



Beginner's Guide to

DIGITAL PAINTING



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You can see the free brushes
in the resources folder that
accompanies this ebook.



Chapter 01

Introducing Photoshop's Workspace, Graphics Tablets,
Screen Calibration, Color Profiles and the Brush Tool

Beginner's Guide to Digital Painting Chapter 1

Beginners Guide to Digital Painting – Chapter 1

Software Used: Photoshop

Introduction

I remember what it was like for me to see digital paintings for the first time: I was dumbstruck, possibly in awe as well. And of course wondering how the heck anyone could do that ... With a mouse! Until someone told me they used a 'graphics tablet'. More awe and wonder. And intrigue. So it was actually possible to use Adobe Photoshop (or PS for short) for painting. How was a mystery to me, but I was determined that it wouldn't stay one for long. So I grabbed myself a wee-tablet – a Wacom Graphire, the first one that came out – and set to playing around in Photoshop. Thankfully, I'd used the programme for a couple of years previously, as otherwise I would have probably despaired.

Since then, I've met many people who were and are just as dumbstruck as I once was, and annoyed that they cannot seem to get the hang of either Photoshop, a graphics tablet, painting with either one for that matter, or any tutorials that could help with starting out. So this is

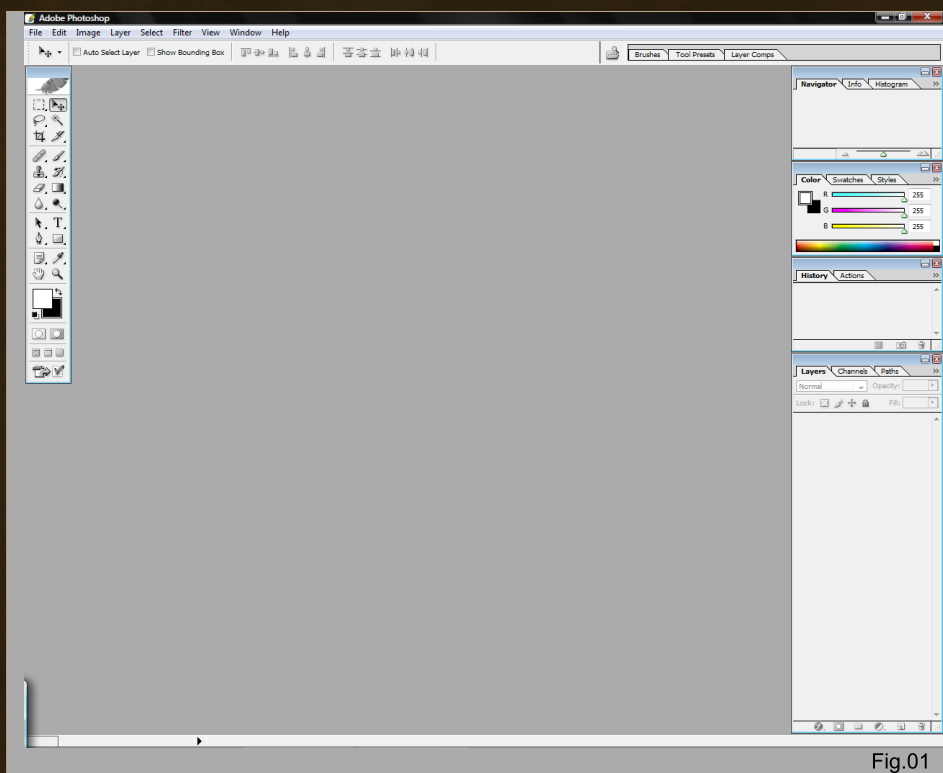


Fig.01

where this 6-part series of workshops comes in: To unravel the mysteries of Digital Painting in Photoshop, using a graphics tablet.

