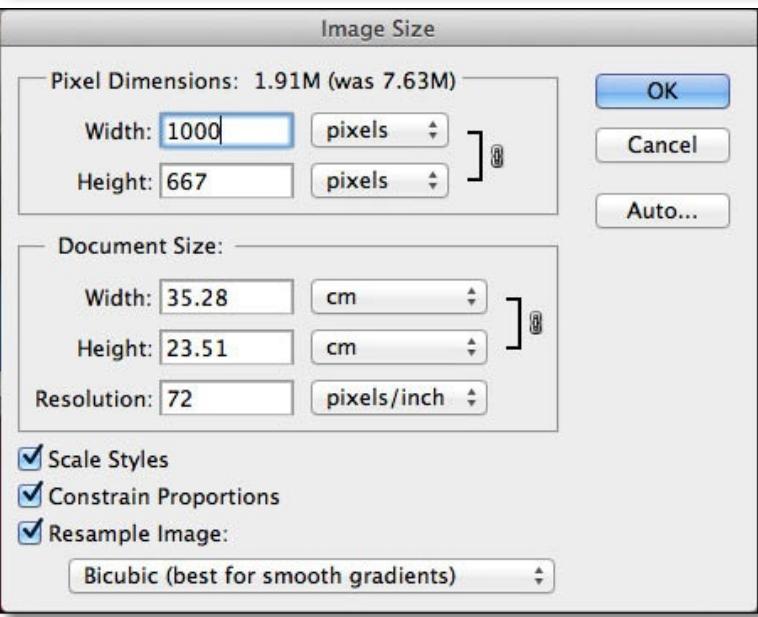
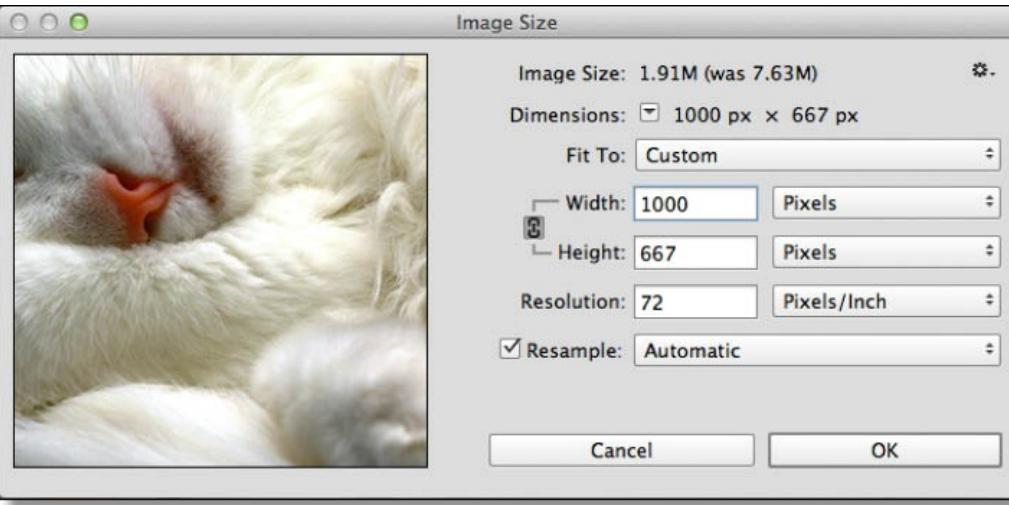


The Image Size dialog in Photoshop  
CS6 and earlier

The 2000 & 1333 in the Width & Height fields represents the dimensions of the image in pixels. We already know that the width of the picture is 2000 pixel and its size is 1333. But this would be very nice to know if we did not~ ;D



Simply typing 1000 in the Width field will be enough to specify the new size we want. Notice how Photoshop changed the height field as you typed the new width. It does that to preserve the Aspect Ratio of the picture.



If you are unfamiliar with the concept of Aspect Ratio, consider reading the cropping chapter, which contains an in-depth explanation about the concept of the Aspect Ratio.

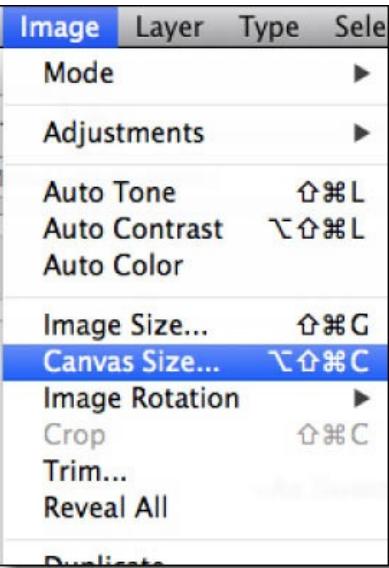
Now you specified the new width of the picture. Click OK and Photoshop will resize the image for you. Here is the new image after it was resized.

## Resizing the image canvas (instead of the picture itself)

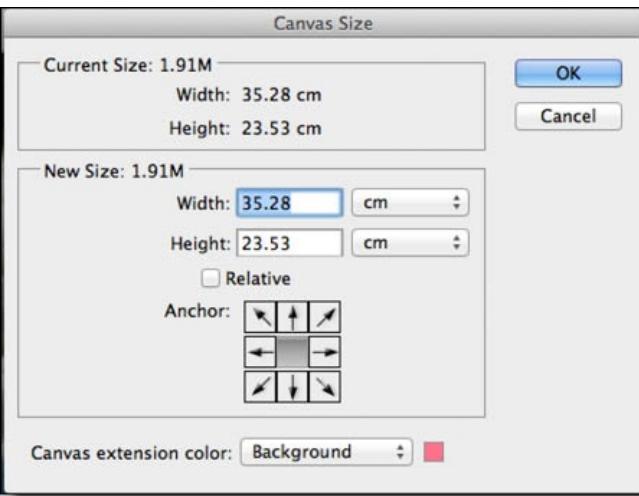
In addition to resizing the picture, Photoshop allows you to change the size of the canvas. The difference between the two is that resizing a picture creates a bigger or smaller version of it. While changing the canvas size merely adds empty pixels for you to paint on. While keeping the size of the original picture intact.

To demonstrate how that works. Suppose I want to create an Internet Meme from the adorable cat picture I just resized. To do that, I need to surround the picture with black pixels, with more black pixels on the bottom to write some text on using the Type Tool (which will be explained later in this book), here is how to do that:-

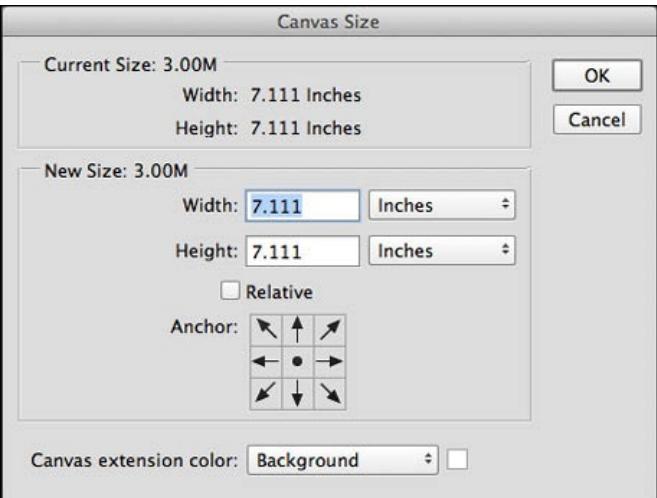
- Select Image -> Canvas Size from the main menu



- The Canvas Size Dialog appears

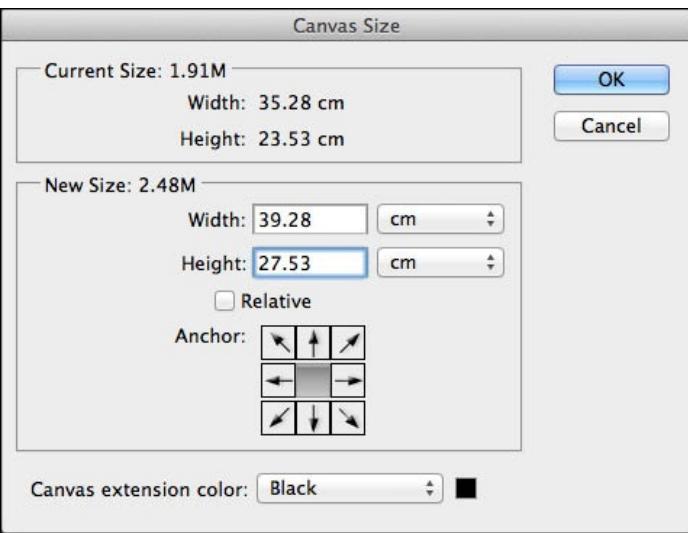


- If you are using Photoshop CC. The dialog will look like this (It can be black as well, depending on your interface settings). Other than the difference in the look. There is no difference in the functionality between the two dialogs.

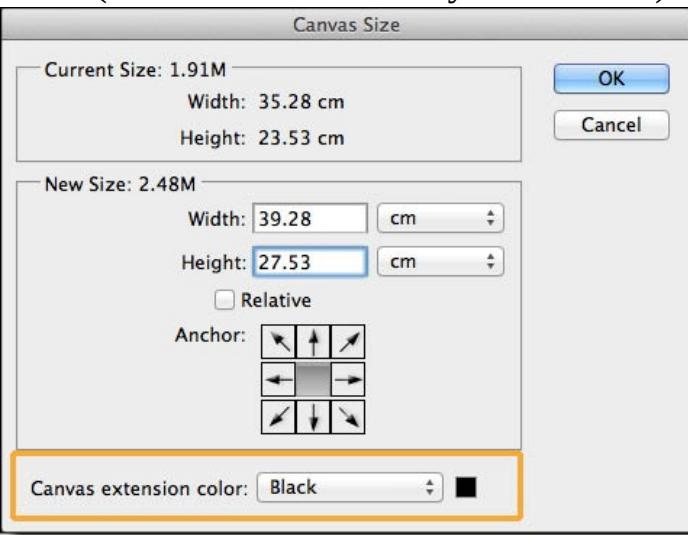


- Enter the new width or height in the corresponding field. You can choose to add pixels horizontally by entering a bigger width value. Or vertically by entering a bigger height. Since

we want both here. I am going to enter bigger values for both. Here the dialog with the values I chose (I go these values by experimenting):-



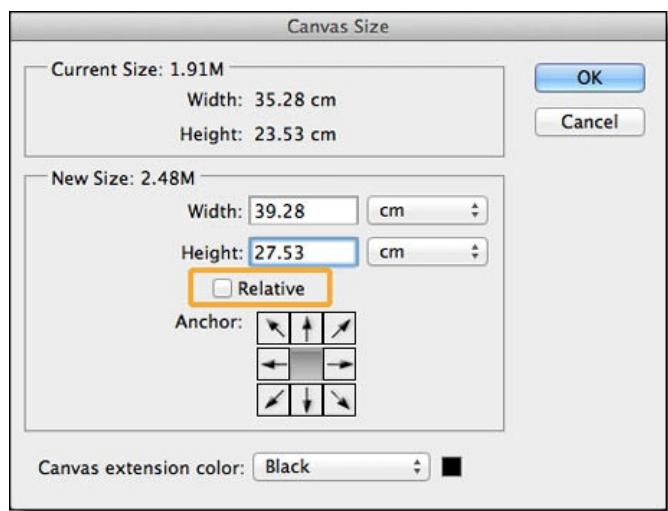
From the canvas extension color option, choose black. This will cause the new added pixels to be black (instead of white or any other color).



Now press OK, and Photoshop will resize the canvas of the picture with newly added black pixels. Here is how the cat picture looked like for me:-



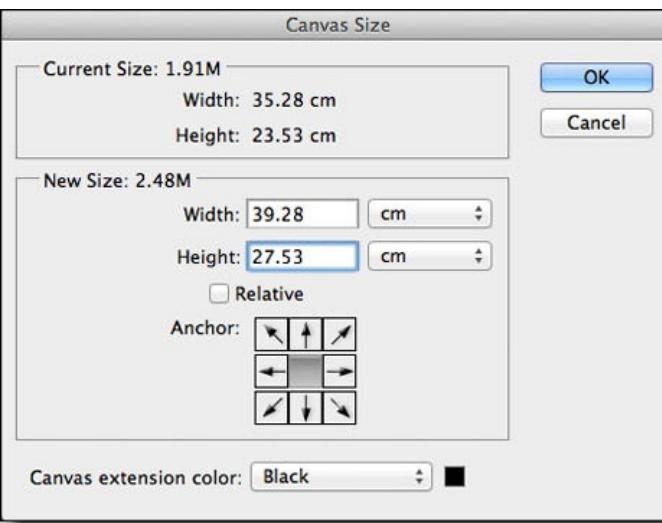
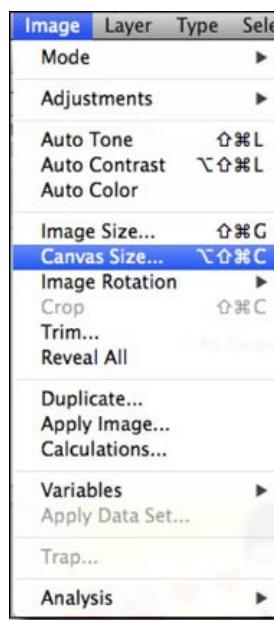
**Note:-** Checking the Relative checkbox from the Canvas Resize dialog allows you to type how many pixels or centimeters you want to add instead of typing the absolute new width or height



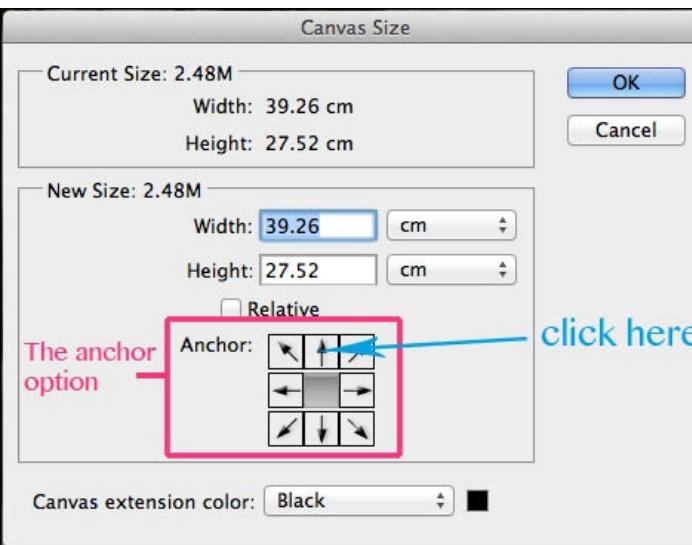
## Resizing the image canvas in a certain direction

Now we have resized the canvas of the sleeping cat picture. You may have noticed that at the bottom of the picture. There is no enough space/pixels at the bottom of the picture to insert the meme text in it. That's fine. We can add additional pixels to the bottom of the page using the Canvas dialog.

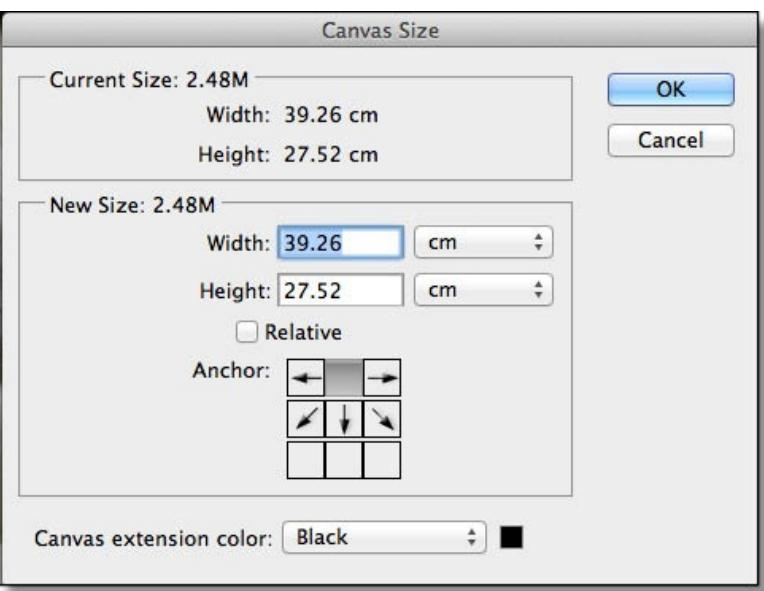
- Choose Image -> Canvas Resize from the main menu. The canvas resize dialog appears



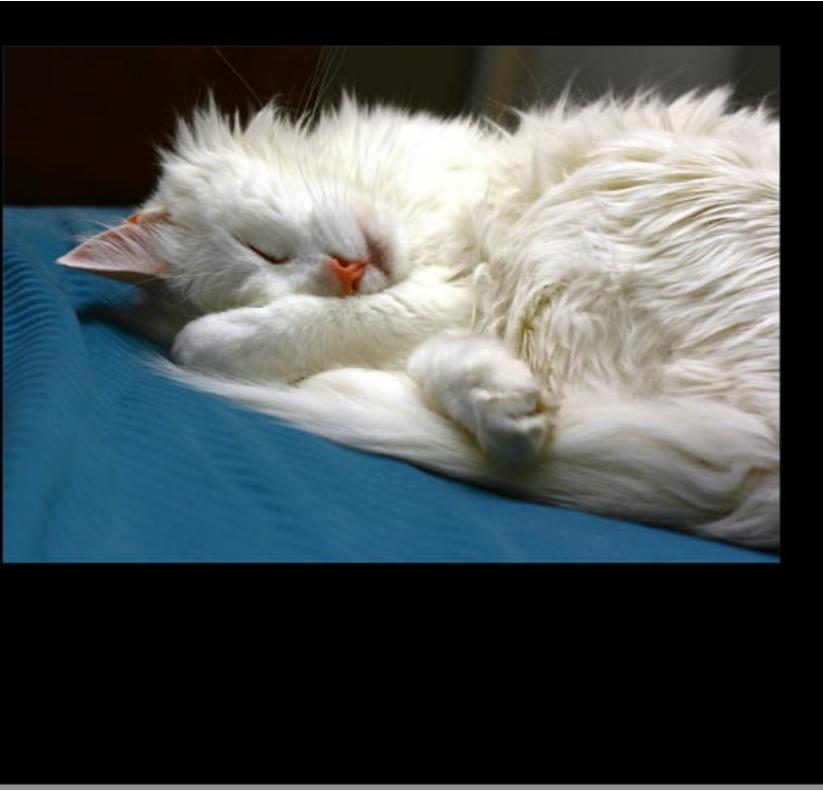
- In the anchor option. Change the direction into which Photoshop will add pixels. So that it won't add pixels to the top of the image (Just click where it is indicated on the picture)



- After changing the direction to add pixels. My dialog looks exactly like this:-



- Type 35.52 in the height field, I had to experiment a little bit to get this value. In the previous step. We specified that Photoshop wouldn't add any pixels to the top of the picture. So it has no option but to add them to the bottom, until the height of the picture become 35.52 CM. Select OK to see the result.
- Here is how the picture looks like for me:-



## Adding the meme text on the picture

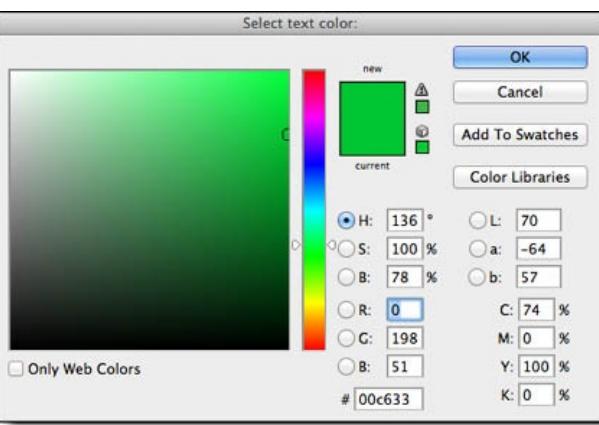
While this chapter is mainly about resizing images in Photoshop. I didn't think it would be nice to start making a meme without adding text to it. So we will take a little detour to add it. Adding text to images is discussed in its own chapter~

- Select the Horizontal Text Tool **T**, from the tools panel.

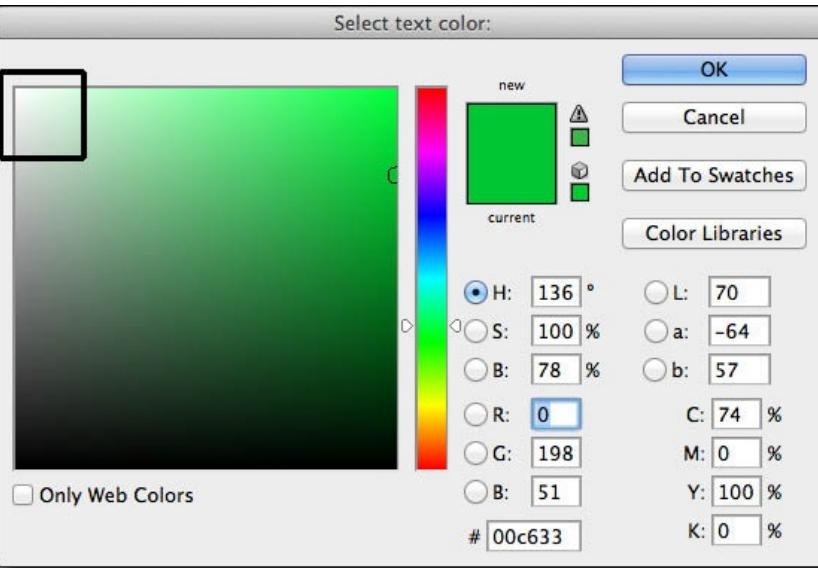
- Let's change the text color to white. From the tool options, click on little colored square~



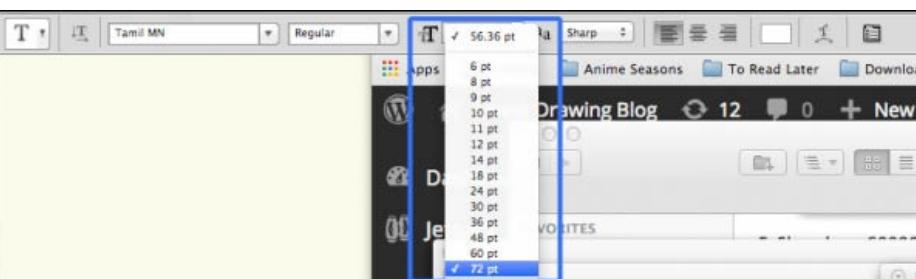
- The color picker appears:-



- Select white from the color picker, which is located at the upper-left corner of the color picker.



- Click OK to close the dialogue.
- From the text size menu, choose the text size 72; I picked this one because it is the most suitable one for my picture. And again, I know this because I kept experiencing with different sizes.



- Click where you want your text to start then start typing the meme text. From what I know.

Internet Memes tend to have a big title and a smaller line of text below it. But for the sake of simplicity, we will ignore that.

- Here is how my meme looks like(I centered the text to make it look better by the way):-



Cats  
The Real Sleeping Beauties

## More about resizing images in Photoshop

Like every time, this chapter is officially done. And in the rest of the chapter will focus on giving tips and explaining more of the dialogs option, we encountered so far.

Because there are nothing about to demonstrate about resizing images, there won't be an examples section in this chapter~

## A more detailed look on the Image Resize Dialog

### The Image Resize Dialog (Photoshop CS6 & earlier)

The Resize Image dialog may look a little bit intimidating at first, but the options in it are fairly simple and straightforward, as it is explained in the following picture:-

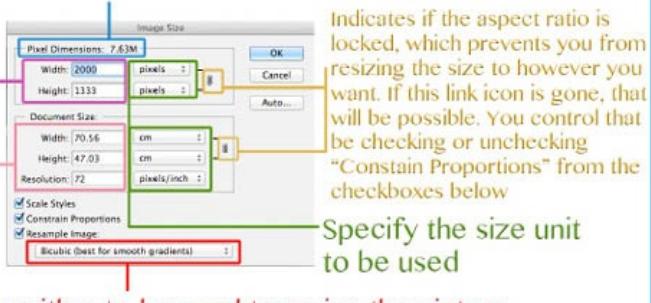
## Image Resize Dialog In Photoshop

The approximated size of the resulting picture  
(Not necessarily the size of the image on disk)

Enter the new Width or Height of the picture here, in pixel or as a percent of the current width/height

Or enter the new Width or Height in real-life units like Centimetre or Millemetre

Choose the resize algorithm to be used to resize the picture



Don't worry if you didn't understand everything in the picture. I will explain again all these options in more details right away~

## The pixel dimensions section

- The width & height fields:-** These two fields allow you to enter the new size of the picture, entering a bigger size will make Photoshop enlarge the picture. And entering a smaller values will make it scale it down. By default. Changing one of the two fields automatically change the other, this is so the picture will retain its Aspect Value(Which is explained in detail in my cropping tutorial)
- The unit drop-down menus(besides the Width & Height fields):-** This option allows you to choose whatever you enter the new image size by pixel or by percent of the current size. The percent unit makes it easier to resize an image to be double or half its size.

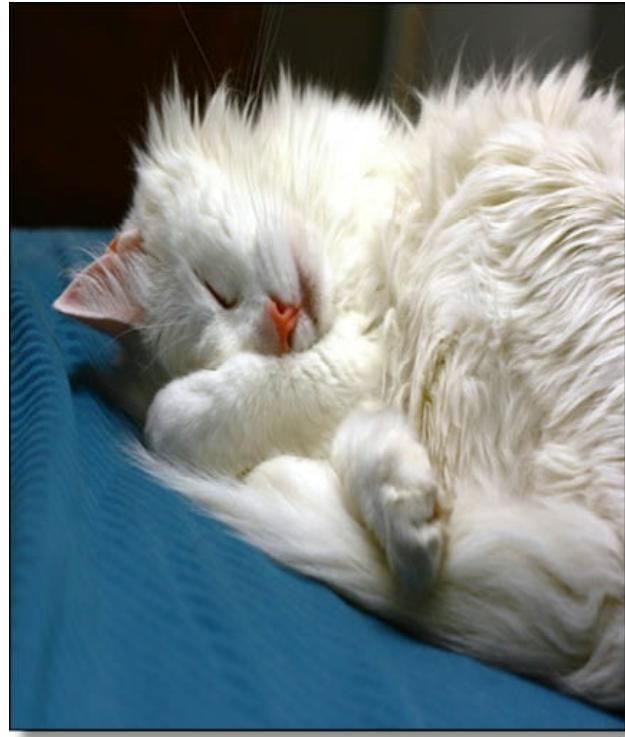
## The Document Size Section

This section is very similar to the pixels dimensions one, except that it allows you to specify the picture size in real-life units instead of pixels or percent, which is very useful if you want to print the picture.

- As with the pixel dimension, you can enter the new Width or Height of the picture in their correspondent field. And as you do that, the pixels dimensions field of the picture will change accordingly.
- You can choose the unit of the width & height from the drop down menus beside the Width & Height Fields. The following units are available for you to choose from:-
  - Percent
  - Inches
  - CM
  - MM
  - Points
  - Pica

- Column

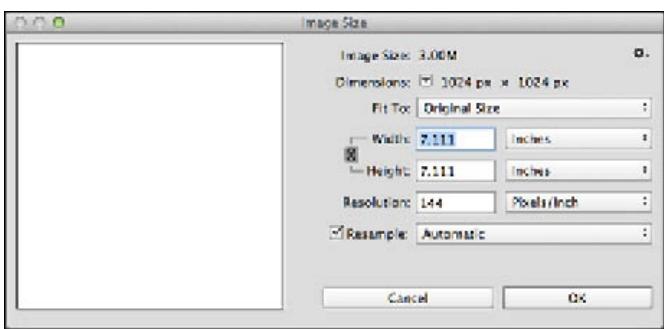
- **The constrains Proportions checkbox** ensures that the picture will retain its aspect value, meaning that as you enter a new Width or Height value in the dialog. Photoshop will automatically change the other value so the Aspect Ratio stays the same. Unchecking this option allows you to create squashed images, like this:-



- **The resample Image checkbox** Changes the number of pixels in the picture. By unchecking this option. The Width & Height fields on the top of the dialog won't be editable. But you can change the real-life dimensions of the document. But that won't change the number of the pixels in the image. To be honest, I always used the Image Dialog with this option checked, so I can't say more about it.
- **The drop-down menu below the "Resample Image" checkbox** allows you to choose the way (or algorithm, in technical terms) Photoshop use to resize your image. Talking about them in detail is out of the scope of this book. But you can refer to [this article](#) if you want to know about their mathematical details.

## The Image Size Dialog (Photoshop CC and later).

The Image Resize dialog has been overhauled in Photoshop CC. Compared to how it used to be in Photoshop CS6 and the older version. Some Photoshop users didn't like how the Image Resize, which dates back to very old versions of the program (I know it has been there in Photoshop 5) got changed the way it got. While there are some obvious enhancements in the new dialog, I personally feel a bit skeptical about the new dialog. But only time will tell if this is good for us or now~



The Image Resize Dialog in Photoshop CC

## The Image Resize Dialog in Photoshop CC

Clicking on the link will toggle whatever Photoshop will preserve the aspect ratio or not



Here you can enter the new width or height of the picture

You can see how the image will look like in after it is resized even before you make the resize, this is useful in case you want to experiment with resampling options.

The new dialog allows you to choose among one of the many pre-specified image sizes that are common, like the A4 paper size of the 1366 X 768 pixel screen resolution

You can select the unit of the image size here, one of the good things about the new dialog is that the computer units like Percent & pixels and real-life units like Centimeters are all present in one place, as compared to the old dialog

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## Some guidelines

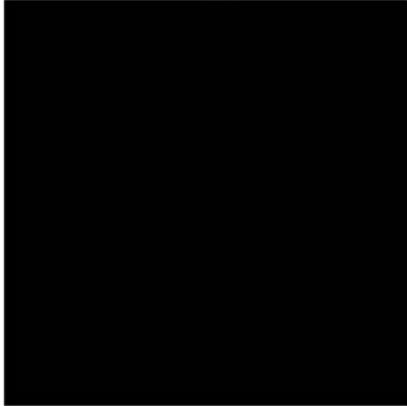
### about choosing the resizing way (Or algorithm):-

- **The Nearest Neighbor option** preserves the hard edges in the resized image. Notice how the small square below retained its hard edge after it was resized by 4 times using this option. Compared to resizing it using Bicubic. Which is the default way of resizing, which produced a square with blurred edges:-

Original Square:-



Nearest Neighbor:-



Bicubic:-



- **Bicubic Smoother** is better for increasing the size of images.
- **Bicubic Sharper** is better for reducing the size of images

## More about resizing the canvas

### Resizing Canvas:- Deciding the direction into which Photoshop will

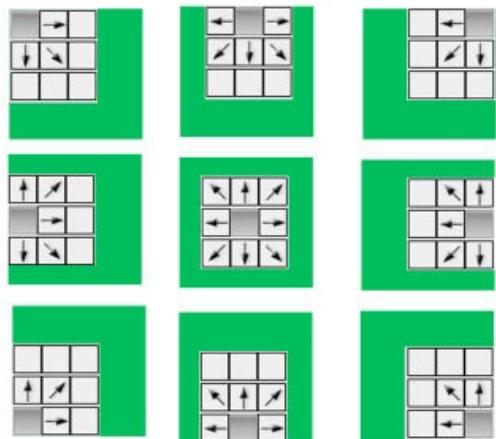
The Anchor option in the Resize Canvas dialog, which consists of nine squares with an arrow on most of them, allows you to choose the direction into which Photoshop will add the new pixels. By default, Photoshop will add pixels in all directions. Meaning that if you increased the width by 2 pixels, and the height by 2 pixels as well. Then Photoshop will add 1 pixel in all the directions around the canvas. (The same works for the other units, like centimeter. But I am using pixels here for simplicity).

The other squares allow you to exclude one or two directions from gaining any new pixels. For example, if you restricted the pixels from being added to the top of the canvas, and then you added 2 pixels to the height of the pixels. Photoshop will add 2 pixels to the bottom of the canvas.

Here is how the anchor option visually works:-

### How the “Anchor” Option Works?

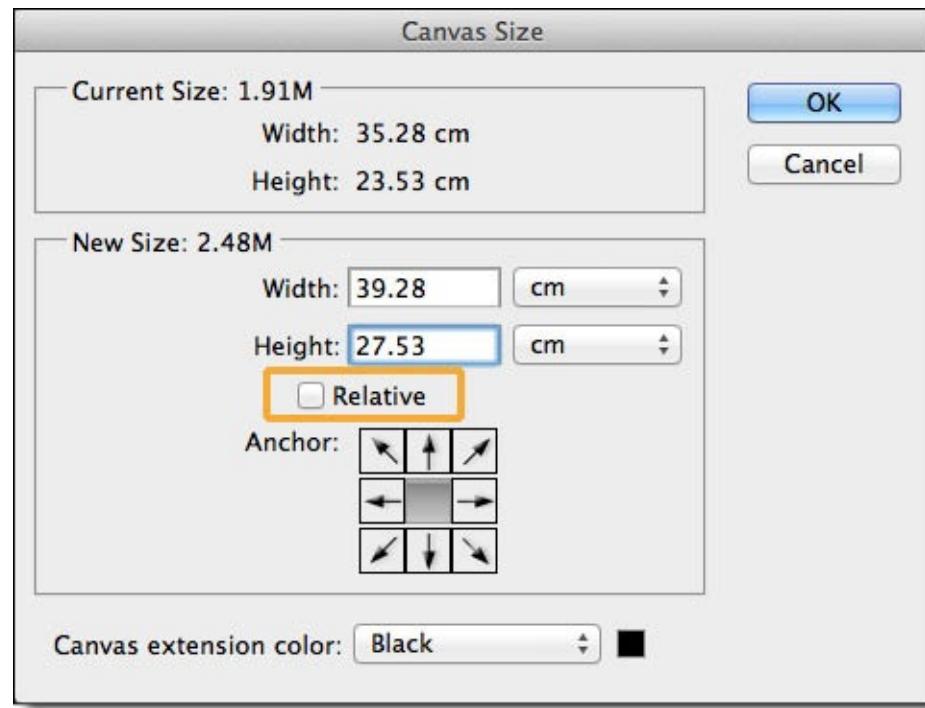
The diagrams below demonstrate how Photoshop will add new pixels to the canvas based on the “Anchor” Option. The green pixels represent the new added pixels



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### The relative option in

## the canvas size dialog



The relative option of the canvas dialog allows you to enter how many pixels to add to the canvas, instead of specifying the absolute width or height values.

Suppose you have a canvas that is 1000 X 1000 pixels, and you entered 100 pixels in both the width and height field while the Relative option is checked. You will end up with a canvas that is 1100 X 1100 pixels. You will get the same results by typing 1100 pixels into the width & height fields while the Relative option is unchecked.

# Word about resizing images in Photoshop

Trying to enlarge a picture will create a larger picture indeed, but the quality of the picture will deteriorate. As Photoshop image resizing only resize images by inserting new pixels guessed based on the existing ones in the picture

On the other hand, resizing an image to create a smaller one is easily possible. To do that, Photoshop eliminates some of the pixels from the pictures~

Take a look at the following cat picture. See how all clear the details in the pictures are, and how it contains no blur or anything of that sort.



Now look at how it became after it was

greatly resized, a lot of details can't be seen in the picture now it is smaller. But it still looks good, since reducing the size of images doesn't have that much bad effect on them.



Let's resize the small image back to the original size. While Photoshop did a relatively good job at producing the new image from the very little data it has. It still doesn't look as good as the original image.



Here is a comparison between the original picture and the resized one:-

#### Comparison Between High-resolution Images with Resized Ones

Original Picture

The Image After It Was Resized Twice



The example I gave here is a bit of an extreme case. But that's to give you a good idea on how image resizing works.

## Summary

- Resizing images is useful for uploading images online and to save storage space.
- Resizing images in Photoshop is done using the Image Resize Dialog.
- By default, Photoshop retains the Aspect Ratio of the images it resizes, but you can resize

images however you want.

- Resizing the canvas is a good way to add more drawing space to the picture. Which you could use to draw new things or to add pictures from other Photoshop files.
- It is not hard to add Text to pictures. Though there are much more details to that than I explained here.
- The Image resize in all the versions of Photoshop gives you a great variety of options for resizing images. Including selecting the unit of the resizing and the way (Or the algorithm, if you want to be technical) the resizing is done.
- You can adjust various things in the Resize Canvas dialog. Including the direction into which Photoshop will add the new pixels.

## All About Photoshop type tools



### Photoshop Type Tools

There are 4 Type Tools in Photoshop, each of them adds text to pictures in a different way:-

- **The Horizontal Type Tool** Adds a horizontal text to the picture. This is the most commonly used type tool
- **The Vertical Type Tool** Adds a vertical text instead of a horizontal one. Similar to what you see in traditional Japanese text
- **Horizontal Type Mask Tool** Makes you create a selection from a horizontal text you type.
- **Vertical Type Mask Tool** Makes you create a selection from a vertical text you type.

### Adding text Photoshop using the Horizontal Type Tool

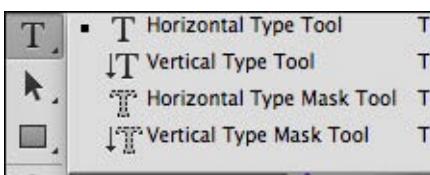
If you read the resizing pictures chapter in Photoshop. You pretty much won't have to read this section, as I will explain again how to add horizontal text to pictures in Photoshop.

Right now, we are going to add some text to the following elephant picture. To do that, follow these steps:-



- Select the Horizontal Text Tool from the tools panel
- Click on the picture where you want the text to start. A blinking line similar to what you see in Microsoft word will appear.
- Type the text you want, press Enter to start a new line of the text, if you want
- Once you are done entering the text. Click the icon on the text tool options. If you changed your mind and no longer want to enter the text. Then press the icon instead. (You could always press the Escape/Esc key at the corner of your keyboard to cancel the operation as well)





The rest of Photoshop type tools can be accessed by clicking & holding the mouse button over the **Horizontal Text Tool** in the tools panel

- Again, click where you want the text to start. Because the text we are creating is vertical, we click where we want the top of the text to be. I chose to click on the upper-left corner of the following picture:-



- I clicked on the picture. I got the same blinking line that prompts me to enter the text. Then I entered the text. Then I clicked the ✓ icon on the Type Tool options.
- Here is the picture after I added “Here we go” to it:-



Note:- Don't worry if you didn't get the exact results as me. I kept changing the text color and font between the examples in order to make them clearer for you to see.

# Creating text selections using the Horizontal Type Mask Tool and vertical Type Mask Tool:

The Horizontal Type Mask Tool , and its vertical equivalent, the Vertical Type Mask Tool  are used to create text selections, which you could work on just like any selection.

I am going to add a text selection using the Horizontal Type Mask Tool to this picture; you could follow the same steps using the Vertical Type Mask Tool as well.

To create the selection, follow these steps:-



- Select the Horizontal Type Mask Tool  or Vertical Type Mask Tool  from the tools panel.
- Click where you want the selection to start. The picture will turn red, meaning that we are in mask mode right now.



- Enter the text you want. Just like we did in the other text tool.

**Nothing Beats This**



- Once you are done entering the text. Click the ✓ icon on the text tool options. If you changed your mind and no longer want to enter the text. Then press the ⊖ icon instead. Since I am satisfied with the text. I clicked on the ✓ icon.
- The text you entered will turn into selection. Which you can use just like any selection in Photoshop



- I painted the text I made with a soft brush right here:-

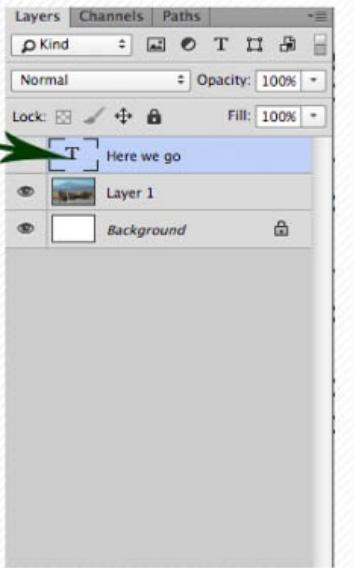
**Candy Tip:-** You can turn any text into selection the same way you do with any layer. Which is by hovering the mouse button over the layer thumbnail in the layers panel, holding the Control button (Command in Mac). And the cursor will have a selection mark on it. Then click on the thumbnail.

# Turning Text Into Selection In Photoshop

Hover the mouse button here

Then hold the Control or Command button. You will see  Besides the cursor

Then Click

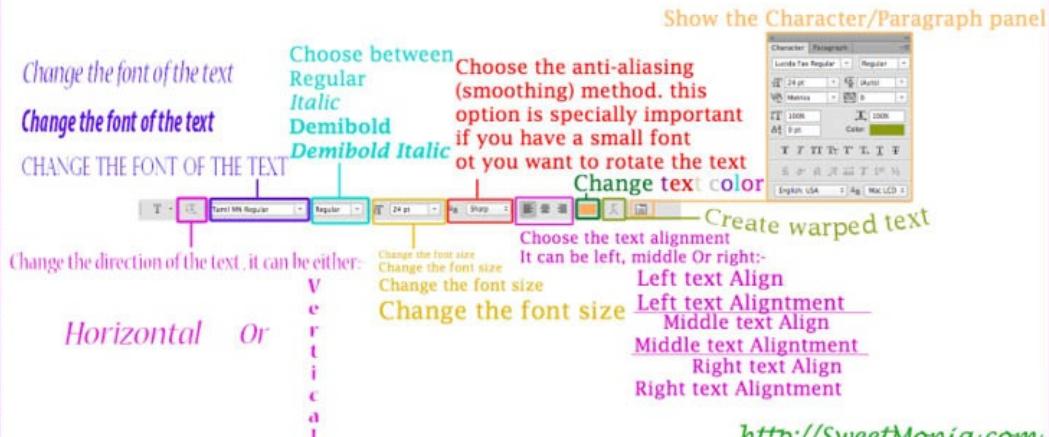


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## Photoshop Type Tools options

Photoshop Type Tools has several options. For the most part, these options are so similar to the ones in Microsoft Word. Like changing the color or font. Plus some new ones like the anti-aliasing (smoothing) method. The following picture explains the text tool options in details. A detailed explanation to them is also available below:-

### Text Tool Options In Photoshop



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## Changing text font

The font menu allows you to change the font of the text. There are a lot of fonts that comes with Photoshop. And if those are not enough, you can get your own fonts online and add them as well. Something I will explain to you later in this chapter

***There are many fonts that comes with Photoshop***

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Sweet Drawing Blog  
*Sweet Drawing Blog*  
**Sweet Drawing Blog**  
*Sweet Drawing Blog*  
**Sweet Drawing Blog**

## Changing text style

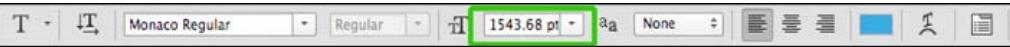


The font style menu allows you to change whether the text is regular (normal), **bold** or *italic*. Depending on the font you selected, some additional styles will appear to you. And some fonts have no styles at all

*The most commonly used font styles in Photoshop*

Regular  
**Bold**  
*Italic*

## Changing Font Size



Font size is self-explanatory. It allows you to change the text size to whatever you want. The biggest font size you can choose from the drop-down menu is 72. But you can enter any value you want in there. As you can see in the picture above~

# Font Sizes In Photoshop

20  
50  
72  
**120**  
**160**

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**Candy Tip:-** You can change the font size quickly by holding

your mouse over the text size icon and drag the mouse left or right

## Text Anti-Aliasing Settings

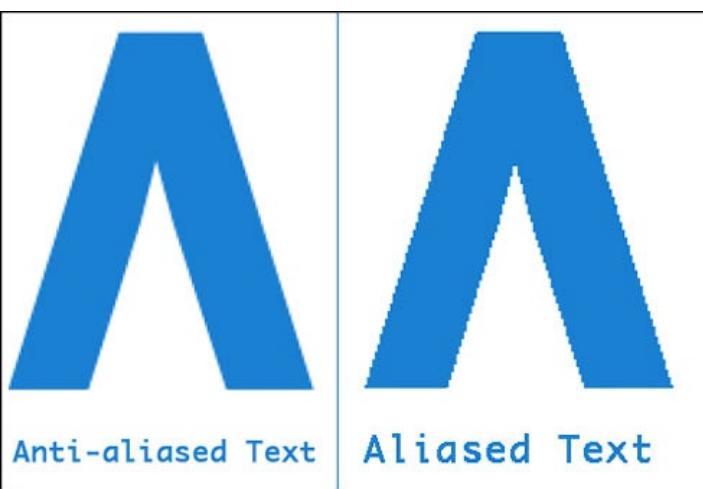


Next comes the anti-aliasing setting. If you are familiar with this term “Anti-Aliasing”, you won’t have any problem understanding this options. But if you are not, don’t worry, as I will explain the term right away:-

## What is anti-aliasing?

Anti-aliasing refers to the process of smoothing the lines formed by pixels. By adding some semi-transparent pixels here and there.

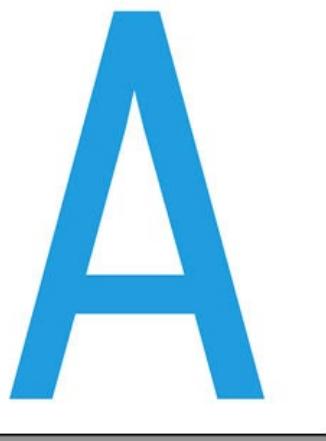
Computers draw lines by lining up pixels side by side to create them. When the resolution is low, or when the text is small to a certain degree. The pixels tend to look like a staircase. And the line will appear choppy. Just like this:-



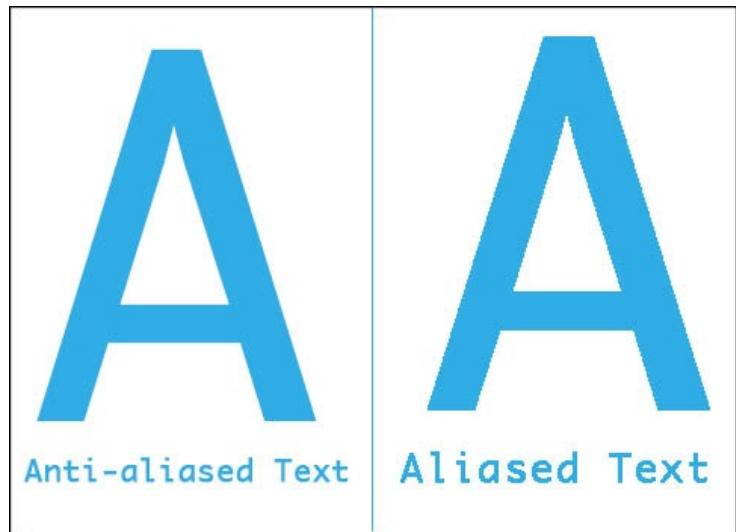
Like I said, anti-aliasing smooths the pixels by adding a few semi-transparent ones here and there. With anti-aliasing is enabled, the pixels of the character above will look like this:-



Anti-aliasing is usually used with small fonts or low-resolution pictures. If the picture you are working on has a high-resolution. Then anti-aliasing won't be of much use to you. Here is a high-resolution picture with anti-aliasing disabled. Do you see the aliasing (The staircase effect)? It is there, but it is too small to be visible



And to repeat what I said again, if the text is so big, or the resolution of your screen is too high. Anti-aliasing won't matter that much for you. Anti-aliasing is used when you have a small font size or low screen resolution. Here is an aliased & anti-aliased characters arranged side-by-side:-



Now you know what anti-aliasing is. You can pretty much understand what the Anti-Aliasing method of the text tool does. Setting the option to none use no anti-aliasing at all. Setting it to the other ones produces different effects.

## Text Align



Text Align aligns the text to either the left, which is the default, to the middle, or to the right. The same way it is done in Microsoft Word.

## Text Align Option In Photoshop

This is how text looks like when it is left-aligned.  
This is the default option

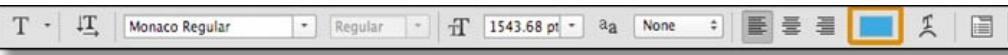
This is how text looks like when it is centered

This is a nice way to add titles

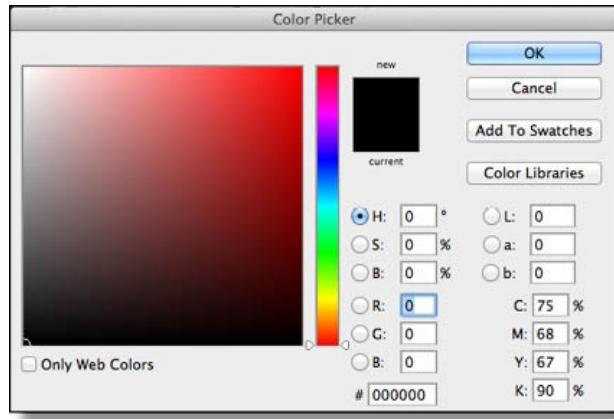
This is how text looks like when it is right-aligned

It looks weird in English  
But not in the other languages

## Text Color



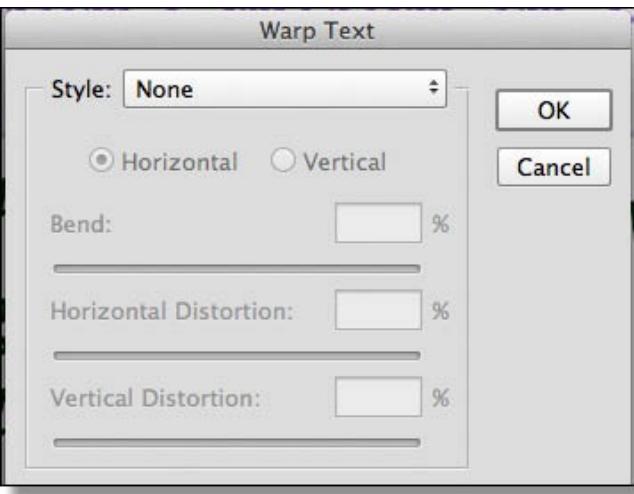
Another self-explanatory option, it allows you to change the text color. After clicking on the color icon. The color picker will appear, where you can choose the font color you want.