In these workshops, we will be going through setting up PS and a graphics tablet for optimum usage, learning about brushes, sketching, colours, composition, perspective, layers, textures, lighting, different tools and filters – you name it! Please bear in mind that this is a more technical series, and will not be dealing with how to paint one thing or another, although I will brush over things occasionally (excuse the pun).

This first instalment, which seems awfully long but will only take you a maximum of 15-minutes to actually apply, will be dealing with the, let's say "duller technical things". However, you will need to know about these in order to get you started – and hopefully hooked!

In the Beginning...

Adobe created the perfect painting platform, and Wacom coined temptation in feature-packed graphics tablets. Put the two together and you get the Big Bang of digital art, or something along those lines.

But before I dig into the inner workings of both let's just check that we are on the same page:

• Photoshop Version

I have Photoshop CS. A few years old now, but that doesn't really matter. For the tools I use on a regular basis I don't need the newest version all the time. So don't worry if you have an even older version (though anything older than Photoshop 7 might pose a problem for some of the things I'll be explaining). If you have a newer version: lucky you – you've got a slightly more streamlined layout and additional tools that we won't be using [Wink].

• Graphic Tablets

I am working with an almost 6-year-old Wacom Intuos 2. These things don't break that easily, unless you happen to have a chew-happy rodent as a pet – the cables cannot be replaced. Whatever tablet you have, even if it's not a Wacom, you'll be able to work with it.

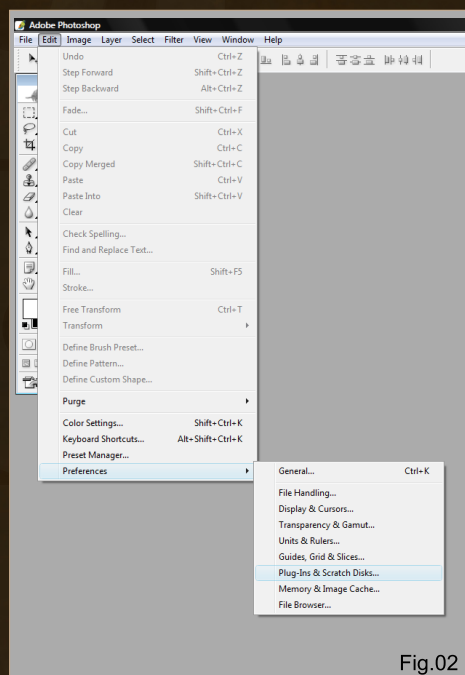


Fig.02



Honestly. If you're not really used to it just yet, plug in your mouse and navigate Photoshop as we go along.

So let's open up Photoshop and see what we've got. This would be the default look of the programme, more or less (**Fig.01**). It's called the Workspace. You have the tools palette to your left (hovering over each tool will give you a short description of what it is), some other palettes to your right, the main menu at the top, and a status bar at the bottom. All in all, a quite convenient layout!

The first thing we do before hitting the panic button and closing PS again is the most important thing we could do: we will set up the Scratch Disks. – The what? – Scratch Disks. These have nothing to do with scratching, and are not real discs either. They are a bit like virtual memory, settings that allow PS to run smoothly, and at its best according to your computer's RAM (Random Access Memory) and processor speed. Without setting these up, you will get quite a few programme errors very soon, including one telling you that "the Scratch Disks are full" and whatever you wanted to do cannot be done.

Therefore, let's go to the main menu and click on **Edit**. In the dropdown menu that appears go right to the bottom and click on **Preferences**, then in the next dropdown menu click on **Plug-Ins & Scratch Disks** (**Fig.02**). (I believe in higher Photoshop versions this will be "Performance".) A box will appear that gives you four rows for the Scratch Disk usage. The first one will by default be set to Startup, while the other three are empty (**Fig.03**).

Now, to run PS properly you do not want the Scratch Disks set to Startup. It's also recommended that they shouldn't be set to a network drive or any kind of removable drive (USB sticks or external hard drives). So click on the arrow next to it and it will give you a choice, namely of the hard drive volumes you have on your computer (**Fig.03a**).

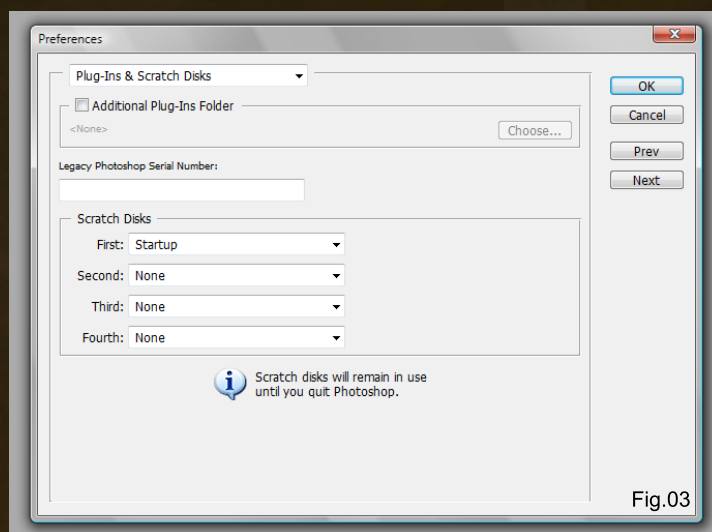


Fig.03

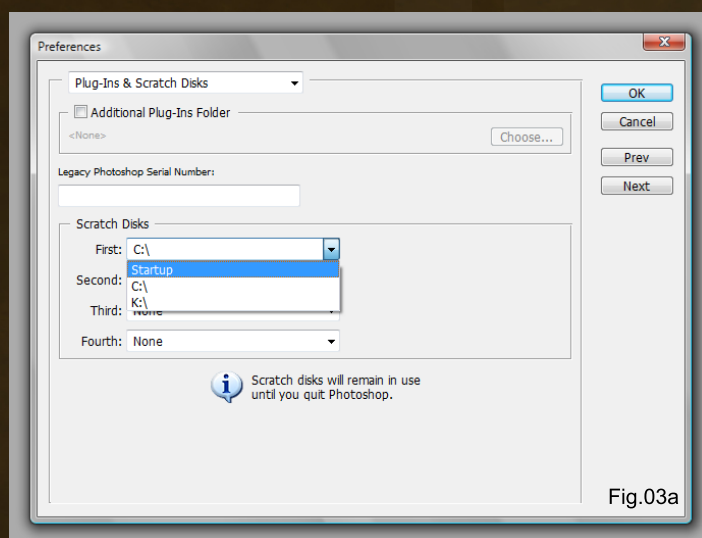


Fig.03a

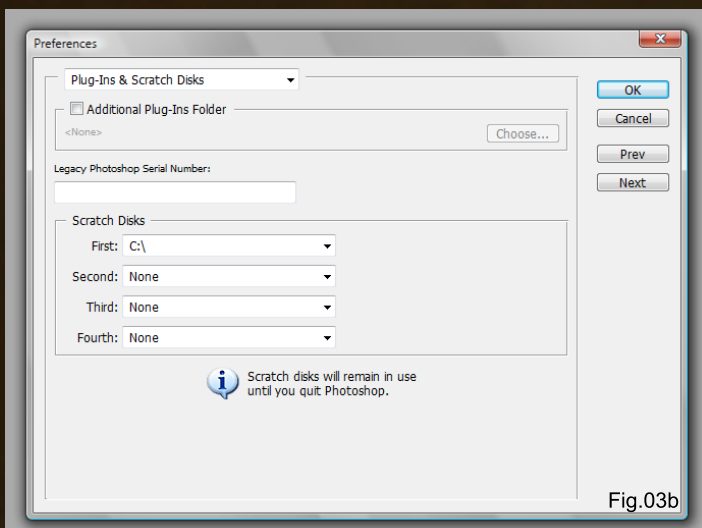


Fig.03b

You can see for me it shows C:\ and K:\ – the latter being my external hard drive, and of absolutely no use in this case. C:\ usually is the drive or partitioned volume that your operating system and programmes are installed on, and that your operating system uses for its virtual memory or paging file. In many cases, especially on cheaper computers, it is also the only drive/volume you will have. If you have a partitioned hard drive, that means you have two volumes, and thus will also have something most likely called D:\, or if you have more than one installed hard drive these will show as well.