## Creating a Warped Text



The Warped Text option for the text tool allows you to create twisted or warped text. Once you click on this option. The Warp Text dialog appears. Offering you various options to do so:-



## Let's take a look at each of these options one by one:-

**Style:-** The style options shows you the various ways to wrap the text. It can be turned into a wave, an arc, a fish or many of other options

**Arc:-**

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**Wave:-**

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**Fish:-**

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The horizontal or vertical set whatever the effect, is done on the text vertically or horizontally. This makes sense depending on the text orientation. Here is how it looks like on horizontal text:-

**Vertical Wave:-**

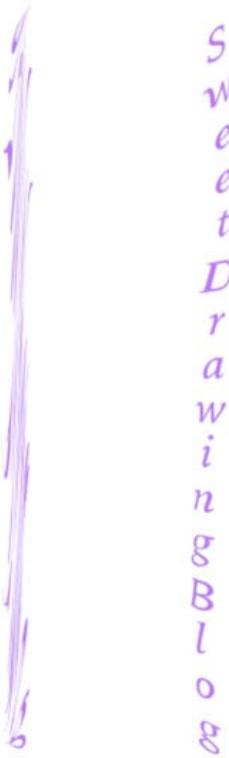
Sweet Drawing Blog

**Horizontal Wave:-**

Sweet Drawing Blog

And here is how it looks like on Vertical text:-

Horizontal Wave    Vertical Wave



The bend option determines how much the text is affected. For example, if you chose the arc style for the text. Then the bend option determines how much the text is arced. Negative values produce a mirrored shape of their positive equivalent:-



## Vertical Or Horizontal Distortion

These two options squash the text in one direction. And expand it on the other. For example, Horizontal Distortion Squash the text from the left or right and expand it on the other side. Depending on the value of distortion, like this:-

Horizontal Distortion +76

*sweet Drawing Blog*

Horizontal Distortion -76

*Sweet Drawing Blog*

Here is how it looks like for Vertical Distortion:-

Vertical Distortion +58

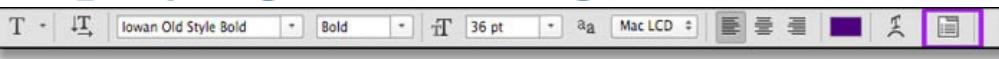
Vertical Distortion -58

S  
w  
e  
e  
t  
D  
r  
a  
w  
i  
n  
g  
B  
I  
o  
g

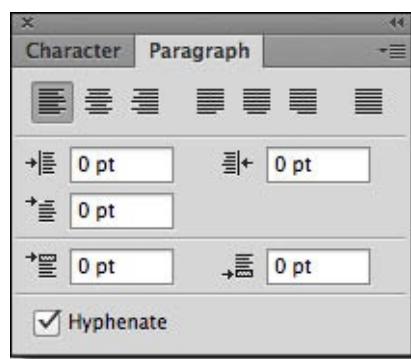
S  
w  
e  
z  
e  
t  
D  
r  
a  
w  
i  
n  
g  
B  
I  
o  
g

**Candy Tip:-** The best way to understand how warped text options work is to play with them for some time~

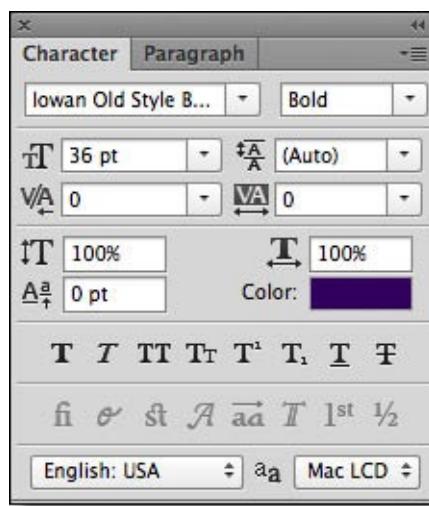
## Displaying and hiding the character & paragraph panels



This last option displays or hides the Character & Paragraph panels. Which are two separate panels that are grouped together in default. Here is how the panels look like (as I said, they are grouped in one panel by default):-



The Character/Paragraph panel, With the Paragraph panel options shown in this picture



The Character panel

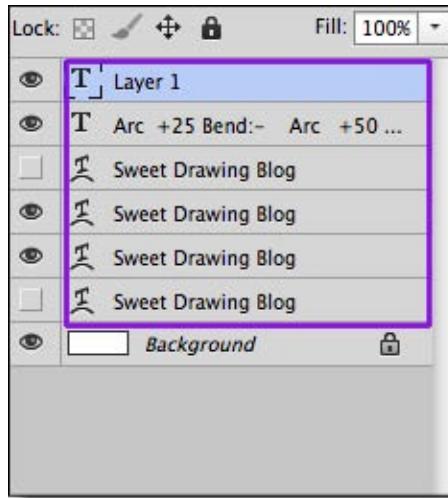
These two panels will be explained in detail later in this chapter. Many of the options in these two panels are the same as the ones we explained above.

**Candy Tip:-** You can also display the Character Panel by selecting Window->Character. And the Paragraph Panel by selecting Window->Paragraph from the main menu.

## More about Photoshop Type Tools

Like every time. The chapter is officially done. And we are going through additional features that have to do with Photoshop Type tools. If you don't feel like reading this right now, feel free to jump to the examples section at the end of this chapter

## Text layers



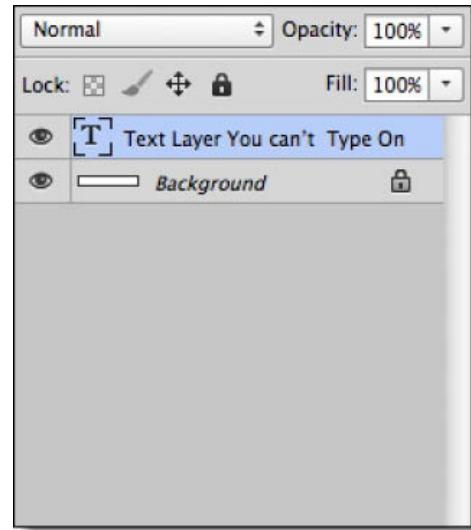
This document contains many text layer. The name of the text layer is usually the same as the content of the text. The icon of the layer depends on whether the text in the layer is warped or not.

You may have noticed that each text you type gets to have its own layer. And these layers look different from the other layers, these are text layers, which are different type of layers than the ones you worked on so far. Text layers can't be used for painting unless you convert them into normal layers.

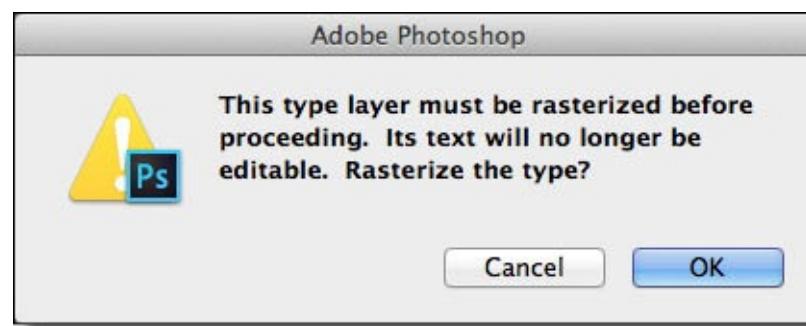
# Converting text into a raster layer

As we just stated. You can't draw on text layer until you convert it to normal layer (Also called raster layer). To do that, you simply need to start painting on it using the brush tool and Photoshop will offer to convert it to you. Here is how:-

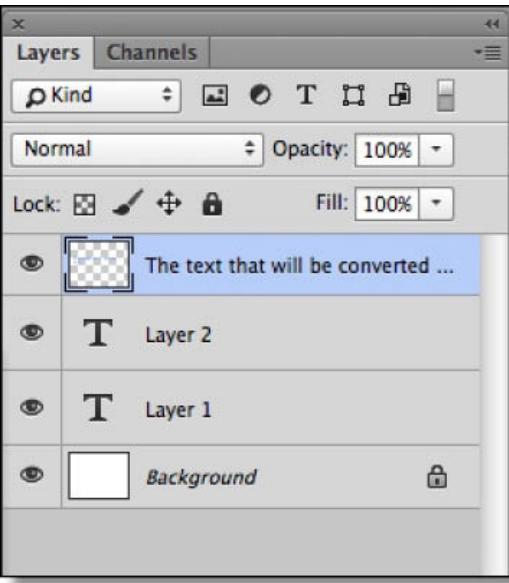
- Select the text layer you want to paint on in the layers panel



- Select the brush tool and click anywhere on the canvas. Photoshop will tell you that the layer needs to be rasterized before you can paint on, click on the OK button to do rasterize it



- The layer will be converted into a normal layer. Which you can work on just like any other layer



- Here is the text layer after it has been rasterized. I locked its pixels. Then I made one purple stroke with the brush tool.

### **Text Layer You can't Type On**

## **Formatting part of a text**

So far, every time we worked with the type options. We modified the whole text. It is also possible to select part of the text. And modify the attributes of the selected part alone. Here is how to do that:-

- Select the Type Tool **T**. from the tools panel
- Hover your text over the beginning of the part of the text you want to edit. And then click and drag the cursor until you select all the text you want. Just like you do in Microsoft word. Here is my text after I selected part of it:-

**This is a text we are going to modify only part of**

- Edit the text attributes however you want. Only the text you selected will be affected by the changes. Here I changed the color of the selected text to blue.

**This is a text we are going to modify only part of**

- After you are done. Click on the **✓** icon on the Type Tool Options.

**This is a text we are going to modify only part of**

- You can modify part of the text however you want. You can set it to bold, change its size. Or do virtually anything you want.

## **Explaining the Character Panel**

The character panel, as well as the Paragraph panel, allows you to edit many attributes of the text. Just like the Type Tool Options we explained above. Except that it gives you even more options to do so.

The following infographic explain it in details. Note that I cut down on the details on the ones we already seen:-

# Character Panel In Photoshop

**Change the text font**

**Change the font size**

**Change the kerning between characters.** In other words, it changes the way the characters are arranged beside each other. Change the characters scale vertically. In other words, it stretches the font vertically.

**Change the text style.** It can be bold, italic or regular

**Change the space/tracking between characters.** Like this or like this.

**Change the space between the lines of the text**

**Change the characters scale horizontally**

**In other words, it stretches the font horizontally**

**Determines how much the characters are above or under the line. It can very pretty much. Like this**

**← Change the text style**

**Choose the text language**

**Change Anti-Aliasing Method**

**Change Text Color**

**Substitute characters to make them look different based on the context**

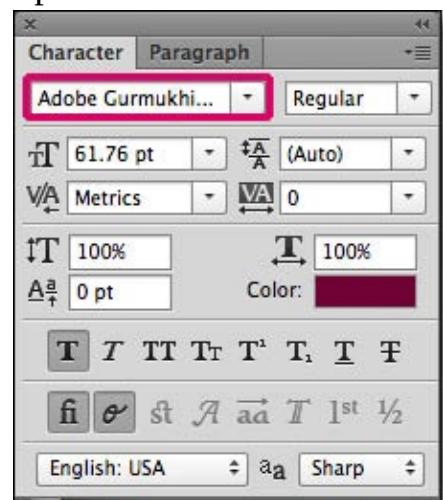
**For example:** *1st instead of 1st*    *H instead of H*

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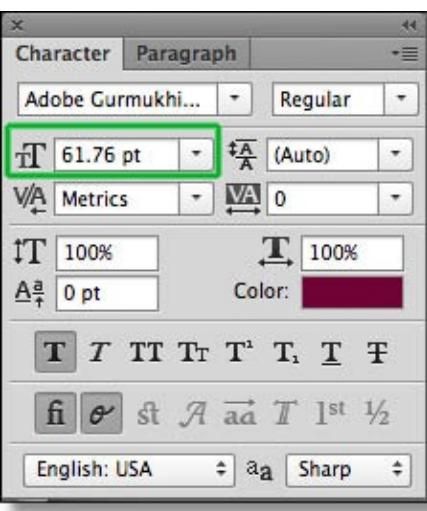
Photoshop Character

Panel

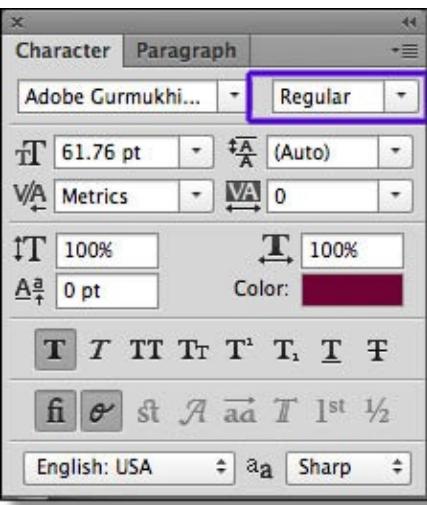
**Text Font:-** Changes the text font, this option works similar to its equivalent in the Type Tool options.



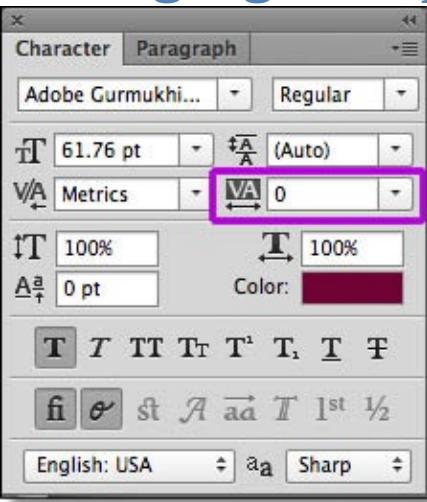
**Font Size:-** Changes the font size, this options also works the same way as the one in the Type Tool options.



**Text Style:-** Again, this option works the same way we have seen before. It changes the text style, from either regular, **bold** or *italic*.



## Changing the space between characters:-

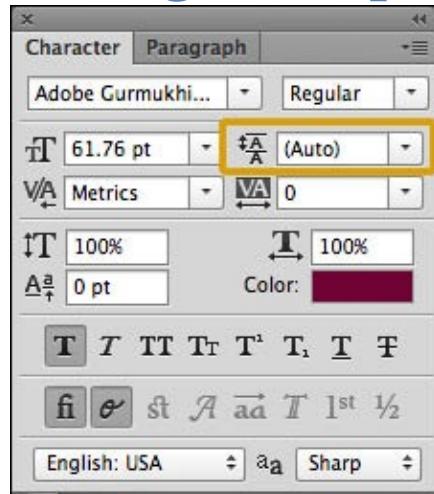


As the name suggests. This option allows you to change the space between characters. You can create a text with a lot of space between characters. Or very little space between them. You can enter any value you want in this field. Or simply choose from the drop-down menu.

Space between character  
Space between character  
Space between character  
Space between character

The space between characters in action

## Change the space between lines:-



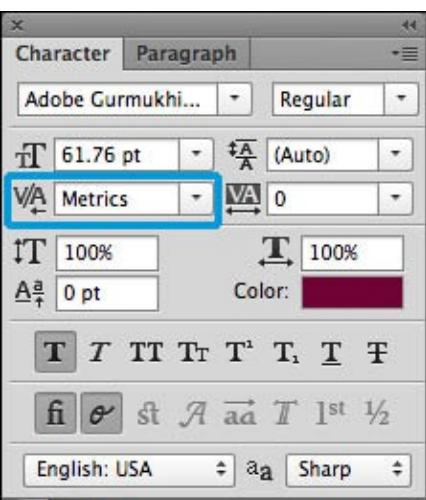
Similar to how you can change the space between characters. You can also change the space between the different lines in your text. This option has no effect if your text consists of only one line.

**The space between lines**  
**The space between lines**

**The space between lines**

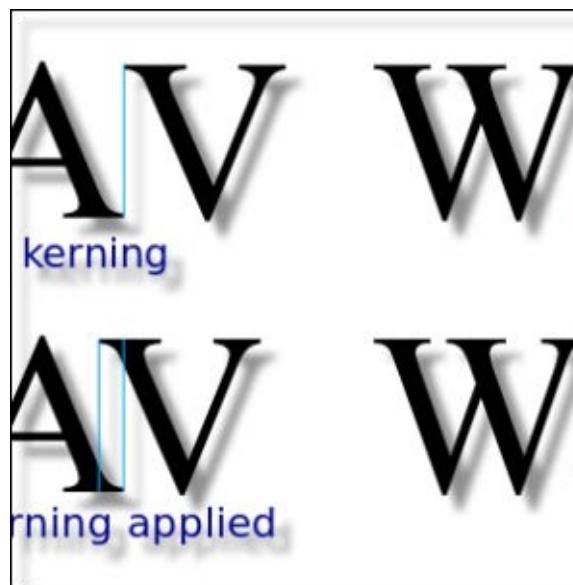
**The space between lines**

Characters kerning:-



[According to Wikipedia](#). Kerning (less commonly mortising) is the process of adjusting the spacing between characters in a proportional font, usually to achieve a visually pleasing result.

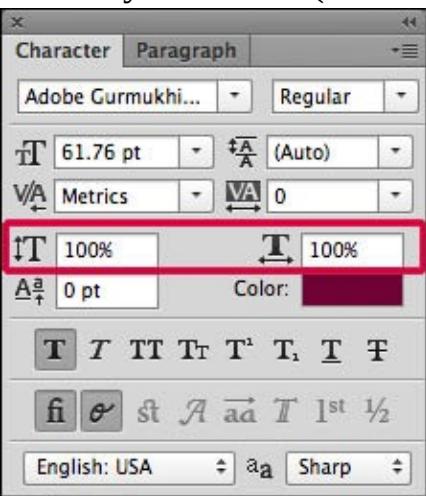
This option allows you to choose the characters kerning method, or you can set it so that there is no kerning at all.



This is how kerning works in general. Picture Credit:- Wikipedia

## Vertical & horizontal scale:-

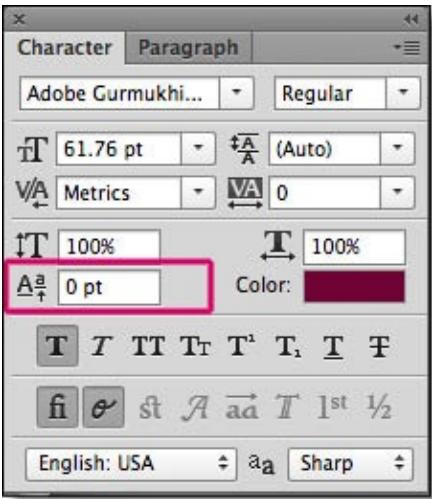
Allows you to scale(or stretch) the text either horizontally or vertically.



# Scale Vertically

## Scale Horizontally

### The baseline shift:-

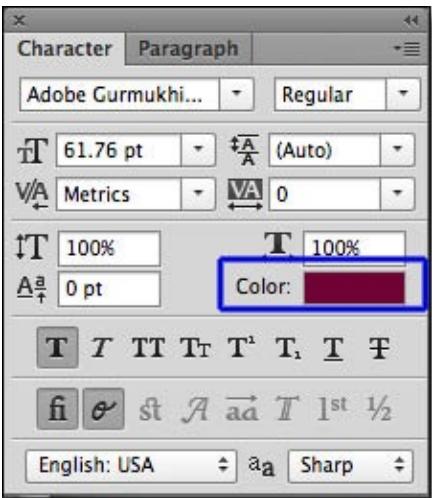


Determines how much the characters are above or below the line of the text (the baseline). You can adjust each character separately this way to create some nice effects.

## Baseline Shift

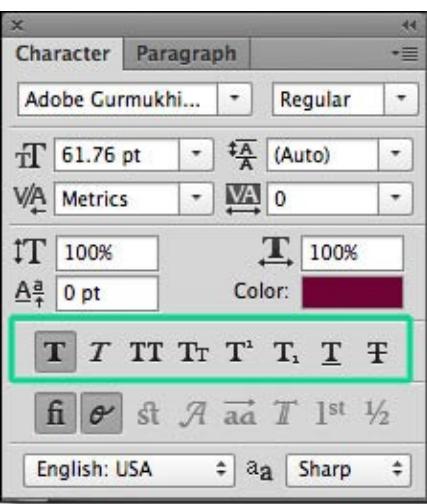
### Change the text

#### color:-



As the name suggest, this option allows you to change the text color.

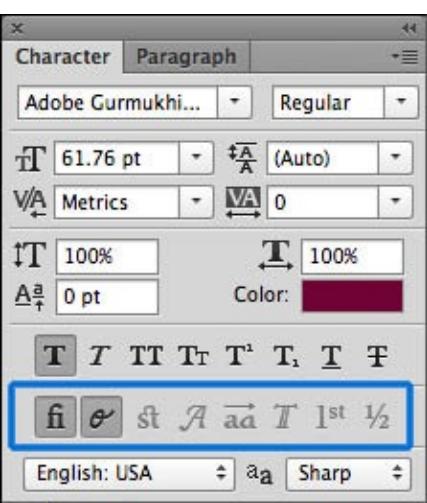
#### Change the text style:-



This range of option works in a similar fashion to the ones you have seen in the Type Tool Options, except that it works whether the font supports them or not. And they offer you some additional styles to format the text. Like the ones you could see in the picture below:-



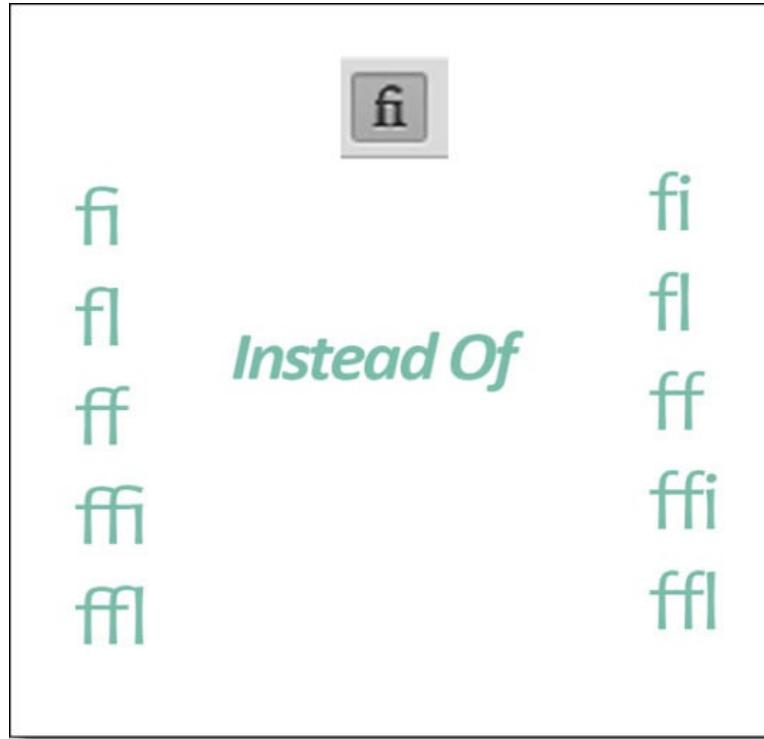
## Open Type Features



These options allow you to substitute some characters in a certain way, to make them look different (or more stylish?). For this feature to work, the font must be an Open Type font, which are the fonts that have the  icon beside them in Photoshop fonts menu. And it must support the certain feature

among these options.

**Standard Ligature**:- Format the certain groups of characters. Like like fi, fl, ff, ffi, and ffl. To connect differently



**Contextual Alternative**:- Adds some serifs and lines to the text to make it look more like handwriting.



**Discretionary Ligature**:- Makes the character pairs ct, st

and ft looks like this:-

With all honesty, none of the fonts I have support the pair ft, so I kept it at that.

ct  
st  
ft

st

*Instead Of*

ct  
st  
ft

**Swash:-** Makes certain characters more stylish.

Like this:-

H  
M

A

*Instead Of*

H  
M

**Stylistic Alternative:-** Changes the look of

some characters to make them look more stylized, the characters styled that way can look weird

→  
aa

**always Take Your Time Instead Of always Take Your Time**

**Ordinal:-** Stylizes characters like 1st, 2nd and 3rd:-

1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>

*Instead Of*

1st, 2nd, 3rd

**Fractions:-** Stylizes fractions:-

1/2

½

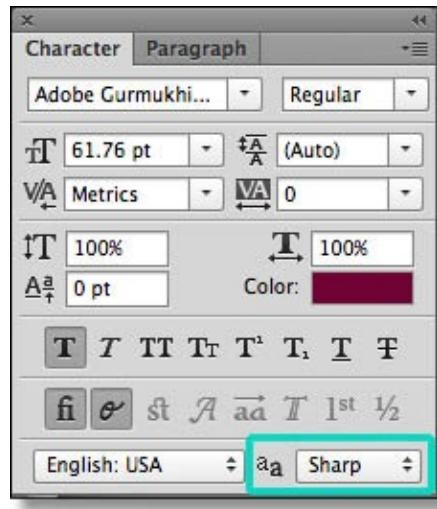
1/2

3/6

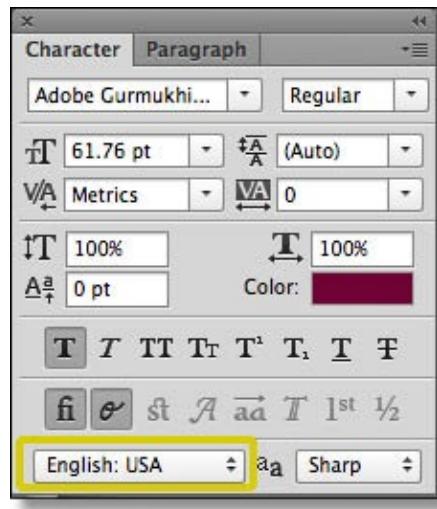
*Instead Of*

3/6

**Anti-aliasing method:-** Allows you to choose the anti-aliasing method. Anti-aliasing has been explained earlier in this chapter.



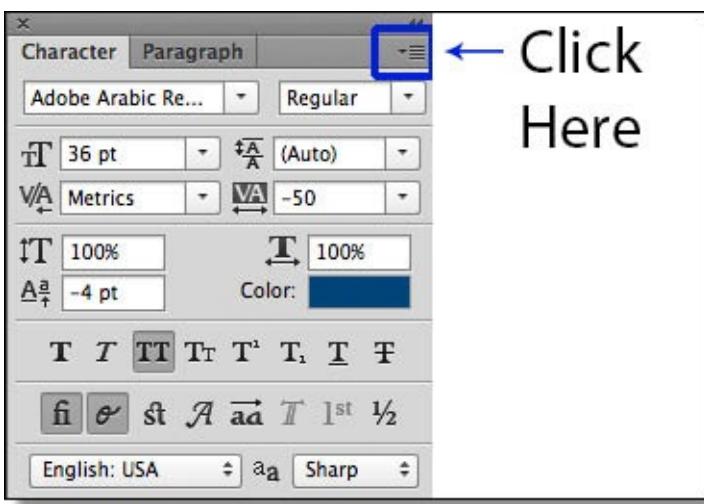
**The text language:-** This option doesn't change the look of the text at all. It is there if you want to use the spell-checker of Photoshop. For example, if you chose French from this menu, then Photoshop will use its French dictionary to look for mistyped words.



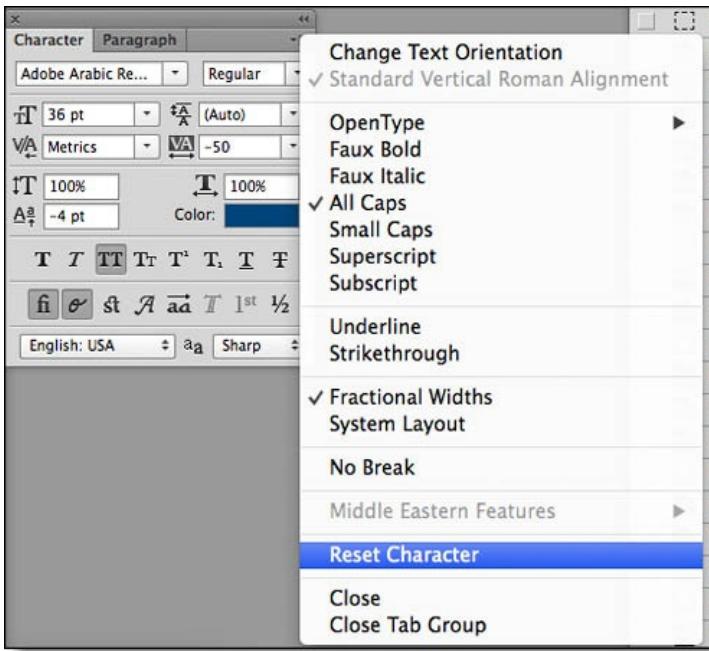
## Reset characters

You can reset all the changes you have made on your text by selecting “Reset Characters” from the Character Panel menu. To do that, follow these steps:-

- Click on the arrow at the corner of the characters panel. A drop down menu will appear



- Select “Reset Characters” from that menu.



## Explaining the Paragraph Panel

The paragraph Panel is much simpler than the character panel. And it contains less options. Many of them are simple and self-explanatory. In the paragraph options examples, I used few paragraphs of Wikipedia’s Cat article. To show you how these options work. Here is the simple explanation for the panel. We will cover each of those options in turn:-

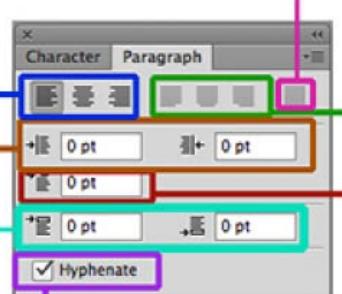
# Paragraph Panel In Photoshop

## Justify the whole text

### Align The Text

Specify the right or left margin for the paragraph

Specify the space after and before the current paragraph



Justify/Align The Last Line of the text

Specify the indent of the first line of the text

Hyphenate words that are at the end of the line  
And continue them on the text one

Photoshop Paragraph

Panel

**Text Align:-** Works the same way we have seen so far. Text align allows you to align the text to the left, right or at the middle.

### Text Align In Photoshop



Aligns the text to the left

Just like this

All the text is aligned

To the left

Aligns the text to the middle

Just like this

All the text is aligned

To the middle

Aligns the text to the right

Just like this

All the text is aligned

To the right

<http://SweetMonia.com>

**Justifying Text:-** To avoid going through the difference between Align & Justify. Let's say that this option gives you the options to align the last line of the paragraph. To the left, at the middle. Or to the right. There is also the option to justify the whole paragraph. Meaning that Photoshop will add space between the words, so that all the lines start & end at the same point

# Justifying Text In Photoshop



## Justify Last Line Left

The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a housecat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.



## Justify Last Line Center

The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a housecat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.



## Justify Last Line Right

The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a housecat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.



## Justify All Lines

The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a housecat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.



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**Paragraph indentation:-** These two options allows you to add an indent. Or a space you could say. To the left or the right of the paragraph.

## Paragraph Indent In Photoshop - Paragraph Panel



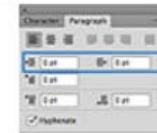
### Left Indent



The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a housecat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.

Cats are similar in anatomy to the other felids, with strong, flexible bodies, quick reflexes, sharp retractable claws, and teeth adapted to killing small prey. Cat senses fit a crepuscular and predatory ecological niche. Cats can hear sounds too faint or too high in frequency for human ears, such as those made by mice and other small animals. They can see in near darkness. Like most other mammals, cats have poorer color vision and a better sense of smell than humans.

Despite being solitary hunters, cats are a social species, and cat communication includes the use of a variety of vocalizations (mewing, purring, trilling,



### Right Indent



The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a housecat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.

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Despite being solitary hunters, cats are a social species, and cat communication includes the use of a variety of vocalizations (mewing, purring, trilling,

**Indent the first line:-** This option allows you to specify the indentation(the space to the left or right) for the first line of the text, while keeping the rest of the text intact.

**The space before and after the paragraph:-** These two options allows you to specify the space before and after a certain paragraph

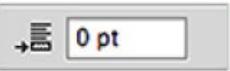
## The Space Before And After Paragraph - Paragraph Panel



The domestic cat[1][2] (*Felis catus*[2] or *Felis silvestris catus*[4]) is a small, usually furry, domesticated, and carnivorous mammal. It is often called a house-cat when kept as an indoor pet,[6] or simply a cat when there is no need to distinguish it from other felids and felines. Cats are often valued by humans for companionship, and their ability to hunt vermin and household pests.

Cats are similar in anatomy to the other felids, with strong, flexible bodies, quick reflexes, sharp retractable claws, and teeth adapted to killing small prey. Cat senses fit a crepuscular and predatory ecological niche. Cats can hear sounds too faint or too high in frequency for human ears, such as those made by mice and other small animals. They can see in near darkness. Like most other mammals, cats have poorer color vision and a better sense of smell than humans.

### The space After The paragraph



Despite being solitary hunters, cats are a social species, and cat communication includes the use of a variety of vocalizations (mewing, purring, trilling, hissing, growling, and grunting), as well as cat pheromones, and types of

### The space Before The paragraph



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**Hyphenate:-** This option specifies whether the Photoshop will split the words that come at the end of the line into halves. And add a hyphen “-“ at the end of the said line. Or simply start the word in the next line. Hyphenation is a common practice in English writing.

**Note:-** You could select a certain paragraph or part of the text. And apply the above options to it separately. This is useful in case you want a certain paragraphs or part of the text to be formatted in a certain way.

For more information about Fonts in Photoshop, check out [this page of Adobe's website~](#)

**Candy Tip:-** Similar to what we have seen in the type tool options. You could click on any of the options in the character or paragraph panel and drag your cursor sideways to increase or decrease the value of the corresponding option. This can save you some time every now and then.

## How to download and add fonts to Photoshop

In addition to the good amount of fonts that Photoshop comes with, you could download tons of fonts from the Internet. Many of these fonts are free. And some of them are only free for non-commercial use, and some others have to be bought before you could use them

In this part, we are going to download and install a new font in Photoshop, and at the end of the chapter, I have made a list of sites that allows you to download fonts for free

## Downloading the font

In this example, we are going to download a font from DaFont.com and add it to Photoshop. The font I chose for this example is called Inked God. Which I hope you find it fancy and worth adding it to

your fonts collection.

- Go to the following URL, where you could find the Inked God font:- <http://www.dafont.com/inked-god.font>
- From what you could see. Inked God is free for non-commercial use only, to use it for commercial uses. You will have to contact the author of the font. If you looked at the bottom of the page. You will see how each of the characters look like.



- Download the font by clicking the gray download at the right of the screen (and donate to the author in case you really liked it)

**Download**

Donate to author

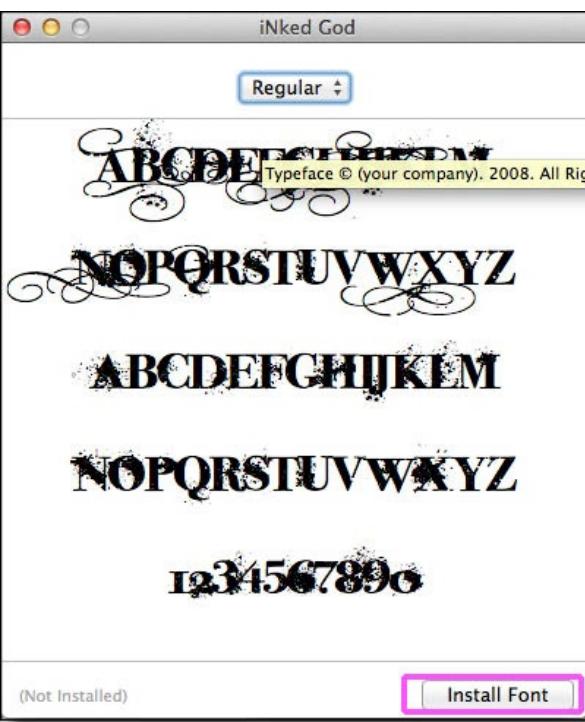
After the file is downloaded. Unpack the zip file where the file has been downloaded to get the font file inside of it. For instructions on how to unpack Zip files, [check out this useful post](#)

## Installing the font on your computer

Because [Adobe already has an extensive instructions on how to add fonts to your computer](#), I won't repeat what they have in that page. But I will cover the simple way to install fonts on Mac OS X below.

## To install a font in Mac OS X:-

- Installing fonts in Mac OS X, all you have to do is to double click the font you downloaded, and Mac will open the Font for you.



- Just Click on “Install Font” at the corner of the window. And wait until the fonts get installed.
- After the font gets installed, restart Photoshop. And you will find the font you installed in the fonts menu

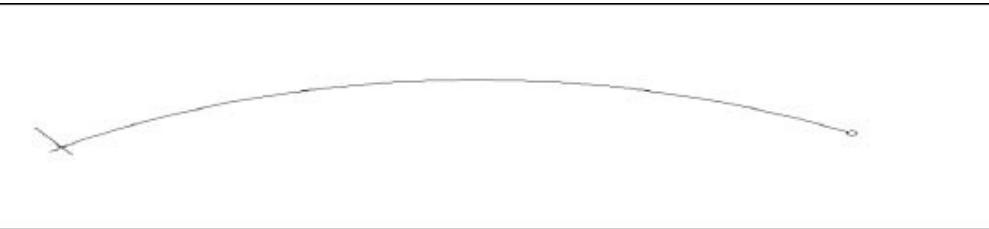
## Aligning Text To Path.

Starting from Photoshop CS. Adobe has added a nice feature to the type tool in Photoshop. Which is the ability to make your text follows any path you made with the pen tool. This is a very nice way to create a wide variety of designs, here is how to do that:-

- First, create a path using the Pen tool. It could be of any shape you want. Here, I created a simple arc. Which I want my text to follow.



- Select the Horizontal Type Tool **T**, from the tools panel.
- Move the cursors toward the path you created in the first step (Where you want your text to start). When the cursor become like this . Click on the path. And the text will be ready to be typed. Here is how my screen looked like before I typed my text:-



- Now type the text you want. You will see the text follow the path you clicked on. Here is how my text looked like:-



The penguin likes to play with snow

- After you are done entering the text. Click on the ✓ on the type tools options. And we will be done.
- To move the text you created. Select the Path Selection Tool from the tools panel, then click and drag the text. And the text will move along with your cursor. Here is how I moved my text a little to the right:-



The penguin likes to play with

## Examples

### Making a better Internet memes.

In last chapter, we have added simple text to our Internet meme using the horizontal text tool. And we didn't bother to resize our text or change the font, because that was outside the scope of the chapter. Now we are aware of many of the type tool options. We can now create a better meme, with more suitable text sizes and fonts.



# Cats

*The real sleeping beauties*

## Colored text + Blending Modes

Like many things in Photoshop, you could change blending modes of the Text layer however you want. Which is a nice way to create simple but good looking effects. Like how I did with the text in this picture:-



## Creating A Simple Logo

Fonts are a nice shortcut in case you want to create a simple logo and didn't know how to go about it. Seeing the vast amount of available fonts on the Internet. I created a simple logo for an imaginary toys store using the font "[Patterns & Dots](#)", which I found online. Of course, we could make this font looks even better by adding more to the design:-



## List of sites to download

### fonts from:-

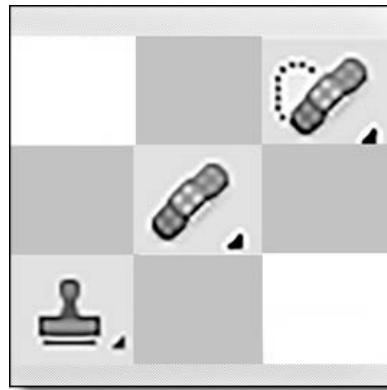
- <http://www.dafont.com/>
- [Adobe Fonts Finder](#)
- <http://www.1001freefonts.com/>
- <http://www.fontsquirrel.com/fonts/list/popular>
- <http://www.urbanfonts.com/free-fonts.htm>
- <http://fontzone.net/>
- <http://www.fontspace.com/>

## Summary

- There are 4 Photoshop Type Tools, which allow you to enter horizontal or vertical text. Or to create a selection from the text you type
- The Type tool options allow you to edit the text in multiple of ways. Like changing the font size or color. Or the font itself.
- You could edit the properties of the whole text. Or just select the part of the text you want to edit
- The type tool also allows you to create a warped text, which is a nice way to create many effects, like wave or flag.
- Anti-aliasing is a method of smoothing text so that it won't look so pixelated. It is particularly useful when you are dealing with small fonts, or low-resolution screens.
- Text layer is another type of layers in Photoshop, as its name suggests. It contains some text. Which you could to edit the at any time
- Text layers can be converted into raster layers, which could then be edited just like any other layer in Photoshop
- The character panel offers a variety of ways to edit your text. Including the ability to make the text bold or italic, even if the font doesn't support that.
- The paragraph panel deals with formatting paragraphs in details, like aligning or justifying the text. And setting all the kinds of spaces and indentations.
- Starting from Photoshop CS. You could make text follow a certain path you drew by just clicking on the path using the Type Tool.
- There are tons of fonts that could be downloaded and use from the Internet

- Fonts are a great way to create logo or Internet memes

# Photoshop Photo Manipulation tools Part I:- Clone Stamp Tool, Healing Brush Tool & Spot Healing Brush Tool



Because there are many Photoshop manipulation tools in Photoshop, and because I want to keep the explanation more focused and enjoyable to read, I decided to break up this chapter into two parts. And this is part I

I believe this is going to be one of the most amusing chapters in this book, as it discusses some of the most interesting tools in Photoshop, and ones that are among the most useful. As they allow you to do many funny things. Like adding or removing things to and from a pictures, or to fix many problems that are found in them.

## Photoshop Photo manipulation tools

There are 6 Photo Manipulation tools I plan to cover, and in this chapter, we are going to discuss 3 of them. The tools we are discussing here are:-

- The Clone Stamp Tool 
- The Healing Brush Tool 
- The Spot Healing Brush Tool 

## First look at the Stamp tool .

The Clone Stamp Tool does one simple & useful thing. It allows you to copy pixels from anywhere in the picture, or from another picture to the area you are painting on

If you selected the Clone Stamp Tool and begin painting with it right away, you will get the following message:-

Could not use the clone stamp because  
the area to clone has not been defined  
(option-click to define a source point).

OK

That message tells you that you have to define a source point, which is the place from which Photoshop will copy pixels to where you are painting

To do that, simply hold down alt/option button and hover your mouse over your picture, the cursor will then turn into a reticle , simply click with your left mouse button and you will be done setting the source.

Now you can paint anywhere with the tool and Photoshop will copy the pixels starting from the point you clicked on in the last step.

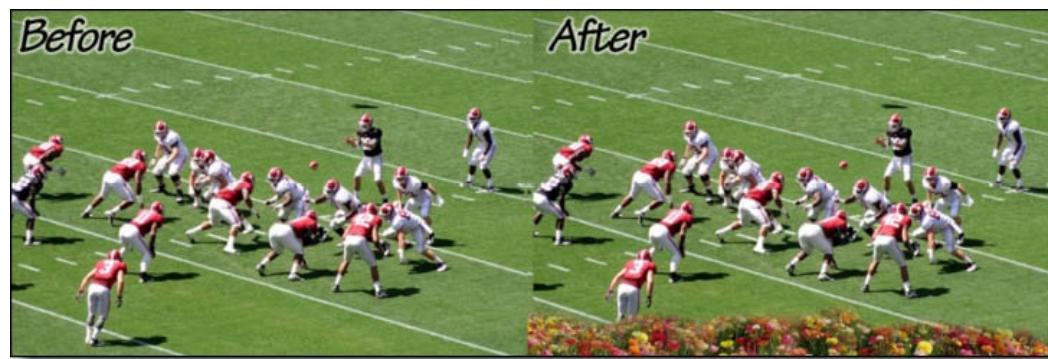
## How can copying pixels from part of the picture into another benefit me at all?

There are innumerable ways this can be useful. It allows you to add or remove things from pictures without much efforts. For example, like how I removed the referee from the following picture:-



Photoshop Photo Manipulation tools like the Clone Stamp Tool makes it easy to do things like removing the referee from the match

Then I added some flowers the same way:-



Here is the picture where I got the flowers from:-



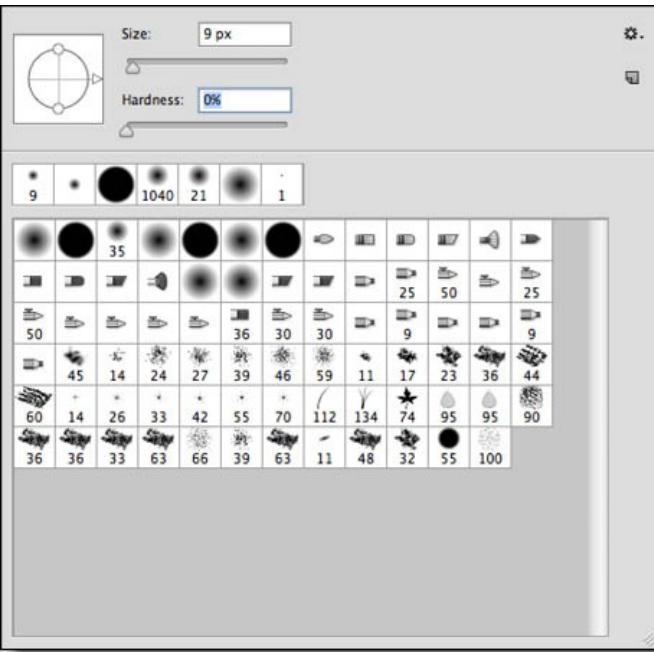
## The Clone Stamp Tool in action

Right now, I am going to show you how I removed the referee from the match. If the referee was not standing there, you would be able to see the field grass that is behind him. So to remove him, all you have to do is to copy some grass from the other parts of the picture over him. Here is how to do that:-

- First, select the Clone Stamp Tool  from the tools panel
- Hover your mouse where you want to copy pixels from, which is the grass that's near the referee. The red circle in the following picture is the sampling point I chose:-



- Before you start painting. I advice you to make the tip of the Clone Stamp Tool soft, which could be done by right-clicking on the canvas. And then move the Hardness slider to the left, just like we have done with the brush tool in the past



- Now hover your mouse over the referee. And Photoshop will interactively shows you how the part below the cursor will look like after you make your stroke:-



- Now begin painting over the referee. You will be able to remove a good part of him, depending on the sample point you chose. Keep painting until some of the unwanted pixels start to creep in. Which mean it is time to choose another sample point. Here is how things looked liked from my side (In case you made a mistake, you could choose Edit->Step Backward to undo the last stroke you made):-



- It is time to select a new sample point, it is totally okay to select the same sample point again, since we simply want to paint the same grass over the referee over and over. Keep repeating what we did until you get rid of most of the referee. Here is how I got rid of most of him. I had to change the sampling point many times. Especially on the grass areas around his feet & head. Which look different than the grass around his waist.



- Now the referee is no longer here, we need to repaint the white lines that were hidden behind his head and feet. This is done same way as we painted the grass. Here is the sample point I chose to do that, which is one of many you could choose from in this example:-



- Hover your mouse over the missing white line. And the preview feature of the Clone Stamp Tool will help you make the correct stroke, like this:-



- Finish painting the white line, then do the same with the second white line. And you will end up with a clean picture with no referee in it.



- If you felt that the repetitive painting over the referral has made it obvious that the picture has been Photoshopped. Simply do a little more resampling and painting over new grass until the area feels more natural
- Here is the final picture without the referee.



## The Healing Brush Tool

The Healing Brush Tool  works the same way as the Clone Stamp Tool . In that you specify a sampling point. And then copy pixels from the area you sampled from to remove or add things to your picture. But it comes with one little difference, is that the Healing Brush Tool tries to match the lighting of the area you are painting on. For example, if you want to copy some flowers to the playing field. And the flowers Photo has a different lighting level than the playing field. Then using the Healing Brush Tool can bring you much better results.

To illustrate my point, here is the field picture after I added some flowers on it. See how the flowers got a bit green to match the field illumination:-



Though, with all honesty, the flowers were greener than necessary there. And more adjustment needed to be done on them

**Note:-** To access the Healing Brush Tool. Click and hold your mouse over the Spot Healing Brush Tool. And Photoshop will show you the rest of the tools under it. Just like you did with the selection tools and pen tools



Accessing Healing Brush Tool from the Tools Panel

## The Spot Healing Brush Tool

As its name says, the Spot healing brush Tool heals and remove Spot problems in your images, like skin blemishes, dirty or unwanted spots. This works similar to cleaning the table you spilled some coffee on. The good thing about the Spot Healing Brush Tool is that it is smart enough to match the texture and lighting of the area you are healing.

Using the Spot Healing Brush Tool is simple; all you have to do is to select the tool, then paint over the part you don't want. Along with some of the area around it, and it will do the job for you.

To get the best results from the tool, make sure that the part you don't want is at the middle of the area you are painting.

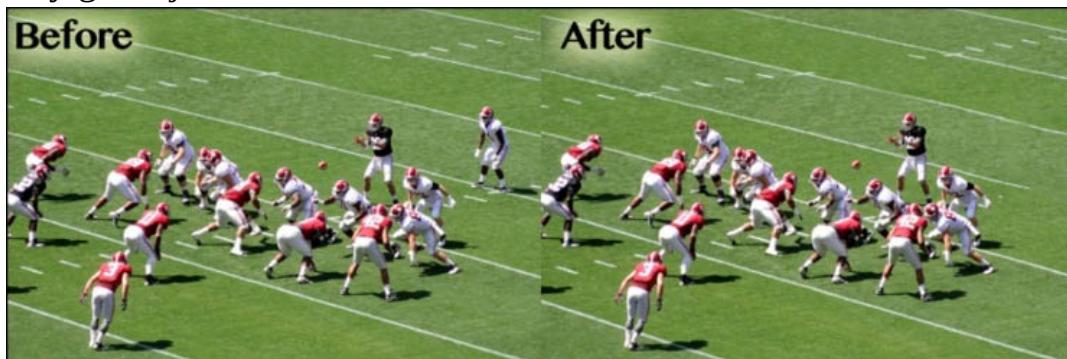
In the following picture, I was able to remove that blemish from the man's neck with the healing brush. And it is as if I erased it, while you could do the same thing with the Clone Stamp tool. The easiness and quickness of the Spot Healing Brush Tool makes it more ideal for things like that:-



Blemishes like that in the picture can be easily removed using the Spot Healing Brush Tool

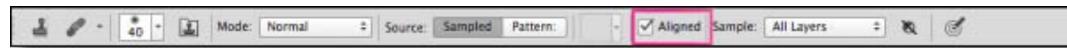
As long the things you want to hide from the picture is at the middle of the area you are painting, the Spot Healing Brush Tool will do a very good job removing that part for you.

Back to our game example, I was able to remove one of the players easily the same way. And it did a very good job at that. All is left was to redraw the white lines of the field, just like we did before:-



The player has been removed quickly and easily using the Spot Healing Brush Tool

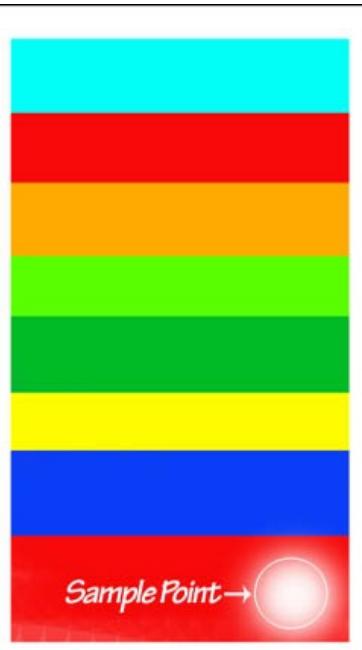
## The Align option in Clone Stamp Tool And Healing Brush Tool.



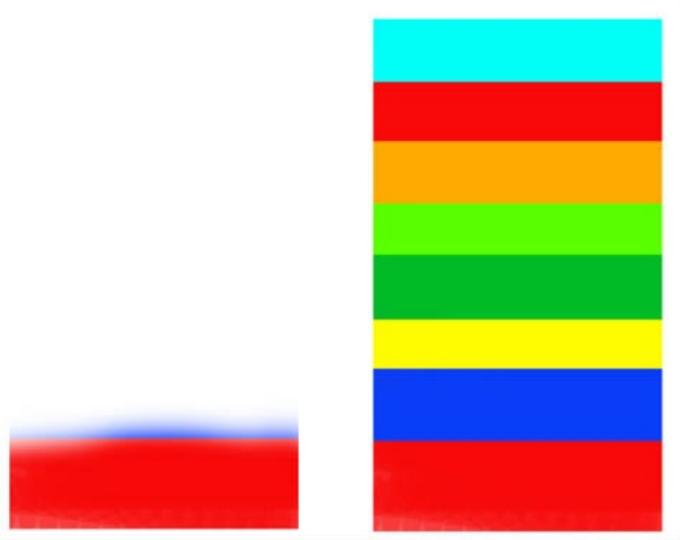
This option determines whether

the Clone Stamp Tool or the Healing Brush tool will copy pixels starting from the same sampling point every time you paint (when it is unchecked). Or if it will copy the pixels from a point that is the same distance away from your cursor (when it is checked).