Let me stop being confusing for a second and spell it out plainly: For optimum performance of Photoshop, the primary Scratch Disk has to be set to a drive or volume that has sufficient space and is kept in good order at all times (defragmentation is your friend). If you have more than one volume, the primary Scratch Disk should be set to the bigger one of the two – you can check up the sizes of your volumes under My Computer – while the secondary to the smaller one. Those of us with only one volume are a bit out of luck right here ... we'll still be able to work, but maybe not as fast as some others. Set your Scratch Disks (**Fig.03b**).

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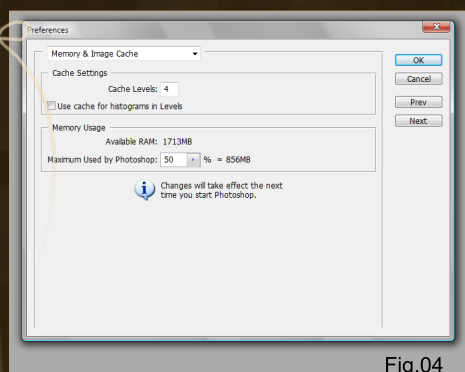


Fig.04

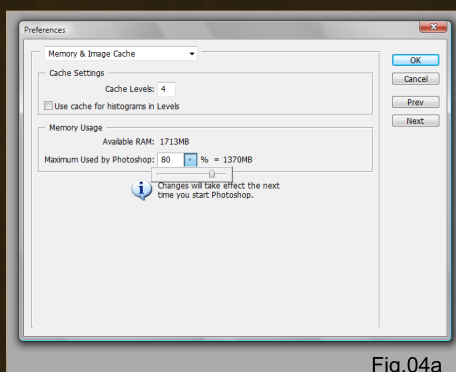


Fig.04a

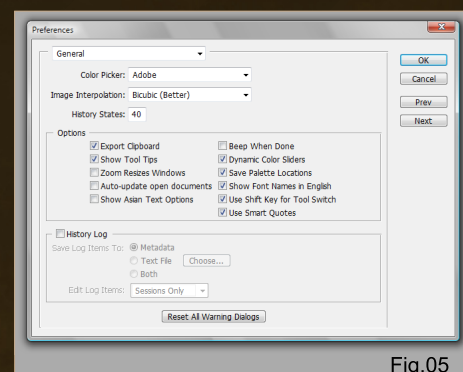


Fig.05

TIP: If you can afford it, and are serious about working with Photoshop, have another hard drive installed in your computer which you can use just for Photoshop's primary Scratch Disk. Or see if someone can partition your hard drive for you. If none of that is an option, keep your drives as clean as possible by defragmenting them regularly and preferably storing personal files on removable media rather than on your computer. I do that at the moment, and it works a treat.

Let's stick with this box for a second and open the dropdown menu at the top of it. It basically gives you the same choices as when clicking **Preferences** from the main PS menu. Click on the **Memory & Image Cache** option. This will give you the chance to enhance the RAM usage of Photoshop (Fig.04). By default, it will be set to 50%. Consider how many other programmes you will be using simultaneously while running PS – the more programmes that

are running at the same time, the more RAM will be used up by them and cannot be used by PS – and using the slider change it to what will suit you and your computer best. I'd recommend not setting it to 100% (Fig.04a).

Another good thing to set up here are the History States. You can find them in the dropdown menu under **General**. The History States are the stages in your image history when you are working which let you go back if you've made a mistake – you know the infamous "Undo" button. 20 may look like a lot, but when you are painting sometimes that isn't quite enough, especially when you are doing very detailed things with lots of brushstrokes. I personally prefer having it set to 40 – just in case (Fig.05).

You can now hit the OK button. The changes we've just made will not take effect until PS is closed and restarted. We'll do just that.

Once we're back in the programme, let's have a look at the Workspace. Some of the things that are hanging around by default won't really be needed, or at least I never make use of them. Also, having all those palettes to the right clutters up the Workspace a bit, giving you less space to use for your images, especially when working on smaller screens. Looking at the palettes (Fig.06), the one right at the top reading Navigator, Info and Histogram, I never use, so I just click the red X of doom and close it. The Navigator can be useful when working on large images, but I will explain that at some later stage – right now it would be too much too fast for those of you who are really new to all this. The next one down, with Color, Swatches and Styles, is partially useful. Click on the Swatches tab and hold it, then drag it onto your Workspace (Fig.06a); it will become a palette all by itself. Then close the palette you just pulled it out of. Do the same with the next one, keeping the History, but not the Actions, and the next, keeping the Layers, but not the Channels or Paths. This leaves us with three palettes that we will definitely be using.

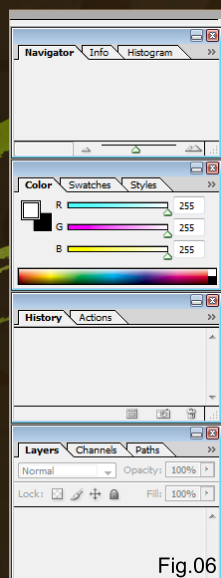


Fig.06

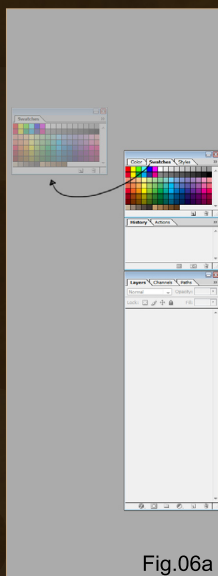


Fig.06a

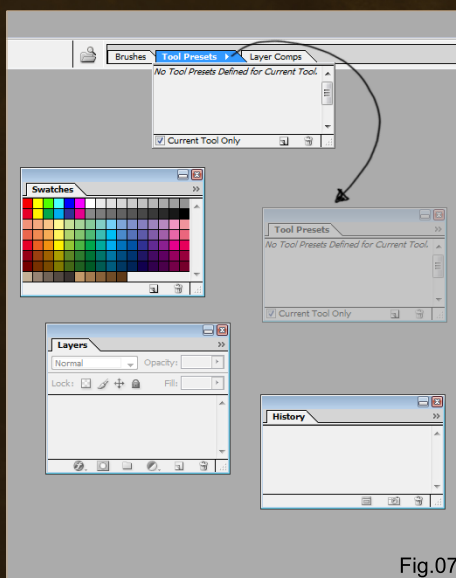


Fig.07

Next up, look at the grey area above the palettes; this is the docking well. There are some more tabs reading Brushes, Tool Presets and Layer Comps. You can click on a tab to open it, or in this case click and hold, then drag the tab onto your Workspace (Fig.07). Do this with the Tool Presets and Layer Comps - close them. Now click and hold the tabs in the palettes still on your Workspace and drag them into the docking well to dock them, freeing up the Workspace (Fig.08).