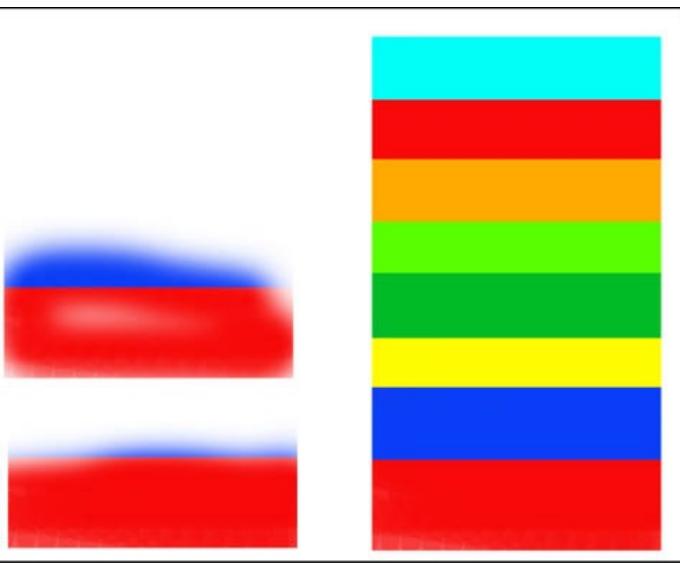
To illustrate this confusing difference, take a look at the following colored rectangles. First, I will sample the white point pointed here, while making sure the Aligned option is unchecked:-



- Then I will begin painting at the left of the rectangle, and the Clone Stamp Tool (Or the healing brush, whatever you are using) will copy the pixels for me. So far, nothing is different.



- Now let's start painting again on the area above, here is what I got:-

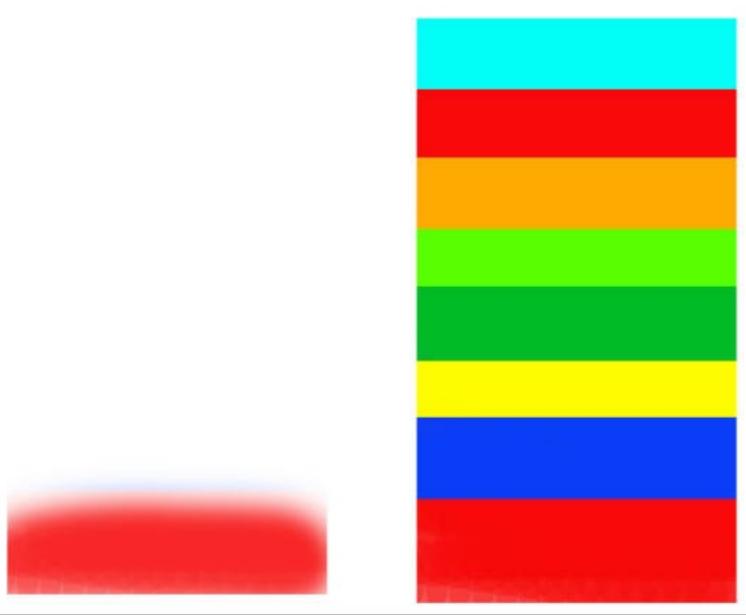


- As you can see, the point Photoshop copies the pixels from the same sample point in both cases. And it will still do the same as long as the Aligned option is unchecked:-

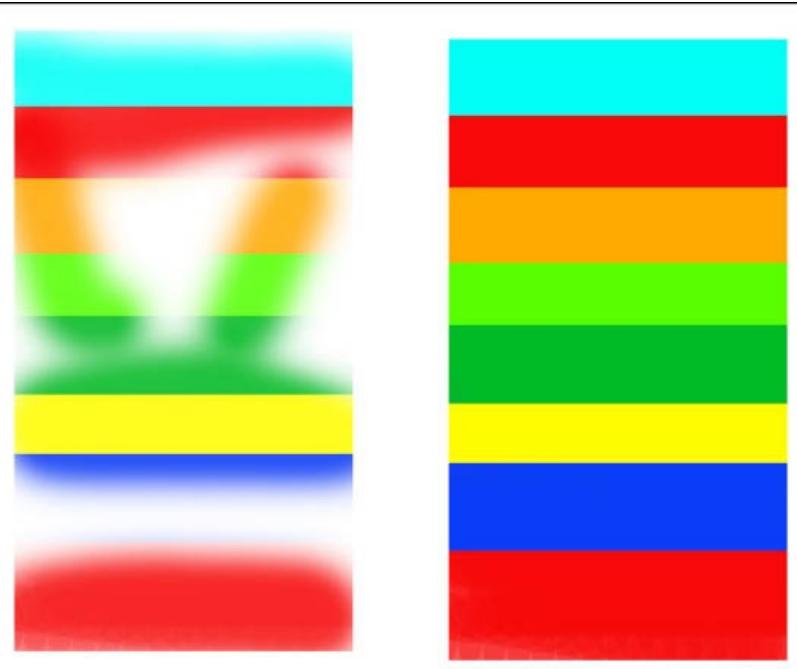


- Now let's redo all these steps, but with the aligned option checked this time. I sampled the

same point and started painting on the bottom of the picture:-



- And then, I painted again & again on the area above:-



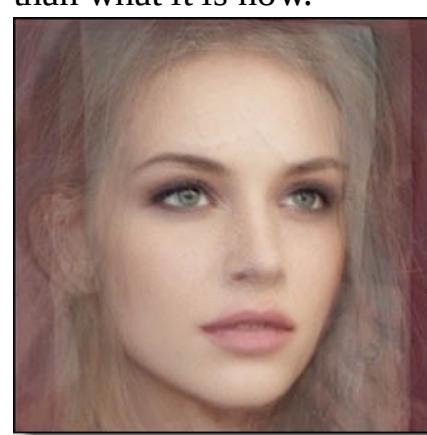
- See! The point Photoshop copies pixels from changed to match the distance between the first area you painted on and the sample point. You can keep painting until you have the colored rectangles all copied on the left. Determining whether to check or uncheck the Align option depending on what makes it easier to you to achieve the results you want.

## Examples:-

### Changing the face of someday

I took a girl face from another picture and copied it on the body of another's. Which it looked almost perfect. Doing some more rotating and resizing of the new face can make it look even more realistic

than what it is now.

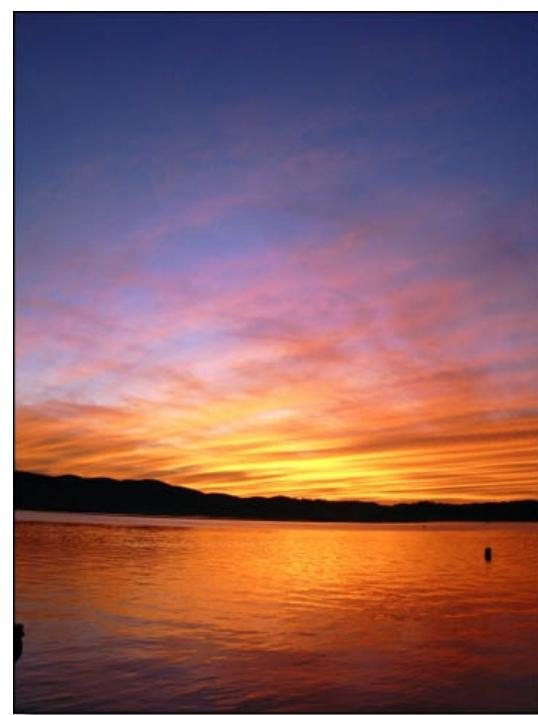


## Artificial Sunset

Take a look at the following scenery. Isn't that beautiful?



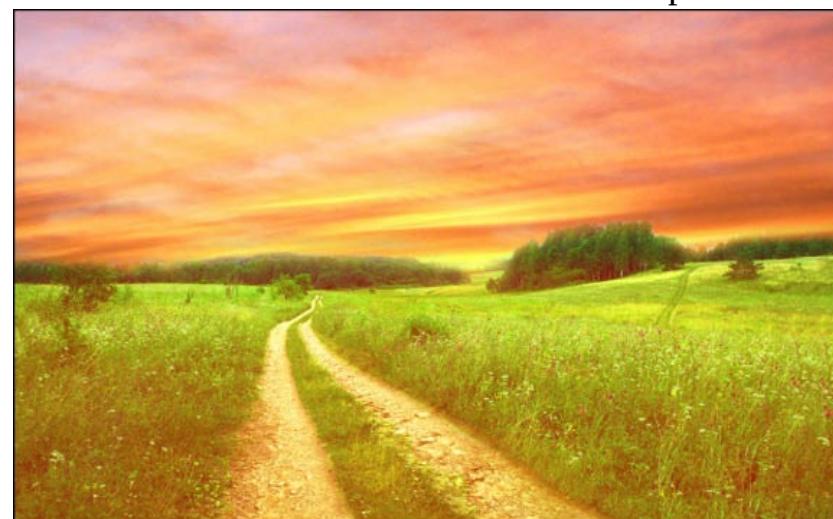
I bet it would look fairly nice at sunset. So let's bring out a sunset picture, like this one:-



And using the Clone Stamp Tool with a soft brush tip. I painted a new sky over the original one. I did some erasing to erase some of the pixels that covered the trees by mistake



To make the scene look more realistic, in a new layer, I painted orange over the rest of the picture, then changed the layer's blending mode to Hard Light. And then decreased the opacity until I was satisfied with the results. Here is the final picture:-



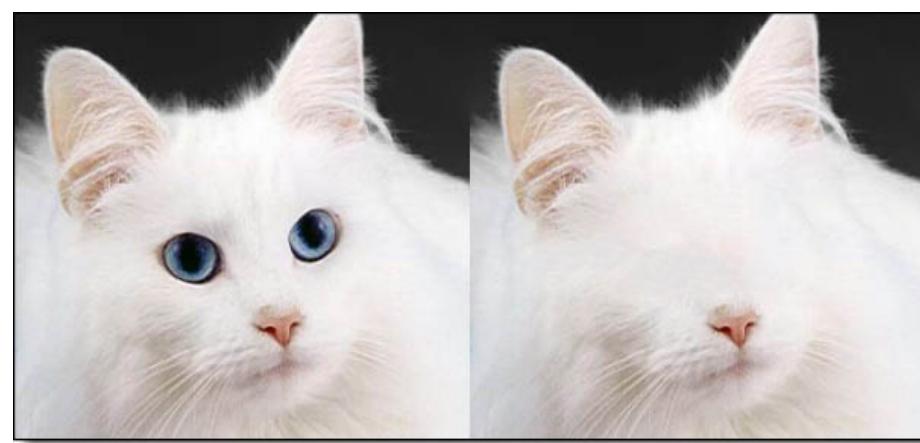
## The New man at the meeting

Using the Healing Brush Tool. I added a new man to the meeting below. I used the Healing Brush tool because it saved me the trouble of trying to fit the man's illumination in the new picture. While I still need to make sure the man fits more in the picture using the Brush Tool. The amount of work needed for that is much less than in case I used the Clone Stamp Tool



## Removing cat eyes

Using the Spot Healing Brush Tool, you could remove the eye of a cat using very few strokes. Don't get me wrong; the purpose of doing that is not to create an ugly picture, but rather to draw your own. Which is a great practice in case you are a digital artist:-



## Pulling out a Photoshop Scam

This is a fictional scam I made up to show you how much you could do with the tools explained in this chapter. I made the house in the picture below look much better by adding fields and a luxury car besides it. Making it look much better than it is in reality. Unfortunately, such practices actually exist in this world.



## Restoring an old Photo

Photoshop Photo Manipulation Tools are not just limited to playing with pictures. But they can also do a lot of restoring the details of old Photos. Like removing all the cracks in the following picture (Picture credit:- [Wikipedia](#)).



## Summary

- In this chapter, we focused on 3 Photo manipulation tools. The Clone Stamp Tool, The Healing Brush Tool, and the Spot Healing Brush Tool
- The Clone Stamp Tool copies pixels from the sample point to the area you choose. It does that the same way you would do it with selection tools and Copy & Paste, except that it is more convenient.
- The Healing Brush Tool works the same way as the Clone Stamp Tool, it also tries to match the illumination of the target area to make the object you are copying fit with the picture, which is so useful in many situations.
- The Align option of the Clone Stamp Tool and the Healing Brush Tool determines whether Photoshop will copy pixels from the same point every time you paint. Or move the sample point so that it is aligned with the first point you clicked on when you started copying.
- The Spot Healing Brush Tool is a nice way to remove things you don't want from the picture. Like blemishes or even whole objects like players in the field.

# Photoshop Photo Manipulation Tools Part II: Patch Tool, Content-Aware Move Tool, And Content-Aware Fill



In this chapter, we will continue focusing on Photoshop photo manipulation tool. The three tools we are discussing here are The Patch Tool  , the Content-Aware Move tool  and Content-Aware Fill option (which has no icon). If you understood how the Spot Healing Brush Tool in part I, you already have a very good foundation on what content-aware tools do.

## What is Content-Aware?

Content-aware is a feature Adobe introduced in Photoshop starting from Photoshop CS5. This feature basically removes a certain part of a picture by analyzing its surrounding area. Without you having to do much work at all. We have seen a little example of how this work in the last chapter, when we removed a big blemish from a man's neck using the Spot Healing Brush Tool. The three tools we are discussion here all work the same way. But each of them is slightly different.

### The Patch Tool

The Patch Tool  allows you to select a part of the picture you don't want. And then replace it by one you do. To illustrate the point, take a look at the following picture. Where we have a little girl sitting between flowers.



Assume we want to remove the girl. All we have to do is use the Patch tool to select the girl, then drag the selection into the grass and flowers around her. Here is how to do that:-

- Select the Patch Tool  from the tools Panel. If you can't see the Patch tool. Simply click and hold on the Healing Brush Tool or the Spot Healing Brush Tool and Photoshop will display the rest of the tools below it

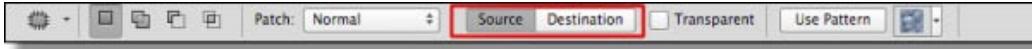


- Click and drag your mouse to select the girl on the picture, here is how my selection looked like:-



- In the Patch Tool Options, make sure that Source option is selected instead of destination.

This option determines whether Photoshop will replace the source (which is the girl here), with the destination (The grass around her). Or if it will replace the destination (the grass) with the source (the girl). If you chose destination here, Photoshop will create a replica of the girl. Choosing source or destination is just a convenient way Photoshop offers to you to make your workflow much smoother. As it is possible do anything you want by knowing one of them.



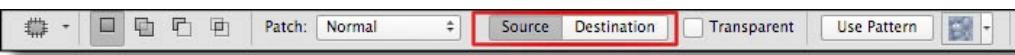
- Now click on the girl selection, and drag it to the grass section, while you are doing that, Photoshop will show you a preview of how the picture will look like after you release your hand off the mouse button. Here is how the preview looked like to me:-



- Now release the mouse button, and wait until Photoshop do all the work of patching the picture. Here is the final picture I got:-



# The source and destination options



The source and destination options of the Patch Tool determine whether you want to replace the source with the destination or vice versa. As I stated in the above, if we followed the same steps as we did above. But instead of selecting destination instead of source, Photoshop will remove the grass on the destination, and replace it with the girl, creating something that looks like this:-



## The Content-Aware Move Tool

The Patch Tool did a very good job at removing the girl in the last example. But instead of removing the girl altogether, we just wanted to move her a little to the left or to the right. The Content-Aware Move Tool does just that. And the steps to use it is the same as the Patch Tool above:-

- Select the Content-Aware Move Tool from the tools panel
- Just like we did with the Patch Tool , select the girl by dragging your mouse cursor around her.



- Drag the girl you where you want to. And Photoshop will show you a preview of how the girl will look like after you release the mouse button. This is how things looked like to me:-



- Release the mouse button, and wait for Photoshop to finish working on the picture. After that, the girl will be on the new spot you chose for her:-



- You may have noticed that Photoshop removed the flowers from where the girl was. This is

totally fine. While the Content-Aware tools in Photoshop did indeed a great job at moving the girl to her new spot. The content-aware technology is not %100 perfect, you will encounter many situations like that in your Photoshop life. Which is why I don't try to use pictures that produces perfect results. You have some of what you can do:-

- Try to do the same things using another tool or technique.
- Copy the flowers again using the Patch Tool or the Clone Stamp Tool, like I did here:-



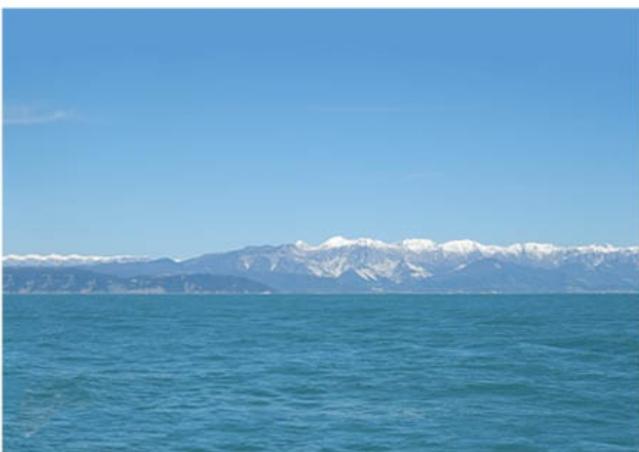
## Content-Aware Fill

Introduced in Photoshop CS5, Content-Aware Fill allows you to eliminate any element you don't want in a picture, just like we did using the Patch Tool and the Spot Healing Brush Tool. In addition to that, it can also be used to "extend" a picture that has missing parts. Just how we filled in the mountain and the sea in the following picture:-

*Before:-*



*After:-*



## Using Content-Aware Fill

To use the Content-Aware Fill, all you have to do is to select the part you don't want in your picture, using any of Photoshop Selection Tools. And then select Edit->Fill from the main menu. Let's do that now~

Suppose we don't want the towel in the following picture. So let's use Content-Aware Fill to remove it:-

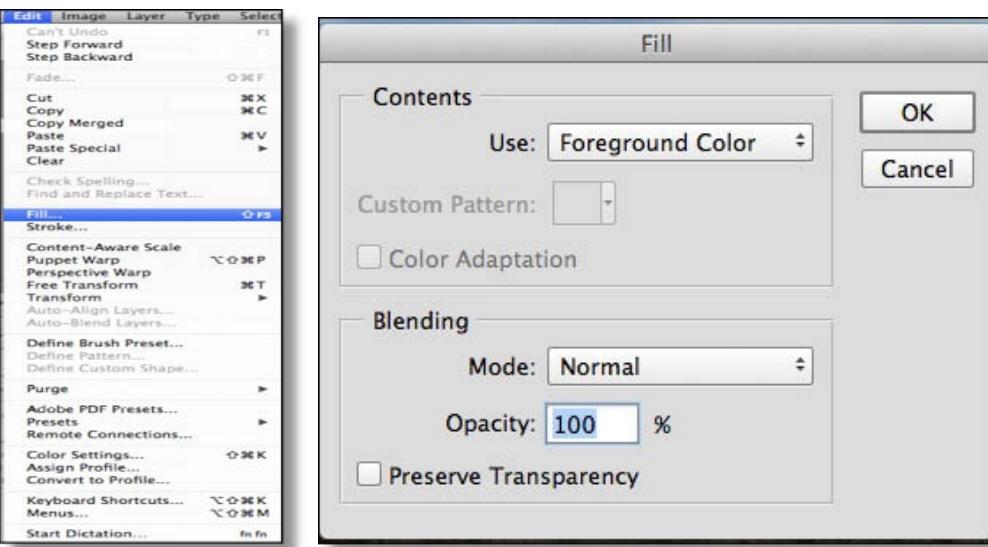


- I used the Lasso Tool to select the towel and the area around it. But you can use any of the

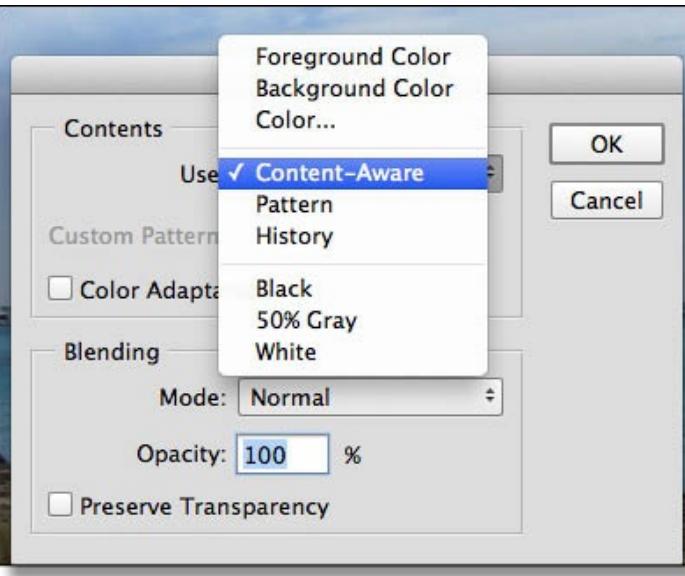
other selection tools if you like. Like the Pen Tool:-



- Select Edit->Fill from the main menu, and the Fill dialog appears



- Select Content-Aware from the Use menu. Then click OK. And now it is Photoshop's turn to do its magic



- Et voilà. The towel is gone. Without having to do much work on our part. This is one of the reasons I think mathematics is nice~



## Using Content-Aware fill to extend a picture

Extending a partial picture by filling in the missing pixels is my favorite Content-Aware fill trick. IN this section, we are going to fill the rest of the sea and the mountain behind it using the Content-Aware fill.



- Select the area you want to Photoshop to fill with pixels. Which is the white area that has no pixels. To do that, I selected the pixels of the sea layer, then inverted the selection by selecting Select->Inverse from the main menu

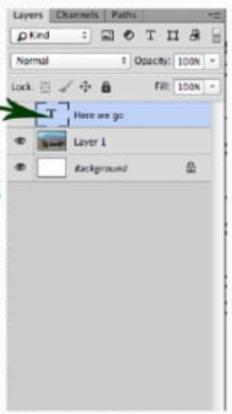
## Turning Text Into Selection In Photoshop

Hover the mouse button here



Then hold the Control or Command button. You will see Besides the cursor

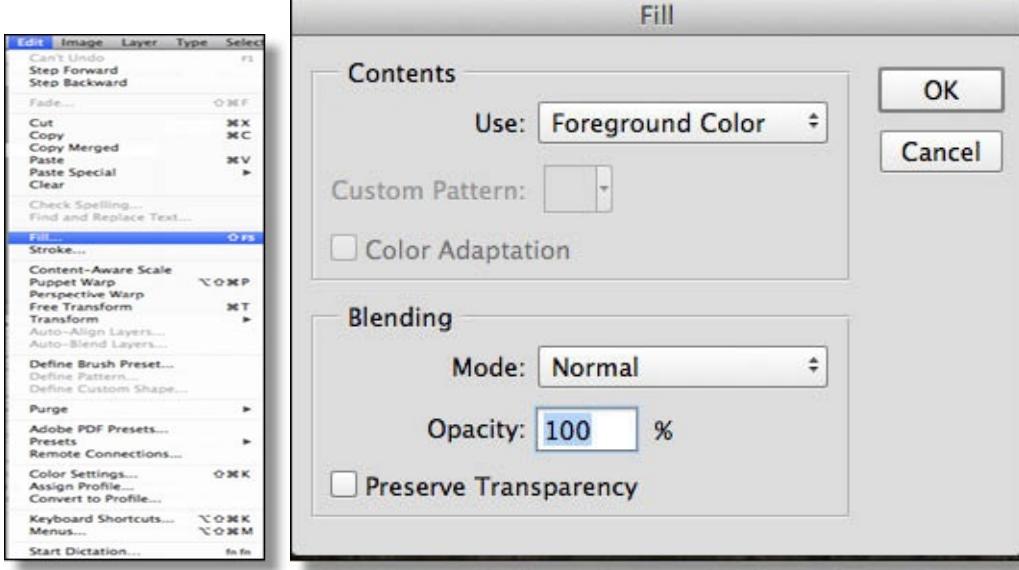
Then Click



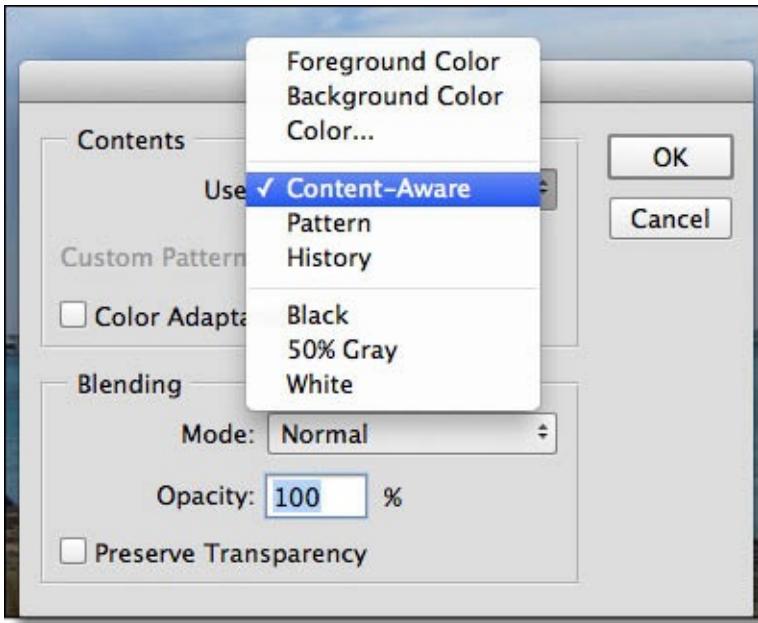
<http://SweetMonia.com>



- To fill the selected pixels, select Edit -> Fill from the main menu, and the Fill dialog appears



- Select Content-Aware from the Use menu. Then click OK.



- After Photoshop finish filling the picture, you will end up with the full sea & mountains picture you see here:-



## Content-Aware tools VS Spot Healing Brush Tool

The Spot Healing Brush Tool and the Content-Aware tools we discussed here are so similar. You may be wondering when to use any of these tools, and you probably know my answer:- “Use whatever you think is best for the job”.

In a complex and vast program like Photoshop, there is usually more than a single way to do a certain thing. One way to go about it is to use the Spot Healing Brush Tool to remove small spots from pictures, like blemishes and pimples. And the other Content-Aware tools to remove and fill bigger parts your pictures. Or you could also ignore the Spot Healing Brush Tool all together and use the Content-Aware Tools we discussed here, this is all up to you to decide.

It is worth it to note that there are times when the Content-Aware Tools will fail to do the job. In which case doing it using the older tools like the Clone Stamp Tool is much better. Like how they failed to fully match the tiles pattern after removing the cat:-



## Examples

### Moving a cat around

Let's play with the following cat:-



We could remove the whole cat altogether using the Patch Tool :-



Or we could move her to another place using the Content-Aware Move Tool :-



## Removing the mountains

Content-Aware Fill can be used to remove a wide range of mountains from the sea picture. Though the selection was a little bit tricky:-



## Removing Blemishes

Content-Aware Fill can be used to remove a large amount of Blemishes, like how I did with the following forehead. To do that, I had to use the Content-Aware fill multiple of times on the picture. Which makes me wonder if I should have used the Healing Brush Tool is better for that:-



## Summary

- Content-Aware Tools use mathematics to fill the missing details of pictures. Without you having to do much.
- The Patch Tool patches a certain area you select using the pixels of another area.
- You could replace the destination with the source and vice versa from the Patch Tool options.

- The Content-Aware Move Tool works the same way as the Patch Tool. Except that it moves the object to somewhere else in the picture instead of removing it. And it uses Content-Aware to seamlessly remove any trace of the moved object, and to integrate that object into the new place you move it to
- The Content-Aware Fill is similar to the Patch Tool. But it can do more, like filling a missing part of a picture so easily.
- Usually, you use the tool you think is the best for the job. The Spot Healing Brush Tool can be used to remove small spots from pictures, like blemishes or freckles. While the other Content-Aware Tools can be used to remove bigger parts.

## Photoshop Blur Tool, Sharpen Tool and the Smudge Tool



In this chapter, We are going to discuss 3 more tools, which are the Blur Tool , The Sharpen Tool , and The Smudge Tool .

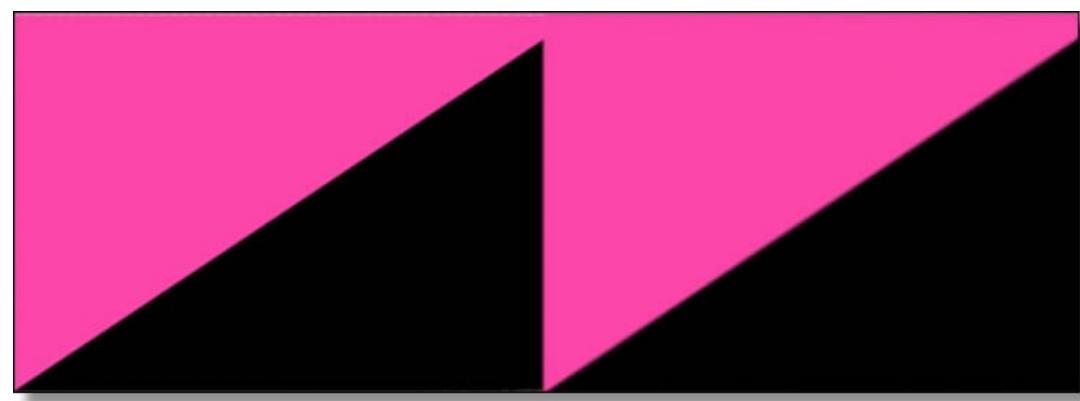
The blur tool decreases the focus of part of the picture, the sharpen tool does the opposite, it increase the focus of a certain area, or sharpen it in other words, while the smudge Tool smears the picture, similar to what you could do to paints with your finger. Which is why it has a finger icon

### The Blur Tool

The blur tool  decreases the focus of the part of the picture you paint on. This is useful to integrate a new object into the picture, or to remove very small blemishes from someone's face.

Bigger blemishes should be removed by using the Spot Healing Brush Tool , or any similar tool to it.

To illustrate how the Blur tool works, take a look at the line on the picture on the left. See how sharp it is. And compare it to the same line on the right. And notice see how blurred and unfocused it looks like. This is because I blurred it using the blur tool.



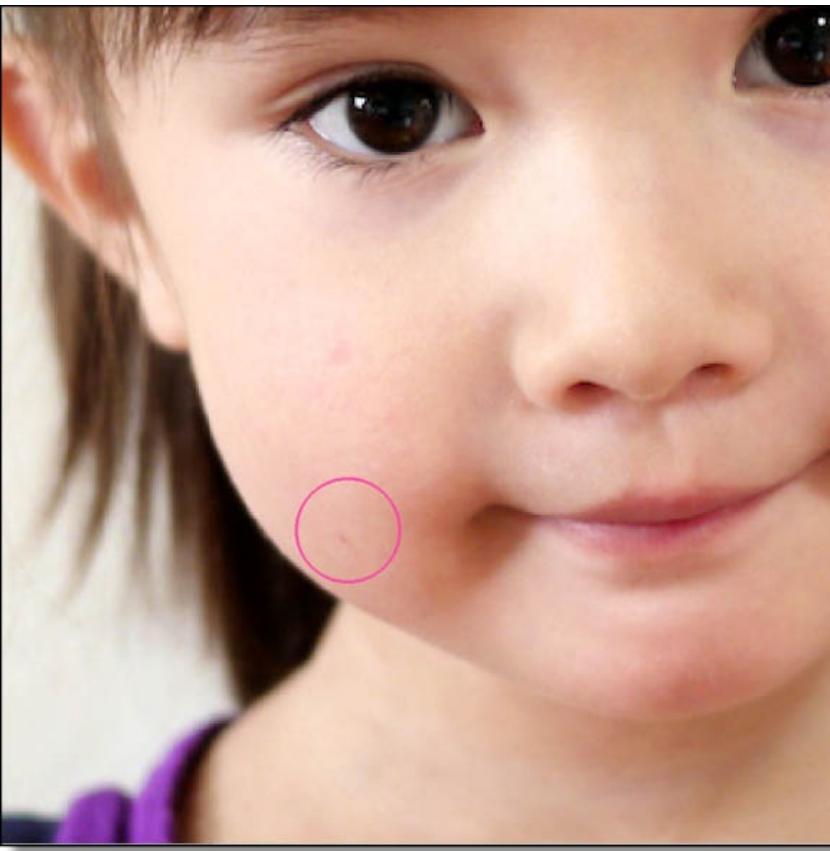
Using the Blur Tool is so straightforward; all you have to do is to select the tool, and then paint on the picture with it, just like we do with the brush tool.

I am going to show you two examples for the Blur Tool, one that works, and one that doesn't work that well.

Take a look at the following girl picture:-



If you looked carefully, you will see a little blemish on the girl face, this blemish can be removed easily with the Blur Tool.



## To remove the blemish, do the following:-

- Select the Blur Tool  from the Tools Panel
- Adjust the brush size of the tool, mine looked like that:-



- Now click and drag the mouse a little over the small blemish, then release the button. Do that about 10 times, and the blur tool will blend the area with the blemish with its surroundings. Causing the blemish to disappear



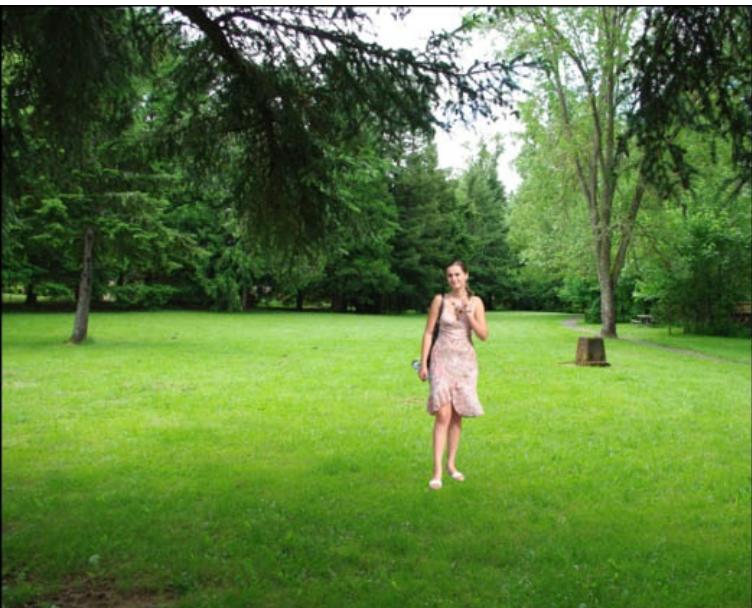
- Now let's work on the example that doesn't exactly work. We will try to remove the bigger blemish in the middle of the girl's face:-



- Select the Blur Tool  from the Tools Panel. And start making strokes on that spot. No matter how much you stroke the area, the blemish won't go. The reason for that is because the Blur Tool is not made for making very strong blur like the one needed to remove the blemish. Making it unsuitable for the job. So if you want to remove that blemish, you will have to do one of the following:-
  - Using another tool, like the Spot Healing Brush Tool or the Patch Tool.
  - Use a more powerful blurring technique, like the Gaussian Blur Filter. Which we will talk about when we get to talk about filters later in this book

## Integrating a new object into a picture using the Blur Tool

Here a girl I pasted onto the field picture:-



And for many reasons, the girl stands out in the picture, causing her to appear unnatural. And it is obvious that she didn't belong to the picture in the first place. One of the few things that could be done to integrate her with the picture is to blur the edges or the girl using the Blur Tool. Because if you looked closely, you will see that the edges of the girl are so sharp. Which is part of what made her stand out in the first place:-



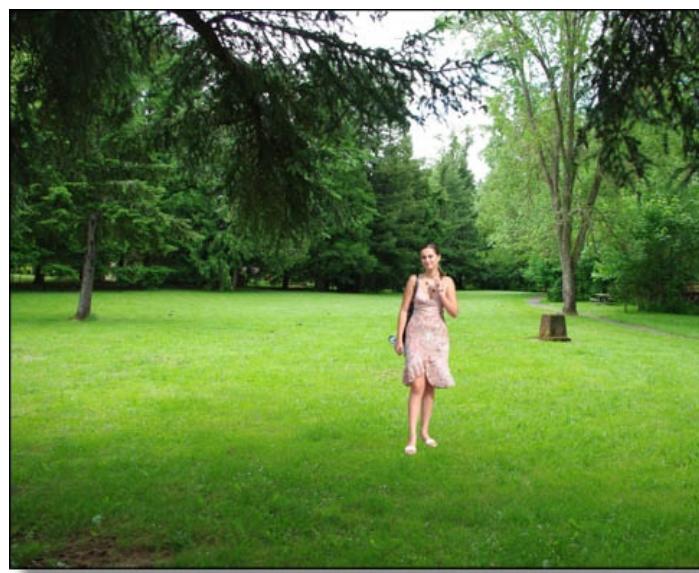
After going through the edges with the Blur Tool, the

edges seem a bit smoother now:-



Here is the picture after I zoomed out. Notice how I applied more blur on her feet to make them look

like they sink into the grass



Another thing you could do to integrate the girl more into the picture is to match her lighting with the picture. So on a different layer, I painted some green over the girl using a soft brush. Then I changed the Blending mode to Soft Light and decreased the layer's flow-opacity until I was satisfied with the results. Here are the final image I got:-



## The Sharpen Tool

The Sharpen Tool  does exactly the opposite of the Blur Tool . It sharpens the edges of the pixels you paint on. Which is a good way to make certain parts of the picture stand out. Or to remove some Blur that may exist in the picture.

To illustrate how the Sharpen Tool works, we are going to sharpen some parts of the fur in the following Panda. To make these parts of the fur stands out more:-



To do that, select the Sharpen Tool  from the Tools Panel, and then start painting with the tool. After a few strokes, the details of the Panda face start to stand out more.



## Don't overdo it with the Sharpen Tool

With the Sharpen Tool  . It is certainly a pleasure to see the details of the picture appears in front of you. This is one of the reasons Photoshop Beginners tend to overdo using the tool trying to get better results. And end up destroying their photo. When editing pictures using Photoshop. You have to remember that in Photo-editing, sometimes less is more. So choosing to sharpen a little bit less is usually better than ending up with a distorted picture. Like how the following Panda picture was sharpened to death:-



One great alternative for the Sharpen Tool is the Unsharp Mask filter, which is explained in the filters chapter

## The strength option of the Blur Tool & The Sharpen Tool



The strength option, which exists for both the Blur Tool & The Sharpen Tool, allows you to adjust how powerful the effect of the tool is. Sometimes, the effect of each stroke from the tool is not enough, so you need to increase the strength of the tool to get faster results. Likewise, sometimes the strength of the tool is a bit too much, where you need to decrease the power of the tool to get the exact effect you want

Take a look at the following Deer picture:-



I sharpened the back of the Deer so sharply by setting the strength of the Sharpen Tool to %100. It took me 3 strokes only to sharpen his back that way:-



Then I redid the sharpening again, but this time, the strength of the Sharpen tool was set to %25. So it took me 12 strokes to get the same amount of sharpening:-



Generally speaking, you could achieve everything you want by keeping the strength of the Blur Tool or Sharpen Tool so low, though that will require you to do much more clicking to achieve the same result, which could lower your productivity to some degree.

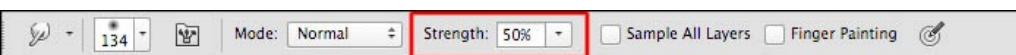
## The Smudge Tool

The Smudge Tool  is intended to use for painting, it aims at simulating the process of smudging the colors with your finger. Similar to how painters do in traditional drawing. But the tool can still be used to do some minor editing as well

I was able to make the Panda eyes bigger using the Smudge tool here. If you looked carefully, you will notice that the edges of the eyes became somewhat distorted. Which could be fixed to some degree by the sharpening it using the Sharpen Tool:-

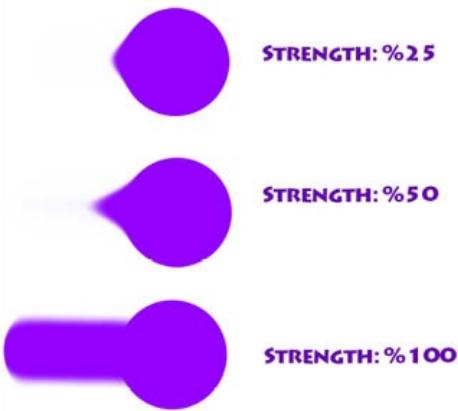


## The Strength Of The Smudge Tool



Just like the Blur Tool & The Sharpen Tool. The Smudge Tool has a strength option that determines how powerful your strokes will move the picture pixels. The more powerful the strength, the more pixels will move by your strokes. Here is how this option works in general:-

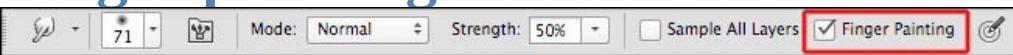
### The Strength Option Of The Smudge Tool



Notice how the Smudge Tool at %100 strength moves all the pixels that are below the cursor.

**Warning:-** Be careful about using the Smudge Tool with huge brush tip, as doing so may cause Photoshop to do lengthily calculations. Rendering it useless until these operations end. Or until you force quit the program

## Finger painting



A nifty feature of the Smudge tool is the Finger Painting check box. When this option is checked, the smudge tool adds a little stroke to the picture, which is fairly useful in case you want to use the tool for painting and color blending.

I added a few red strokes on the Panda head using the Finger Paint option.



And after working on it a little bit, I ended up making the following hat:-



**Note:-** The Liquify filter provides a much easier way to manipulate pictures than the Smudge Tool. The Liquify filter will be explained in the filters chapter

## Summary

- The Blur Tool smooths the pixels you paint on, making them look misty or less focused
- The Sharpen Tool does exactly the opposite of the Blur Tool. It increases the sharpness of the pixels by increasing the contrast between them
- Overusing the Blur Tool or the Sharpen Tool can lead to less than ideal results. So be careful about using them, and always remember that less is more when it comes to photo-editing
- The strength option of the Blur Tool & Sharpen Tool determines how much blurring or sharpening happens with each stroke you make. This is a useful way to apply effects precisely on your pictures

- The Smudge Tool simulates smudging & mixing colors with your finger, and it is a very useful tool to use for digital painting
- The strength option of the Smudge Tool determines how much and how far pixels are moved with each stroke
- Fingerprint option of the Smudge Tool applies a little color alongside your stroke, which is a good way to mix multiple colors together

## Examples

### Blur the surroundings of an object

The Blur Tool can be used to blur the surrounding of the object you want to be the center of focus. That way, the viewers of the picture will tend to focus on it when they look at it (A similar & better example to this will be introduced in the filters chapter):-



### Emphasizing the details of a picture

The Sharpen tool is a very good way to emphasize the details of a picture. As I have done with the following dog picture



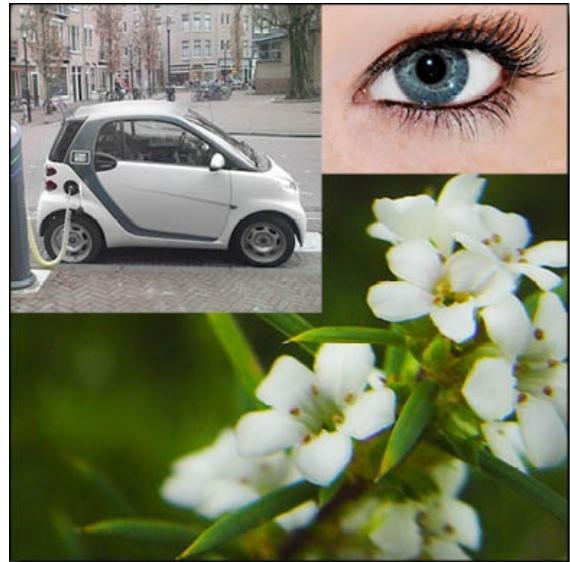
### Creating a logo

The Smudge Tool, along with the fingerprint option, can be used to create a simple logo. Like the one I created for the fictional company “Fire”:-



# The Fire

## Photoshop Dodge Tool, Burn Tool, And the Sponge Tool



### The Dodge Tool

The Dodge Tool is used to lighten a part of the picture, which makes it very good way to lighten a picture or parts of it, like how we are going to see now

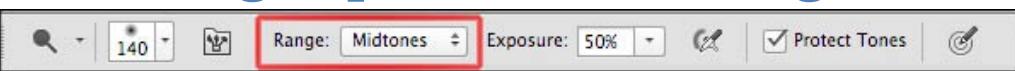
Take a look at the following flowers picture, notice how the flowers is kind of dark:-



Using the default settings of the Dodge Tool. You could lighten the picture a little bit more. By making a few dabs with the Dodge tool, and causing the flowers to look much better:-



## The Range option of the Dodge Tool:-

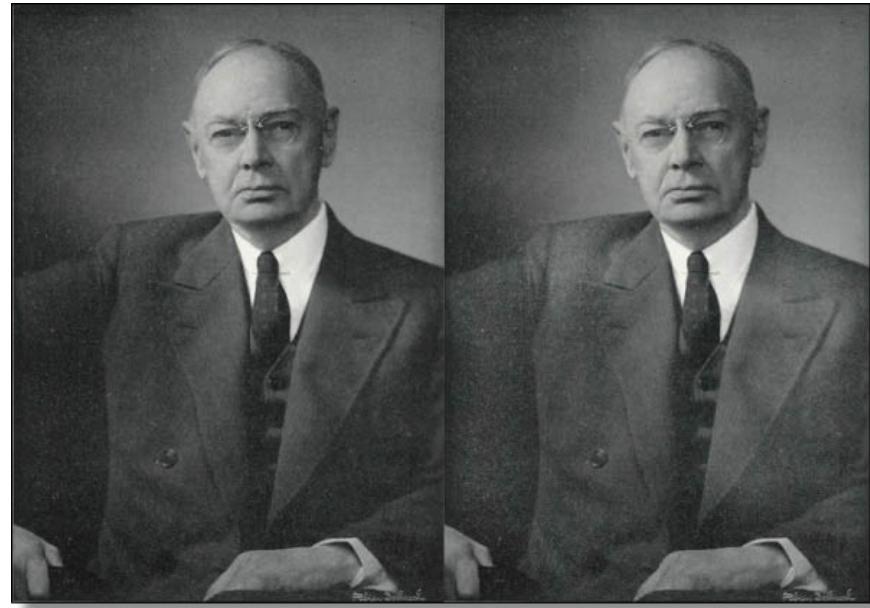


The Range option of the Dodge Tool determines the range of values (or colors) that get affected by your strokes. If you selected Shadows, then mostly the dark areas will be lightened. If you selected Highlights, then the bright area will be affected the most by your strokes. Midtones affects the values in between.

Take a look at our flowers picture; I applied similar strokes on the picture using each of the range options. Notice how when I applied the strokes using Shadows. The midtones and highlights areas got barely affected, making them a good way to remove shadows from a dark picture. While the Highlights affected the bright areas, causing them to become even brighter



The Shadows Range option is certainly useful at shedding some light on a dark picture, the this one:-



## The Exposure setting of the Dodge Tool:-

The Exposure setting of the Dodge Tool is similar to the Strength option of the Blur Tool & the Sharpen Tool. The more the exposure is, the more powerful the affect of each strokes you make will be. Using low exposure is a good way to apply precise effect on pictures. While high level of exposure can help you apply a powerful effect to the picture, something you may want to avoid doing most of the time.

In short, high Exposure level is a way to achieve a bigger effect using less strokes. Take a look at the

following cat picture, I applied two strokes using %25 exposure, %50 exposure and %100 exposure respectively. Notice how the effect gets stronger with the higher exposure level:-

### The Exposure Setting Of The Dodge Tool



## The Burn Tool

Remember when we discussed Blending modes of the Brush Tool. And how I describe the Color Burn blending as the mode that burns the colors of the picture? The Burn Tool  does exactly that, it darkens a certain area of the picture; which is the opposite of what the Dodge Tool does. The Burn Tool is useful for darkening bright areas of pictures, or to correct the illumination in them. Just like how I toned down the illumination of the following room a little bit (the effect is too slight here, but it is obvious more on the lower part of the picture):-



The Burn Tool is also a good way to emphasize the dark area of faces, like the eyebrows and the eyelashes. It gives you the same feeling as applying mascara to the eyes (Again, the effect is not easy to see, but notice how the mascara became a bit thickened around the girl's eyes :)



## Range of the Burn Tool

The Burn Tool has the same range option of the Dodge Tool. Which allows you to specify the values or tones that gets affected mostly by your strokes, be it the dark areas (Shadows), the bright areas (Highlights) or the areas in-between (Midtones). Choosing the most suitable range can insure you get the best results possible.

Darkening the mascara using the Burn Tool while setting the range to Shadows produced better results than when did it with mid tones:-



Now take a look at the earth picture, the picture in the upper left corner is the original one. While the other three have been painted with the burn tool using the Shadows, Midtones and Highlights respectively, notice how in the Highlights picture, the bright areas of the picture got dimmed, while in the Shadows one, the dark areas got darker:-

*Original*

*Shadows*



## The exposure option of the Burn Tool

Similar to the exposure of the Dodge Tool, the exposure setting of the Burn tool allows you to burn the image more or less with each stroke, depending on the exposure value you choose

In the following picture, I made 5 strokes in the area marked by the white rectangle, using exposure levels %25, %50 and %100 respectively. And I got a more powerful effect each time the exposure was higher:-

*Original*



*%50 Exposure*



*%100 Exposure*



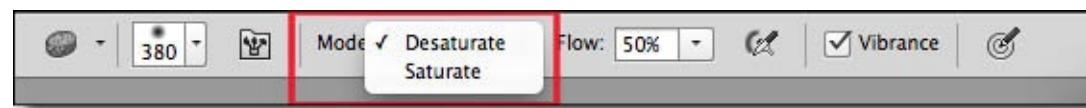
## The Sponge Tool

The Sponge Tool adds or takes color from the picture. In other words, it saturates or desaturates the picture colors. It can be used to enhance the colors your pictures, or to lessen them in case they were a bit much colors in a certain area.

The Sponge Tool desaturates the colors of the pictures by default. And if you overdid it, you will end up turning the colors of part of the picture into grayscale, just like this:-



But you can change the mode of the tool to make it adds colors to the picture instead of taking it away, using the mode option.



Here is how I added colors to the electric car instead of taking it away, overdoing it can produce some interesting results:-



## The Flow Option of the Sponge Tool

The flow option of the Sponge Tool work the same way the flow, strength or exposure settings of the other Photoshop tools. It determines how much your strokes affect your picture. In other words, it determines how much your strokes saturates or desaturates the area you paint on.

I applied one thorough stroke using the Sponge tool with the Flow option set to %50 and %100 respectively. See how the color of the car become more saturated with each flow value:-



## Summary

- The Dodge Tool lightens part of the picture, and it can be used to enhance the illumination of a specific object or whiten it.
- The Burn Tool does exactly the opposite of the Dodge Tool. It darkens or “Burn” the part of the picture you paint on. Which can be used for both enhancing the look of pictures, or to create certain effects.
- The Exposure setting of the Burn tool & the Dodge Tool works the same way the Flow setting of the Brush Tool. It determines how each stroke affects the picture. Having more exposure means that you can achieve more by going fewer clicks. But you have to be careful about doing that.
- The range option of the Dodge Tool & The Burn Tool determines which are the values that get affected by the tool the most. Shadows make the tool work mostly on the dark areas of the picture, while Highlights makes them work on the bright ones. And Midtones makes them work on the area in-between the most.
- The Sponge Tool increases or decreases the color of the picture, or in other words, it saturates or desaturates the area you paint on, depending on the tool mode.
- The Flow options of the Sponge Tool works the same way as the Exposure of the Sponge Tool or Burn Tool. It determines how much effect the Sponge Tool has on the picture.

## Examples

# Enhancing the eye looks

Take a look at the following beautiful eye:-



CGP

Using the Dodge Tool, you can whiten the eye to make it look better, but make sure you don't overdo it:-



CGP

Then you could burn the eye lashes a little bit, to make the mascara on the eyes look better:-



CGP

## Painting lights on a car

The following Mercedes has its lights off, but we can turn them on using the Dodge tool



First, we carefully make a few strokes using the Dodge tool; the lights are starting to come into life



Then with a soft white brush, I dapped around the lights to make them look more realistic:-



## Burning the face with the Burn Tool

The Burn Tool can literally burn the human faces. Just like how I did to the face of the girl below,

overdoing it can produce some ugly results. So I stopped after few dabs of the tool.