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Of course, you don't have to do this, but I often feel the more space the better. And don't worry: the palettes we've just removed are not gone forever! You can call them up again by clicking on **Window** in the main menu (Fig.09) – all the ticked palettes are currently active, while the unticked ones are not. "Options" represents the bar under the main menu, including the docking well. At the bottom of this list you also find the Status Bar; if you feel you don't need to see how long PS is taking to process something, or don't need the little tips on how to use the tools that show up in it when a tool is selected, simply un-tick it, thus freeing up even more space at the bottom of your screen. To save these Workspace settings, just go to **Window > Workspace > Save Workspace...** (Fig.09a) and call it whatever you like. Not doing this may reset your Workspace to its default layout once you've closed PS.

We're almost done with setting up PS now. However, there is one more thing: colour management. This may not seem too big a deal to most people, but when you are painting, and especially when painting for print, it is. We can do this here: **Edit > Color Settings....**

A box will pop up (Fig.10). I don't know what the default settings here are; as you can see I've already set my colour profiles up. Tick the box next to Advanced Mode – this will give you more options. I've got my Working Spaces set to sRGB, but another setting called AdobeRGB works too. The reason I have mine on sRGB is because I like saving my paintings for viewing on the internet without loss of colour, and found that if I set my Working Space Profile to AdobeRGB it greys out the colours of paintings saved for the web. Don't ask me why – I don't know.