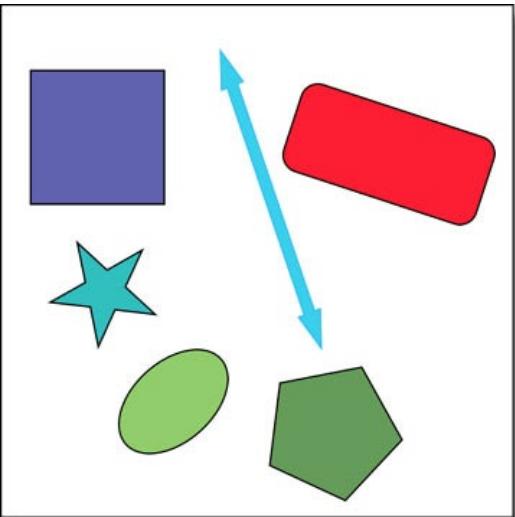


## Saturating a part of the picture

Using the Sponge Tool, you could saturate all but a certain part of your picture. Which is a good way to create an effect or draw the viewer attention to a certain object in the picture, just like I did with the following house, which has been saturated in order to make it stand out more:-



## Photoshop Shape Tools



This chapter is relatively easy compared to the previous ones. In this chapter, we are going to discuss the Photoshop Shape tools, which are more straightforward to learn. Think of this chapter as a breather after the last few ones.

Despite their simplicity, The Shape Tools' importance can't be underestimated. Especially for those who plan to use Photoshop for graphics design.

## Photoshop Shapes Tools

There are 5 Shape Tools in Photoshop, besides the Custom Shape Tool, which allows you to choose from tons of shapes to add to your designs, these tools are:-

- Rectangle Tool 
- Rounded Rectangle Tool 
- Ellipse Tool 
- Polygon Tool 
- Line Tool 
- Custom Shape Tool 

I will talk about the Custom Shape Tool in details in the next chapter. For now, let's focus on covering the other ones

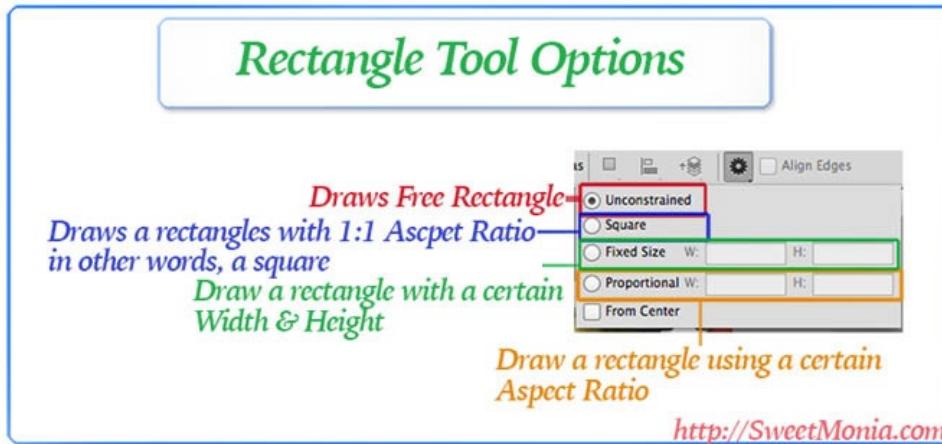
## The Rectangle Tool

The Rectangle Tool allows you to draw a rectangle (obviously), to do that, just do the following:-

- Select the Rectangle Tool  from the Tools Panel
- For more options, click on the gear button for the available options for creating the rectangle.

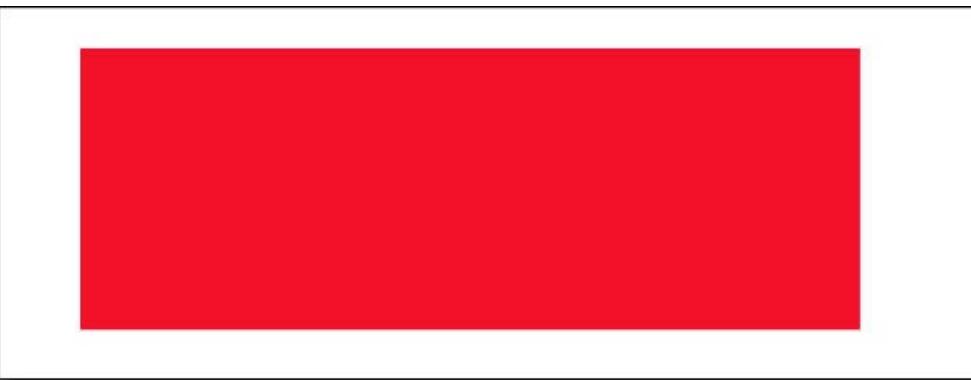


- All the gears options are explained in this infographic:-

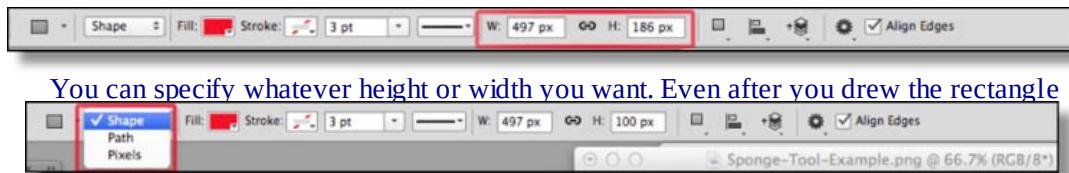


The “From Corner” checkbox will be explained shortly. If you are not familiar with Aspect Ratio, then I highly recommend that you read the Cropping chapter (Cropping Images in Photoshop using the Crop Tool And Rectangle Marquee Tool, and An Introduction to aspect ratio)

- After you specify the rectangle options, click drag the mouse to draw the rectangle:-



- If you want the rectangle to have a certain dimensions, you can adjust its Weight & Height from the Rectangle Tool options, this will only work if you drew the rectangle as a Photoshop Shape, something you will have to specify before you draw the rectangle:-

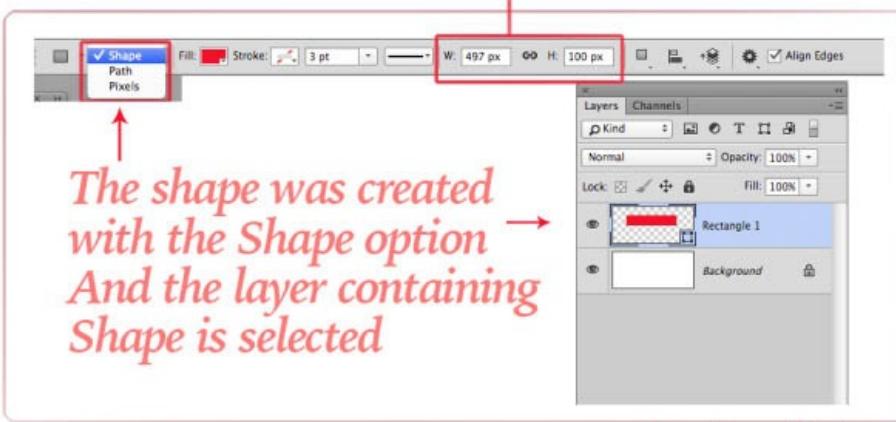


To be able to change the width & height of the rectangle after you draw it. The shape must be created in the shape mode. All the Shape, Path & Pixel modes will be explained later in this chapter

- Here is the rectangle after I changed its height to 100:-



*To change the size of your Shape*

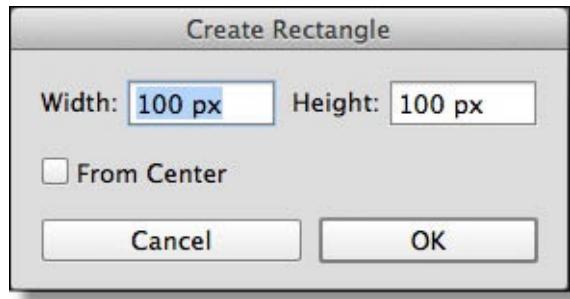


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Another way to draw

## rectangles using the Rectangle Tool

- Select the Rectangle Tool  from the tools panel
- Click anywhere in the canvas, just make sure you don't drag your mouse at all, and Photoshop will display the Create Rectangle dialog:-



- Enter the width & height you want of the rectangle, if you kept the "From Center" option unchecked, then the top left corner of the new rectangle will be at point you clicked on to display the dialog. If you checked it. Then the rectangle will be created so that point will be the center of the new rectangle. If what I just said felt confusing to you, then I highly suggest you try to draw the rectangle twice, once when "From Center" is checked, and again when it is unchecked.
- Click on the OK button, and Photoshop will draw the new rectangle (or square) for you



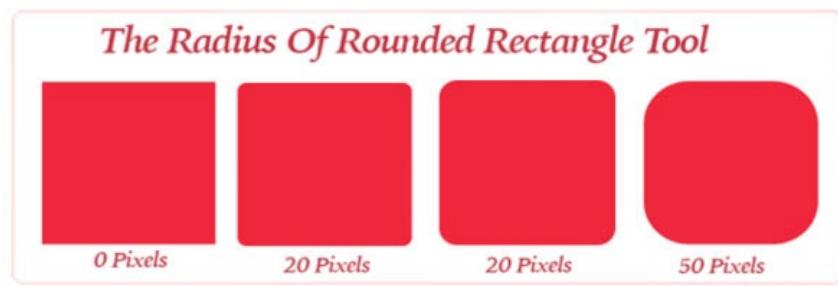
# The Rounded Rectangle Tool

The rounded rectangle shape looks much cooler than the boring rectangle. And it works the same way as the normal rectangle, except that you get to specify the radius of the corners, or in other words, how much the corners are rounded.

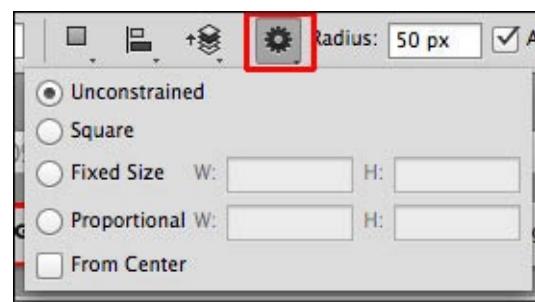
Just like the rectangle shape. You can draw the Rounded rectangle in two ways. Interactively or using the dialog

## To draw a rounded rectangles interactively, follow these steps:-

- Select the Rounded Rectangle Tool from the Tools Panel
- In the Radius option. Enter the radius of the corners of the rectangle, the more radius the rectangle has, the more rounded the rectangle will be. See the picture below for some examples



- Just like we did with the Rectangle Tool. Click on the gear to specify the aspect ratio options, the options for the Rounded Rectangle Tool is the same as the ones we discussed when we talked about the Rectangle Tool.



- Click and drag on the canvas to draw the rounded rectangle. Once you are satisfied with the rectangle, release the mouse button.

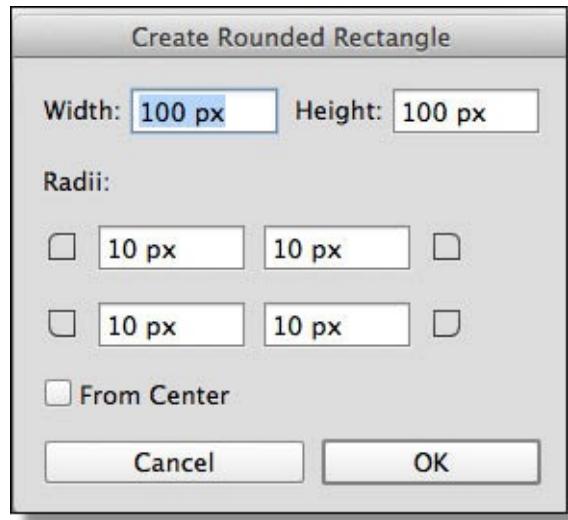


Drawing a rounded

rectangle using the dialog

Drawing a rounded rectangle using the dialog also works the same as drawing it using the Rectangle Tool. In addition to being able to specify the radius of the corners in the dialog.

- Select the Rounded Rectangle Tool  from the Tools Panel
- Click on the canvas where you want the rectangle to be drawn
- Photoshop Will display the Create Rounded Rectangle dialog



- Enter the width & height of the rectangle. And choose if you want the rectangle to be created from the center
- Then enter how much rounded each of the rectangle corners are. The nice thing about creating the rounded rectangle from the dialog is that you could specify how much each of the 4 corners is rounded. And you could enter a different value for each of them. Using that I was able to create a bizarre looking rounded rectangle, whose corners are all rounded differently

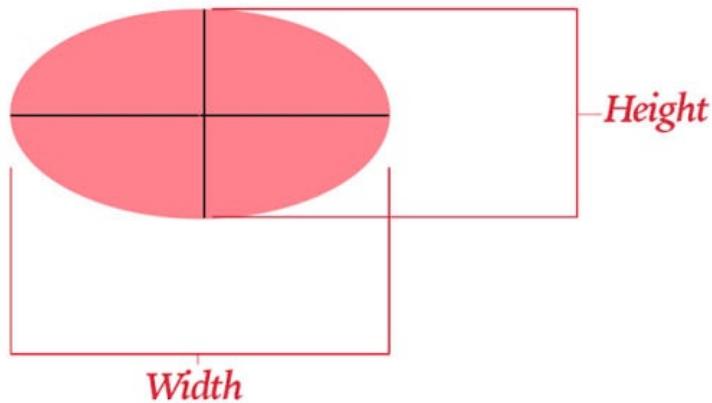


## The Ellipse Tool

The Ellipse Tool, which is obviously used to create Ellipses. Also works exactly like the Rectangle Tool. In that it allows you to create ellipses by specifying its width & height, or by clicking & dragging using the mouse cursor

If the idea of ellipses having width & height is confusing to you, here is how these dimensions are measured:-

## Dimensions Of Ellipse

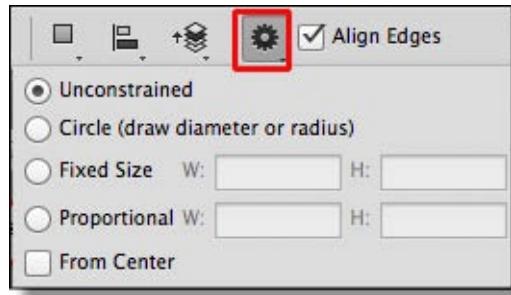


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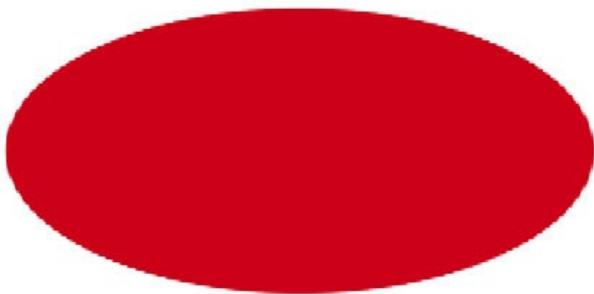
## To create an ellipse

### interactively, follow these steps:-

- Select the ellipse tool  from the Tools Panels
- Just like we did with the Rectangle Tool and the Rounded Rectangle Tools. Click on the gear to show the aspect ratio options of the rectangle. The only different in the settings is that you get the option to draw a “Circle” option instead of “Square”.



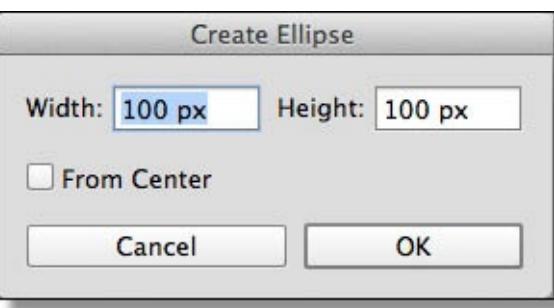
- Click and drag the mouse cursor. And Photoshop will draw the ellipse for you.
- When you are done, release the mouse button, and you will be done



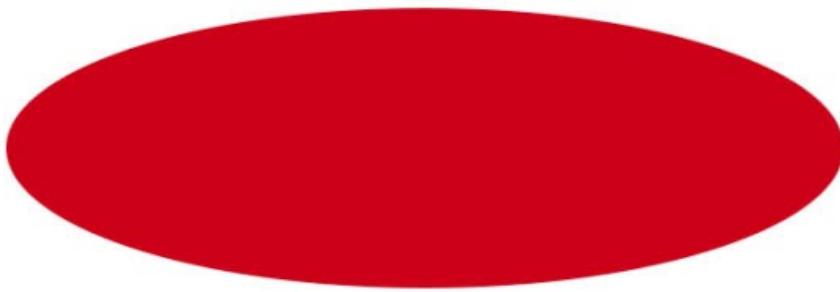
## To create an ellipse using the

### dialog, follow these steps:-

- Select the Ellipse Tool  from the Tools Panel
- Click on the canvas where you want the ellipse to be drawn, and Photoshop will display the Create Ellipse dialog box



- Enter the width & height you want for the ellipse. And choose if you want the ellipse to be created from the center or not, then press on the OK button.
- Photoshop will then draw the ellipse for you, I drew a 600 X 200 ellipse right here:-



## Polygon Tool

Unlike the shapes we have been creating until now, the Polygon Tool offers a wider variety of options. Which is why we will take our time exploring its options.

### To draw a polygon using the Polygon Tool interactively, follow these steps:-

- Select the Polygon Tool  from the tools panel
- From the Polygon Tool options. Type the number of the sides the polygon will have.



- For the rest of the chapter, I will stick with 5 sides polygons. But you can draw a triangle, square, pentagon, and polygons with any number of sides you want.

# Polygons With Many Sides



3 sides



4 sides



5 sides



6 sides



7 sides



8 sides



9 sides

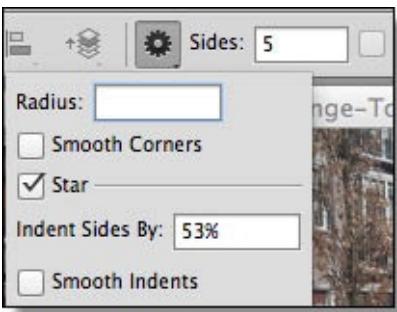


10 sides

<http://SweetMonia.com>

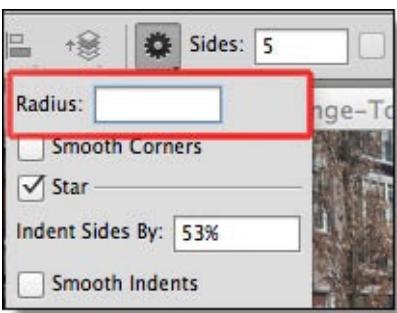
Click on the gear button to specify

how the polygon will looks like.

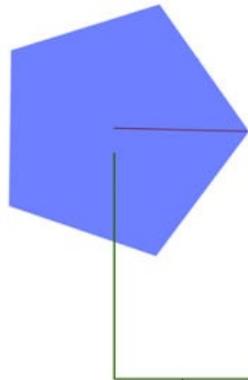


The options you can specify are:-

## Radius

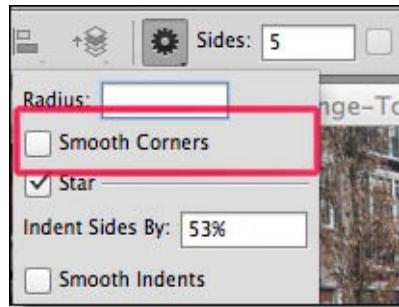


The radius of a polygon is the distance between the center point and one of its head. Specifying the radius means that you won't get to interactively decide on the size of the polygon. But will be able to rotate it while you are drawing it.

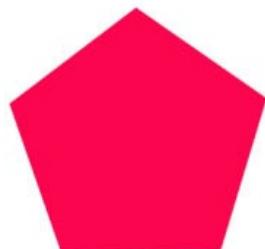


*Polygon  
Radius*

## Smooth Corners



This checkbox allows you to create a polygon with rounded corners, if your polygon has 5 or more sides, the polygon will look like a circle

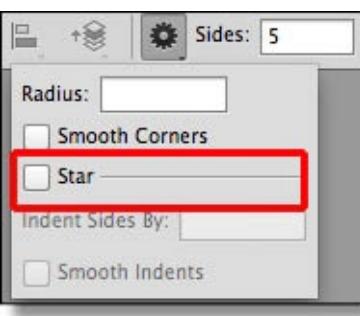


*5 Sides Polygon  
With Smooth Corners  
Off*

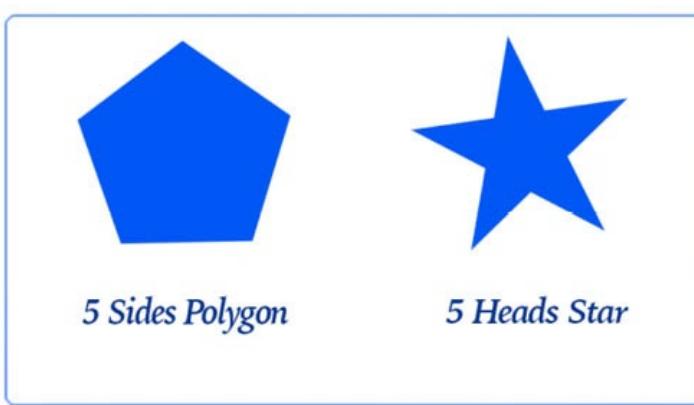


*5 Sides Polygon  
With Smooth Corners  
On*

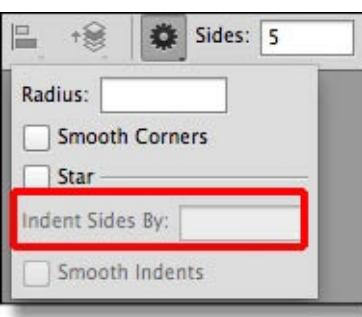
**Star**



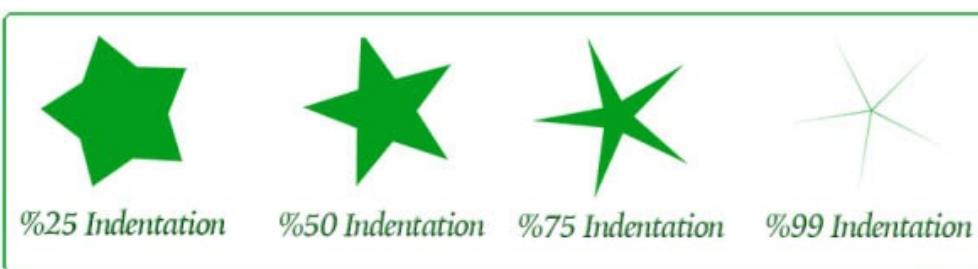
The Star check box creates a star instead of a polygon. With the same number of heads as the number of sides you specified



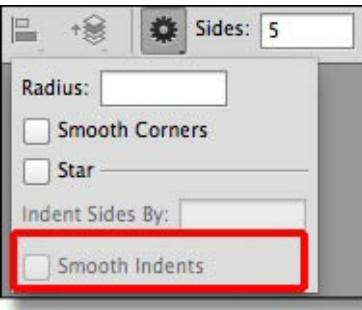
## Intent Sides By



This option determines how much the sides of the polygon (which is a star now) are indented



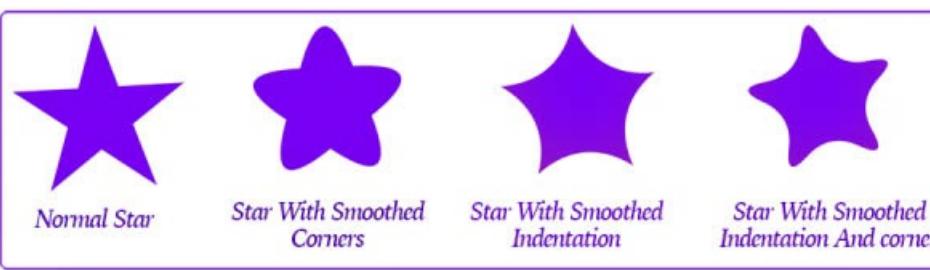
## Smooth Indents



Smooth Indents smooth the indented corners. Just like the Smooth Corners option smooths the heads of the polygons



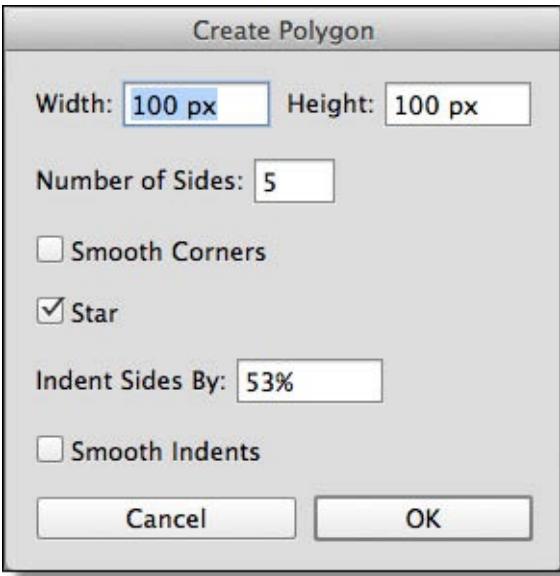
- Note that stars can have either smooth heads, smooth indentations, or both:-



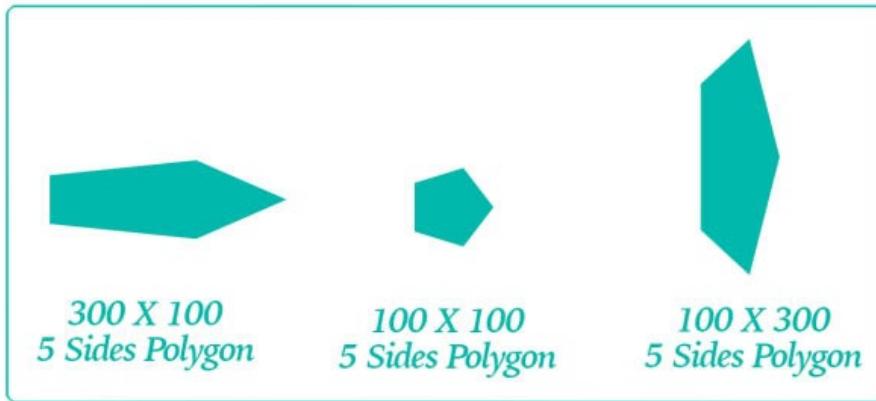
- After you adjust the option to match what you want, here comes the easy step, click and drag the mouse on your canvas. And notice how polygons are always drawn from the center.

## To Draw a polygon using the dialog

- Select the Polygon Tool from the tools panel.
- Click anywhere on the canvas, and Photoshop will display the Create Polygon dialog



- A good thing about using the dialog to create polygons is that you get to type the desired Width & Height, which allows you to create all sorts of squashed polygons. Like these in the picture:-



- The number of the sides of the polygon allows you to specify the number of sides the polygon has.
- The Star options allows you to create a star instead of a polygon
- Indent sides is available only when you check the Star checkbox. It specifies how much the star heads are indented
- Smooth indents will create curved indents instead of the sharp ones that are typical of a star

**Candy Tip:-** The polygon tool can be used to draw perspective as well, The way to do that is explained in my blog post [Drawing Perspective in Photoshop & Illustrator, A simple how to](#)

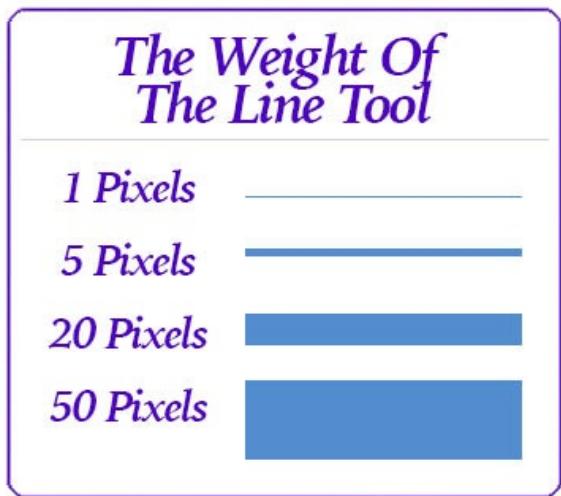
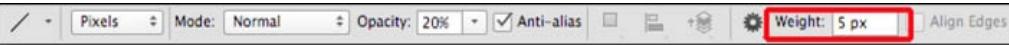
## The line Tool

The Line tool is very simple at heart, it allows you to draw lines while specifying its width (or weight as Photoshop calls it). As well as whether each of the line ends with an arrow, and how the arrows look like.

Unlike the rest of the Shape tool, you can only draw lines interactively. There is no other way to draw a line using the Line Tool in Photoshop.

## To draw a line using the Line Tool, follow these steps:-

- Select the Line Tool  from the Tools Panel
- From the Line Tool options, enter the weight of the line (or how thick the line is):-

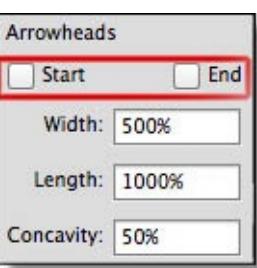


- Now, click on the gear button on the Line Tool options to see the available options for the tool. We will take a look at each of them one by one.



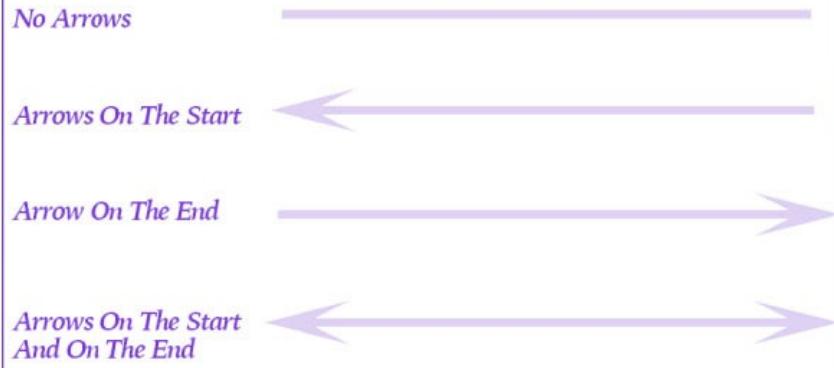
## Start & End

## Checkboxes

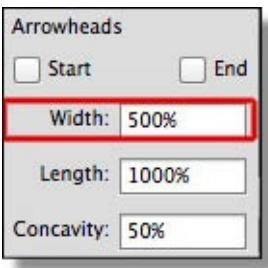


- The Start & End check boxes determines whether there is going to be an arrow at the start or the end of the line, respectively, you have arrows on either sides, neither side, or only one side:-

## *Arrow Options Of The Line Tool*

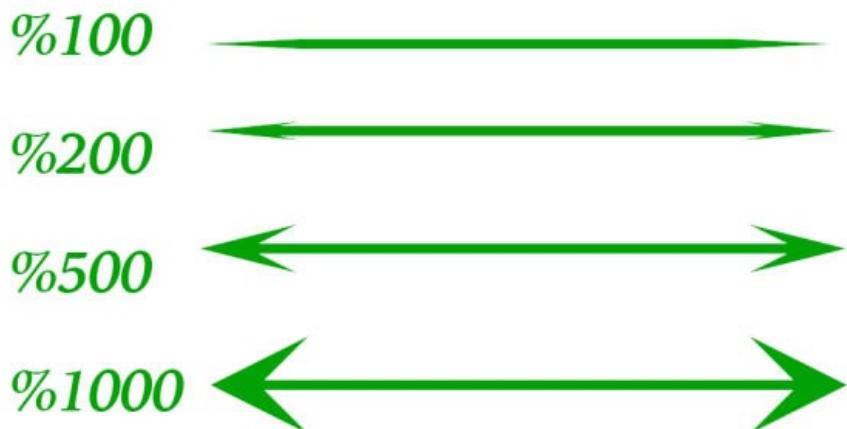


**Arrows Width**

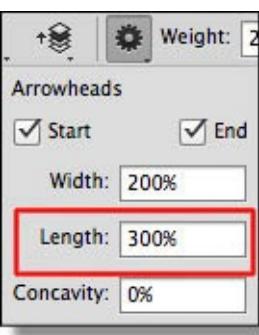


- The Width option determines how wide the arrows are in relation with the line weight. If you set this value to %500, it means that the arrowhead will be 5 times the width of your line. Here is how a line with a 20 px weight will look like with different values of this options, notice how the width of the first arrows is the same as the line itself.

## *Arrow Width Compared To Its Weight/Width*

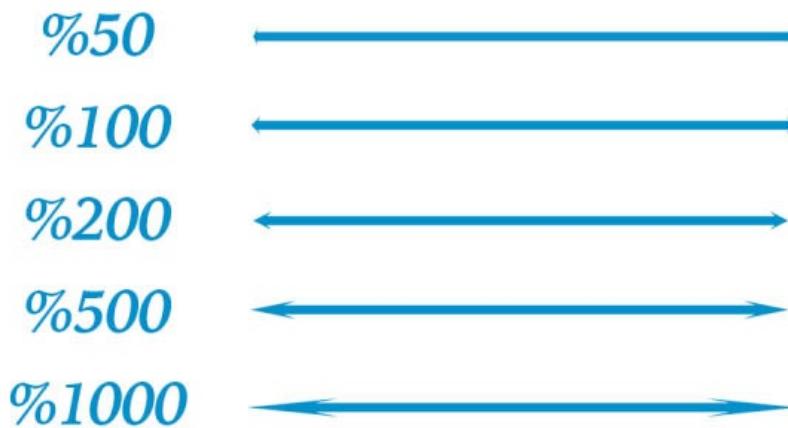


**Arrows Length**



- The length option determines how long the arrowhead is compared to the weight of the line. If the length is set to %100 and the line Weight is 20 pixels. Then the length of each of the arrowheads will be 20 pixels. If the length is set to %500 and the line weight is 20 pixels, then the length of each of the arrow heads will be 100 pixels, and so on.

### *The Length Of Each Of The Arrow Heads Compared To The Weight Of The Line*

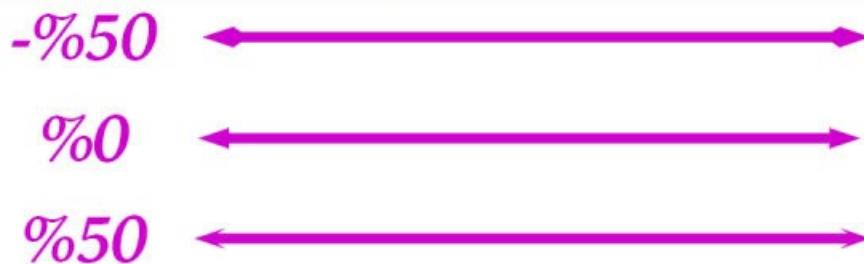


## Arrows Concavity

- The last option, the concavity, determines how much concave the arrowheads are compared to the weight of the line. If the line weight is 20 pixels. And the Concavity is %20, and then each of the arrowheads will go back (or be concave) by 4 pixels. If the concavity is %50, then each of the arrow heads will go back by 10 pixels, and so on

*The Concavity Of Each Of The Arrow Heads*

*Compared To The Weight Of The Line*

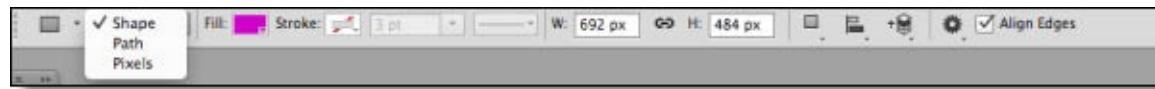


**More about the**

## **Photoshop Shape Tools**

As usual, this chapter is officially done. But we will still take a look at the wider range of options of the shape tools. If you don't feel like going through that right now, you can skip to the examples section for now~

## **Exploring the 3 different modes of shapes tools:- Shape, Path And Pixels**



In the option bar, you

could specify one of 3 modes for the shape you are creating. The 3 available modes are:-

### **The Shape Mode**

Shapes created using the shape mode are contained in a special kind of layers, called Shape Layer. The main advantage of shapes layers is that they contain vector graphics shapes. Meaning that you can resize the shapes in the layer however you want without losing any of the quality of the shape. Because the shapes are redrawn every time you resize them using mathematical equations

### **The Path Mode**

The Path mode creates a path of the shape you are drawing, be it a square, rectangle or any other shape. The path can be treated just like any path you create in Photoshop. And whenever you want, you can change the shape mode into a pixel mode, turn it into selection, or turn it into a mask for the current layer.

### **The Pixel Mode**

The easiest to understand among the 3 types, the pixel shape you create in this mode is added to the current layer pixels. And it is treated the same way as any pixel you painted using the brush tool, or any other tool.

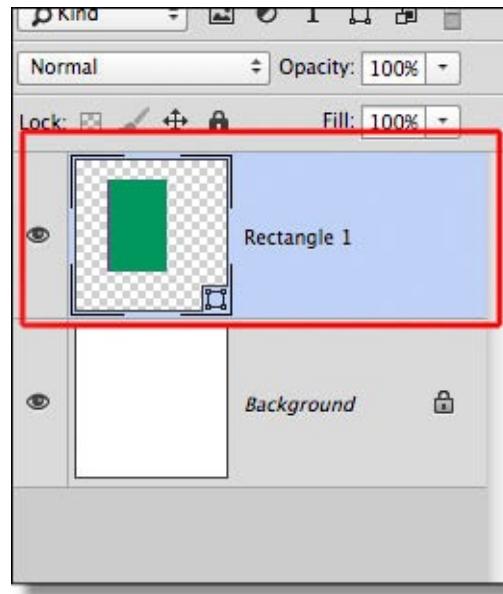
In another word, there is no difference between say, rectangles you create with the shape tools this

way, or the one you create by making a rectangular or elliptical selection and then filling it with pixels using the brush tool.

Let's talk a look on the options of each of these 3 modes:-

## The Shape Mode Options

The Shape Mode shapes works the same way any vector graphics program works. If you have any experience working on a vector graphics, then these options will look familiar to you. You can set these options before you draw your shape, or after you draw it by selecting the shape layer of the shape then changing the options you want.



Shape Layer in the Layers panel

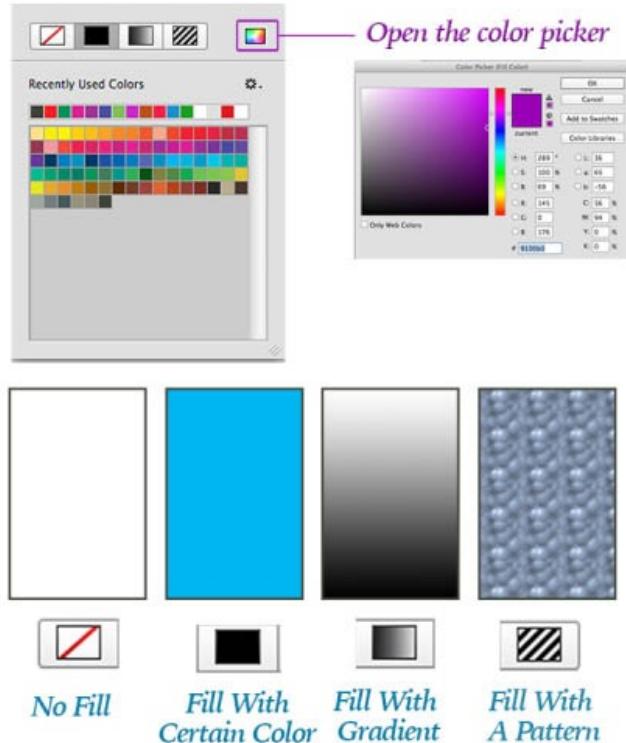
## Fill Color



Determines the fill of the shape,

you can choose any color you like from the colors palette. You can also make the shape so that it has no fill at all

# Changing Shape Fill In Photoshop



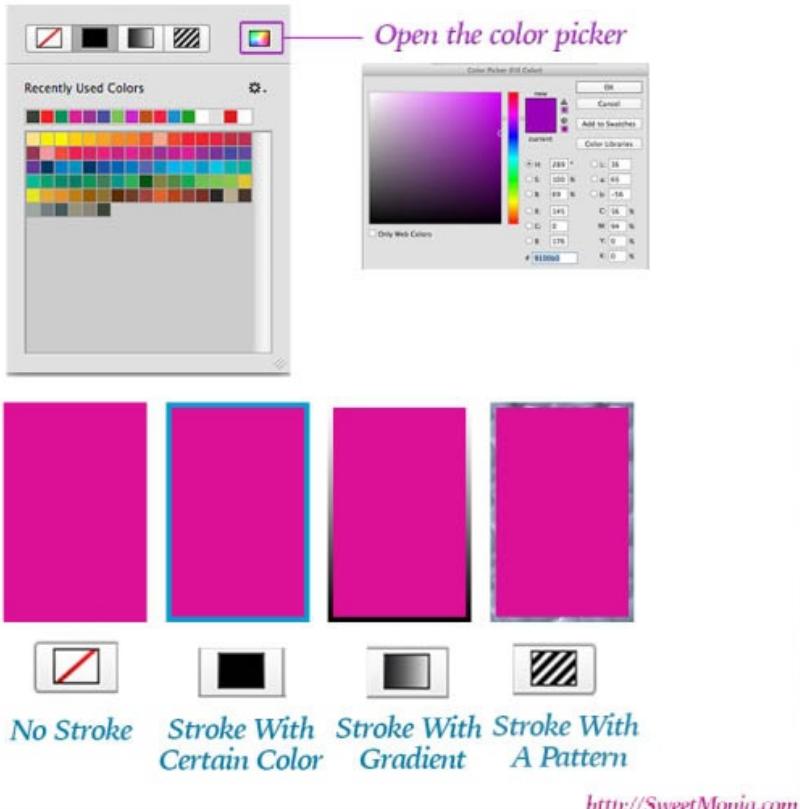
<http://SweetMonia.com>

## Stroke Color

Allows you to specify the color of

the shape stroke (or border, as you may call it). The options here are exactly the same as the ones available for the Fill Color option. You can choose a certain color for the stroke, make the shape has no stroke at all, make the shape stroke color to be a gradient or a pattern.

# Changing Shape Stroke In Photoshop



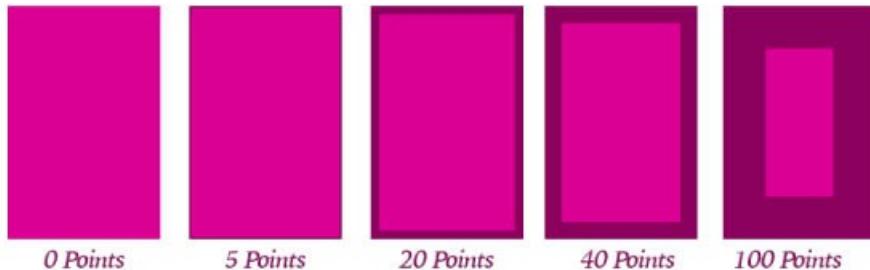
<http://SweetMonia.com>

## Stroke Width

This option determines how thick

the shape stroke is. Setting this to 0 means that the shape stroke at all

## Shape Stroke Width In Photoshop



<http://SweetMonia.com>

## Shape Stroke Types

Shape strokes don't have to

be continuous stream of pixel. As this option allows you to choose from many types of stroke types, from dashes to strokes. It also allows you to create your own stroke types as well:-

# Shape Stroke Type In Photoshop



You can choose the stroke type from this menu Right now, there is only 3 options in there. But you can create your own as well



<http://SweetMonia.com>

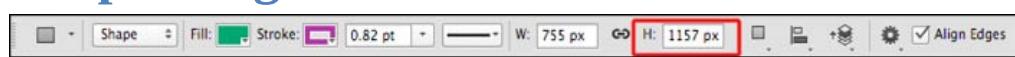
Shape

## Width



Determines the shape width.

## Shape Height



Determines the shape height.

## Link Shape Width & Height



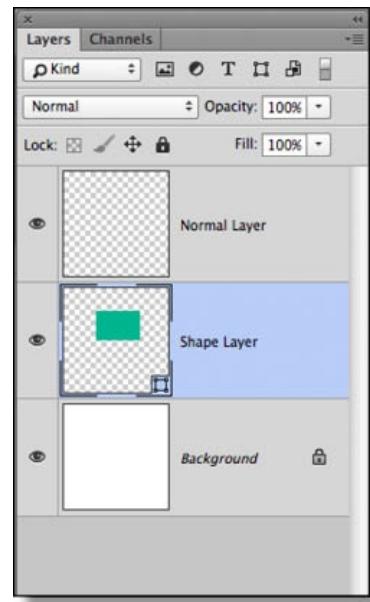
When this option is toggled on. Photoshop will link the Width & Height so that the shape aspect ratio will stay the same. Meaning that when you type a new value for the width, Photoshop will automatically change the height so that shape will preserve the same aspect ratio it has.

For more information about Aspect Ratio, refer to the chapter “Cropping Images in Photoshop using the Crop Tool And Rectangle Marquee Tool, and An Introduction to aspect ratio”.

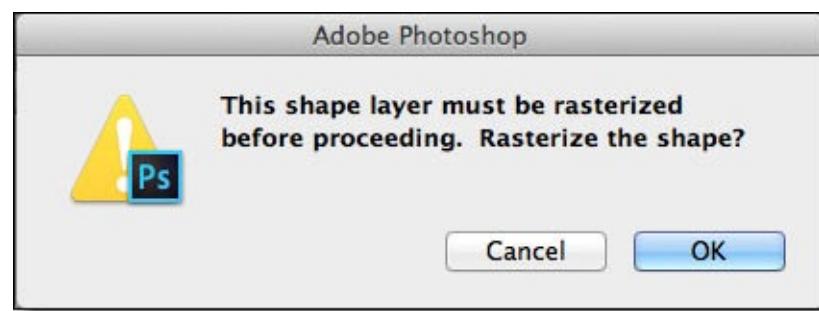
# Converting shape layer into normal layer

Shape layers are nice and all, but sometimes you may want to convert them to pixel layers so you could paint directly on them, or to apply a filter that doesn't support vector graphics. To do that, follow these steps:-

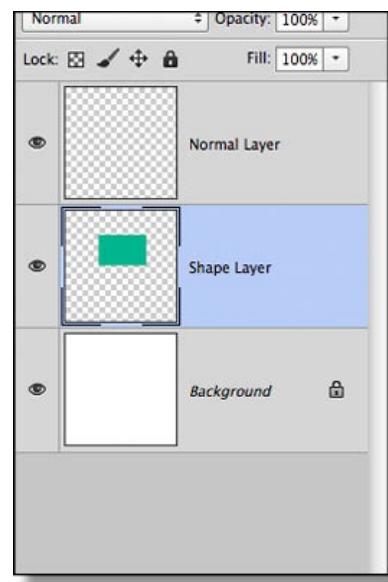
- In the layers panel, select the shape layer you want to convert into a normal layer.



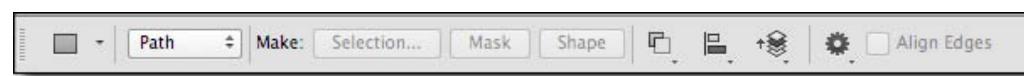
- Select the brush tool  from the Tools Panel
- Now click anywhere on the canvas, and Photoshop will ask you whether you want to convert the shape layer into a normal layer (Normal layers are also known as raster layers or pixel layers as well)



- Click on the OK button, and Photoshop will turn the shape layer into a normal one.

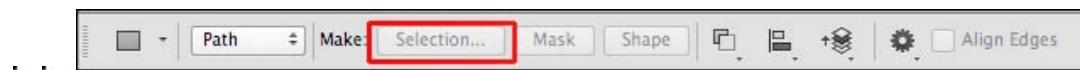


## The Path Mode Options



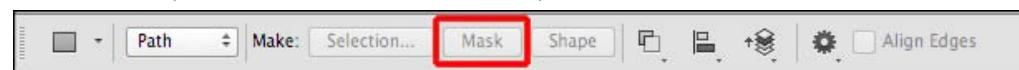
The Path Mode options are much simpler than the ones in the Shape Mode. There are only 3 options you have to be aware of, which they are:-

### Selection (Or Make Selections)



This option will turn the shape path into a selection, which you could manipulate just like any other selection in Photoshop. For more about Photoshop Selection Tools, Refer back to the chapter "Photoshop selection tools In-Depth"

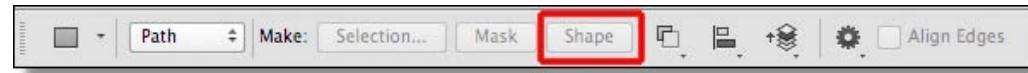
### Mask (Or Make Mask)



This option adds a layer mask to the current layer. If you don't know what a layer Mask Is, I suggest you check out the Layers Chapters. But in short, Layer Mask is a way to hide or conceal some of the

pixels in a given layer, but without actually deleting them. This means that by modifying the mask, you can determine which pixels are visible in a given layer and which are not.

## Shape (Or Make Shape)



This option will turn the Path Shape into a Shape layer, which is the same as the shapes created with the shape mode. When you use that option, Photoshop will add a new layer that contains the newly created shape.

## Summary

- There are 6 Photoshop Shape Tools. The Rectangle Tool, the Rounded Rectangle tool, the Ellipse Tool, the Polygon tool, the Line Tool, and the Custom Shape Tool.
- The Rectangle Tool and the Rounded Rectangle Tools both do the same things, but the Rounded Rectangle can draw rectangles with rounded corner
- You could specify the aspect ratio options for almost all the shapes you draw by clicking on the gear icon before you draw the shape
- The ellipse is drawn the same way you draw rectangles, the width & height of the ellipse is measured by the length its axis
- The Polygon Tool offers more options than any of the other Photoshop shape tools, it allows you to draw a star instead of polygon, which you could also customize in any ways.
- Using the star option of the Polygon Tool can help you draw in perspective in Photoshop easily
- The line tool draws all kind of thin and thick lines. You could also specify if the line has arrows on either side of it
- The line tool arrows can be customized in more than a way in relation with the weight or width of the line

## Examples

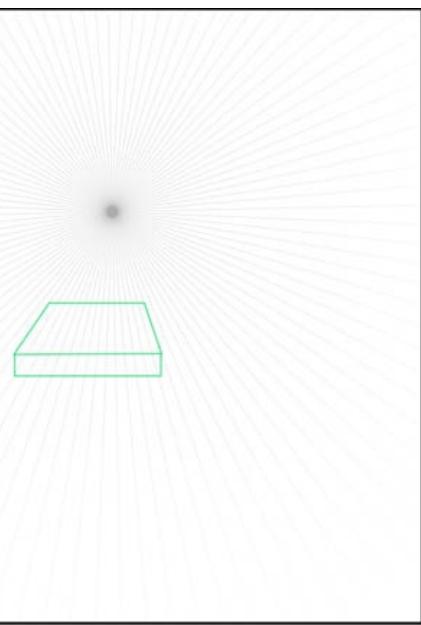
### Creating an iPhone-like Icon

The Rounded Rectangle Shape Tool is one of many ways you could use to create an iPhone-like icon. While you don't really create it that way when you develop applications for the iPhone. Icons that looks like that can make websites look more modern and cool:-



## Drawing in Perspective using the Polygon Tool

This example is out of the scope of this chapter. But it is worth mentioning for those who plan to use Photoshop for drawing. The Polygon Tool, along with the Star Option, can be used to quickly draw a vanishing point and all of the lines that come out of it, which can then be used as drawing guidelines. This trick can be used to draw in One, two or three points perspective. The whole trick is explained in full details in my blog post [Drawing Perspective in Photoshop & Illustrator, A simple how to~](#)

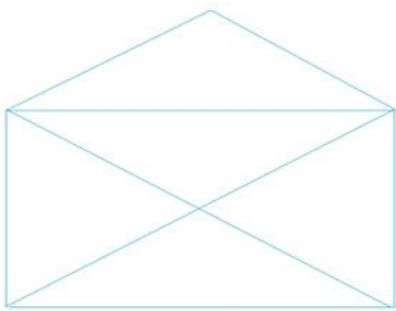


## Using the shapes tools to create simple drawings.

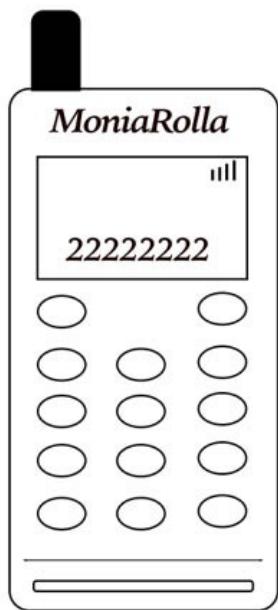
Since all the kinds of shapes exist everywhere around us. They can be used to draw tons of things, and without having much of drawing skills, and if you made these shapes in the Shape Mode, you will be able to resize them however you want, without affecting their quality.