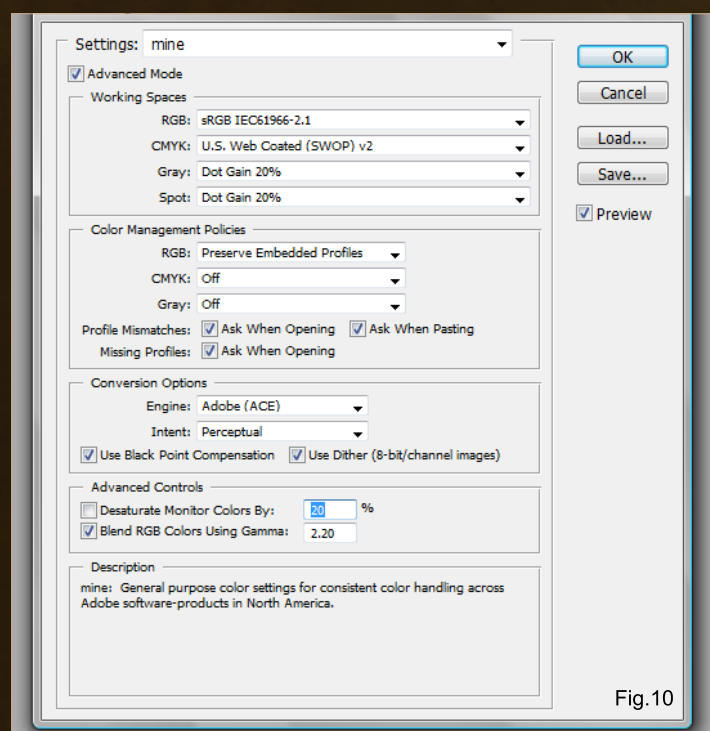


Fig.10

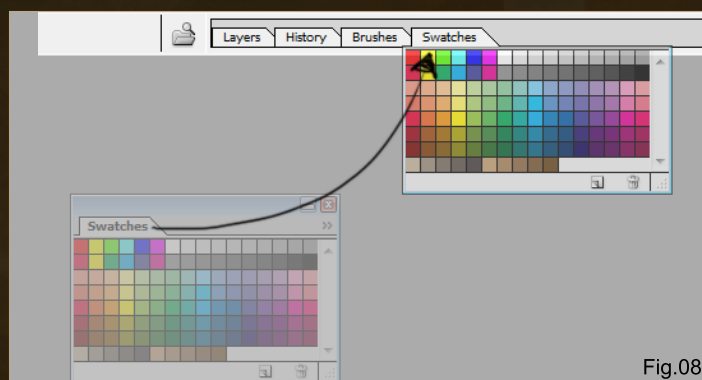


Fig.08

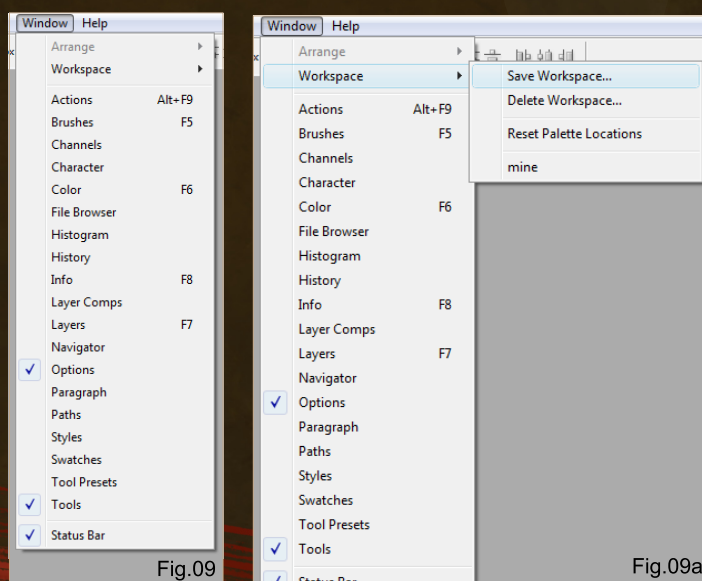


Fig.09

Fig.09a

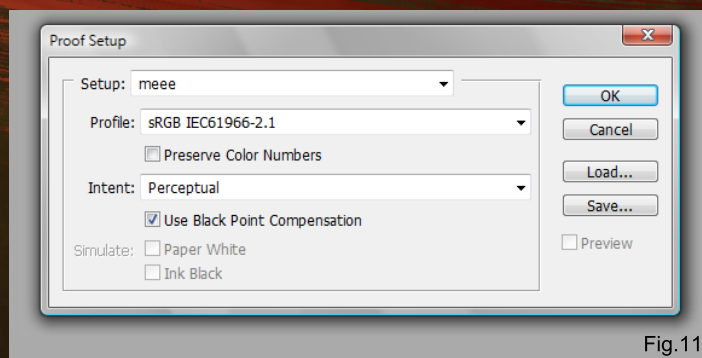


Fig.11

All in all the settings are quite straightforward, but here you could in theory set the profiles for certain things, for example if you have been commissioned by a publisher to paint something for print and they have specific requirements. The profiles you choose here correspond to different settings of printers. If you were to paint a picture in RGB, but a printer is set to CMYK, you will notice a difference in colours, which is not always favourable. Once you've finished setting things up, click Save and give your custom profile a name.

Next up, go to the main menu and click on **View > Proof Setup > Custom**. Another box will pop up. I've already set mine (Fig.11). You'll see in the dropdown menu you will have a lot of options. Choose the

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same colour profile you chose before. You can also save this and call it whatever you want.

Sticking with colours, most screens these days are pretty good with them. Some – namely laptop screens – are terrible, or at least I yet have to find a laptop that gives me good colours without adjusting them. Another thing I've found is that glossy screens (the shiny ones, looking all pretty and stuff and great for leaving fingerprints on) are also not that great when it comes to using them for painting, because they tend to make dark colours appear a little lighter than they should be due to the reflection and "crystal bright" technology these things advertise. But that's just me.

TIP: *By the way, did you know that it's not very good to paint digitally in a completely dark room? The lack of surround light makes the colours seem a lot more vivid than they actually are, thus making fine nuances, especially in dark colours, more apparent. Also, it's not good to have your computer opposite a window or strong light source. The perfect position for a screen is against a wall, with soft but adequate light coming either from the left or right.*

Anyway, colours ... Something you may want to do, no matter how brilliant you think your screen is, is calibrate it. Calibration means adjusting the screen so it gives you the closest match to actual colours as possible – useful for print. You can do this with Adobe Gamma, a programme that usually comes installed on your computer upon purchase, at least on a PC anyway. You can find it in your computer's control panel. If you're using Vista like me, click on "Classic View" in the side panel – you will then find Adobe Gamma in the top row (Fig.12).