If you are really interested in drawing that way, then I highly advice you to learn a Vector Graphics program like Adobe Illustrator, which was designed specifically for that. And it contains much more tools for that than Photoshop.

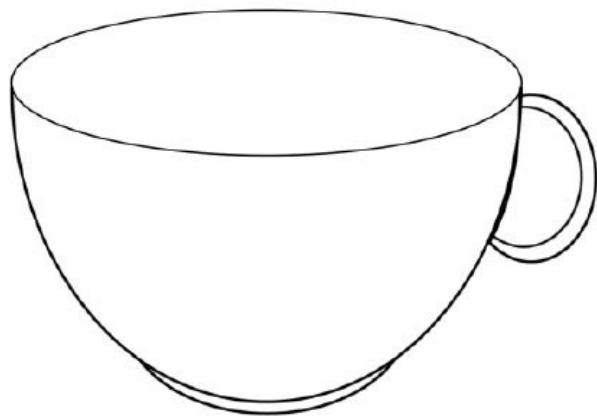
## An Envelope using lines



A mobile using ellipses and rounded rectangles, with some texts here and there



A coffee cup made entirely from ellipses and half ellipses



Photoshop Custom Shape Tool

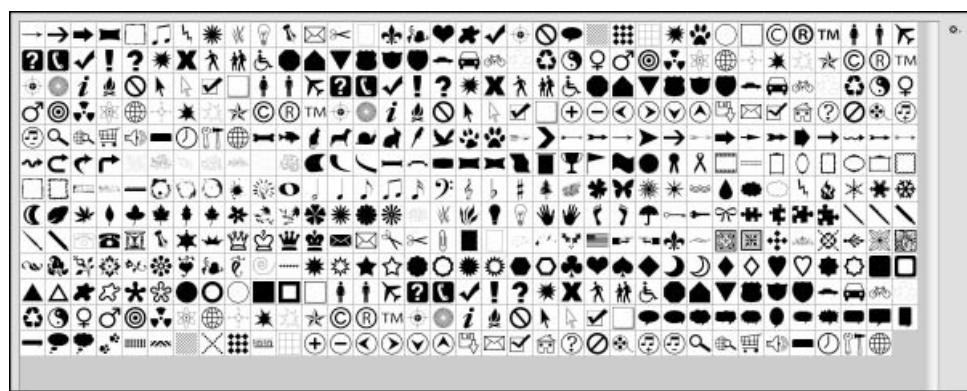


Custom Shape Tool is similar to the other shape tools we have seen in the last chapter, except that instead of limiting you to draw basic shapes like lines, rectangles or circles. The Custom Shape Tool allows you to draw from a wider variety of shapes. And technically speaking, there is no limit to what shapes you can draw using this tool.

Here are some of the shapes you could draw with the tool:-



And here are all the shapes that are available to you out of the box (to see all these shapes, you have to tell Photoshop to load them for you first, I will explain how to do that later in this chapter):-

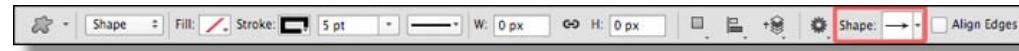


Besides these shapes, you can download more shapes from the Internet, or create your own, the possibilities of the shapes are endless

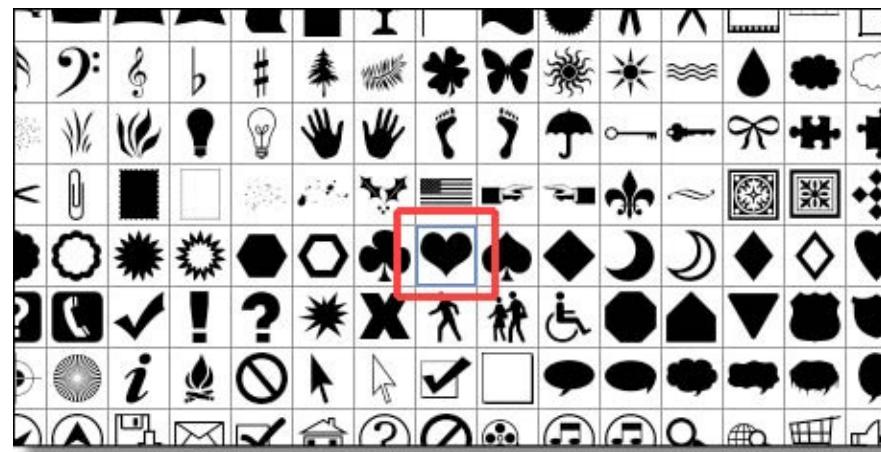
# Drawing a shape using the Custom Shape Tool

Creating custom shapes is easy, and it is not that different from using the other shape tools. To draw a custom shape in Photoshop, follow these steps:-

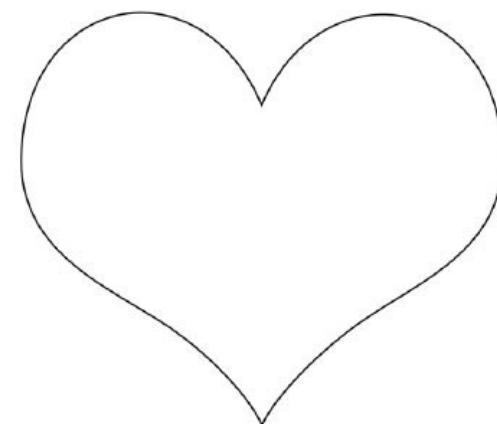
- Select the Custom Shape Tool  from the Tools panel
- From the Custom Shape Tool options, click on the shape option



- Photoshop will display all the shapes that are loaded for you to choose from. The shapes you will see depend on how many shapes you told Photoshop to load, and how many you have downloaded and added from the Internet
- Select the shape you want to draw, I selected the heart shape in this example:-



- Adjust any setting you want, like the fill, the line width, shape color or the aspect ratio. All these options work the same way I explained in the shapes chapter. If you find the term Aspect Ratio confusing, refer to the Resizing Photos chapter, which explains the concept in details.
- Now click and drag the mouse cursor over the canvas, and Photoshop will draw the shape for you:-



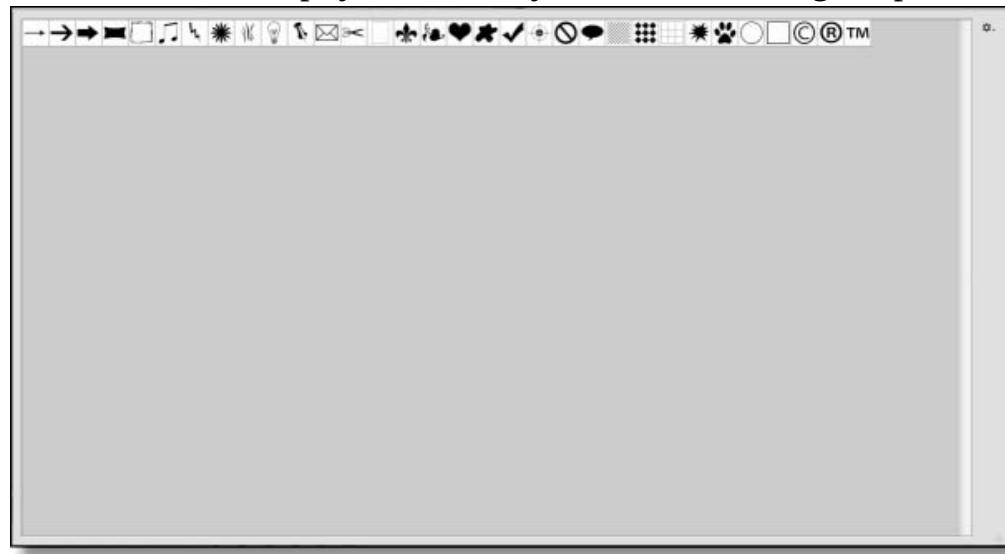
Since Custom shape Tool have the exact options as the regular shape

tools we explained in the previous chapter, I will avoid explaining them again, to know more about

these options, refer to the Shape Tools chapter for an in-depth explanation about them.

## Loading new shape groups into Photoshop

By default, the Custom shape tool doesn't show you all the shapes you have seen above. If you just installed Photoshop, you will only see the following shapes in the Shapes Panel:-



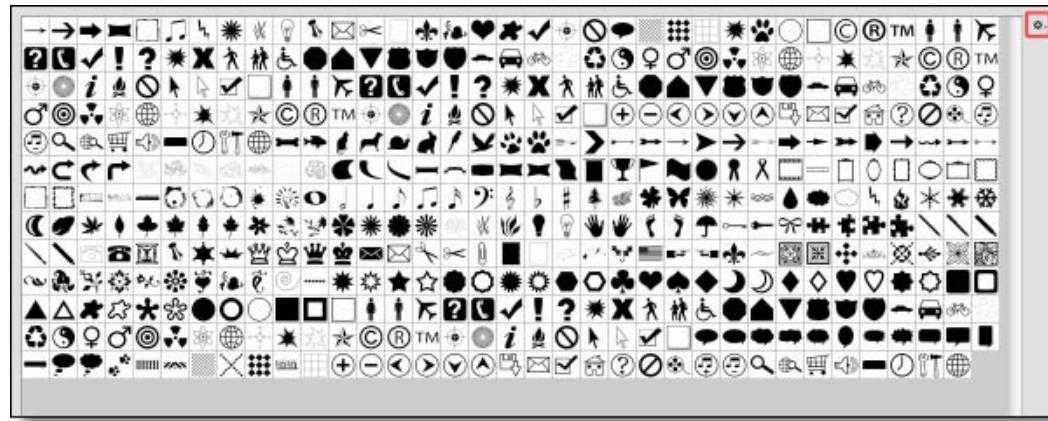
To be able to see the rest of the shapes, you will need to tell Photoshop to load them first, And this is what we are going to do next.

## To load a new shape group, follow these steps:-

- Select the Custom Shape Tool  from the Tools panel
- From the Custom Shape Tool options, click on the shape option



- From the upper-right corner of the shape panel, click on the small gear icon.



- From the menu, select the shapes group you want to load. Selecting the "All" option will load all the shapes groups, which is what I am going to choose

Rename Shape...  
Delete Shape

Text Only

✓ Small Thumbnail  
Large Thumbnail  
Small List  
Large List

Preset Manager...

Reset Shapes...

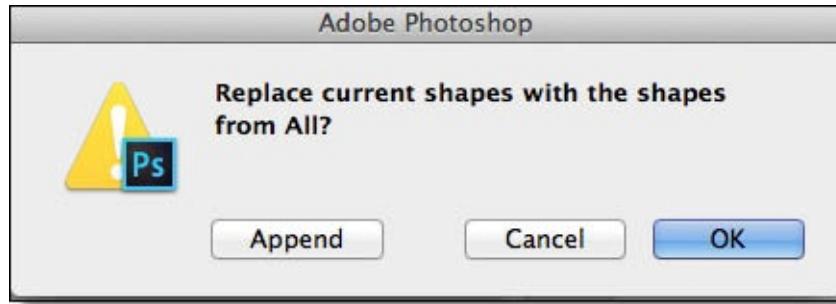
Load Shapes...

Save Shapes...

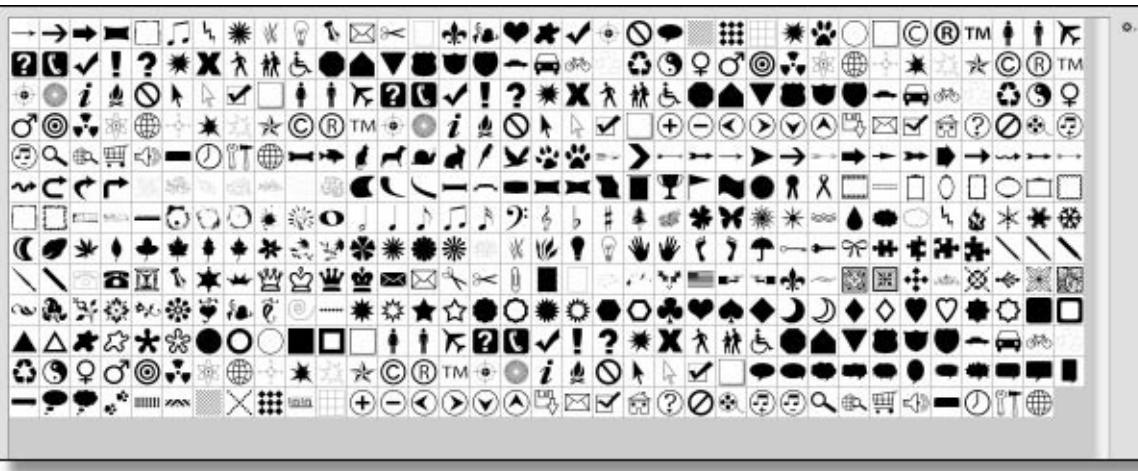
Replace Shapes...

All  
Animals  
Arrows  
Artistic Textures  
Banners and Awards  
Film  
Frames  
Grime Vector Pack  
LightBulb  
Music  
Nature  
Objects  
Ornaments  
Shapes  
Symbols  
Talk Bubbles  
Tiles  
Web

- Photoshop will ask you whether you want to replace the currently loaded shapes with the one you selected. Selecting append will add the shapes in the group you selected to the shapes panel, while keeping all the shapes that are already there. And selecting OK will cause Photoshop to remove all the loaded shapes, and replace them with the ones you are loading



- Now open the shapes panel again, *et voilà*, all the shapes are here, ready for you to use them:-)



## Downloading and Loading new shapes from the Internet

Besides the various shapes available in Photoshop out of the box. You can download any number of shapes from the Internet; similar to how you can download brushes, patterns & filters.

To show you how to add shapes into Photoshop, we are going to download and add the “Animal Costum Shape Package” from [Brusheezy](#). Which contains 6 very beautiful and well-made animal shapes, free for you to use, as long you didn’t use them in a Tattoo, according to the creator.



To download the Animal Costum Shape Package, follow these steps:-

- Go to the “Animal Costum Shape Package” page in Brusheezy:- <http://www.brusheezy.com/shapes/32561-animal-costum-shape-pack-inspired-by-nature>

This animal Costum shape pack is Freeeeeeeee!!! Included in this animal brush pack are 8 different animal Costum shape files.  
please do not use this shared as tatto, because it's forbidden for moeslim ^\_^V

Views: 6086  
Downloads: 9426  
Version: CS3  
Number In Set: 8  
License: Show Info

Butterfly flower lizard nature Spider sea horse scorpion crabs  
animal animals

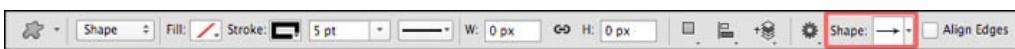
- Click on the download button to download the shapes file
- Go where you saved the compressed file, and uncompress the zip file. For detailed steps on how to uncompress zip or rar files for all the major operating systems (Windows, Linux & Mac OS X), [check out this link](#).
- After you uncompress the file, you will end up with the following csh file:-



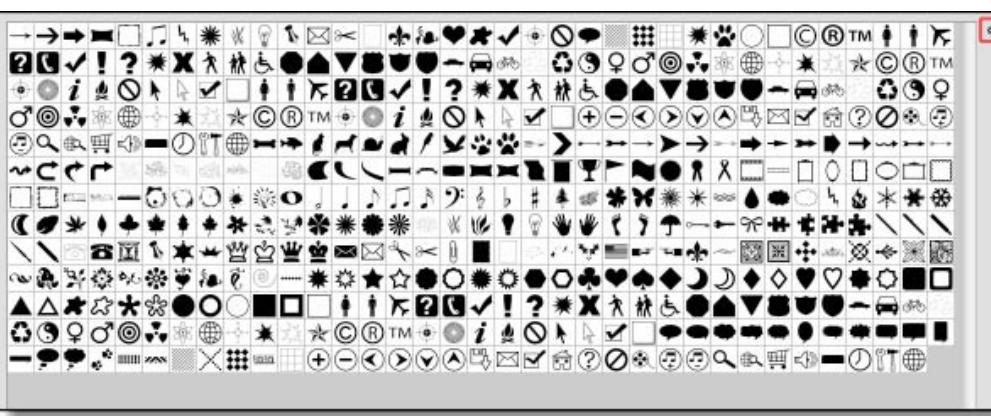
All that's left if to tell Photoshop to load the shapes in the file so that you could start using them.

## To load the CSH file that contains the shape into Photoshop:-

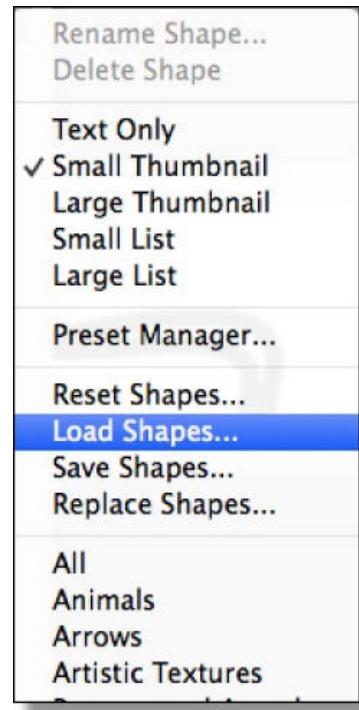
- Select the Custom Shapes Tool  from the Tools Panel
- From the Custom Shape Tool options. Click on the shape option



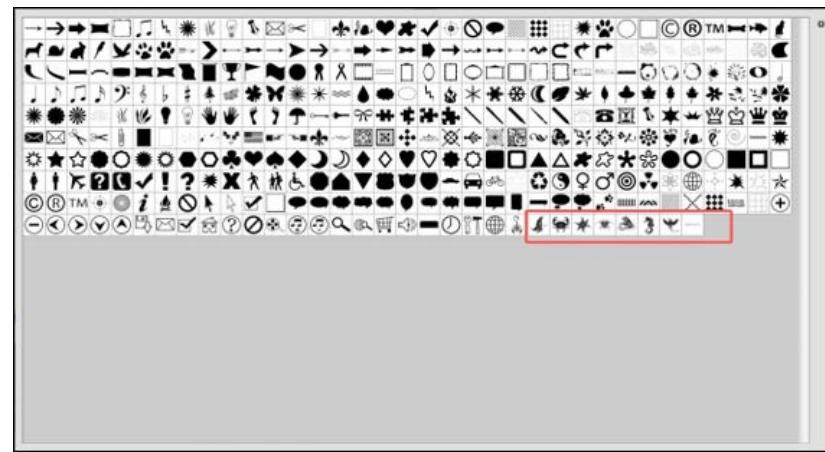
- From the upper-right corner of the shape panel. Click on the small gear icon.



- From the drop-down menu, select the load shapes option



- The open dialog appear (whose look depends on your operating system), locate the file you downloaded and then double-click on it
- And Photoshop will load the new shapes for you.



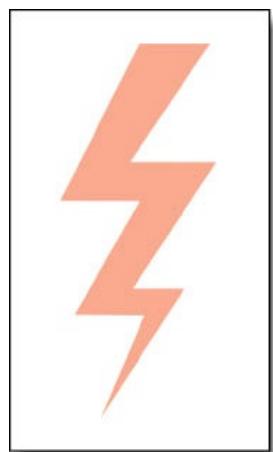
Now you can use the new shapes just like any of the other ones:-



## Create New Shape From Scratch

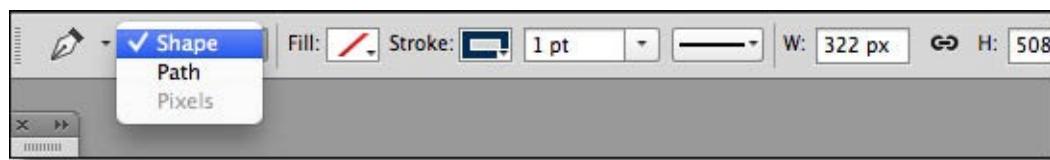
In case the shape you want is not available on the web, or if you felt like being creative and wanted to create a unique shape. Photoshop allows you to create your own shapes.

Virtually speaking, anything you can draw with the pen tool can be turned into a shape, if you are not familiar with the pen tool, then I highly suggest that you read the pen tool chapter before proceeding. We will create the following thunder shape, which is not just easy to draw, but still represents something we all know:-

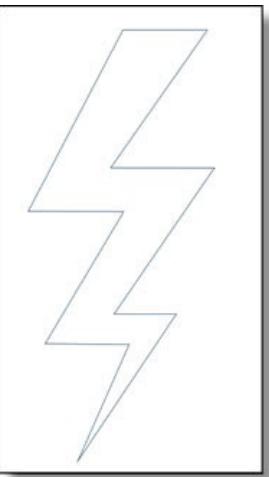


## To create the thunder shape, follow these steps:-

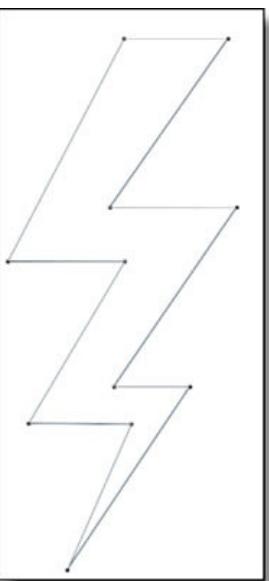
- Select the Pen Tool from the tools panel
- From the Pen Tool options, make sure you select the shape option instead of the path. Doing so will ensure that the pen tool will create a shape instead of a path, which is exactly what we want to do



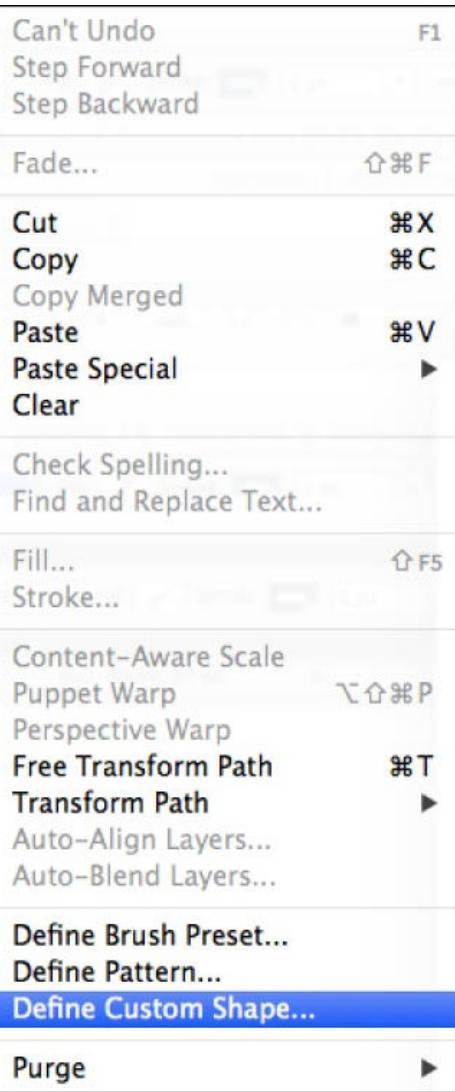
- Now draw the thunder shape, to make it easier to create straight lines that are 45 degree from each other, hold down the Shift key while you are clicking with the pen tool:-



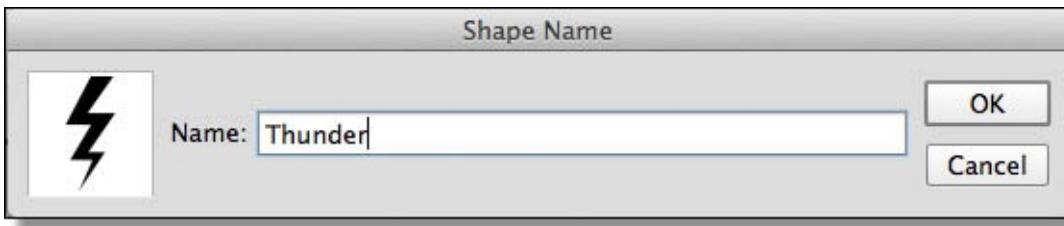
- After you are done drawing the shape. Select it using either the Direct Selection Tool  or the Path Selection Tool  :-



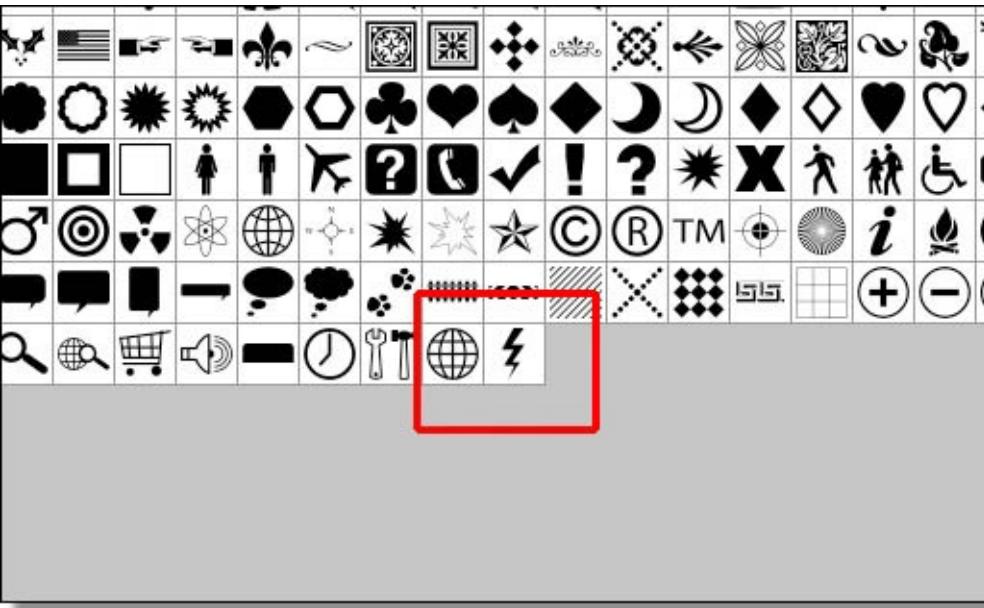
- Select Edit -> Define Custom Shape from the main menu



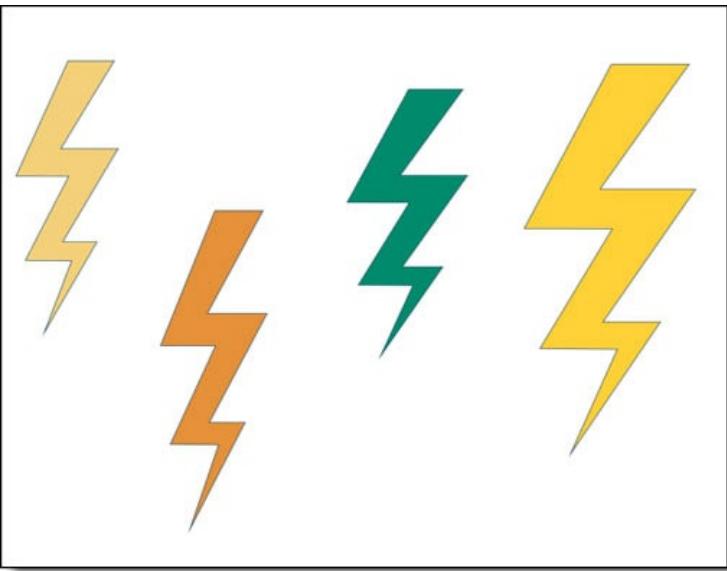
- In the Shape Name Dialog, enter the name you want to give to the shape, then press OK



- And the new shape will be available to you in the Shapes panel



- And now you can use your new shape however you want now:-



## Sites where you can download Custom Shapes from

- [Brusheezy](#)
- [Shapes4Free](#)
- [InspirationFeed](#)
- [Photoshop.cc](#)
- [DeviantArt](#)

## Summary

- Photoshop Custom Shape Tool allows you draw a variety of shapes, unlike the regular shape tools
- Custom Shape Tool options are exactly the same as the regular shape tools
- Photoshop comes with a lot of shapes out of the box, but to be able to see & use them. You

will have to tell it to load them for you.

- Besides the shapes that come with Photoshop, you can download many shapes from the Internet; many of these shapes are completely free.
- If the shape you want doesn't exist, or you couldn't find it. You can create it from scratch. Any shape you can draw using the Pen Tool can be made into a custom shape

## Examples

### Creating A Simple Greeting card

Using multiple shapes, especially the frame shapes, you could create a simple greeting card or a signature, and the better you arrange the shapes, the better the card will look:-



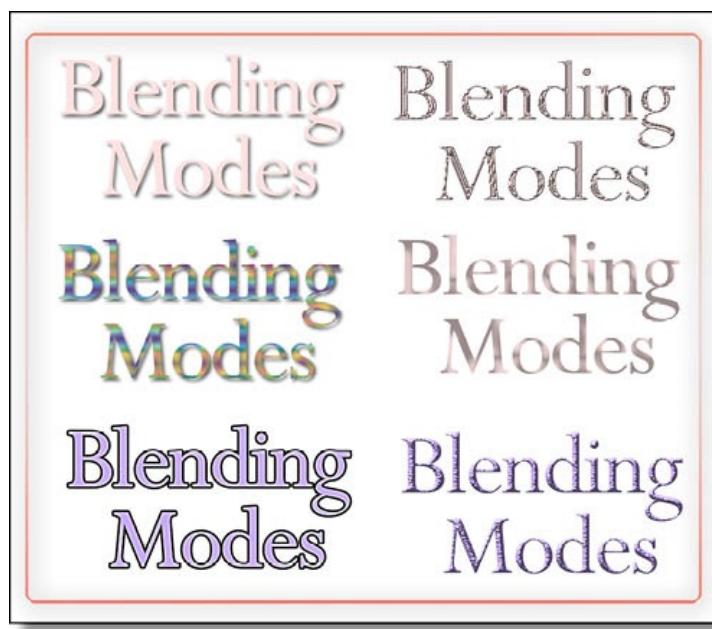
### Embedding shapes into text:-

One of the common uses for shapes is to insert them inside a text, which can make a good example of logo creation. I made up a simple logo for an imaginary Anti-Virus called "Protector Anti-Virus", but instead of having an O in Protector. I placed two shield shapes, one inside the other.

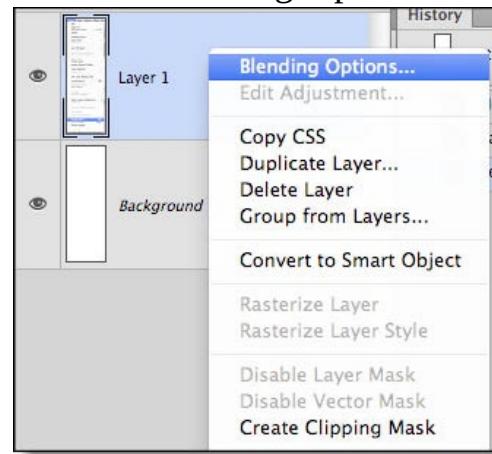
To make the logo looks the best way possible. I played a little bit with the space between the characters in the Character Panel until I felt like it was perfect:-

*Protector  
Anti-Virus*

## Photoshop Blending Options



Layer Style or Blending Options, like they are also called, is one of my favorite features in Photoshop. And I rarely ever do any kind of design without playing around with them. Blending options is a way to add some effects to the contents layers. Many of the options in the dialog are straight forward, and delving into them can provide you a way to create a lot of nice effects. To access the Layers Styles dialog, right-click on the layer you want to apply Layer Styles on, and choose “Blending Options” from the contextual menu.



Here are all the Layer Styles available in Photoshop, we will take a look at each of these styles one by one:-

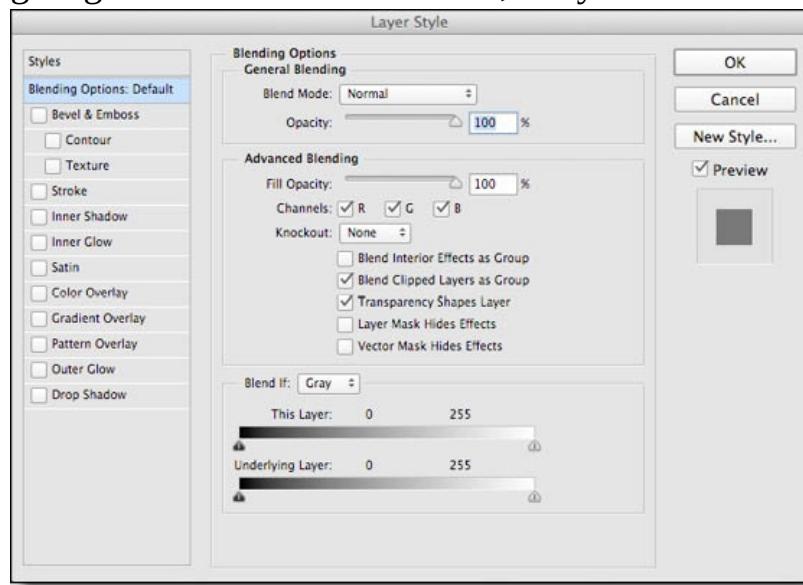
- Bevel & Emboss
- Contour
- Texture
- Stroke
- Inner Shadow
- Inner Flow
- Satin
- Color Overlay
- Gradient Overlay
- Pattern Overlay

- Outer Glow
- Drop Shadow

Each one of these Layer Styles has many options, And the number of options may feel a little bit overwhelming to learn at first, Except that many of these options are similar, too the degree that if you learned one of them, all the options similar to that one will be easy.

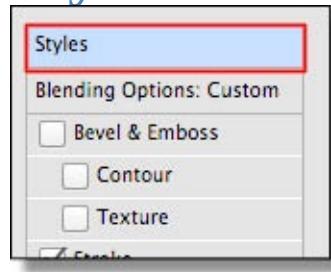
I am aware that this chapter is quite repetitive, but I thought it is better to make it this than to make it short but hard to understand, so feel free to skip the parts that are explained over and over

If you are using an older version of Photoshop, chances that the options in the layer style dialog are going to be in a different order, but you can still follow this chapter without any problem



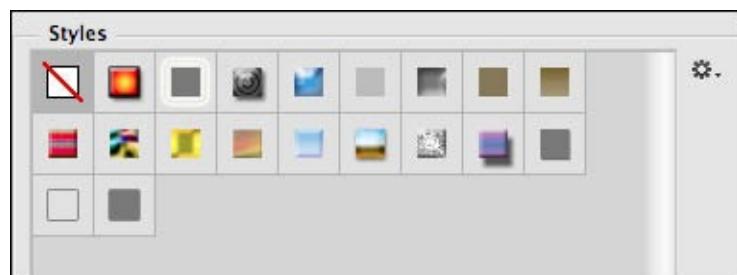
Now let's start looking at each section in the Blending Options dialog:-

## Style

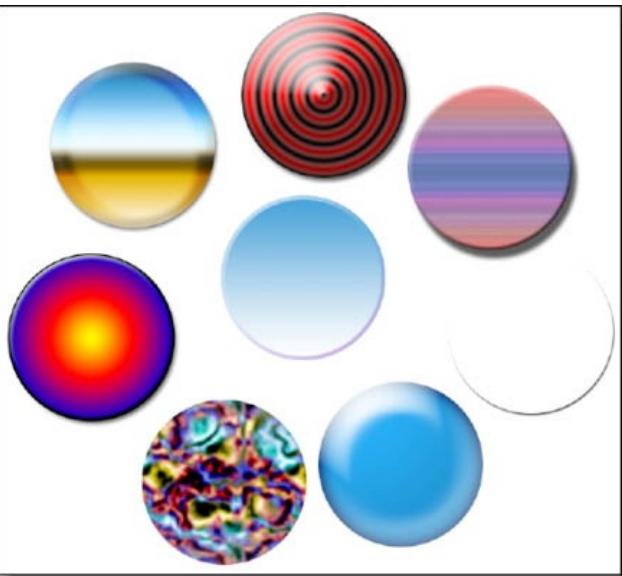


This is where you get to choose from the many premade Layer Styles that ships with Photoshop, plus any Layer Styles you created or downloaded from the web.

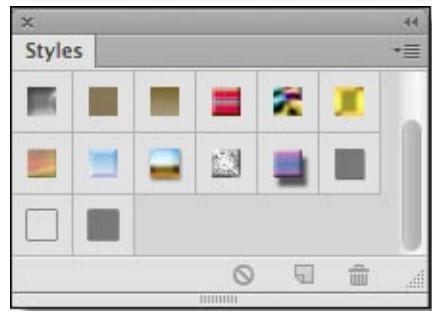
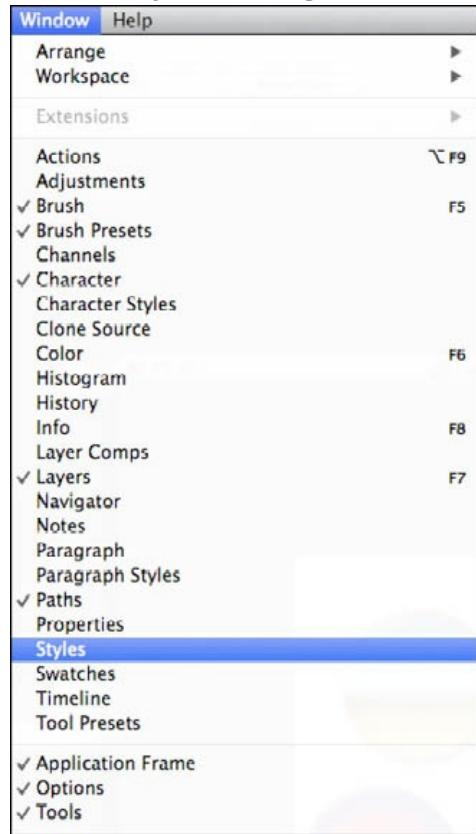
Even if you have Photoshop just installed, you are going to have a quite few layer styles shown in there:-



And it is fairly fun to check out these styles to see how each of them looks like:-

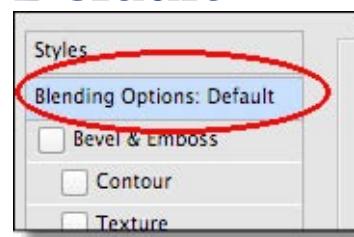


You can also see these styles from the Styles panel, if you don't have the Styles panel open, you can show it by selecting Window->Styles from the main menu



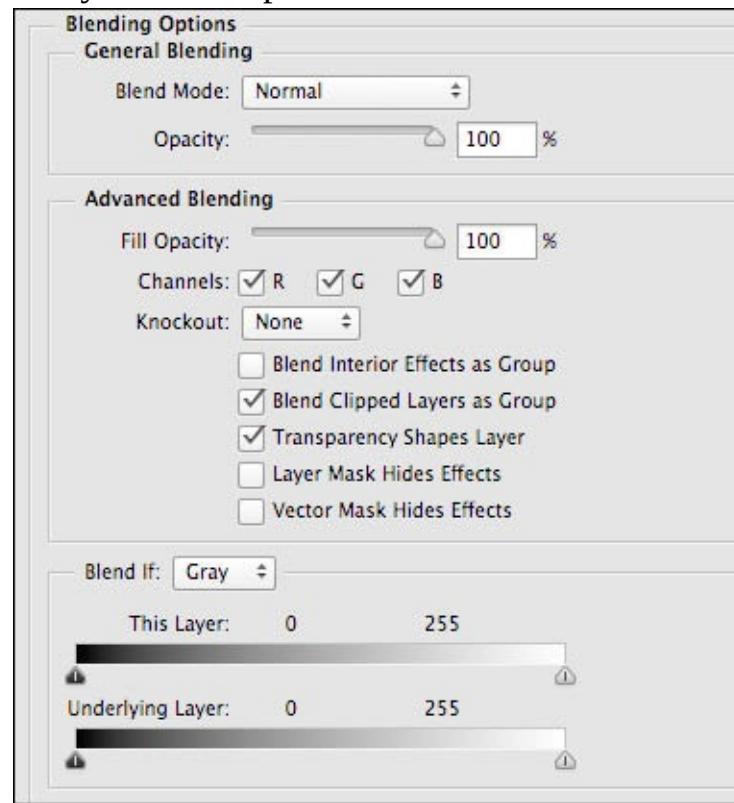
Anything that can be done from the Styles part of the Layer Style dialog can be done from the Styles panel, including loading new styles ~

# Default

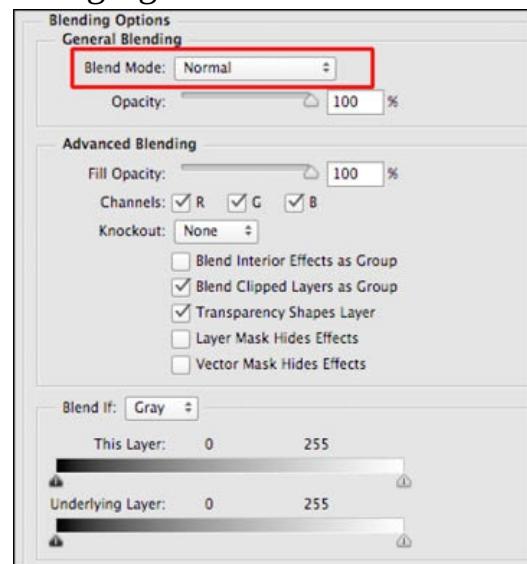


Default is not a Layer Style on its own, but it contains many options that affect all the layer styles we are going to learn in this chapter

Because many of these options are not usually used, and for the sake of keeping this book simple, many of these options won't be covered in this edition

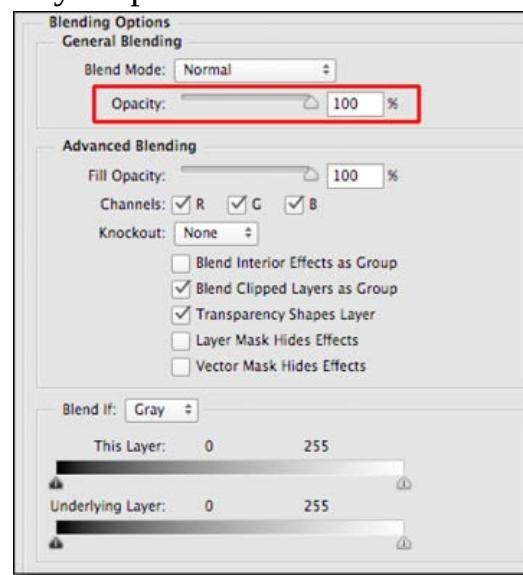


The first option, the Blend Mode, change the layer's Blend Mode, there is no difference between changing Blend Mode from here, or by doing so in the Layers panel

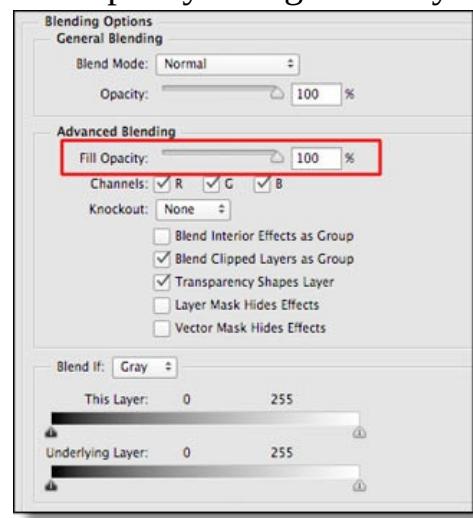


The opacity changes the layer opacity, and again, it works exactly the same as the Opacity in the

## Layers panel

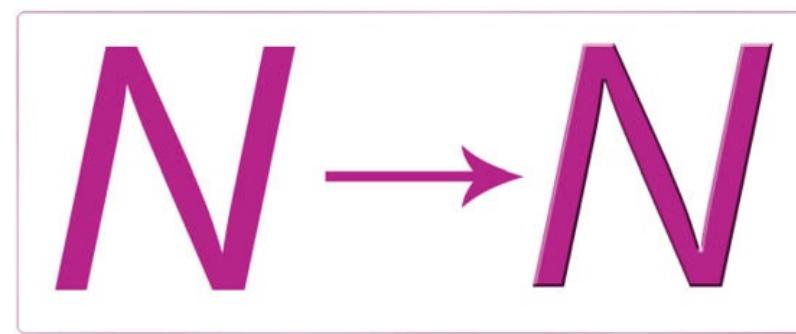


Fill Opacity changes the layer fill, and once again, this is the same as the fill slider in the Layers panel

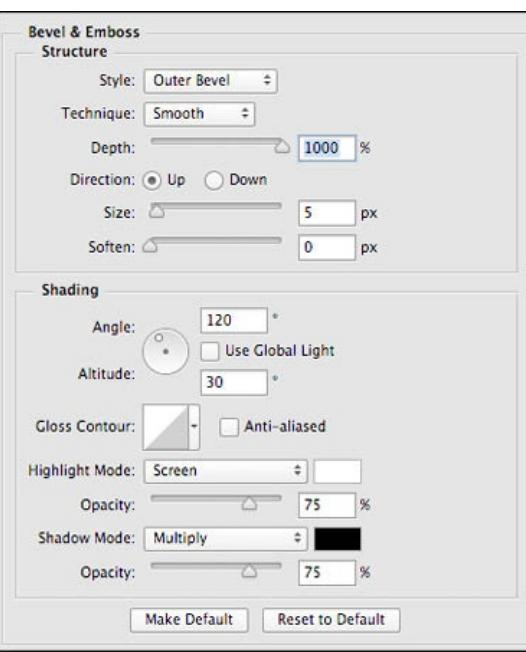


## Bevel & Emboss

Bevel And Emboss allows you to add a 3D effect to the content of your layer, even without understanding any of the options of this layer style, you can make some very nice looking shapes & characters:-

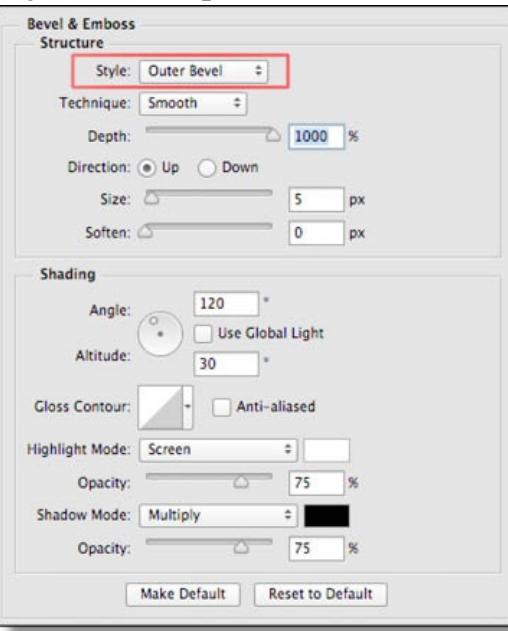


Let's take a look at each of the Bevel & Emboss options:-



## Style

Style menu options determines from where the bevel comes from:-



Outer bevel comes from “below” the shape, and Inner Bevel comes from “above” it, this is how each of these two look like:-



If the difference between the two bevels are not clear, then zooming-into the two characters can make things easier, for that reason, most of the bevel examples are going to be zoomed in:-



You can probably see now why I said that Outer

bevel gets from “below” the shape, and inner bevel get from “above” it.

And Emboss applies the bevel in both the inside and outside the shape:-



Pillow Emboss is the same as emboss in that it

applies the bevel on both the inside and the outside. Except that it does it in the opposite direction (look at where the shades are to see what I mean):-



The Stroke Emboss works only when the “Stroke”

Layer Style is activated. **The stroke Layer Style adds a stroke/border around the text.** And when you apply a Stroke Emboss to a text with such border. Parts of the stroke becomes a bit shiny, which gives it a nice 3D look:-

*Text With Stroke*



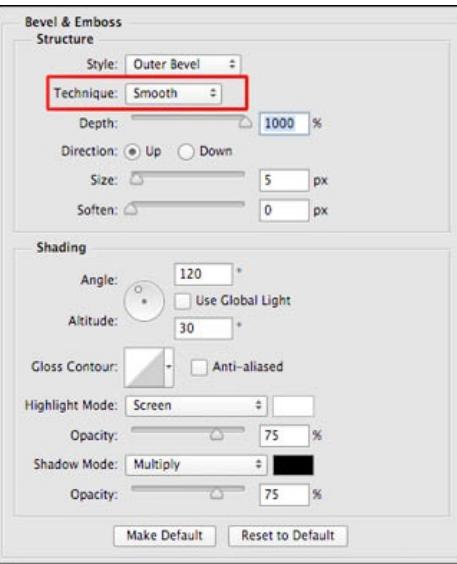
*Text With Stroke  
+  
Stroke Emboss Applies*



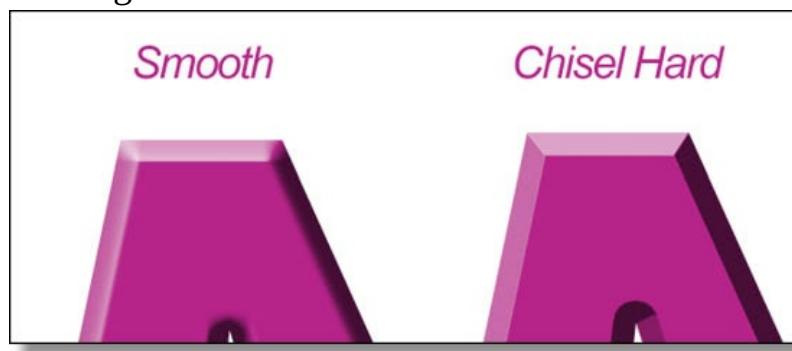
To explain the rest of the options, I will stick with the Inner Bevel, but the rest of the options work the same way across all the types of bevel.

## Technique

The technique menu allows you to choose the way the bevel is applied.



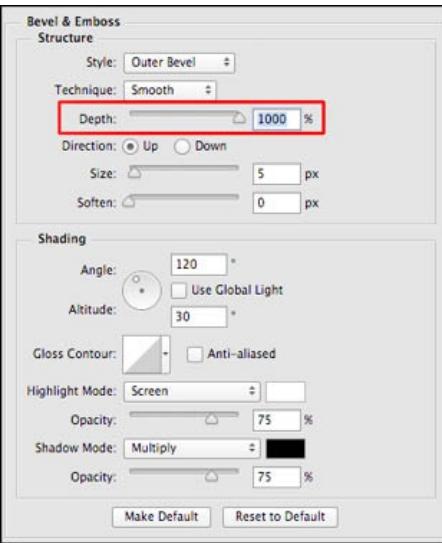
Smooth allow you to create a smooth transition of the bevel, while Chisel Hard creates a blunt looking effect



While the Chisel Soft is the same as the Chisel Hard, except that it adds a little texture to the bevel:-



## Depth



The Bevel depth determines how much deep the Bevel is, it doesn't really make the Bevel bigger or smaller. It just change the contrast of the bevel colors to make the bevel looks deeper or shallower

*Depth:- 100*



*Depth:- 500*

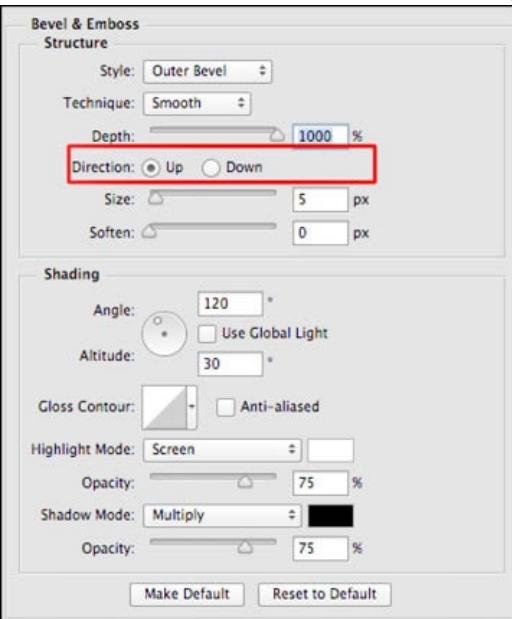


*Depth:- 1000*



## Direction

Determines whether the bevel is pointing upward or downward



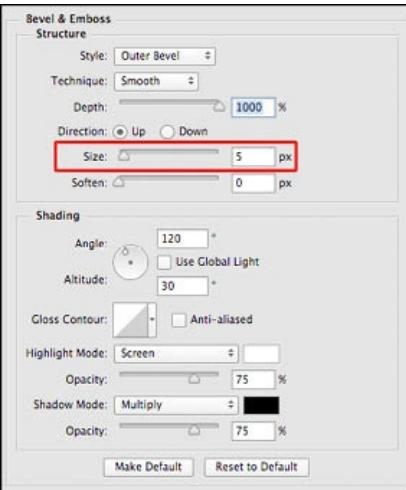
Depending on if you are creating a signboard, or want some text to look like it has been chiseled on a wall, this option can help you achieve what you want

# Up

# Down



## Size



The bevel size determines how big or small the bevel is:-

Size:-10



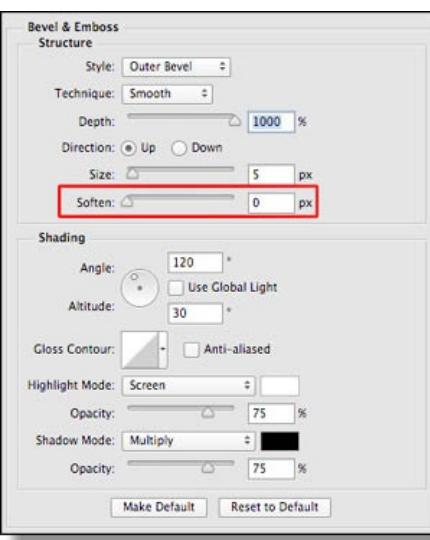
Size:- 35



Size:- 80



## Soften



The Soften option smooths the bevel, and it works whether the bevel technique is Smooth, Chisel Hard, or Chisel Soft.

Here is how the Soften option works when bevel is set to Chisel Hard:-

*Softten:- 0*



*Softten:- 7*



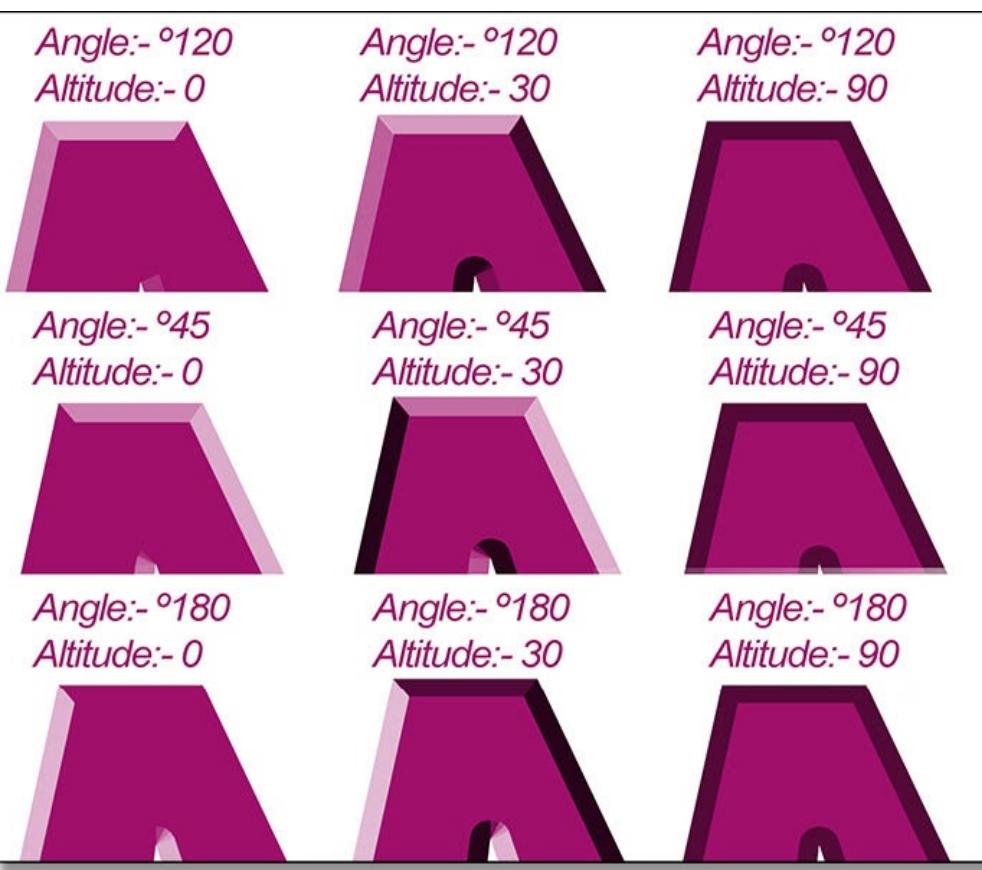
*Softten:- 16*



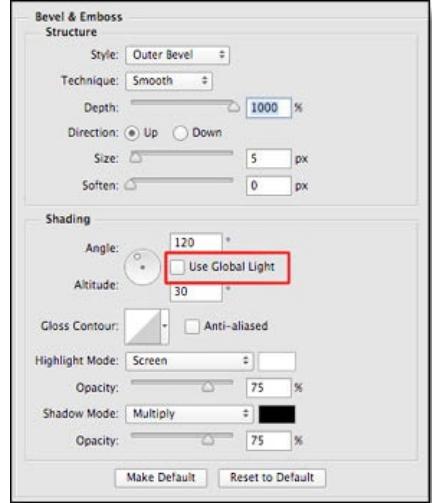
## Angle & Altitude

Angle & Altitude determines where the light is coming from, this allows you to create many kinds of bevels, depending on how far or close the light source is, while the Angle option is easy to understand, as it allows you to select the bevel direction. The Altitude option is better understood by experimenting with it.

Here is how the tip of the N looks like with a various values of Angle & Altitude:-



## Use Global Light

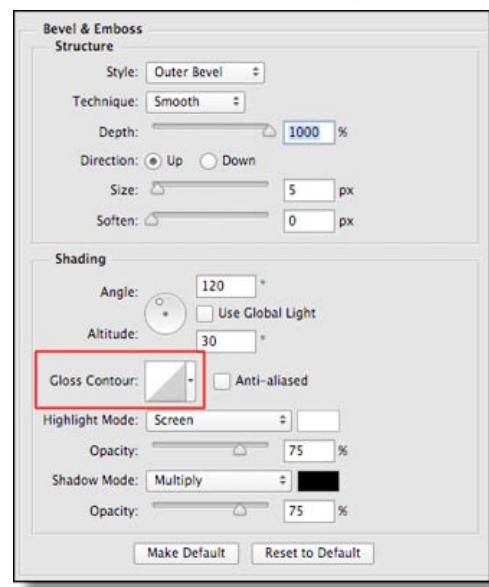


The “Use Global Light” option allows you to create multiple shapes with the same angle & altitude values, for all the shapes/layers that have the “Use Global Light” checked, the Angle & Altitude of the light will be unified. And if you changed the Angle or Altitude for one of these shapes, it will change for all the other shapes as well.

And According to Adobe:- This setting allows you to set one “master” lighting angle that is then available in all the layer effects that use shading: Drop Shadow, Inner Shadow, and Bevel and Emboss. In any of these effects, if Use Global Light is selected and you set a lighting angle, that angle becomes the global lighting angle. Any other effect that has Use Global Light selected automatically inherits the same angle setting. If Use Global Light is deselected, the lighting angle you set is “local” and applies only to that effect. You can also set the global lighting angle by choosing Layer Style > Global Light.

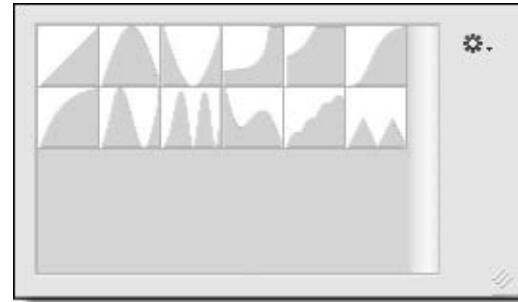
From now on, be ready to see this option in more than one place in the Layer Styles dialog

## Gloss Contour



The Gloss Contour option allows you to define the edge of the bevel. Using this option, you could make your shape look metallic or plastic depending on the curve you choose.

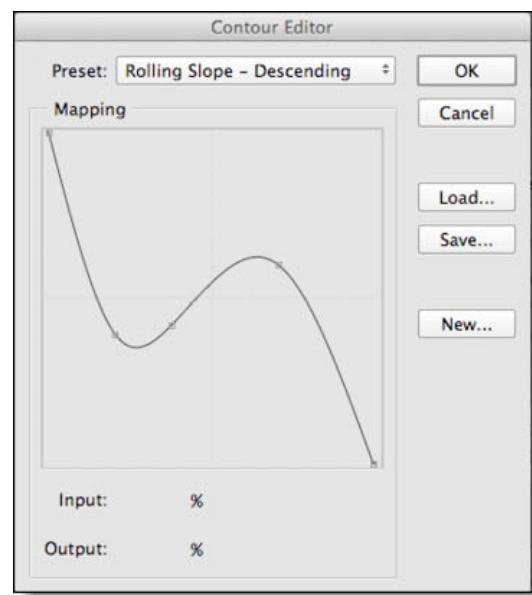
There are 10 curve that are available for you to use by default:-



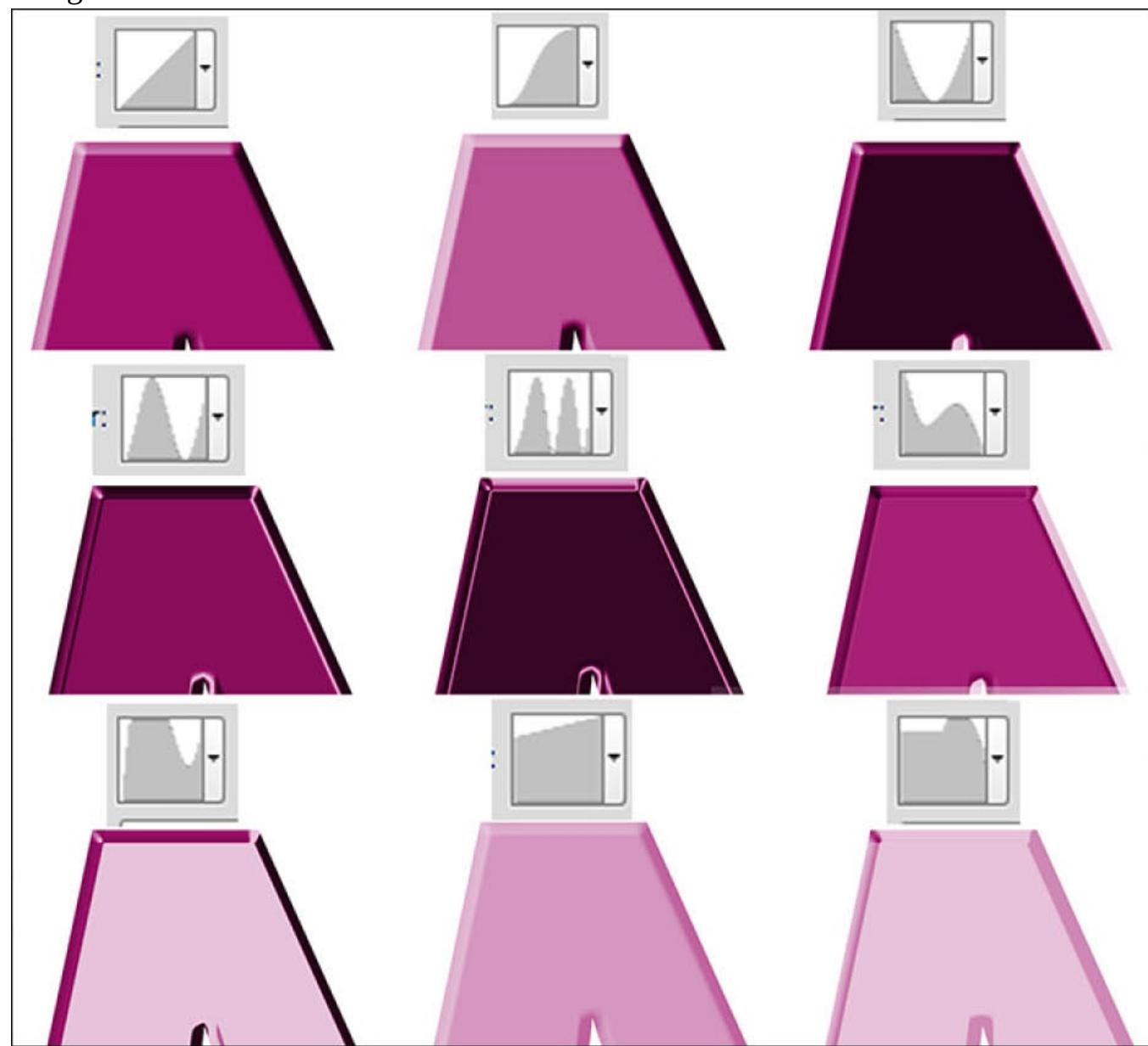
You could also create your own curve by clicking on the curve icon itself:-



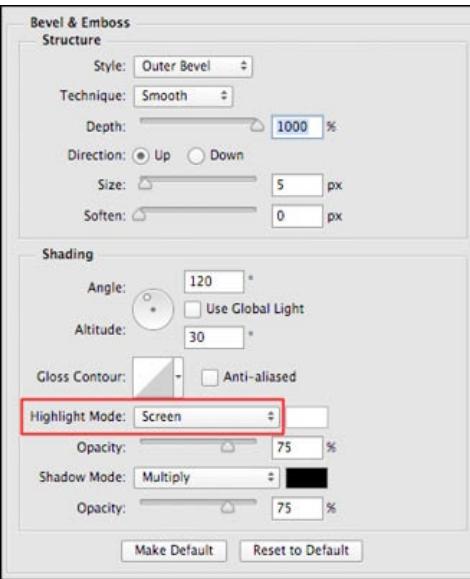
Which opens the Contour Editor dialog, which allows you to edit the curve however you want:-



Here is the tip of the N after I applied 9 different curves to it. The 3 curves in the last row were created using the Contour Editor:-

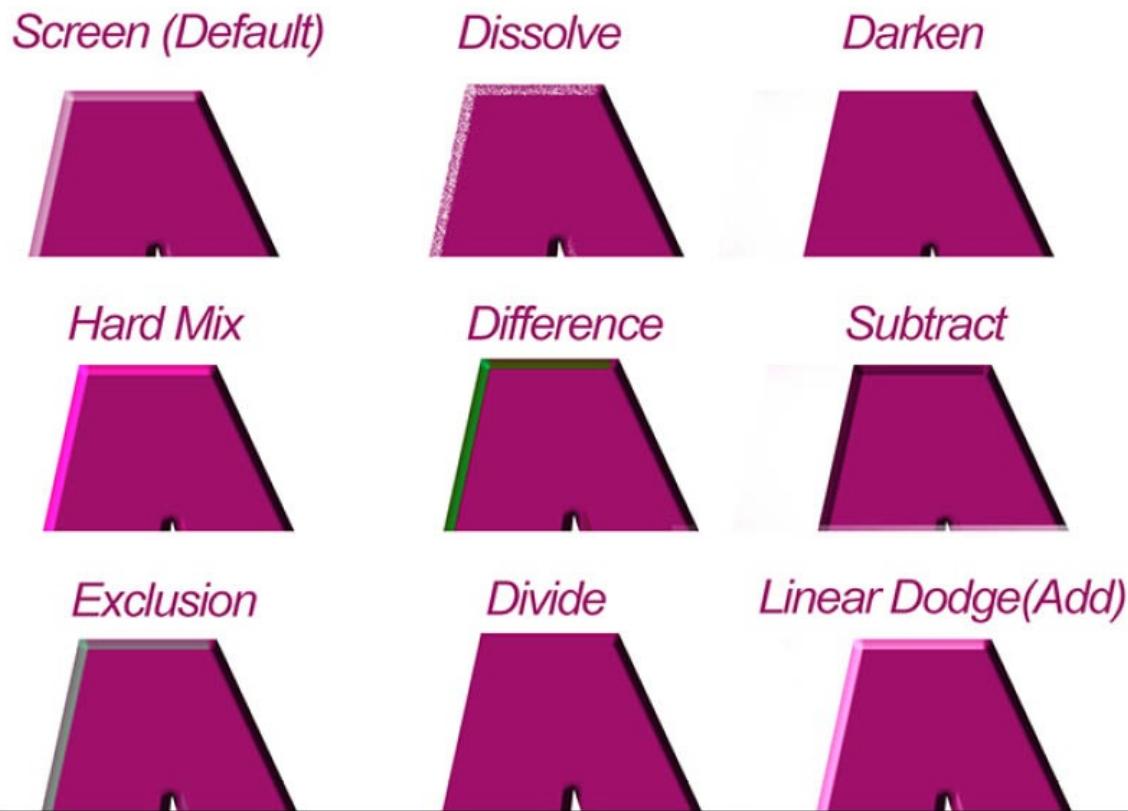


## Highlight Mode



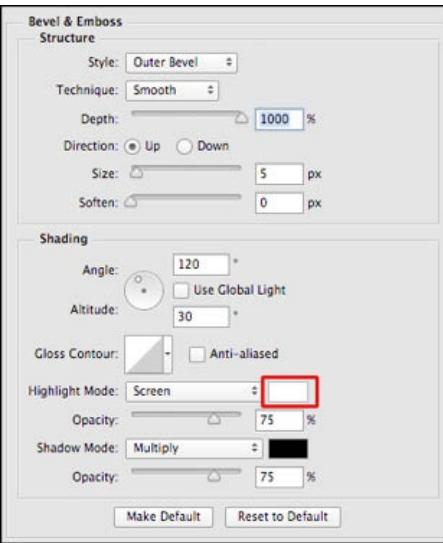
Highlight Mode allows you to choose the blending mode of the highlights the effects you will get depend on both the shape and highlight colors, this option is a good way to get some weird or glamorous effects on your shapes

The 9 examples below may not be enough to illustrate all the uses of this option, but it gives you an idea on how it works:-



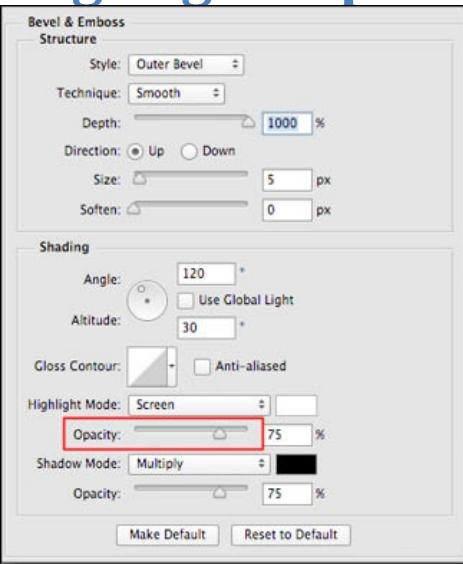
## Highlight Color

Besides the highlight Blend Mode, you can also choose the highlight color using this option, which is White by default;



Here are a few tests I made using different highlight colors:-

## Highlight Opacity



The opacity option allows you to change the opacity of the highlight, to the point that you could hide the highlight altogether:-

*White (Default)*



*Blue*



*Red*



*Green*



*Purple*



*Yellow*



And you can

also increase the default opacity from %75 to %100 as well:-

*75% (Default)*



*%100*



*%30*



*%0*



*%50*

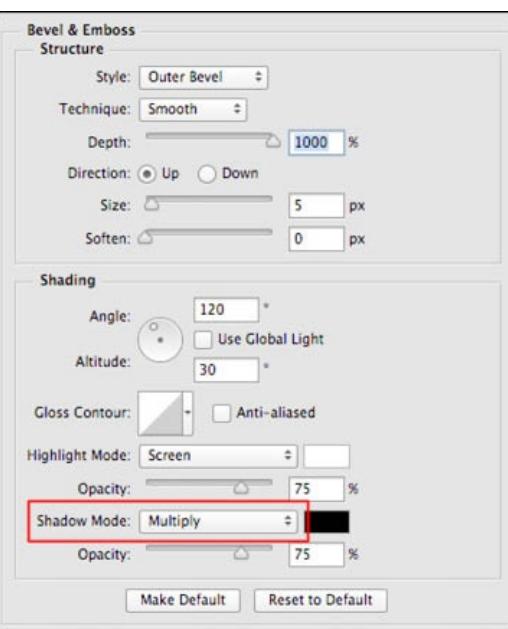


*%20*

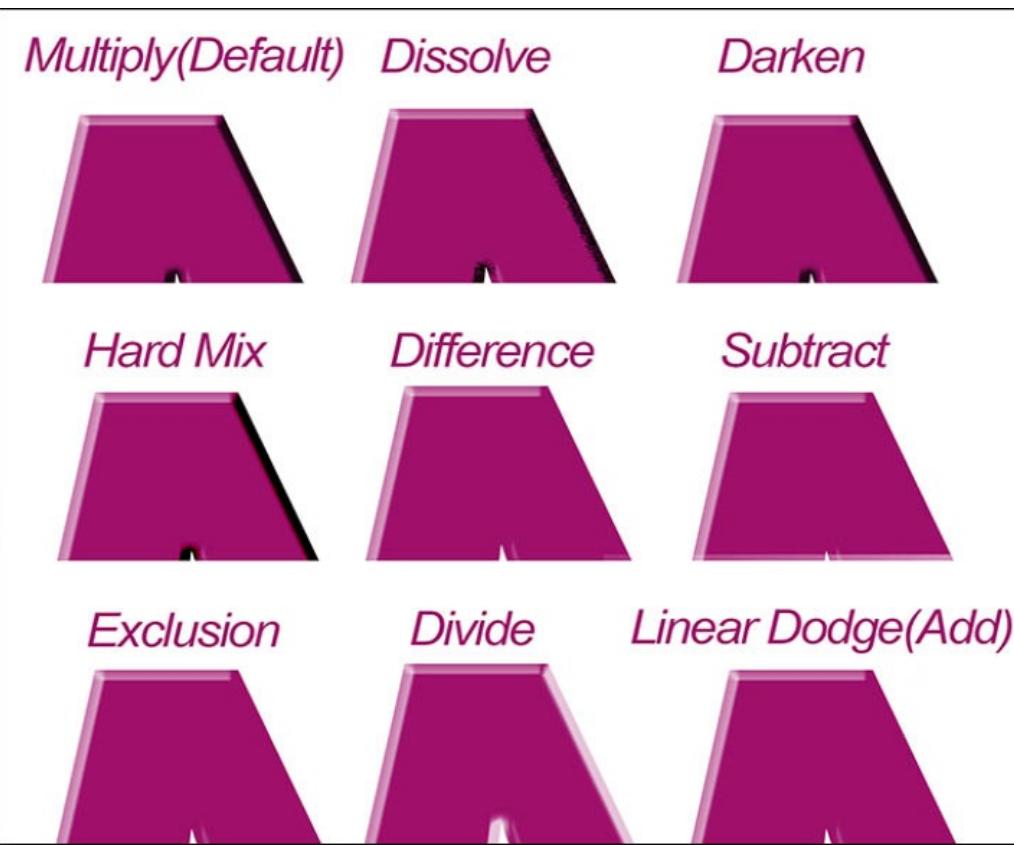


## Shadow Mode

The Shadow Mode changes the blending mode of the bevel Shade. It works the same way as the Highlight Blending Mode, in that you could get very difference results depending on the colors of the shape & the shadow

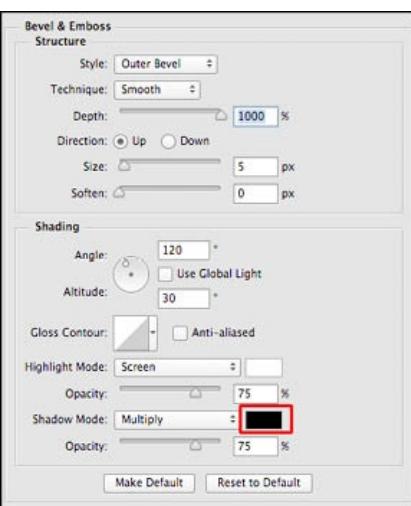


Here is how the Shadow Blending mode works, some of the modes barely make difference with the colors we have and some of the modes, like dissolve, can only be seen by looking so closely on the shadow:-



## Shadow Color

You can change the Shadow Color by clicking on the Shadow Color button:-

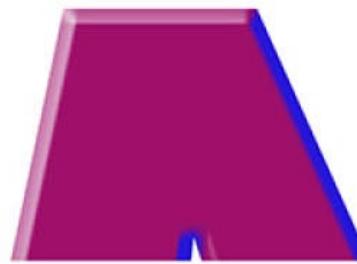


Because the default Blending Mode for the shadows is Multiply, some colors won't appear clearly. So I changed the blending mode to normal in the following examples to make the colors appear more obvious:-

*Black (Default)*



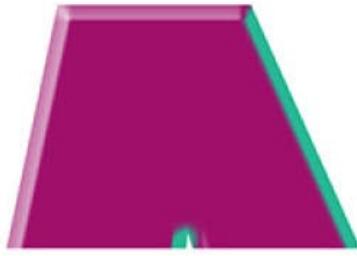
*Blue*



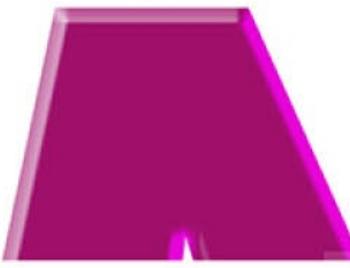
*Red*



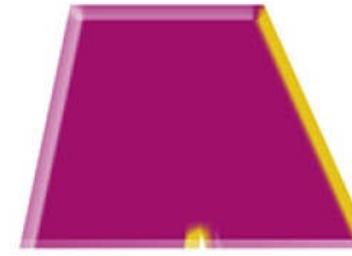
*Green*



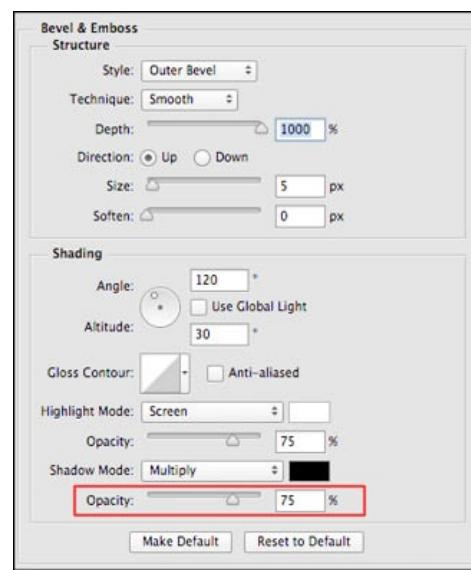
*Purple*



*Yellow*



## Shadow Opacity



You can also change the opacity of the shadow, which is %75 by default, to any percent you want:-

**%75 (Default)**



**%100**



**%50**



**%0**



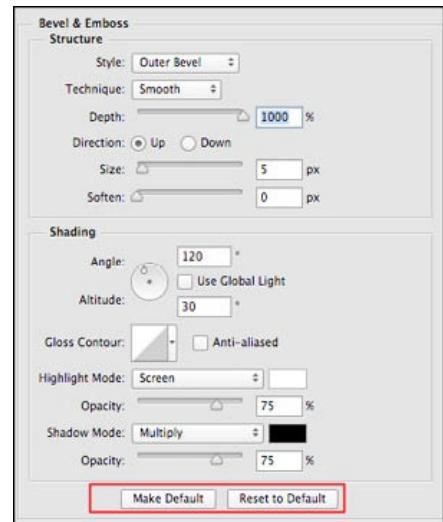
**%30**



**%20**



## Default Settings Options

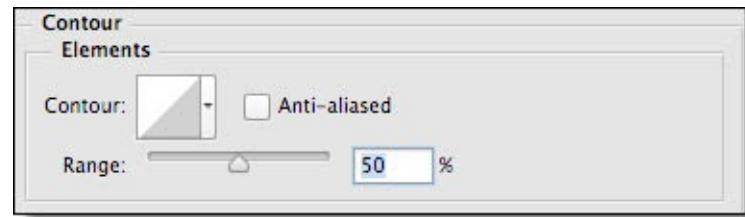


The last two options “Make Default” & “Restore To Default”, allows you to change the default options to the ones you currently have.

By clicking the “Make Default” button, the current options you have are going to be the starting point the next time you apply Bevel & Emboss. This is useful in case you use certain values all the time. J The “Restore To Default” resets all the values in the dialog to the default/starting values.

These two buttons are available in all the Layer Style section. And they work the same way in all of them. Because of that, I will refrain from explaining them in the upcoming sections to avoid making this chapter more repetitive than it is J

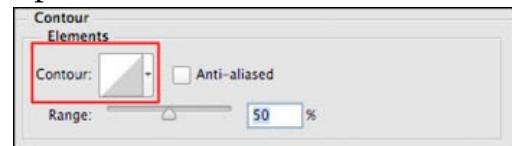
## Contour



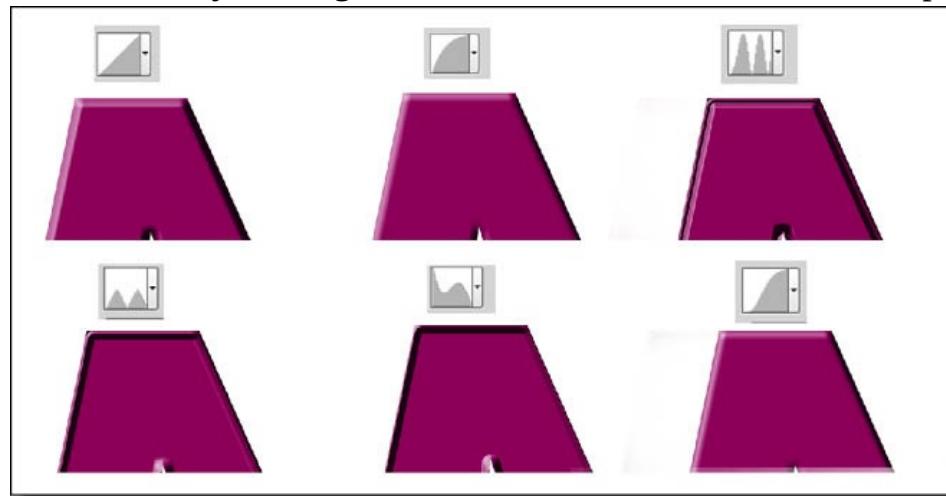
Contour options, as its name suggests, controls the contour of the bevel. Unlike the Gloss Contour option, which I explained just now, this option affects the edge of the bevel only, instead of the whole shape.

## Contour

The contour option allows you to choose the curve of the contour. This is one of my favorite Bevel options

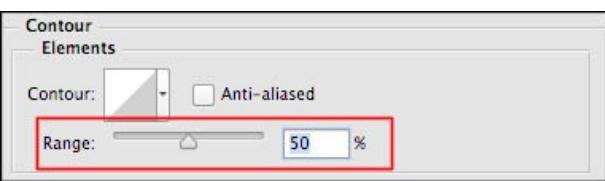


Here are a couple of examples of using the contour option using different curves, notice how the option affects only the edge of the bevel, and not the whole shape:-



And just like we did with the Gloss Contour option, you can click on the curve itself and create your own curve using the Contour Editor.

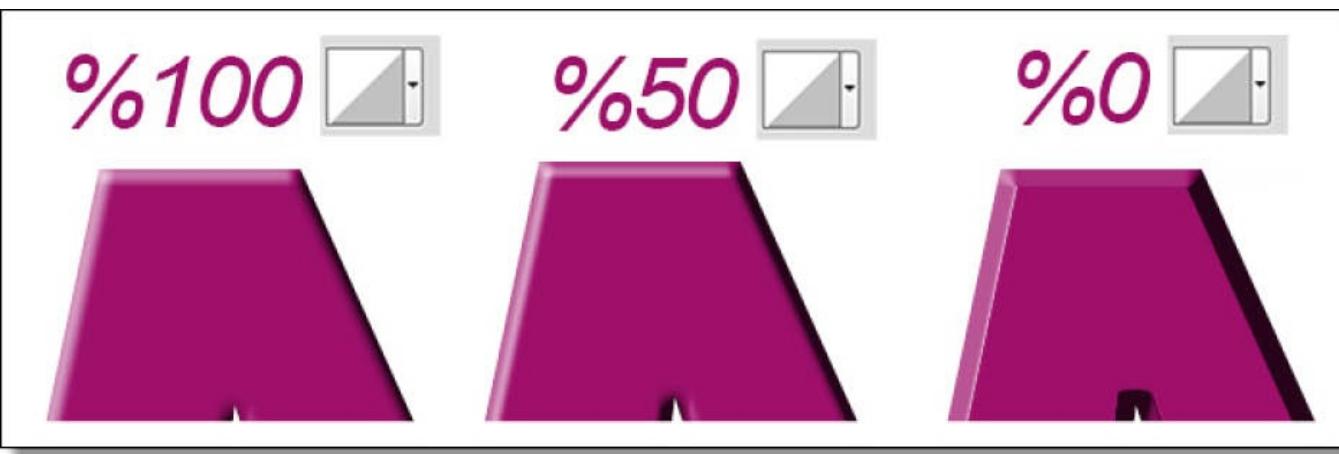
## Contour Range



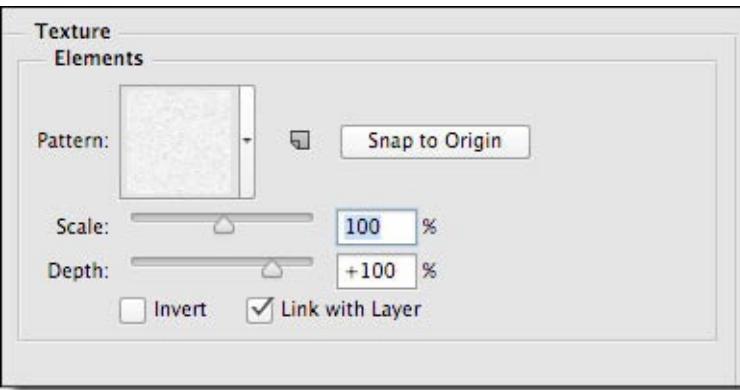
The range option, which has a confusing name, determines the percent of the edge of the bevel will be affected by the Contour curve.

In other words, if you set the Range to %100, the Contour curve will be applied to the entire bevel edge.

If you set it to %50 the Contour curve will be applied to the upper %50 of the bevel edge. And setting the range to %0 will apply it only the very upper edge of the bevel, here is how it looks like for the default contour:-

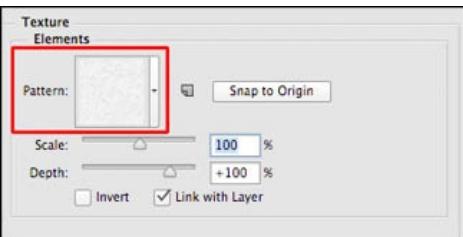


## Texture

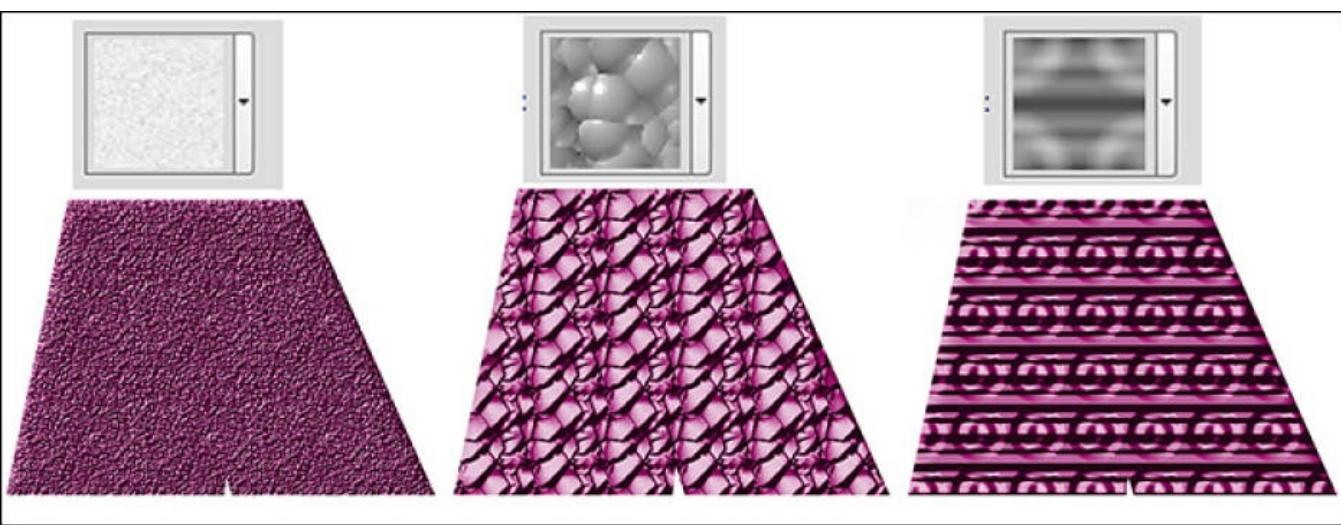


The texture options apply a texture on the beveled shape, using any of the patterns you have in your Photoshop installation.

## Pattern

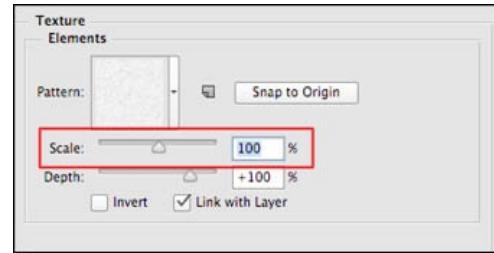


The pattern option allows you to choose the pattern you want to apply to the shape from among many textures to apply on your beveled shape:-

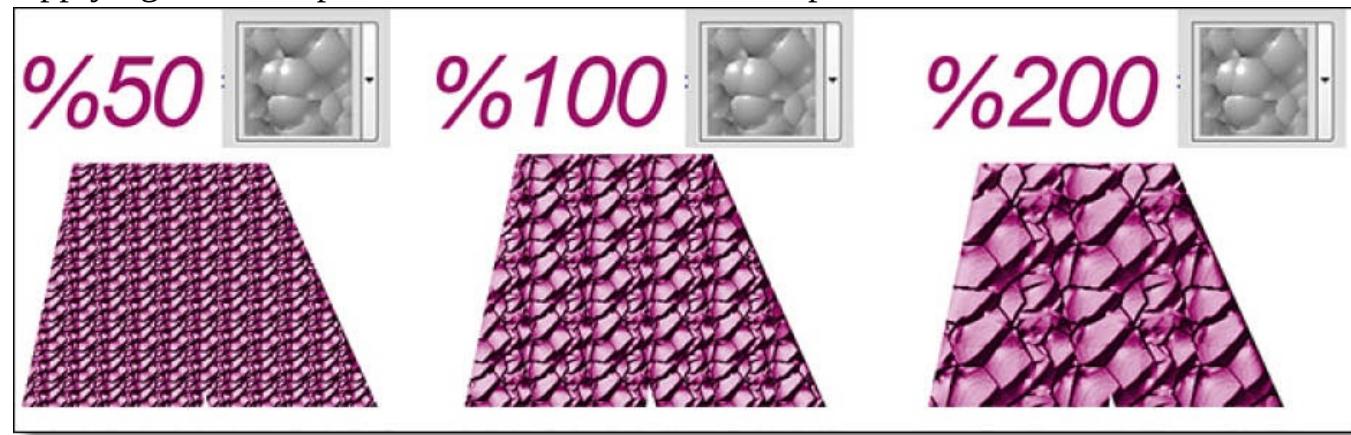


## Scale

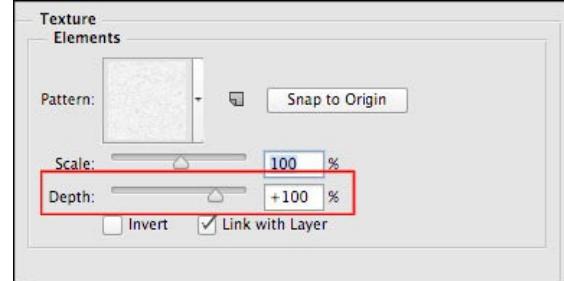
Determines how big or scaled the pattern is:-



Applying the same pattern with different scale can produce different results:-

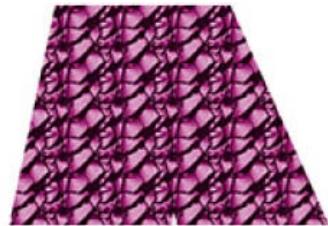
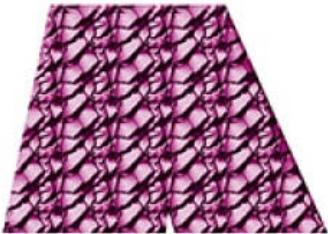
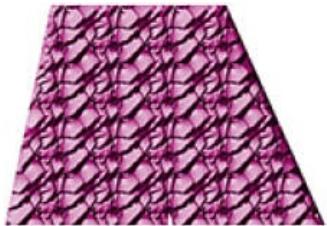


## Depth



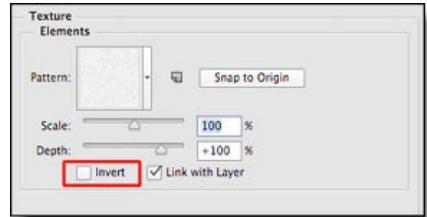
The depth increases the contrast of the pattern colors to give you the impression that the “bumps” of the pattern are deeper or shallower. And it does a very good job at that:-

# *Depth:-50 Depth:-100 Depth:-1000*

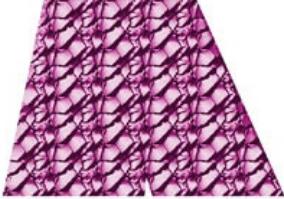
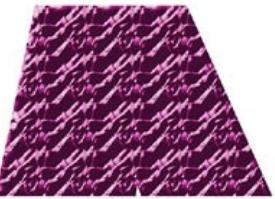


## Invert

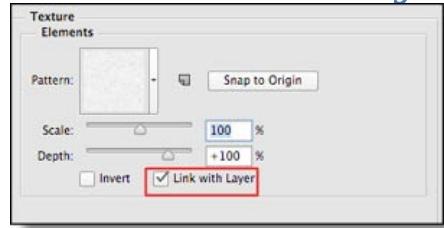
And the invert option inverts the colors of the texture



And doing this can lead you to totally different patterns than what we have seen:-

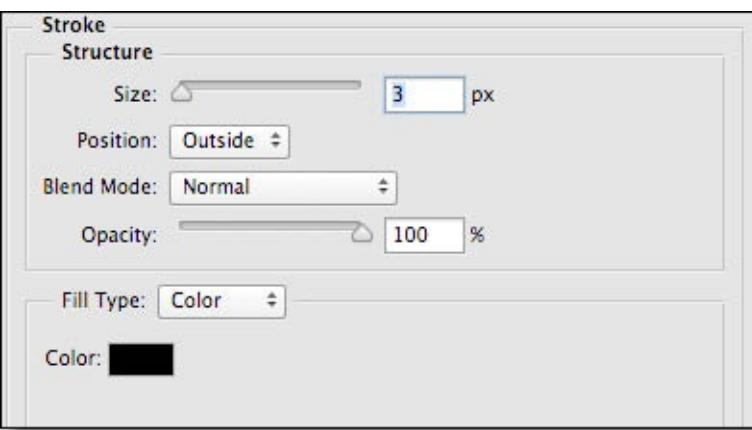


## Link With Layer



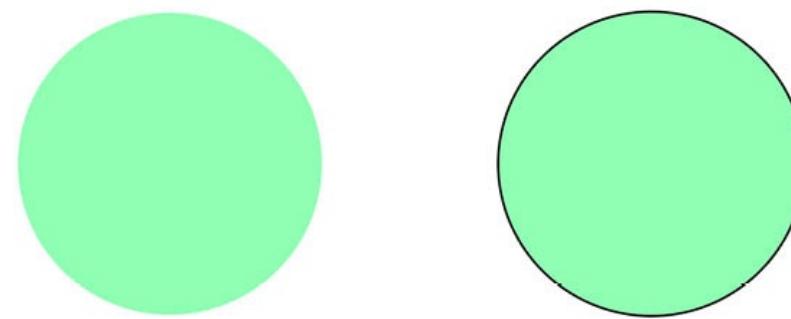
The “Link With Layer” option determines whether the pattern will move along the shape/layer when you move it. If you unchecked this option, the pattern is going to change every time you move the contents of your layer. As if the layer is acting like a mask for the underlying pattern. To see what I mean, try to apply a texture on a certain layer with the “Link With Layer” unchecked, and then move the layer contents using the Move Tool to see what happens.

## Stroke



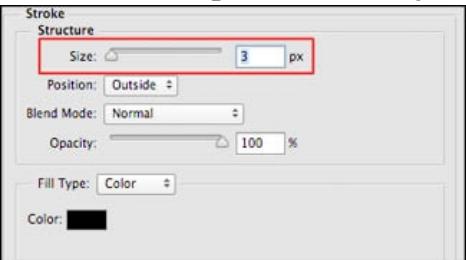
Despite its many options, the Stroke Layer Style is one of the simplest sections in the layer style, if you have a good idea on how to use Photoshop Shape Tool, you won't have a hard time understanding most of the options here.

The Stroke Layer Style does a simple thing, it applies a Stroke/Border on the edge of your shape:-



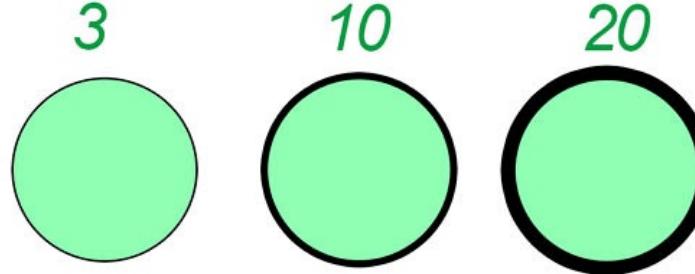
## Size

Stroke Size option allows you to specify the size of the stroke/border



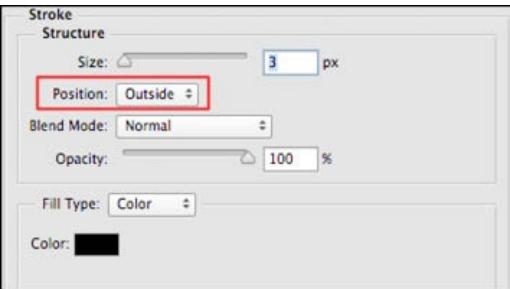
The bigger the Stroke Size you specify, the bigger the stroke/border will be:-

### Stroke Size



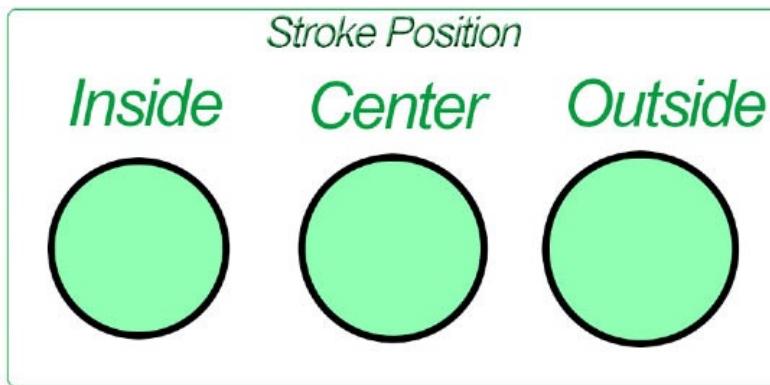
## Position

Stroke Position determines whether the stroke will be applied outside of the shape, inside of it, or in-between (Center).

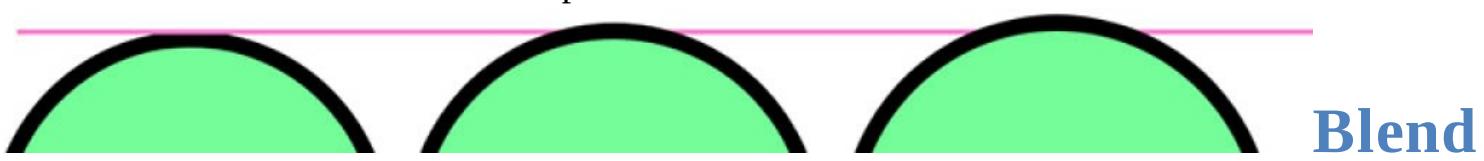


Depending on which position you choose, the shape size can change. “Inside” doesn’t change the size of the shape, because it applies the stroke inside the shape. Center increases the shape size by half the stroke size. And Outside increases the shape size by the full stroke size.

Here is how this works out:-



Let’s take a closer look at the shapes to see how the circle have different sizes with each option:-

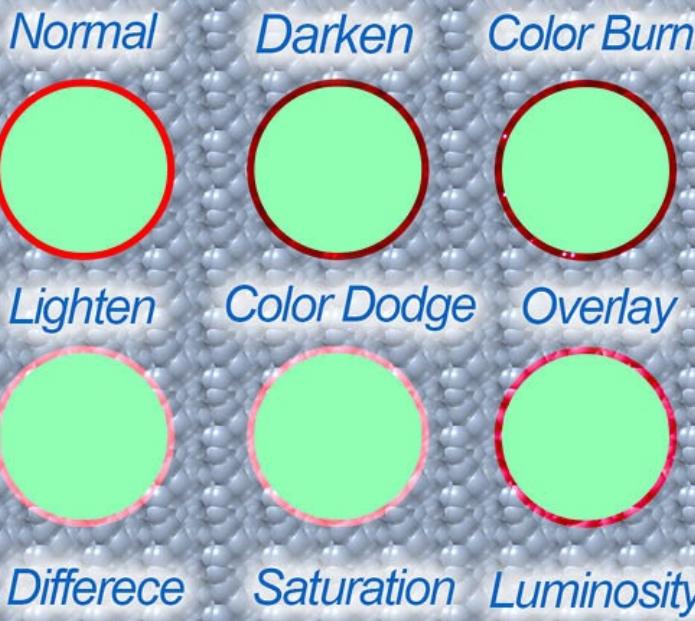


**Blend**

## **Mode**

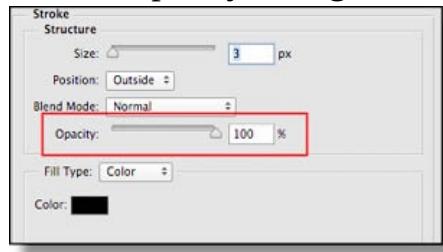
Stroke Blend Mode allows you to choose the stroke Blend Mode, which is Normal by default. Here is how the Blending Mode looks like after I changed the stroke color to Red and added a background so you could see how the stroke looks like with each Blending Mode:-

## Stroke Blend Mode

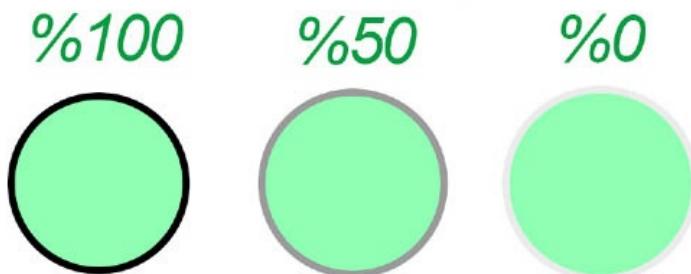


## Stroke Opacity

Stroke Opacity changes the transparency of the stroke, similar to how the Layer opacity works

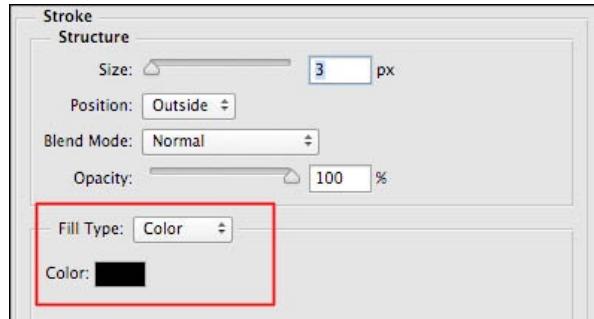


### Stroke Opacity



## Stroke Fill

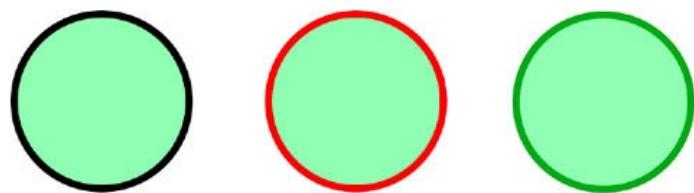
The stroke Fill Type allows you to determine how the stroke is filled



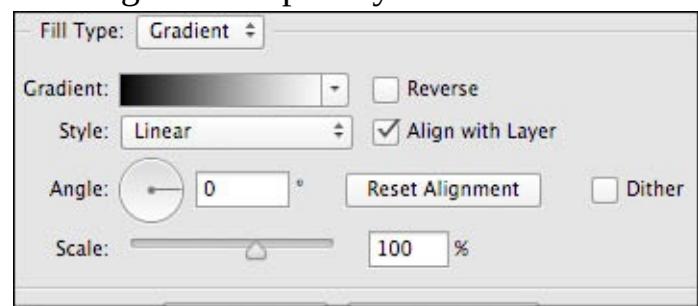
The default option, which is the Color fill, allows you to

choose a solid color for the stroke, like this:-

## Stroke Fill - Color

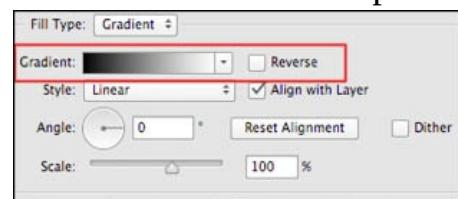


Choosing the “Gradient” option fills the stroke with a gradient instead of a solid color, once you choose “Gradient” from the Fill Type menu, you will see additional options, these options help you set the gradient option you want to have

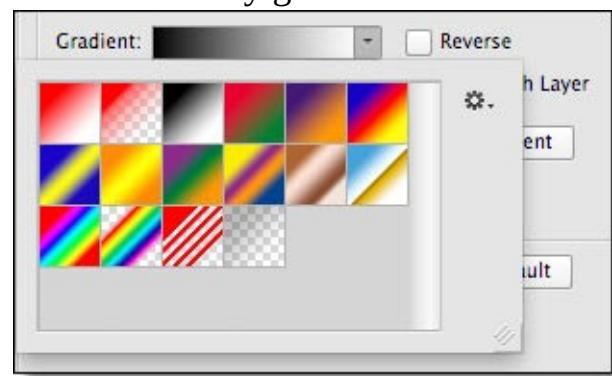


## Gradient Colors

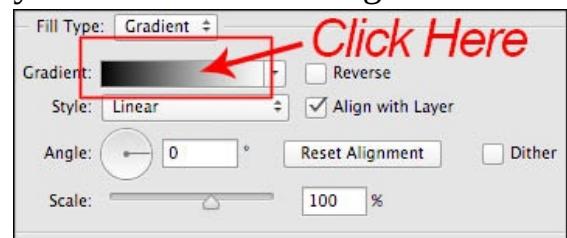
The Gradient Colors option allows you to choose the gradient colors



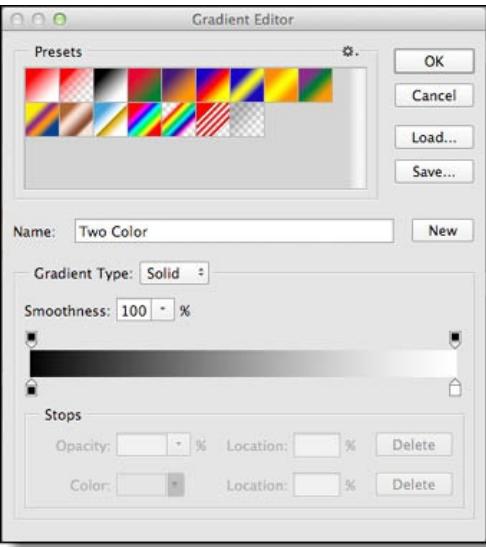
There are many gradients available with Photoshop:-



And clicking on the gradient itself, instead of the arrow besides of it opens the Gradient Editor, where you can create or edit gradients to suit your needs:-



Here is how the Gradient Editor looks like:-



## Reverse

Image9386.PNG

The Reverse checkbox allows you to reverse the direction of the gradient. For example, if the gradient you set originally comes from left to right, it will come from right to left after checking “Inverse”

Here are a few linear gradients that are applied to the stroke of our circle. With and without the Reverse checkbox checked:-

Image9394.PNG

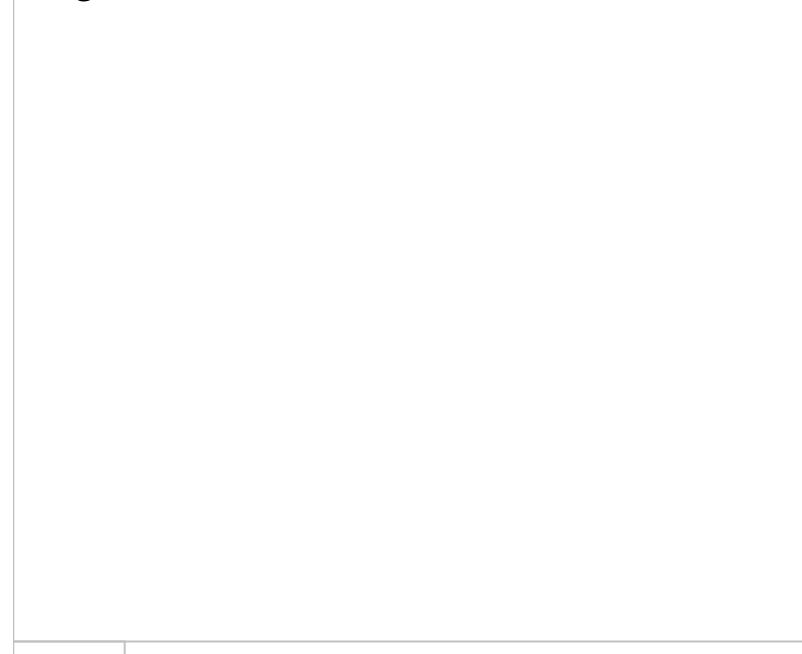
## Gradient Style

Image9401.PNG

Gradient Style allows you to choose the type of the gradient, which is Linear by default. Linear gradient is the type of gradient where the colors gradually change from one direction to another, like,

from left to right, or from up to down and so on. We will take a detailed look at each of these types. Here are all the gradient styles we have, I made the stroke so big so that you could see the gradients much better:-

Image9411.PNG



**Note:-** Don't worry if you couldn't understand all the gradient types right away. Many of these types will be re-explained when we get to the Gradient Layer Style

## Gradient Angle

Image9418.PNG



Gradient Angle allows you to choose the direction of the gradient, which is from left to right by default

In a way, this option makes the Reverse option kind of useless J

Here are the black-to-white gradient on the circle, with different directions of the gradient applied using Linear gradient style:-

Image9425.PNG



The Angle Option doesn't have much effect over the Radial Gradient.

Here is how it looks with the Angle Gradient:-

Image9433.PNG

And the Reflected Gradient:-

Image9442.PNG

And Diamond:-

Image9451.PNG

The Angle option has no effect on the Shape Burst gradient style

## Scale

Image9462.PNG

The last option, which is the scale, determines how much fast the graduation from the first to the second color will be. In other words, it determines how much “big” the graduation is. To better understand how the Scale Option works, take a look at the 3 examples below, notice how when the scale value is as low as 10, the gradient happen very quickly, but when the scale is 150, the scale becomes much smoother:-

Image9475.PNG

## Stroke Pattern

Image9482.PNG

Stroke Pattern applies a pattern on the stroke instead of a solid color or a gradient. The pattern options are very similar to the bevel pattern.

Image9491.PNG

Pattern

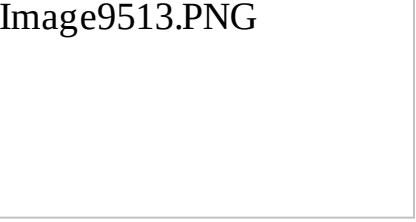
Image9498.PNG

The Stroke Pattern option allows you to choose the pattern you want to apply. There are many patterns to choose from, and more could be downloaded from the Internet by the way:-

## Image9506.PNG

### Scale

Image9513.PNG

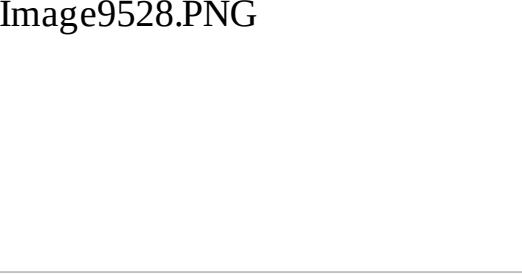


The Pattern scale determines how big or small the pattern is, here is how the same pattern looks on different scales; I have changed the size of the stroke in each of the circles to make the pattern more visible:-

## Image9520.PNG

### Link With Layer

Image9528.PNG



The “Link With Layer” option determines whether the pattern you applied will move along with the shape in case you moved it using the Move Tool or any other moving tool or not. If this option is unchecked, and then you moved the contents of the layer, the pattern is going to change depending where you place your shape.

## Inner Shadow

Inner Shadow applies a shadow on the inside of the shape, as appose to the outside of it. Which is what the “Drop Shadow” Layer Style does.

Image9536.PNG

Here are the Inner Shadow Options; You can

probably guess what many of these options do by now:-

Image9545.PNG

## Blend Mode

Image9556.PNG

Blend Mode determines the Blending Mode of the shadow; the final result you will get depends on both the color of the shadow and the color of the shape

Image9568.PNG

Nothing much, right?

You are going to get much better results if the shape fill is a pattern or the color of the shadow is not black, for the sake of visibility, I have also increased the size of the inner shadow:-

Image9575.PNG

## Shadow Color

Image9583.PNG

You can change the color of the Shadow by clicking on the color icon, to make the colors more visible, I changed the Blend Mode of the shade to “Normal”:-

**Image9590.PNG**

## Shadow Opacity

The opacity option determines how transparent the inner shadow is.

Image9598.PNG

You probably noticed by now how the opacity option works the same way across all the Layer Styles

Image9605.PNG

Angle

Image9613.PNG

The Angle option determines where the direction the shadow is facing, this is another option that works the same way across many Layer Styles

Image9621.PNG

Distance

Image9629.PNG

This option is kind of confusing; so don't worry if you couldn't understand what it does at first. The Distance determines how much the shade "travels" inside of the shape. This option works along the Angle option, which we will get to shortly. You could also say that this option moves the exposed area (The area that are not covered by the shadow) to the direction specified by the Angle option.

**Image9638.PNG**

## Choke

Image9649.PNG

The Choke option determines how gradual or smooth the edges of the shadows are. The amount of smoothness you could get from this option also depends on the size of the Shadow (which we will explained next).

Here are what different Choke values do when the size of the Shadow is 15, bigger sizes for the shadow can easily produce smoother graduation for low Choke values:-



## Size



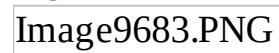
The Size determines the amount the shape gets covered by the shadow. This option works along with the Distance option to determine the area that are not covered with Shadow.

The Size option also works along the Choke option to determine how much space the Choke option has for smoothing the shadow



As I said, the Size & Distance options work

together, here is how the Distance option like when the shadow size is set to 50:-



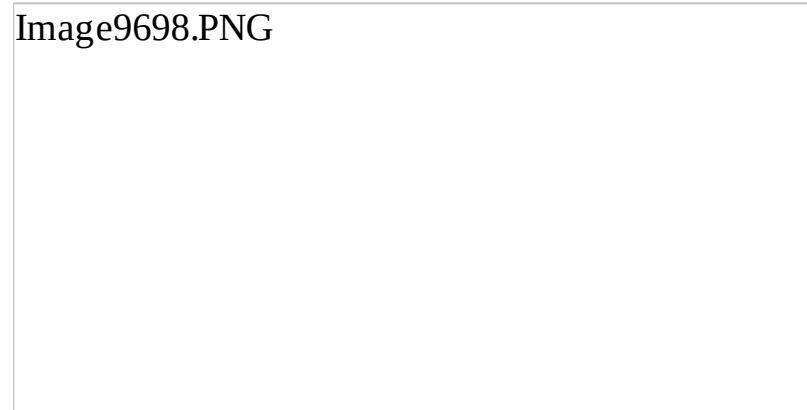
## Contour

Image9691.PNG



The Inner Shadow Contour allows you to specify the look of the shadow using different curves. Bear in mind that for this to work, the Choke option should have a value that is less than 100, and preferably below 50

Image9698.PNG



Just like we did with the curves before, clicking on the curve itself opens the Contour Editor dialog, where you could edit or create your own curves

## Noise

Image9707.PNG



The noise option adds some noise to the shadow, so you will get a noisy shadow once you set the value of this option above 0 J

Image9715.PNG

In case you can't get see the difference between the

noise values, here are a close-up look on how they strokes look like:-

48812.jpg

**Inner**

## Glow

Inner Glow adds a glow to the inner edges of the shape, similar to how the Inner Shadow adds a shadow to it

Image9732.PNG

Various options are available to help you adjust the

glow however you want, and I bet many of these options are obvious to you now, like Choke

Image9743.PNG

# Blend Mode

Image9755.PNG

The first option, Blend Mode, determines how the blend mode used to apply the glow color on the shape, the results you could get from this option depends on both the glow and the shape colors  
Here are some examples Inner Glow with different Blend Modes:-

**48827.jpg**

**Opacity**

Image9770.PNG

Opacity determines how the glow is transparent; setting this option to %0 means that there won't be glow at all

48835.jpg

Noise

Image9785.PNG

Noise adds noise or static to the glow, this option is 0 by default

48844.jpg

Glow

Color

Image9800.PNG

For settings the glow color, you have two options, you can either chose a certain color for the glow, or to apply a gradient

Choosing a color allows you to choose a color using the color picker, this is the simplest way for settings the glow color

Image9808.PNG

## Gradient Glow

Image9816.PNG

Gradient allows you to select (or create) a gradient instead of a single color, applying a gradient instead of a color can change the color of the entire shape. But it can lead to some interesting effects:-

## 48856.jpg

### Technique

Image9839.PNG

Technique specify how the glow is created, “Softer” makes the glow soft, and with that option, the glow doesn’t follows the contour of the shape precisely, while “Precise” does the opposite, it follows the contour of the shape, even if that mean the glow will be hard

## 48863.jpg

Source

Image9860.PNG

The Source option determines where the glow starts from, Edge means the glow will start from the edges of the shape and continue inward. Center means the glow will start from the center of the shape and continue outward

This option will be easier to understand once I explain the Size option, so don't worry if you didn't get what this option does right away:-

**Image9868.PNG**

**Choke**

Image9875.PNG

Choke specify how gradient or smooth the glow will be, this option is %0 by default, meaning that the glow will be as much smooth as possible. Setting Choke to %100 will make the glow very sharp

48875.jpg

## Size

Image9890.PNG

Size determines the glow size, the bigger the size, the more parts of the shape will be covered by the glow

48883.jpg

It is worth to demonstrate how different sizes look when the glow “Technique” is set to “Precise” instead of “Softer”:-

48894.jpg

Let's visit the

Source option again, it is easier to see what this option does when we play with it along the glow size:-

48902.jpg

## Contour

The Contour option let's you make the glow follow a certain curve, just like we have seen with many Layer Styles

Here are various glows, with the Source set to both “Center” & “Edge”. Note that for this option to work, the Choke value must not be set to %100, and it is preferable for it to be less than %50:-

48909.jpg

Just like we saw with the other

Layer Styles, clicking on the curve itself opens the “Contour Editor”, where you can edit or create your own curves

## Range

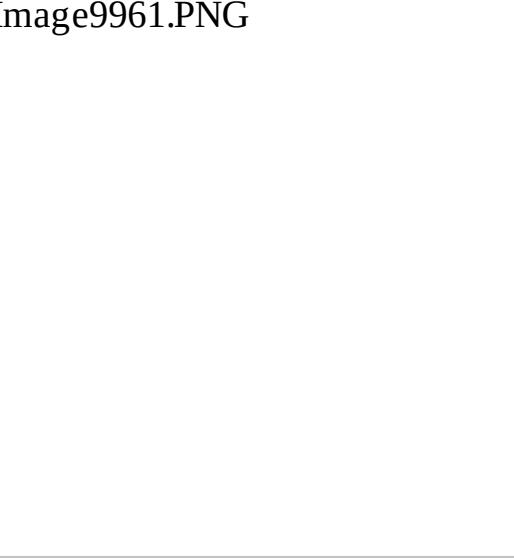
Image9946.PNG

The Range option determines how fast the color transitions of the contour will be. In other words, low value of Range means that the color changes of the Contour will be abrupt, high value of range makes the contour very smooth.

48917.jpg

**Jitter**

Image9961.PNG



The Jitter option works only if you have a gradient applied to the glow color instead of a single color. This option determines how much noisy the color transition of the gradient. Setting this option to a low value means that there won't be much noise

48927.jpg

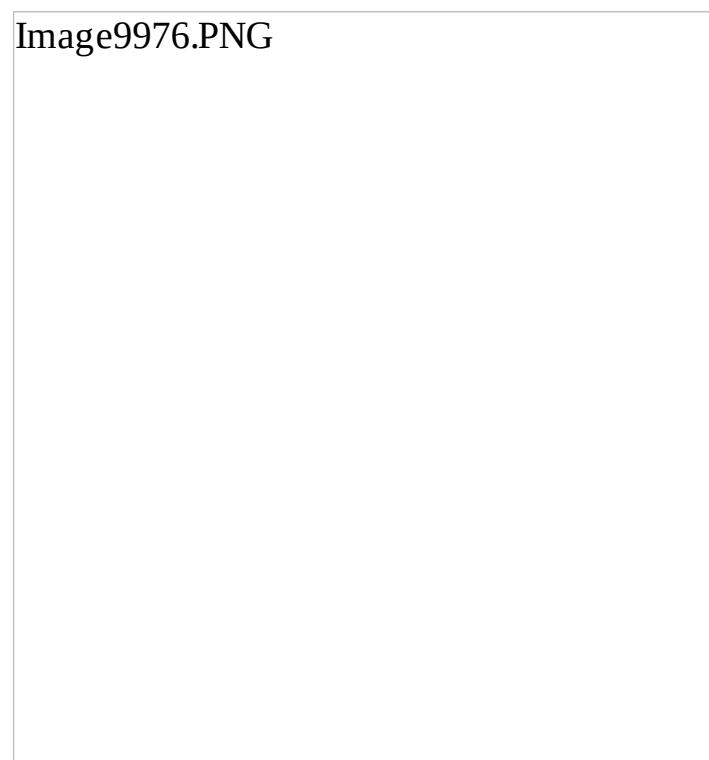
## Satin

The Satin Layer Style is the hardest to grasp, despite being so simple in reality, this Layer Style creates a duplicate of your shape, and then applies it on the inside of the shape. Which is useful in creating various effects, like Chrome or metallic effects

Because of the randomness of the results you will get from this layer style, it is kind of hard to demonstrate what it does using pictures, but I will try nevertheless. The best way to understand what it does is by playing with it.

All the following shapes have the Satin Layer Style enabled, but with different settings for the "Distance" option. You will notice how a distorted copies of the shape itself is used to create the Satin effect. And in case of the Text at the bottom, a distorted copy of the word "Text" is placed inside.

Image9976.PNG



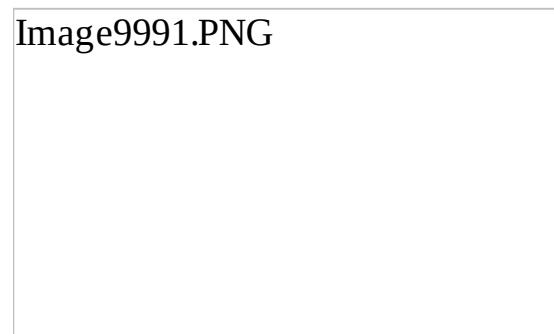
You are probably wondering now, “What is this layer style used for?”. The best way to think about it is to consider the Satin Layer Style as a way to create an effect. And to not concern yourself trying to fully understand how it works.

Fortunately, there are not many options for the Satin Layer Style, and almost all of these are self-explanatory

Image9983.PNG

## Color

Image9991.PNG



The color option is change the color of the inner shapes that Satin create inside your original shape. To make the results of this option appears more visible, I changed the Blend Mode of Satin from the default mode (Multiply) to Normal

# **Image10000.PNG**

## **Blend Mode**

Image10008.PNG

Blend Mode of Satin changes the Blend Mode of the inner Satin shapes, like with every Layer Style, the final result you are getting depends mainly on the colors of the Satin and the color of the original shape

Here are how red Satin looks like under different blend modes:-

# **Image10017.PNG**

## **Opacity**

Image10028.PNG

Opacity determines the transparency of the inner satin shape, exactly like you have guessed J

## **Image10040.PNG**

### **Angle**

Image10047.PNG

Satin Angle is where it gets confusing a little bit, to simplify the idea, think of it as a way to rotate the internal shape(s) created using Satin

## **Image10056.PNG**

### **Distance**

Image10063.PNG

Distance is another confusing option, it kind of specify how the shapes created by Satin are merged with each other.

For example, take a look on how the different values of distance do to the rounded rectangle Satin:-

Image10071.PNG

Similar effects happen when you experiment with

the circle instead of the rounded rectangle:-

**Image10078.PNG**

**Size**

Image10085.PNG

The size blurs the borders of the inner Satin shapes, it kind of reminds me of the Gaussian Blur filter, which we will get to when we start working with Photoshop filters.  
This is the last confusing Satin option we are going to see, fortunately~

## Image10093.PNG

### Contour

Image10101.PNG

Contour change and control the contour of the Satin shapes, for this option to work, the Size parameter has to be larger than 0

Here are how the rounded rectangle looks like using different contours, with the size value set to 20:-

Image10110.PNG

Interestingly, here are how these same contours

look like when the size parameter is set to 100:-

Image10121.PNG

## Invert

Image10133.PNG

Invert changes the invert the shape and the satin colors, the shape color becomes the satin color and vice versa

Image10140.PNG

## Color Overlay

Color Overlay is probably the easiest and the simplest Layer Style. It applies a certain color over your shape, it produces the same result as creating an identical layer above your shape, then changing the color of the new shape, and apply a certain opacity and Blend Mode to that layer, you can always get back how your shape used to look like by hiding that layer.

Color Overlay foes just that, except that Color Overlay is an easier & cleaner way to do that

Here is what happened to the red square below after I applied Color Overlay using Pink as the overlay color, and Hard Light as Blend Mode:-

Image10148.PNG



There are 3 options for Color Overlay; all of them should be easy for you right now, as they work identically to many of the similar options we have seen so far

Image10155.PNG



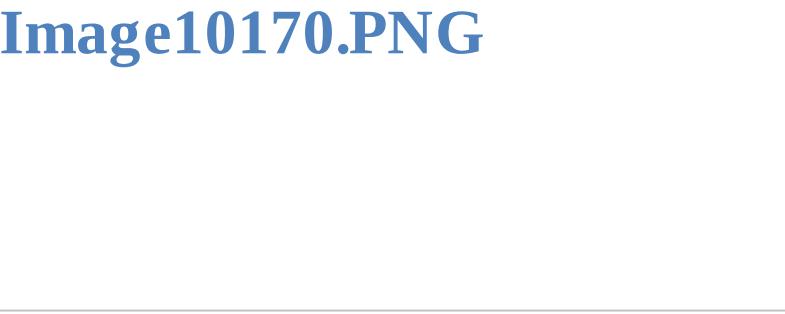
Color

Image10163.PNG

The color option allows you to choose the color to apply the overlay with, unless you set the opacity parameter to a value that is less than %100, this color you choose will be the dominant color for the shape especially when the Blend Mode is Normal

Here is how our red square looks like using different colors, because the Blend Mode is set to “Normal”, and the opacity is %100, all the colors I chose dominated over red:-

Image10170.PNG



Blend Mode

Image10178.PNG



Blend Mode determines the blending mode of the color you chose, this is where your color choice can produce a different result than merely changing the shape color

The following Squares are the same as the ones we saw just now, except that the Blend Mode was changed from “Normal” to “Color”, the difference between these examples and the previous ones is easy to spot

Image10186.PNG

## Opacity

Image10194.PNG

Opacity changes the opacity of the Overlay color, lowering this

value will make the original shape color appears through

Here are the 3 squares after changing the Blend Mode to “Normal”, and decreasing the opacity of the Overlay color a bit by bit:-

Image10203.PNG

## Is the Color Overlay Layer Style Useless?

In case you are thinking of that, think again, while you may not use the Color overlay in the simple way we have been using just now. Color overlay really shines when the original shape is more complicated than a solid color, like a pattern of a picture, like the textured square we have here:-

# Image10214.PNG

## Gradient Overlay

Gradient Overlay is exactly the same as Color Overlay, but instead of overlaying a single color over your shape, it will overlay a gradient instead.

### Image10226.PNG

Just like the case with Color Overlay, applying

Gradient Overlay with %100 opacity and using Normal Blend Mode will completely cover the original shape color(s). If this is the result you are looking for, then this is fine. But much more can be achieved by playing with these two settings

Gradient Overlay options are almost identical to the ones we have seen when I covered the Stroke Layer Style, which is why we are going to go through some of these more quickly than we have done so far

Image10233.PNG

## Blend Mode

Image10241.PNG

Blend Mode determines the blend mode that's applied on the original shape color(s)

## Opacity

Image10248.PNG

Opacity changes the opacity of the whole Gradient Overlay, this is a nice way to mix the gradient with the colors of the original shape

## Image10256.PNG

## Gradient

Image10263.PNG

Gradient allows you to choose the colors of the gradient, which are black to white by default. The reverse checkbox change that to from White to black in this case

Clicking on the little arrows allows you to choose another gradient, and clicking on the gradient itself instead of the little arrows will open Gradient Editor, where you can create your own gradients

## Style

Image10279.PNG

Style allows you to choose the gradient type, which is Linear by default, many other types of gradients are available here, and it is worth it to take another look at them again

## Image10287.PNG

Image10296.PNG

## Angle

Angle determines the angle of the gradient, for all the examples of the gradients above, the Angle was  $^{\circ}90$

The effects of the pattern Angle depend on the gradient itself, it is an easy option to perceive once you know how the whole thing works. Note that this option has no effect on the Radial gradient style

Image10307.PNG

Image10321.PNG

Image10328.PNG

**Image10336.PNG**

**Scale**

Image10343.PNG

The Scale option works the same way as the Choke & Range options we have seen before. The less scale value you have, the more abrupt or quick the gradient occurs, and the more Scale value, the more smooth & slow the gradient will be.

The scale option has no effect on the Angle gradient

Let's take a look on how the scale parameter affects the various gradient styles:-

Image10351.PNG

Image10358.PNG

Image10366.PNG

Image10373.PNG

Now we have taken a look on how the gradient layer style works, let's take a look at some useful ways we could use the Gradient Overlay, which is much

more powerful than the simple Color Overlay

Image10381.PNG

## Pattern Overlay

Image10393.PNG

Pattern Overlay works similarly to Color Overlay

and Gradient Overlay Layer Style, except that it overlays a pattern instead of a single color or a gradient.

Here are the Pattern Overlay options, which we are going to take a look at them one by one:-

**Image10405.PNG**

## Blend Mode

Image10418.PNG

Blend Mode determines how the Pattern Overlay will be applied on the original shape, here is how the default pattern is applied on a red square using different Blend Modes

## Image10425.PNG

### Opacity

Image10433.PNG

Opacity determines how much transparent the Gradient Overlay is.

Let's take a look on how the opacity works with different Blend Modes:-

# Image10440.PNG

## Pattern

Image10449.PNG

You can choose the pattern you want to apply from the Pattern option, there are few patterns that comes with Photoshop out of the box, but you can download as much patterns you want from the web  
J

## Image10456.PNG

### Scale

Image10464.PNG



Scale changes the size of the pattern; you can have a very big or a very small pattern using this option

## Image10471.PNG

### Link With Layer

“Link With Layer” works the same way as the other “Link With Layer” checkboxes we have seen so far. If you unchecked this option, then you moved the shapes in the layer you have the Pattern overlay applied on, the pattern will change depending on the new location of the shapes.

And if you have this option checked, the pattern will move alongside the layer contents, and will stay the same no matter where you place the layer contents

## Outer Glow

Outer glow is identical to Inner Glow, except that the glow is created on the outer edges of the shape, rather than the inner edges:-

Image10480.PNG



There are a lot of similarities between the Inner Glow & Outer Glow options, so if the Inner Glow options were clear to you, then the case will be the

same with Outer Glow options

Image10490.PNG

## Blend Mode

Image10501.PNG

The first Outer Glow option, Blend Modes, specifies the Blend Mode that will be applied on anything that comes below the glow. Sometimes the default Blend Mode, Screen, will cause the glow to not appear in case you have your shape on a light background.

So if you only want to have a glow around your shape, no matter what is behind of it, setting the Blend Mode to normal is the best things to do

Image10513.PNG

## Opacity

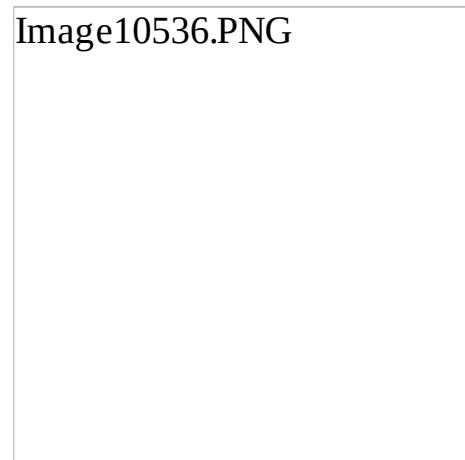
Image10520.PNG

Opacity determines how transparent the glow is, I apologize if you  
felt bored hearing this over and over from me J

## **Image10529.PNG**

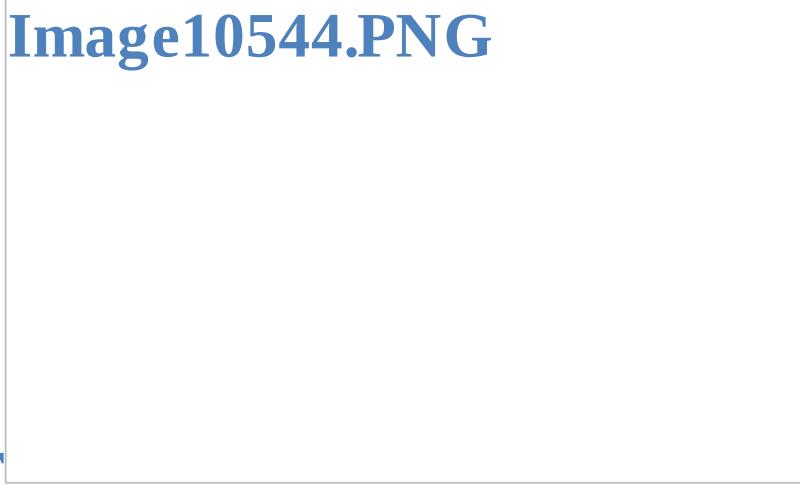
**Noise**

Image10536.PNG



Noise adds some noise to the glow:-

## **Image10544.PNG**



## **Outer Glow Color**

There are two ways to specify the glow color, you can either specify a single color for the glow, or choose a pattern.

### **Single Glow Color**

Image10551.PNG

The first option, which is to specify a single color, allows you to choose one color for the glow, as opposed to the pattern option, which allows you include more colors

**Image10560.PNG**

**Gradient**

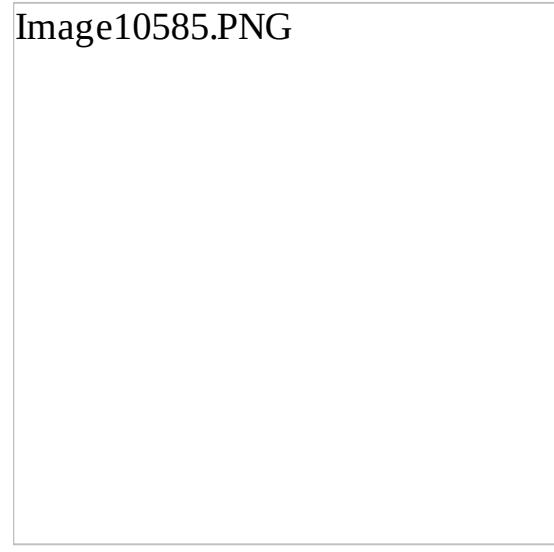
Image10567.PNG

The second option allows you to choose a gradient instead of a single color, which is kind of cool, patterns glows tend to have harder edges compared their single color equivalent.

## Image10575.PNG

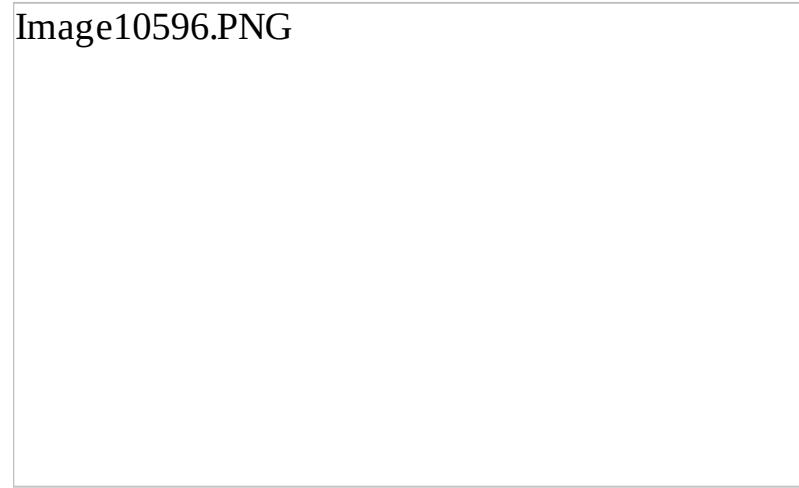
### Technique

Image10585.PNG



Technique drop-down menu works the same way as the one we have seen in Inner Glow, it determines whether the glow will follow the edges of the shape (Precise), or be smooth but doesn't follow the edges quite precisely

Image10596.PNG



## Spread

Image10608.PNG

Spread works along with the Size option to produce different results, and in general, it determines how smooth or hard the glow is, low Spread value will create a smooth glow, and a high value will create a hard one, very high value can produce an oversized & ugly glow, how low or high the spread value should be depends on the size value of the glow

**Image10615.PNG**

**Size**

Image10623.PNG

Size determines the glow size, depending on the Glow Spread value, you will get different results, which are all shown in the infographic below

Image10630.PNG

## Contour

Image10638.PNG

Contour allows you to define how the glow looks like, instead of having a glow that starts at the edge of the shape and then fades out near the edge, contour allows you to control where & how the glow starts or ends. The contour size is affected by the glow size and the spread values as well

# Image10645.PNG

## Range

Image10653.PNG

Range determines the percent of the glow in which contour transition occurs, the lower the range is, and the tighter the contour will occur. Having range set to %100 gives the whole glow area for the contour transition; And in that case, you won't be able to see the whole contour, as part of it will be hidden behind the shape itself, as you can see in the second picture below~

Let's take a look at two examples to see how this option works with Outer Glow:-

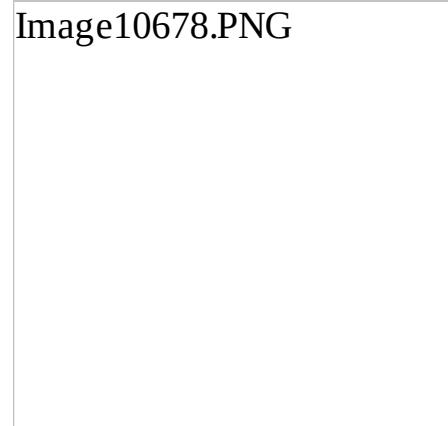
Image10660.PNG

## Image10668.PNG



Jitter

## Image10678.PNG



Jitter only works when the glow colors is set to gradient, as you most likely have guessed, it creates a noisy color transition instead of the usual smooth one

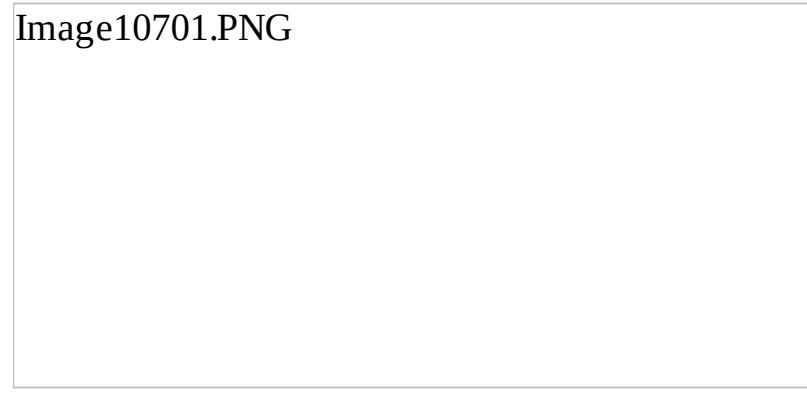
## Image10689.PNG

## Drop Shadow

Drop Shadow Layer Style creates a shadow below the layer contents, which makes it another good option to create a 3D-like shapes & effects.

Here is how the drop shadow works on a little square:-

## Image10701.PNG



And following are the Drop Shadow options,

which are similar to the Inner Shadow's:-

## Image10708.PNG

### Blending Mode

Image10716.PNG



Blending Mode determines the blending mode of the shadow you are going to create; This is a good way to create a shadow that interacts with the elements that are below it.

## Color

Image10723.PNG



The shadow color option determines the color of the dropped shadow, this color is set to black by default. But you can change it to any color you want:-

## **Image10731.PNG**

**Opacity**

Image10738.PNG



Opacity determines how transparent the shadow is:-

## **Image10746.PNG**

**Angle**

Image10753.PNG

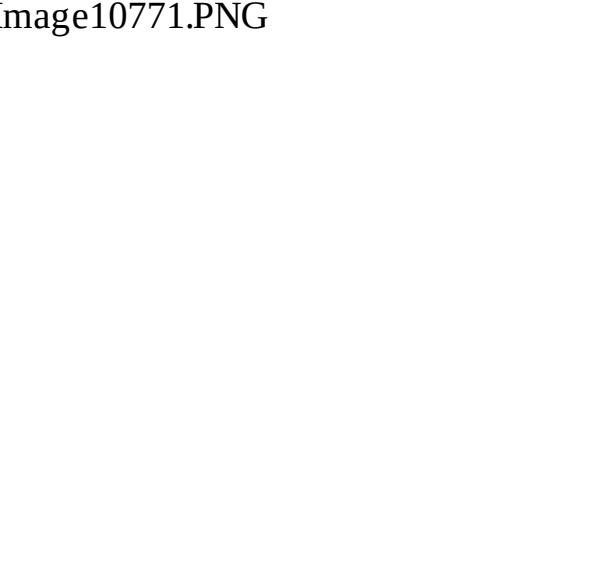


Determines the angle of the shadow, you can have the shade cast in any direction you want:-

## Image10761.PNG

### Use Global Light

Image10771.PNG

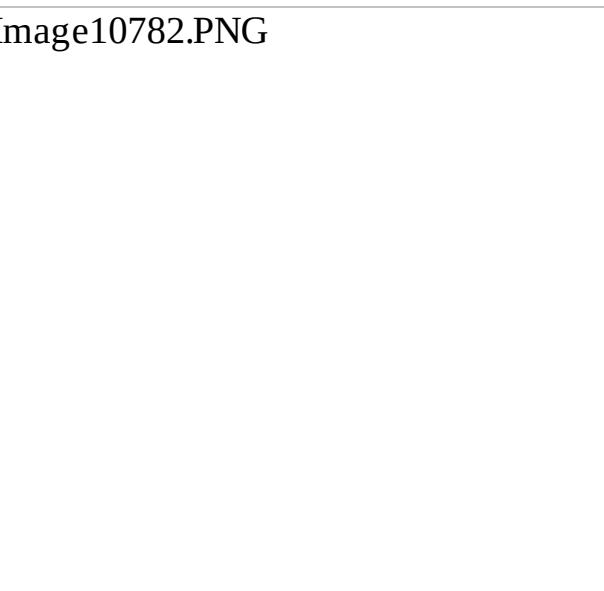


If the “Use Global Light” option is checked, then the shadow in that layer will be the same on all the layers that has this option checked, and the direction of the shadow will change to the angle of last layer you changed its angle with this option checked

In other words, this option allows you to unify the direction of the shadow across multiple layers. Which is a good thing in case you are using the layer styles to create scenes.

## Distance

Image10782.PNG



The distance option determines the distance between the layer shape and its shadow:-

# Image10794.PNG

## Spread & Size

Image10801.PNG

The spread and the size options have to be explained together. Because they are so related. Let's start with the size option

The Shadow Size determine how scattered the shadow is, the more size the shadow has, the more scattered & blurred the shadow will be:-

Image10809.PNG

To make the resized shadow less scattered, you can increase the spread of the shadow. Here are the same shadows we just saw, but with the spread value set to 40 instead of 0:-

Image10816.PNG

Setting a high size & spread values allows you to create shadows that are bigger than the original shape:-

Contour

Image10831.PNG

The shadow contour is similar to the contour option in the other Layer Styles. It allows you to create shadows that follow a certain curve, the high points in the curve represent black, while the lowest point represent white.

For the contour option to work, the shadow must be expanded using the Size & Spread options. Here are some ways you could play with the shadow using many of the available curves:-

Image10839.PNG

Image10846.PNG

If you did not like any of the available curves, you could draw your own using the Contour Editor

## Noise

Image10878.PNG

The noise option is self-explanatory; It adds noise to the shadow :)

Image10892.PNG

## Layer Knocks Out Drop Shadow

Image10899.PNG

Now comes the badly named “Layer Knocks Out Drop Shadow”, this option determines what happens when you reduce the transparency of the layer that has the Drop Shadow applied on.

To make things clearer, here are two identical layers, with two identical Layer Style, except that the “Layer Knocks Out Drop Shadow” is checked in one of them, and unchecked in the other.

Image10907.PNG

So far, there is no difference between the two, but after changing the layer fill to %10, you are going to see this:-

Image10914.PNG

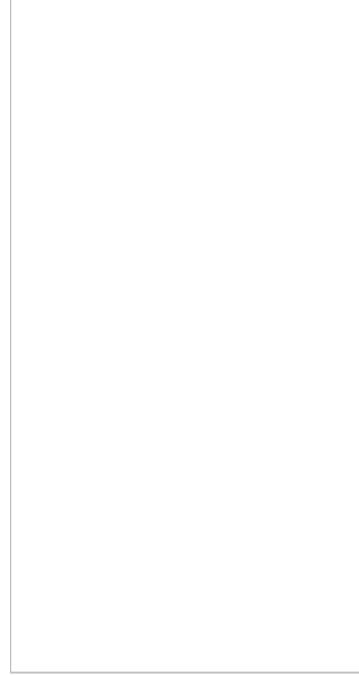
As you saw, when the option was unchecked, you were able to see the rest of the shadow that was

below the shape, and when it was checked, you could see the contents of the layers below instead, which is white background in this case.

## Enabling and disabling Layer styles from the Layers Panel

One of the nice features in the Layers Panel is the ability to turn any of the Layer Styles on and off, and it works the exact same way you hide and show layers:-

Image10922.PNG



Each time you apply a layer style on a layer, Photoshop will add that style name below the layer you applied it on in the Layers Panel, and clicking on the eye icon besides the style enables and disables it. Clicking on the eye icon besides the “Effects” text on the very top disables or enables all the Layer Styles applied on that layer

## Rasterizing your Layers Styles

One of the main advantages of Layer Styles is that they don't change the original contents of your layer, this means you can disable all these styles, edit or change them however you want without affecting the original contents of the layer.

This advantage is called non-destructive photo editing, which is a very important concept nowadays, and it is highly recommended that you edit your picture using such technique as much as you can. But sometimes you may really need to edit the pixels of the styles themselves, using any of Photoshop tools, like the Brush Tool or filters, and to be able to edit your layer styles that way, you will need to rasterizing them first (turn them into pixels), and doing so is pretty simple, here is how to do that:-

- Create a new layer from the layers panel; This is done by selecting Layers -> New -> Layer from the main menu, or by clicking the “New Layer” from the Layers Panel

Image10929.PNG

Image10937.PNG

The new layer will be created and it will appear in the Layers Panel:-

By merging the new layer with the one with the Layer Styles, all the styles applied to the original layer are going to still be rasterized and ready to be editing like anything you have edited so far.

## To merge the two layers, do the following:-

- Click on one of the layers in the Layers Panel to select it
- Then hold the Shift button and select the other layer, the layers panel will look like that after you make the second selection:-

- To merge the two layers, select Layer->Merge Down from the main menu, and the two layers will be merged

After the layer style is rasterized, you will be able to edit them using filters or any other Photoshop tool, here is how I blurred the whole contents of a rasterized layer style:-

# Image10962.PNG

## Saving your Layer Styles

After you create your Layer Style, you can save it to be able to use it later, this is done from the Styles Panel, here is how to do that:-

- Make sure the Layer you applied the Layer Style on is selected in the Layers Panel

# Image10973.PNG

- In the Styles Menu, click on the arrow on the top-right of the panel:-

# Image10985.PNG

- Select “New Style” from the menu:-

Image10992.PNG

- The “New Style” dialog Appears
- Type the name of the new style, and make sure the “Include Layer Effects” option is turned on, then click OK

Image11000.PNG

- And the new style will be available in the Styles Panel for you to use at anytime~

## Loading more Layer Styles into Photoshop

The Styles Panel gives you the option to load more styles groups that comes with Photoshop with a few clicks, all you have to do is to click on the styles group name you want to load:-

- Let’s say I want to load the “Buttons” styles group, so I select that option from the menu
- Photoshop asks you whether you want to replace the currently loaded styles with the ones in

the group you selected, selecting OK will do just that. And selecting Append will simply add the new styles into the Styles Panel, and keep the ones that are already there, this is what I chose:-

Image11015.PNG

- Now take a look at the Styles Panel to see all the styles in the “Buttons” group are there:-

Image11022.PNG

## Downloading and loading new Styles from the Internet

As I said earlier, you can download Layer Styles from the Internet, and then load them into Photoshop to use in your own designs. There are millions of ways to create Layer Styles, and different people around the world would create styles you wouldn't be able to think of yourself. Plus, it saves a lot of time to use some premade designs.

There are many sites and places where you can download styles. Brusheezy.com is one of them. The Style we are going to download and load is called the “Style Steel Text”, this style is free to use for personal & commercial use, as long you link to the original Layer Style and credit the author.

Image11030.PNG

“Contributor’s Des1Ussef/brusheezy.com.”

**Note:-** It is a good idea to read the License of anything you download from the Internet, including Photoshop Brushes, Patterns & layer, so that you won’t get into legal trouble, no matter how boring this may seem. For one, here is the text of “Style Steel Text” license:-

Image11037.PNG

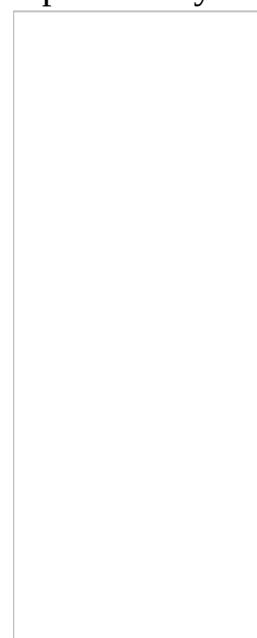
To download and load “Style Steel Text” into Photoshop, follow these instructions:-

- Go to “Style Steel Text” page in Brusheezy:- <http://www.brusheezy.com/styles/43653-style-steel-text-by>
- Click on the “Download” button to download the Style:-

Image11045.PNG

- After the file finish downloading, unzip the file to be able to see its contents, for a great instructions on how to do that, on all the major operating systems, visit this page:-  
<http://www.computerhope.com/issues/ch000506.htm>

Open the Style Panel menu, and choose “Load Styles” from the menu:-



Locate the folder where you extracted the zip files contents, then select the .asl file, which is called “Steel RGBY By Ussef ps.asl” in this case, then click “Open”.

And in the Styles Panel, you will find 4 new Steel styles loaded and ready for you to use:-

Image11067.PNG

## Summary

- Layers Styles is a great & easy way to create effects, and there is not painting needed to create them, only a good taste and some experimenting
- There are many Layer Styles that comes with Photoshop, and you can download many others from the Internet
- Many of the options in the Layer Styles are the same that some of them can be accessed from the Layers panel, like the fill, opacity and blend mode.
- Bevel allows you to add a 3D effect to the contents of your shapes, you can also control the contour & add some texture to your shape
- Stroke creates a border/stroke around your shapes. The Stroke can have a single color, pattern, or a gradient
- Inner Shadow creates a shadow inside the shape, along with Bevel, this can help you create a 3D effect for your shapes.
- Inner Glow is similar to the Inner Shadow, but it creates a glow instead of a shadow.
- Satin is the hardest Layer Style to grasp, it creates duplicates of your shape and applies them inside your shape, it also distorts these shapes and creates a chrome-like effect. Experimenting with this Layer Style is the best way to understand how it works

- Color Overlay covers your shape with a certain color, while this may seem useless, it gives you a nice way to change the color of your shape without exiting the Layer Style dialog. And without actually changing the pixels of your shape
- Gradient Overlay works the same way as Color Overlay, except that instead of covering your shape with a layer, it covers it with a gradient of any type you want
- And as you may have guessed, Pattern Overlay covers your shape with a pattern, instead of a color or a gradient
- Outer Glow creates a glow outside your shape, it is a great way to make your shape glow, and you can use it to draw all sorts of things, from a light bulb to a laser sword.
- Drop Shadow creates a shadow below your shape, this one more 3D effects that is nice to have
- You can turn any of the layer styles you created on & off directly from the Layers Panel
- It takes only a few clicks to save any layer style you created, which you can then reuse at any time you want
- You can add more Layer Styles to Photoshop, by either telling Photoshop to load some of the available Layer Styles group, or by downloading them from the Internet

## Examples

### Drawing A House

One of the nice things about the layer styles is the ability they give you to draw things from scratch, while I don't advice you to fully depend on them for that if you are into digital art.

The Layer Styles that has been used the most are Bevel (along with texture), Drop Shadow and patterns, tweaking the options more and more and adding more shapes can make the following house look even better

### Image11079.PNG



### Creating a Logo

By applying Layer Styles on text, and along with a few shape tools, you can create some simple logo.

You can do that using your own layer styles, or a layer style you download from the Internet. The same techniques used for creating the logo can be used to create signatures, badges, and many other things

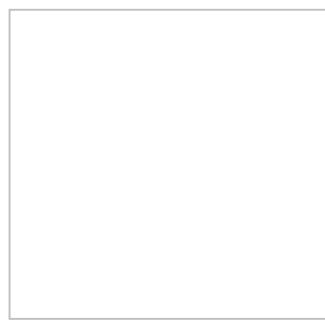
Image11086.PNG

Image11094.PNG

Image11101.PNG

Image11109.PNG

## The History Brush Tool, and the History Panel



The history brush tool  reverts part of the image you want to what it used to be in a previous state. To understand the how to use the History Brush Tool, you need to understand how to use the History Panel first, so let's start with that

### The History Panel:-

The History Panel shows the steps, or the status that the picture went through to reach to its current state.

To access the History Panel, chose Windows->History from the Main Menu:-

Suppose you have created a new picture, here is how it will look like, along with the history panel:-  
48969.jpg

There is only one state in the History Panel, which says “New”, meaning that we created a new picture.

Let’s pick the Brush tool, and make a stroke with it, here is how the canvas and the History panel looks like:-

48977.jpg

Now we have a new state, which is called “Brush Tool”, meaning that we used the Brush tool once, let's make another stroke:-

48991.jpg

We got another state in the History Pane, which is called “Brush Tool”.

Suppose we want to go back to a previous state, to do that, all we have to do is to click on that state, to try that, let's click on the first “Brush Tool” state:-

48984.jpg

Which gets us back to how the picture was when we were in that state:-

48998.jpg

Notice that the second “Brush Tool” is grayed out, meaning that it is no longer affecting the picture, you can still look at it to go back to that state by clicking on it. Bear in mind that this state and all the other grayed out state will be deleted once you edit anything on the picture while they are in that state  
Now we are familiar with the History Panel let's get back to the History Brush

## Using the History Brush to retrieve part of a previous state

There is a good chance you know what the History Brush does from the title above, if not, you will do by the end of this section J

Suppose I picked the following candles picture, and then I painted some red with the Brush tool using the Soft Light Blending Mode

Image11187.JPG

Now suppose I don't want the candles to be red, we can simply go back to the original state from the history panel, and redo the painting:-

Image11195.PNG

But wouldn't that be too much work? Depending on what you are working on, this could be the case. Another way to go about it is to use the History Brush Tool, which allows you revert the area you paint on to any previous state.

To choose the state you want the History Brush to revert back to, click on the small square besides the state you want the History Brush to go back to:-

Image11203.PNG

After you select the state you want, the history brush icon  will appear besides of it, meaning that when you paint on the picture using the History Brush, you area you will paint on will revert to that state, the icon is placed besides the "Deselect" state right here:-

Image11218.PNG

Now let's paint on the candles using the History Brush Tool , notice that you can adjust its options, like the Opacity & Flow, or the softness of the brush, to suit your needs.

Here is the Candles picture after I reverted the candles to how they were before in the first state:-

Image11233.PNG

We are going to examine many good uses of the History Brush tool when we get to Photoshop filters and Image adjustment tools~

## Summary

- History brush is a useful tool to revert parts of the picture to any state in the History Panel
- History Panel allows you to see and go back to any previous state in your picture, it is a convenient way to “Undo” anything you have done to it
- The History Panel also allows you to choose the state you want the History Brush Tool to go back to when you paint using the tool

## Photoshop Filters

## Image11242.JPG

Filters are one of the easiest tools to use in Photoshop, and many of the filters are straightforward if you know what they do. The only real problem with them is that some of the parameter has ambiguous names, which makes those a bit intimidating to learn.

Filters are also a great way to create effects, and they can be used in an innumerable of ways and for all sorts of things

Because filters are all about experimenting, I won't be covering all of them, but we will take a good look at some of the most important ones, plus a quick look at some other ones at the end of the chapter, I will make sure to visit this chapter and add more contents to it on each edition of this book

## Gaussian Blur

The Gaussian blur gives you a very good way to blurs your image as much as you want, much more than any of the other Blur tools and filters. Particularly the Blur Tool

To access the Gaussian Blur filter, choose Filter->Blur->Gaussian Blur from the main menu

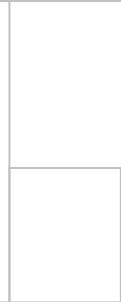
## Image11254.PNG

The Gaussian Blur dialog appears:-

## Image11266.PNG

There is only one option in the dialog, which determines the amount of blur you are going to apply to your image. And you can have as much blur as you want.

Here is how the Gaussian Blur works:-



**Note:-** You may have noticed the zoom buttons in your filter settings, these buttons allow you to zoom in & out in the preview window on the top of the filter, which is helpful to see what a certain part of your picture will look like. Though you can use filters very efficiently without even knowing about this. Also, you can click on the preview window and drag your cursor to change the part of the picture that is shown in the window

## Motion Blur

Motion blur adds a sense of motion to pictures by blurring the picture in a certain direction, as if some very strong wind has blurred the picture in that direction. Take a look at the following car picture to see how the Motion Blur filter works:-

Image11288.JPG

Applying the blur on part of the picture can creates a much better effect than if it was applied on the whole picture (which could be done using the History Brush ):-

Image11304.JPG

To access the Motion Blur filter, simply select Filter->Blur->Motion Blur from the main menu:-

Image11313.PNG

And the Motion Blur dialog appears

Image11321.PNG

There are two options for the Motion Blur, Angle and Distance; Angle determines the angle or the direction of the motion, you can type the angle you want, or use your mouse cursor to change it from the little circle besides it to adjust the angle.

Here are the red car picture after I applied Motion Blur using different angles:-

49176.jpg

The second Motion Blur option, which is the distance, determines how much powerful the motion blur is J

49124.jpg

## Unsharp Mask

Unsharp Mask is a very popular way to sharpen images, and the good thing about sharpen images using the filter is that you can tweak the amount of sharpening until you are satisfied, it will also ensure that you won't overdo it when you sharpen your image

Let's see the Unsharp Mask filter in action by sharpening the following suit picture at the right, which produced the picture we see at the right, notice how more of the suit details become available:-

Image11349.JPG

And that's not all, the Unsharp Mask can sharpens the colors of the suit, as opposed to the details of the suit only:-

Image11364.JPG

And you can also sharpen both the color and the details, which produces strong results to some degree:-

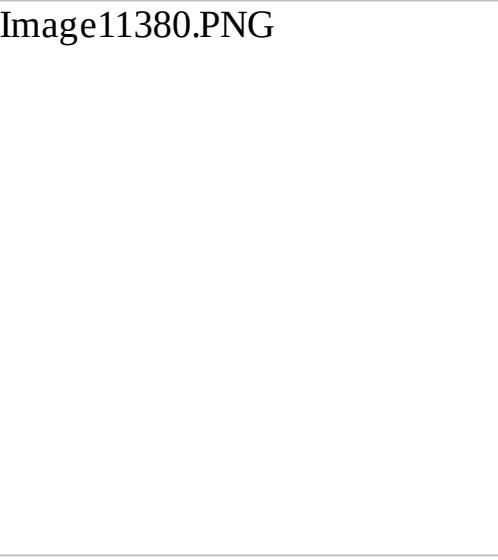
Image11372.PNG



If you learned how to use Unsharp mask to sharpen your images in these 3 ways, then you are good to go, so let's see how to do that J

To access the Unsharp Mask filter, select Filter->Sharpen->Unsharp Mask from the main menu:-

Image11380.PNG



The Unsharp Mask dialog appears:-

Image11387.PNG



There are 3 parameters in the dialog, these parameters are used by Photoshop to detect the edges in the picture to do the sharpening, while it is useful to know what each of these parameters exactly does, learning how to use them matters much more

The first option, which is the Amount, determines how much Photoshop will sharpen your picture, using this option while keeping the Radius parameter at a low value produces an image with sharper details

Image11395.PNG

The second option, the radius, determines how much you want to sharpen the colors of your picture, but this will only work as long you kept the Amount option at a low value:-

Image11402.PNG

And of course by increasing the Amount & Radius parameters high together, you can sharpen both the details and the color together:-

## Image11410.PNG

The last option, Threshold, can be easily ignored if you know how to use the first two option, it kinda alleviates the sharpening effect, which can be useful to make sure you won't overdo it when you apply unsharp mask on your images.

To see how this option works in action, the following two images have the exact same settings, but the second one has the Threshold set to 20, which alleviates the sharpening applied to the suit quite a bit:-

## Image11418.PNG

## Add Noise

Add Noise adds noise to the picture, or the part of the picture you selected. This is useful in many

situations & designs; like in case you want to make a certain picture look dirty or old.

To access the Add Noise, select Filter->Noise->Add Noise from the Main Menu

Image11426.PNG

After that, the “Add Noise” dialog appears

Image11437.PNG

The first option in the “Add Noise” dialog is the Amount slider, which allows you to determine how much noise Photoshop is going to add, the more “Amount” you add to the picture, the more noisy the picture becomes, to the degree that you will not be able to see the picture at all

The distribution allows you to choose between Uniform & Gaussian, Uniform creates a totally random noise. While Gaussian adds more pixels that are of the midtones of the colors of the picture, which is less random than Uniform does

Monochromatic creates a white, black and gray particles/pixels only, instead of colored particles

Image11449.JPG

Image11463.JPG

## Median Filter

The Median filter does a very nice and simple thing, it reduces the noise in the picture, while it won't work the best in all situations, it does great jobs at the many of them.

One of the best uses for the Median filter is to smoothen the skin of human beings, and there is going to be an example of that in the examples section at the end of the chapter.

To access the Median filter select Filter->Noise->Median

Image11471.PNG

And the Median filter appears:-

Image11479.PNG

There is only one option for the Median filter, which is the radius, which determines how much power the median effect is

Let's see how this filter works, we have the following clock picture, which is all clear and has no problem at all:-

Image11486.JPG

Now let's add some dots using the brush tool, to see how good the median filter will do to remove them:-

Image11496.JPG

Now let's apply the median filter on the clock, to see how it works. After some experimentation, it turns out that setting the radius at 18 does the best job for removing the dots:-

Image11504.JPG

And because many details has disappeared, so let's apply the median filter on only the parts of the picture that has the dots on it (using the History brush ), and this is what we get:-

Image11521.JPG

Pretty neat, huh. Now let's try something else, and add %50 noise to the clock:-

Image11531.JPG

And let's apply the Median filter on it again, using 20 Radius (which I got after some experimentation again):-

Image11541.JPG

And again, to avoid losing many of the details of the original picture, I selectively applied the Median filter using the History brush  on the picture:-

Image11565.JPG

And most of the noise has been eliminated, while we lost some details, the picture is much more presentable at least.

## Liquify – The Best Photoshop Filter

The Liquify filter turns your image into a liquid, so that you could manipulate it to your heart contents

In other words:- the Liquify Filter allows you to take a picture like this:-

Image11573.PNG

And turn it into something like this:-

Image11582.PNG

I am sure you have seen many pictures of smiling cats and other things on the Internet, a lot of these have been made using the Liquify filter

I am going to cover the simple mode of this filter, but I plan to cover more of it in a future edition of this book~

To access the Liquify Filter, choose Filter->Liquify from the main menu:-

Image11589.PNG

And the Liquify Window appears

Image11597.JPG

Let's take a closer look at the main Liquify tools:-

Image11605.PNG

- **Forward Warp Tool**:- Works like the finger tool, and has a similar icon to it. It allows you to drag any part of the image however you want, and it is the most important tool for the liquefy filter. Here is how the cat picture looks like after I pulled his ear away, I overdid it a little bit, but it is for the sake of making this step clear:-

49191.jpg

- There are two main options for this tool, **these options applies to almost all the tools in the Liquify filter, not just the Forward Warp Tool**:-

Image11621.PNG

- **Brush Size** determines the size of the Warp Tool, if you want to pull a huge area, like when

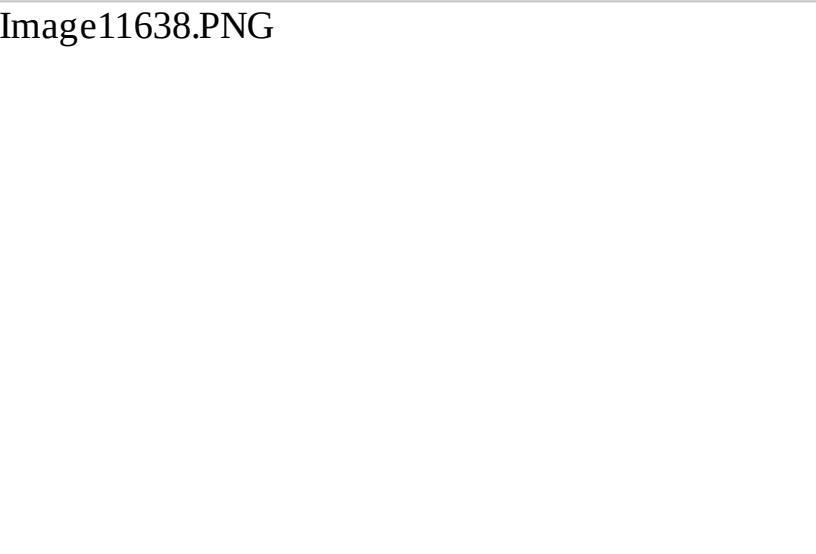
I pulled the ear of the cat, then you will need to increase the brush size

- **Brush Pressure** determines how much the “liquified” pixels will be pulled along the Warp tool, having this value set to 100 means that the pixel will be pulled along your mouse cursor quite easily when you drag them. Having it set to a low value, like 10, will make it super hard to make big movements on the pixels

- **Reconstruct Tool:-** This tool works like a history brush  for the Liquify filter. It reverts the parts you paint with the tool to what they have been before you opened the Liquify filter, and it does that gradually, meaning that when you paint on a part you edited, you will see that part gets back to where it was, a little by little. And if you kept painting it will return to how it was before you opened the filter. The speed of the revert depends on the value of the “Brush Pressure” parameter

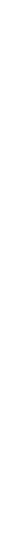
To see this on action, let's take a look at the Reconstruct Tool, say I am still playing with the cat picture, and I kept playing with it until I got the following picture inside the Liquify filter:-

Image11638.PNG



Assume that I don't like how the mouth look like, and I decided to restore how that part looked like earlier so that I could try manipulating it again. So I select the Reconstruct Tool, and then paint a little on the mouth, and this is what I got:-

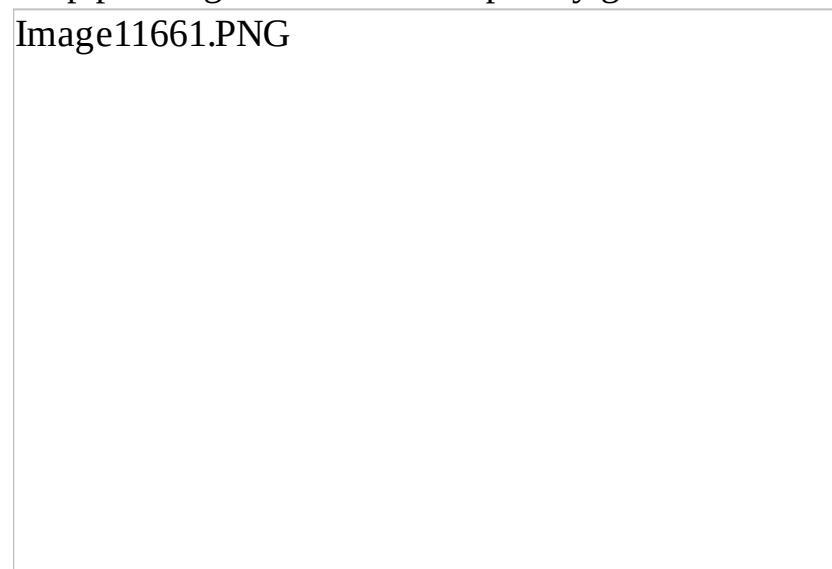
Image11649.PNG



As you can see, the mouth is starting to get back to where it was before I opened the filter, now I will

keep painting on it until I completely get it back to its original location:-

Image11661.PNG



Now I introduced the Reconstruct Tool, it is time to explain an important option for the Liquify filter, which is the “Restore All” button, which is located below the “Brush Size” & the “Brush Pressure” settings

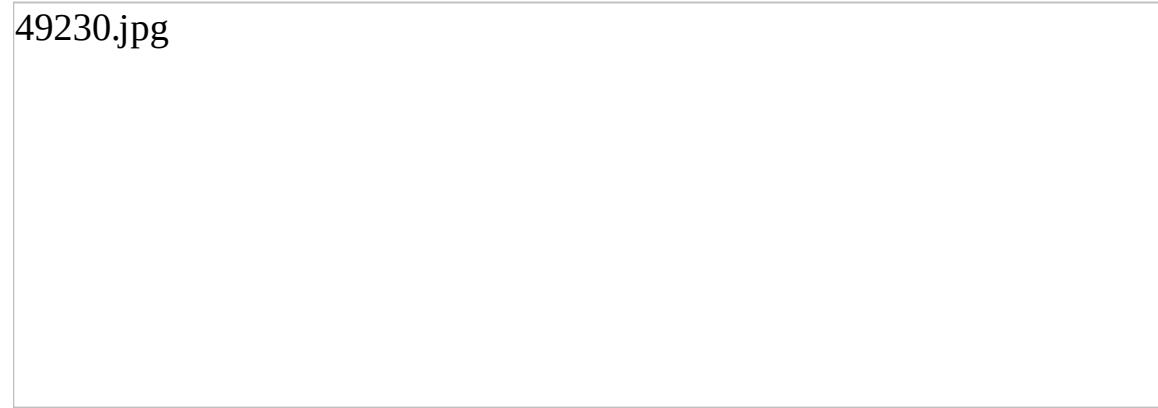
Image11668.PNG



This button will restore the photo completely to how it was before you opened the filter, similar to what you can get by applying the Reconstruct Tool over the entire picture J

- **Pucker Tool:-** The Pucker tool allows you to pinch any part of the picture simply by clicking on it, here is how I used this tool to make the cat eye smaller:-

49230.jpg



The Brush Pressure option doesn't apply to the Pucker Tool

- **Bloat Tool:-** Similar to the Pucker tool, except that it makes the part you are clicking on bigger, just like I did with the poor cat eye here:-

And again, the brush pressure option doesn't apply to this tool

- **Push Left Tool:-** This is such a weird tool:-

- It moves the pixels up when you click and drag the mouse to the right.
- And left when you drag it up,
- And down when you drag it to the left,
- And to the right when you drag it down.

This can be useful in case you want to resize part of the picture, in a way that it looks like it has been sucked into or out of a certain point, you can do that by clicking and rotating the cursor around that part you want to resize, clockwise to increase its size, and counterclockwise to decrease its size

Here is how we made the poor cat face smaller that way:-

Image11691.PNG

And here is how if got bigger:-

Image11698.PNG

- **Hand Tool:-** The Hand allows you to change the part that is shown of the picture, and that's in case you zoomed in and can't see the whole picture
- **Zoom Tool:-** The zoom tools works the same way the zoom tool works in Photoshop, it allows you to zoom in & out to see the part you want to edit more clearly

## A quick look at some of the other filters

There are many other good filters that we didn't take a look at, it is kind of hard to cover all the filters in the program in this book, but it won't hurt to take a quick look at some of them

### The Emboss Filter

Image11706.JPG

### Find Edges

Image11715.JPG

### Wind

Image11724.JPG

### Clouds

Image11734.JPG

### Fibers

## Radial Blur

### Image11759.JPG

## Summary

- Filters are a popular way to modify photos, enhance them, and add effects to them.
- Gaussian Blur is a very good way to add a powerful blur to Photos, and much more than the Blur Tool allows you to
- Motion Blur Filter allows you to add blur in a certain direction, which adds the impression of motion to it
- The Unsharp Mask sharpens your image, its colors, or both. This probably is not the most accurate way to describe how this filter works, but it makes it very easy to make it work for you
- The Add Noise filter allows you to add noise to your picture, which is useful way to create multiple of designs
- And the Median filter does quite the opposite, it removes particles and noise from pictures to a good extent
- The Liquify Filter is so much fun, it liquifies your picture and allows you to tweak it in an innumerable of ways. Some of them are included in the examples section below
- There are many other filters than the ones I introduced here, the key to understand filters is to experiment with them, though some of the filters are easier to understand if you knew what they were made for

## Examples

### Making the skin smoother using the Median filter

As I promised you earlier in this chapter, here is an example of how to use the median filter to smooth the skin, this is commonly used on models to enhance their skins, and of course, I selectively applied the filter on the girl's face, because I don't want to apply the Median filter on some of the

other parts of her face, like the nose

## Image1176.JPG

### Blurring everything around your subject in the photo

The Gaussian blur is great for blurring everything around your subject, so that the subject gets all the focus of the person viewing the picture. We have done something like that when I explained the Blur Tool, but doing it using the Gaussian Filter is much better & effective:-

## Image11776.JPG

### Adding motion to a bullet

This is similar to the car example we saw when I introduced the Motion Blur, but it is applied on a bullet instead of a car:-

And we can place the bullet in some picture for some fun, I added some glow to the bullet, I also applied the Motion Blur filter on parts of the room to give impression that the bullet is moving so fast:-

## Image11792.JPG

# Enhancing the quality of a picture by sharpening it

Take a look at the following picture:-

Image11800.JPG

It looks good and all, but it can still be enhanced much better by sharpening it using the Unsharp Mask filter:-

Image11809.JPG

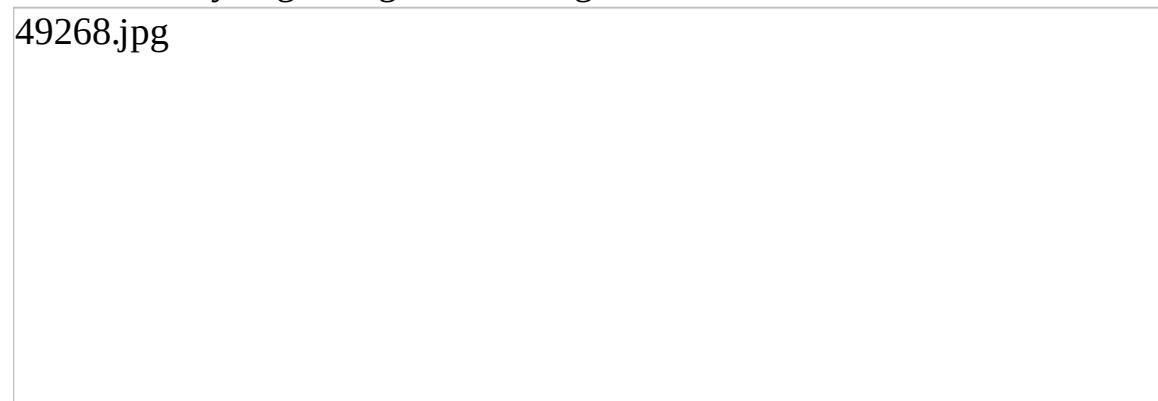
If you zoomed in to the picture, you will notice that many details in it has became clearer, if not, then let's sharp it once more:-



This made some parts of the picture, like the laptop keyboard, look much better, but it also kind of destroyed many of the pictures a bit too much, which mean we should stop sharpening the picture, and maybe take the second one as the final one

## Making a cat more fluffy using the Liquify filter

Just like I was able to play all sort of pranks with the poor cat using the Liquify Filter, I can make him more fluffy that way, by making his fur rounder and his eyes bigger. I think the cat is very beautiful from the very beginning, but making it even more beautiful wouldn't hurt much:-



49268.jpg

## 13 goes 31?

Take a look at the following girl picture, she is cute, I bet she is going to be a fine lady when she grows up:-

Image11836.JPG

A good way to find out how she is going to look like when she is like 20 or 30 is to use the Liquify filter to make her look a bit older, here what I got:-

Image11848.JPG

## Image Adjusting Tools

Image11861.PNG

Image adjusting is important part of working with image, especially for those who work in Photography, or have that as a hobby.

Image adjusting tools allows you to enhance your image colors, lighting, or even change them so that they have no colors at all, and a few other things

Many of these image adjustment dialogs are very easy to use as long you know the terminology behind the options in them, which is why most of this chapter will focus on those most of the time

Image adjusting dialogs can be accessed by selecting Image->Adjustments and then selecting the dialog you want to open. Since all the dialogs can be accessed from the same menu, I won't be telling you where the dialogs are located like I did in the rest of the book

Image11868.PNG

Here are the tools we are going to cover in this chapter:-

- Bright/Contrast
- Level
- Color Balance
- Hue/Saturation
- Invert
- Desaturate

## Bright/Contrast

As you could guess from the dialog name, Bright/Contrast adjusts the Brightness or the Contrast values of your pictures.

Bright/Contrast dialog is probably the simplest dialog you will see in this chapter, it only has two sliders, one for Brightness, and another one for Contrast.

Image11876.PNG

Brightness makes your picture brighter by increasing the white level on the midtones colors of the picture. Midtones colors are the colors that are not in the lighter color range in the picture. And neither are the shadows or the darkest areas of it. Which is why they are called the Midtones.

How many times have you took a picture with your digital camera and it ended up a little bit dark, just because there hasn't been enough lighting in the room, brightness is one of the tools that can help you

fix this problem. Just like it did with the little girl picture over here:-

Image11883.JPG

When Brightness decreases, it decreases the light in the room, which is the opposite of what we wanted to do with the picture above:-

Image11892.JPG

But maybe that's what we want, as I used the History brush  to restore some of the darkened picture to what it used to be, which created a nice looking effect:-

Image11908.JPG

Contrast controls how much difference in the values between the colors; Pictures with low Contrast looks dull, while pictures with high contrast can look too strong (specially if you increased the brightness along with it), so it is important to have the right contrast for the picture.

Here is how low-contrast pictures can look like, it can't be more dull than that in my opinion:-

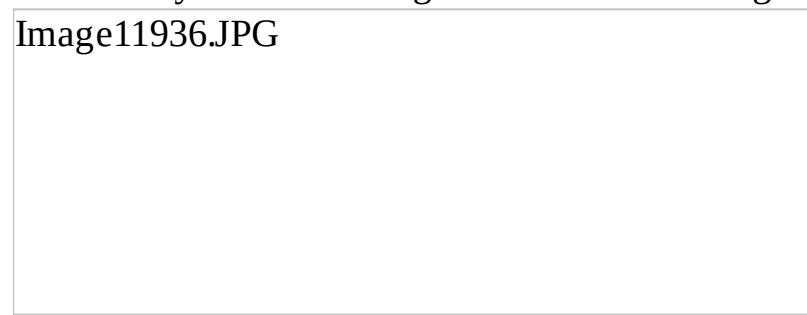
Image11917.JPG

And high-contrast pictures can look like this:-

Image11926.JPG

It is usually advisable Brightness & Contrast together to get the best results:-

Image11936.JPG



The “Use Legacy” checkbox allows the Brightness/Contrast to affect all the values of your picture, and not just the midtones, this is how this dialog used to be before Photoshop CS3, instead of affecting the midtones colors of the picture, it used to affect all the colors & pixels in the picture, which could eliminate some important values in your picture.

Image11954.PNG



I highly advice you against using the option, no matter how much good you think it makes your picture. Because again, that will make you lose a lot of values, and there is a chance you will end up with a bad picture, especially if you plan to apply filters or adjust the image a bit more after that. Here is our little girl picture after I applied Brightness/Contrast using this checkbox, it made the picture brighter indeed, but it overdid it, as there are not much dark values anymore, and some bright areas became too strong:-

**Image11969.JPG**

## Levels

Levels adjust the white level of the picture, think of it as an advanced way to adjust the brightness of the picture.

If you understood the Brightness/Contrast, you will have an easier time understanding levels, because both dialogs almost do the same thing, except that Levels gives you more control over the contrast & the tones of your picture.

To understand how Levels work, you have to know what the little black diagram we have at the middle of the dialog is, which is called Histogram. Understanding won't just help you understand how to use Levels, but also how to use many of the other Photoshop tools that depend on it.

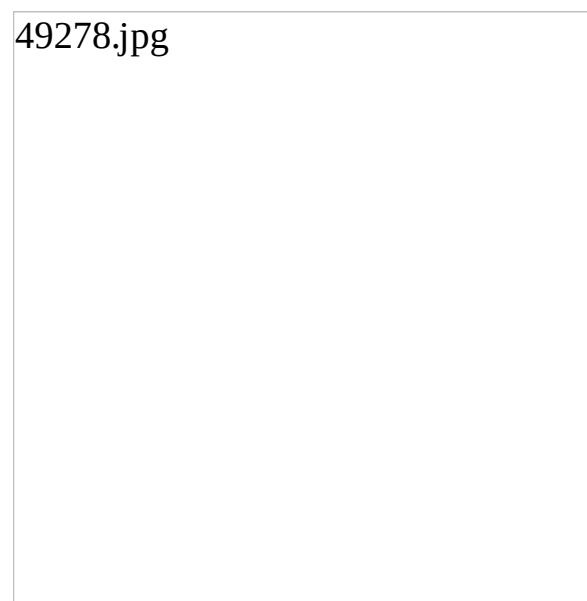
The Levels Dialog, along with the Histogram Dialog at the middle of it

## What is the Histogram?

Histogram is a chart that shows you the distribution of the values inside your picture, to clarify this, take a look at the following 7 X 7 picture:-

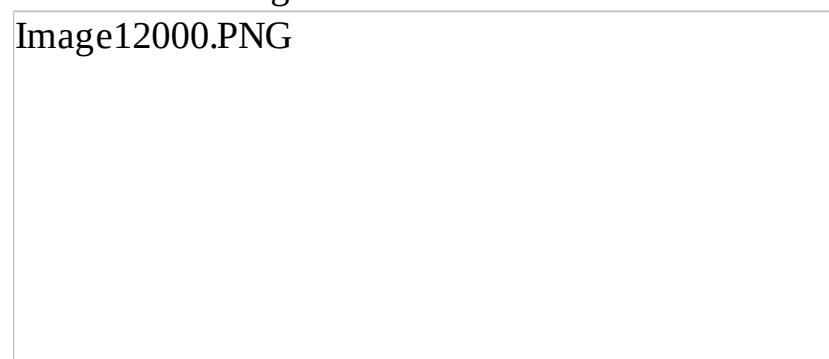
Image11985.PNG

This picture has 49 pixels, with 3 color values, White, Black & gray. There are 20 black pixels, 19 white & 10 gray, so a simple way to draw the diagram for this picture is like this:-



Full Histograms usually contains the values from 0 (black) to 255(white), but for the sake of simplicity I made this histogram using 3 values only, if the 7 X 7 picture was opened in Photoshop, it will have a histogram that looks a bit like this:-

Image12000.PNG



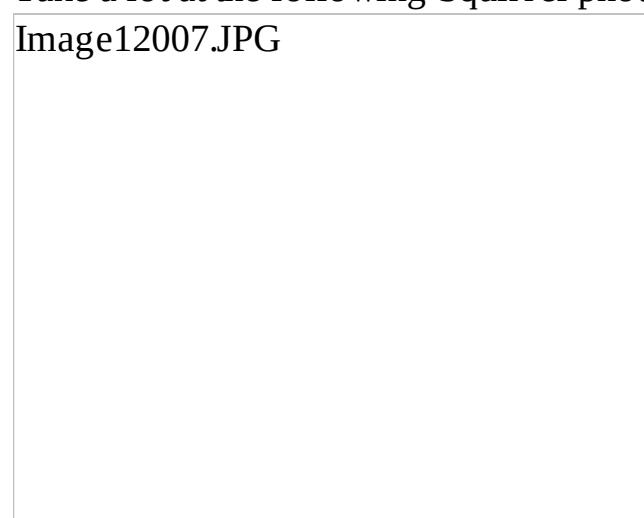
As you can see, we can see the values for white & black at the sides of the Histogram, and the gray value (which is 71) right on the middle. Of course, the histogram is not going to look that fancy in Photoshop, but I guess you get the idea on how it works J

## Using Levels Dialog to adjust your images

So the Levels dialog adjusts the picture contrast by manipulating the values of the histogram, you can use Levels in some good extend without knowing any of these basics, but getting to know them will help you use it much more efficiently

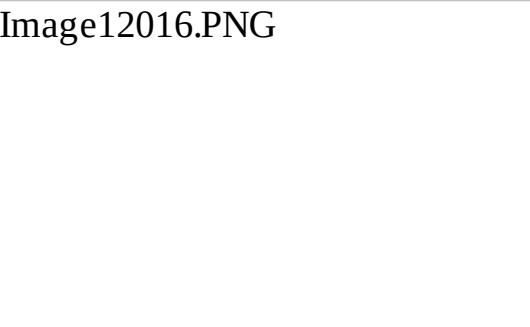
Take a look at the following Squirrel photo:-

Image12007.JPG



It seems a little bit dark, doesn't it, now let's open the levels dialog and look at its Histogram:-

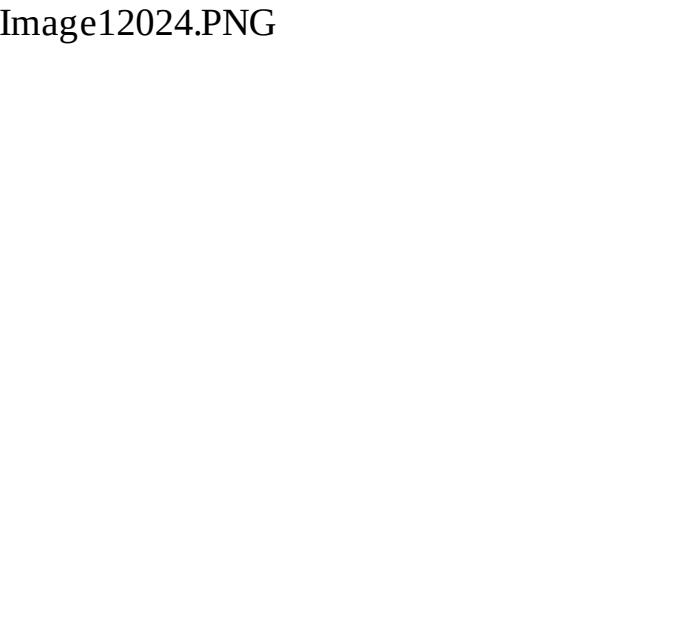
Image12016.PNG



And the image is indeed dark, as there are a lot of pixels with dark values, this is not exactly a bad thing, but it usually is. And in this case, we want the values to be more evenly distributed to some degree

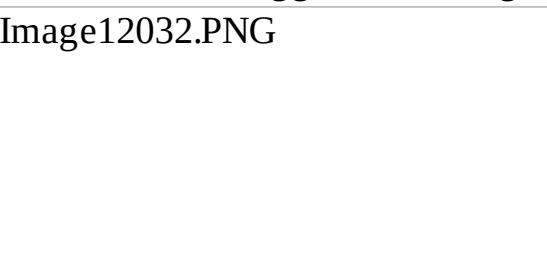
So to re-distribute the values of the Histogram, in the Levels dialog, drag the right handle, which is also called the Highlights handle, to the left, just like it is shown here:-

Image12024.PNG



Here is how I dragged the Histogram:-

Image12032.PNG



Now let's take a look on how things are going to be on the histogram:-

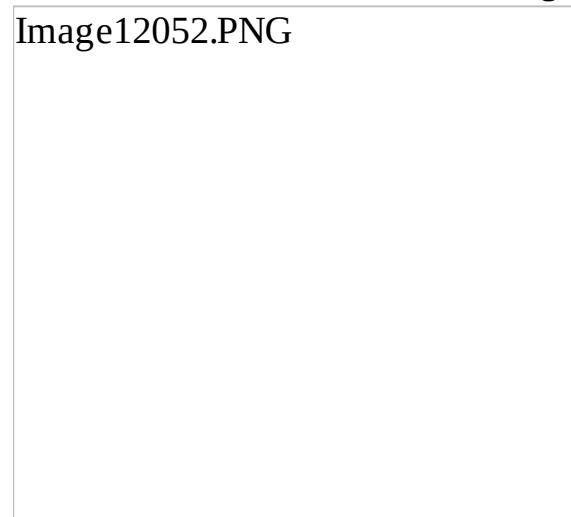
Image12041.PNG



The part framed in green in the picture above is going to stretch and become the new Histogram, and the part framed in Red is going to be eliminated.

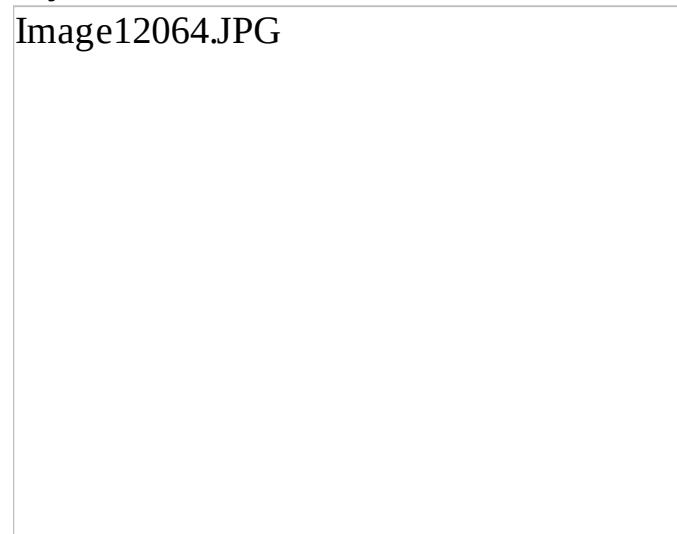
Now click OK in the Levels dialog, and then open it again, here is how it looks like:-

Image12052.PNG



Notice how the part of the Histogram we selected has been stretched, and it became the new Histogram now. The new Histogram looks a bit choppy, but that's because we don't have enough values to fill the Histogram, but that's fine, here is how the Squirrel picture looks like after the adjustment:-

Image12064.JPG



Which looks much better, or has a better exposure, as they say in Photography~

Let's pick another picture:-

Image12072.PNG



This is such a good picture, except that the light doesn't seem right.  
Let's take a look at the picture Histogram:-

Image12080.PNG

That's such an irregular histogram, many of the values barely has any pixels assigned to them, so let's adjust the histogram using Levels, this is how I adjusted the values:-

Image12087.PNG

If you have the “Preview” checkbox checked, you will be able to see the picture change in real time as you move the handles.

Here is how the picture looks like after I adjusted it:-

Image12095.JPG

Doesn't it look much better?

As I said, you don't have to understand anything about histogram to use Levels, but it is really worth it in the long term to learn a little bit about it

Also, you don't need to open the Levels dialog every time you want to see the picture Histogram, as you can view it using the Histogram panel, which can be accessed by choosing Window->Histogram from the main menu:-

Image12103.PNG

Here is how the Histogram panel looks like:-

Image12112.PNG

By default, the Histogram panel shows only 128 different values, as opposed the full 256 values we have seen so far, this is because the panel is shown in the compact view by default, to switch the Expanded view, click on the menu button on the corner of the Histogram panel, and then choose Compact View from the menu:-

Image12120.PNG

And the Expanded Histogram will appear, which shows more information and values than before:-

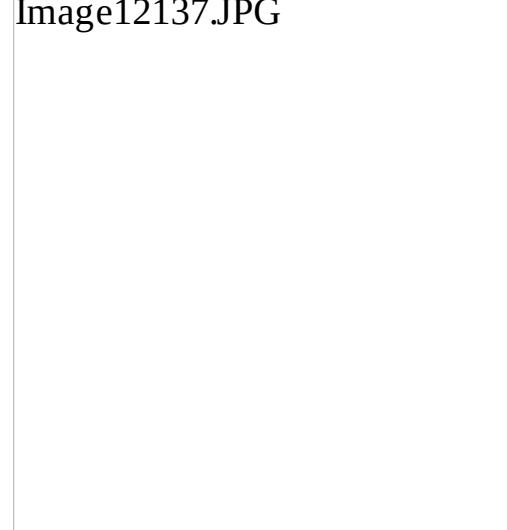
Image12128.PNG

## Color Balance

Color balance allows you increase or decrease the value of a certain color in a very simple way.

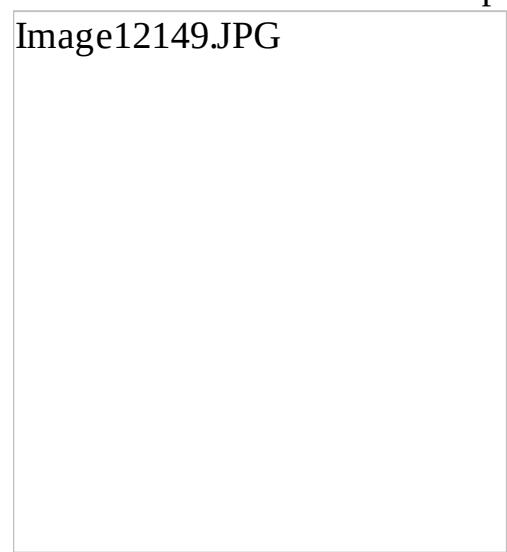
Say that you have the following Sunflower iMac picture:-

Image12137.JPG



It seems a little bit yellowish, something that we want to change, to do that, all we have to do is to decrease the Yellow from the picture to some extent, which produces the following picture:-

Image12149.JPG



Which looks much better.

Now let's take a look at this car picture:-

Image12162.PNG



The picture has nothing wrong with it, but suppose we want to add some blue tone to it? This can also be done using the color balance:-

Image12169.JPG

Now we know what the color balance is used for, let's take a look at the dialog where we can do all that:-

49299.jpg

There are 3 sliders in the Color Balance dialog, one that increase or decrease Red, another that do that to Green, and the third to do it to Blue. Dragging the slider to the right increase the corresponding color value, and dragging it to the left will decrease the color.

Of course, instead of pulling the sliders, you can enter the exact value to be added/subtracted to each of the 3 basic colors fields:-

49306.jpg

And of course, you can type negative numbers in the fields as well

The radio buttons at the bottom of the dialog determines which color ranges that Photoshop will add the color to. It can be the shadows (the dark areas in your picture), the highlights (the areas with more light than the others areas), or the midtones (the area with values in-between Highlights & Shadows), most of the time, you will want to balance the color of midtones, but it is very useful to know about these.

49314.jpg

## Hue/Saturation

The Hue/Saturation works the same way as the Color Balance dialog, except that instead of adjusting the RGB (Red,Green & Blue) colors, it adds to the HSL values instead. HSL is one of many ways to represent color, and in that aspect, Photoshop is giving you more ways to adjust your colors, which is

a good thing.

If you are reading this book in order, then you already know what each of the HSL color system components is, but I will go through it quickly in case you haven't:-

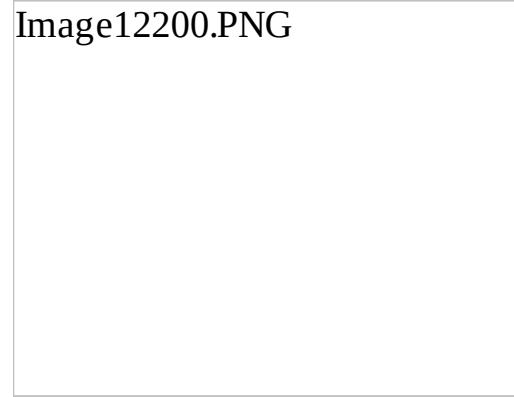
**H in HSL stands for Hue, or the color itself, red is considered red whether is light or dark, and whether it has a high red value or not.**

**The S stands for Saturation; It determines how much of the color there is. What I mean is, take red for example, red can be faint red or strong one, the power of the color is determined by the saturation value, having the saturation set to 0 means that the color will be gray**

**The L in HSL stands for Lightness; it determines how dark or light the color has. Or to explain it in another way, it determines how much white there is to the color**

All the HSL 3 values work together to help you adjust your images, here is how the Hue/Saturation dialog looks like:-

Image12200.PNG



The way the dialog has sliders makes it similar to the Color Balance dialog, using it is easy as long you know how the Hue, Saturation & Lightness values do

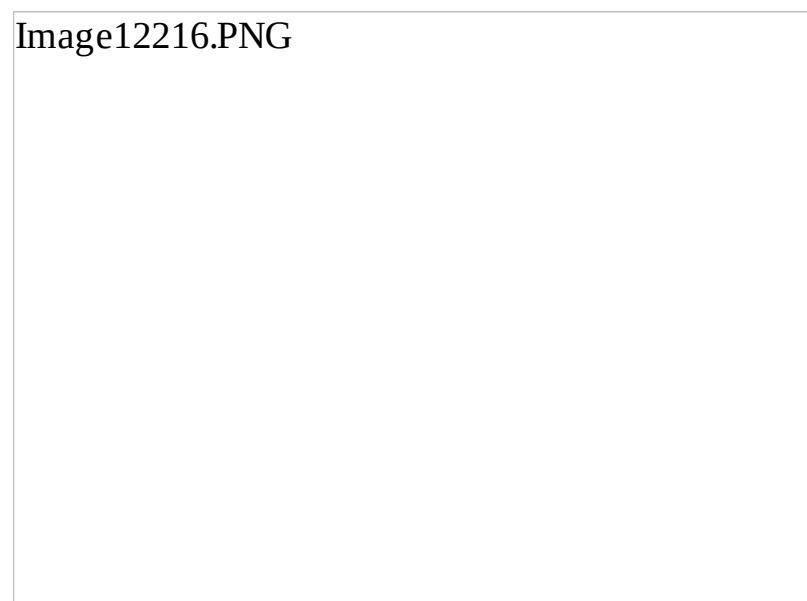
To play with the Hue/Saturation dialog, let's take the following flowers photo, which has flowers of multiple colors:-

Image12208.JPG



As I said, Hue controls the color itself, so by increasing or decreasing the Hue value, all the flowers colors will change to something else:-

Image12216.PNG



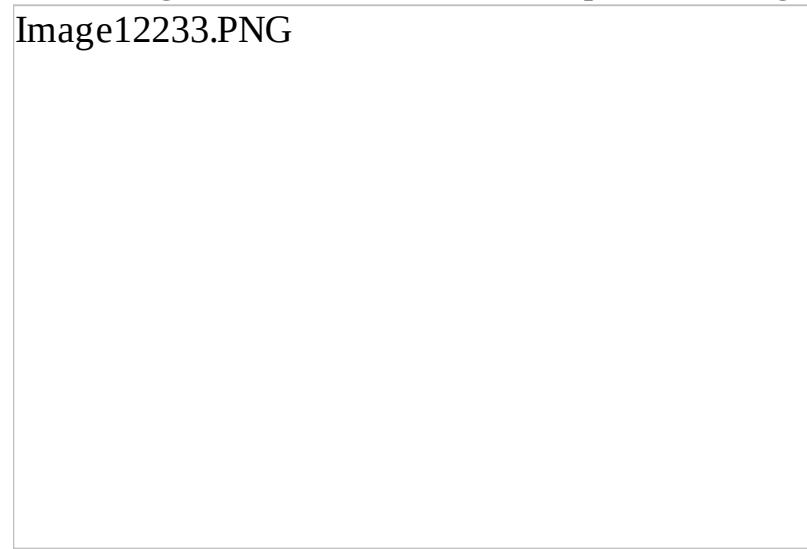
Decreasing the Saturation of the flowers picture takes life out of the color and makes the colors kind of depressing. Unfortunately, increasing the Saturation in this picture does nothing to it, because the flowers in the picture already have a very high saturation

Image12224.PNG



Increasing the Saturation in another picture will get you much better results:-

Image12233.PNG



The last option, which is Lightness allows you to increase the white component in the picture, to some extent, it controls how much “Light” there is in the picture:-

Image12247.JPG

Of course, when you adjust the HSL values, there are many cases where you will need to adjust 2 or more values at the same time, just like I played with the Saturation & Lightness right here:-

**Image12260.PNG**

## Invert

Invert is a simple image adjustment option, it creates a “Negative” of your picture, by inverting all the colors in it, Invert has no options:-

Image12267.PNG

## Desaturate

Desaturate turns your image into white & black, it simply changes each color into its gray equivalent, there's no options to set here at all, it is just that simple:-

# **Image12275.PNG**

## **Disadvantages of editing pictures that way, and what to do about this**

All these adjustment tools are nice and all, but they have one serious disadvantage. After you edit your picture using these tools, the original image will be gone, and unless you have a copy of it somewhere on your computer or on the Internet, you won't be able to get it back. This is what is called "Destructive Editing".

The solution to this is what is called "Non destructive editing", which preserves the original picture, but still allows you to adjust it to however you want and get the same results.

Non-destructive editing works by creating a layer that does affect all the layers below of it, say you created a "Brightness / Contrast" adjusting layer, all the layers below that layer will be affected by the settings of that layer. That means you can move any layer above that adjustment layer so that it won't be affected by it. It also mean that at any time you don't want that layer to affect your picture, you can easily remove it or hide it.

Adjustment layers can be created in more than one way, my favorite way to create them is from the Layers Panel, because it does not requires me to open any additional panel to take some real-estate of my screen

To create an adjustment layer, simply click the  button in the Layers Panel, then choose the kind of adjustment layer you want to create:-

# **Image12290.PNG**

Image12297.PNG

The new adjustment layer appears in your Layers Panel, which you could hide or delete just like any other layer:-

Image12305.PNG

Somewhere in your screen, usually in the upper-left part of it, the Properties panel will appear, which allows you to adjust the correspondent options of the dialog you chose, notice how the Brightness/Contrast settings are the same as the ones we saw when we discussed the dialog:-

Image12312.PNG

If you don't see the Properties panel, you can choose Window->Properties from the main menu:-

Image12320.PNG

Another way to access the properties panel is to double-click on the panel of the adjustment layer in the layers panel:-

Image12329.PNG

This is also a good way to access the properties panel or to edit the parameters of a certain adjustment layer

To disable the adjustment layer, just click on the eye icon in the layers panel to hide it, hiding an adjustment layer stops it from affecting the layers below of it

Image12341.PNG

And because adjustment layers affects only the layers that are below it, if you created a layer and

placed it above that layer, it is not going to be affected by the adjustment layer

## Summary

- Image adjusting tools are a good way to enhance the picture colors and lighting, plus it allows you create some good effects as well
- Brightness/Contrast is an easy way to enhance the brightness or the contrast in your pictures. Or if you want to manipulate your image values in a certain way
- Before Photoshop CS3, the Bright / Contrast dialog used to destroy the values in your images, you can still make the dialog work that way using the “Use Legacy” checkbox, but that’s totally not recommended.
- Levels dialog allows you to adjust your histogram by redistributing parts of the histogram so that the values are better distributed over the different values of your pictures
- Histogram is small charts that displays all the number of pixels that has a certain value, sometimes the values distribution can be skewed and need to be adjusting
- The Histogram Panel is another good way to view the histogram of your picture, and without having to open the Levels dialog
- Color Balance allows you to adjust how much Red, Green or Blue are there in the picture, either to fix some of the color unbalance in it, or to add an effect to it
- Hue/Saturation works in a similar way to Color Balance, but it adjust the HSL values of Hue, Saturation & Lightness.
- Invert creates a negative of the picture, similar to how the cameras films were before the invention of digital cameras
- Desaturate remove all the colors from the picture, and creates a black & white picture in its place, this is useful in more than one way, you can use it to examine the tones of the picture, or to create old looking pictures

And at the end

I hope you enjoyed this book and benefited from it, I am open to any suggestions on how to enhance it

If you liked this book, please tweet about it and tell others about it, as that will help me expand it and create even more books & contents

^ ^