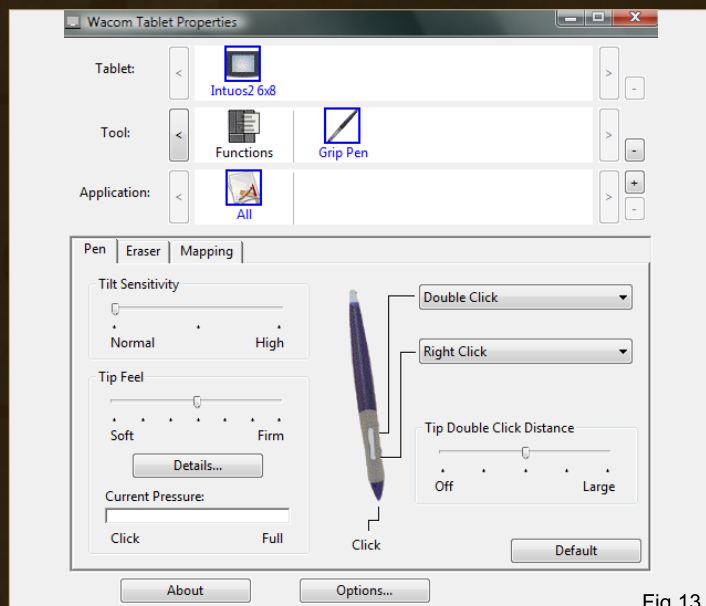


Fig.13

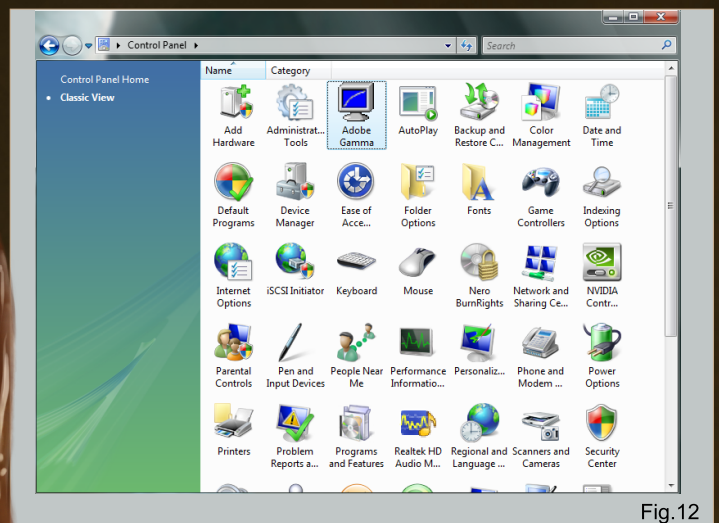


Fig.12

If you click on it, you will get a pop-up box that offers you a couple of choices: Step-by-Step Wizard, or setting it up manually in the control panel. The wizard is pretty good, so go with that one as it explains the different steps to you. In the next window you will need to choose a colour profile – load the same one that you've chosen in Photoshop. The next one is pretty self-explanatory; just do what the programme tells you to do. The next one will ask you to set the Phosphores. Do not change anything there unless you know what is set by default to be wrong. The next window asks you to adjust the Gamma. Do this according to the explanation, and then set the Gamma at the bottom to 2.20. Next up is the Hardware White Point. You can measure it – and that's actually quite fun. Just follow the instructions on the screen. Some screens are naturally warmer than others when it comes to colours, meaning that their whites will seem yellow, rather than blue, which would be cold. Adjusting this helps a lot, as you want a neutral colour appearance, however it can also totally derail your colours for other people when they view your paintings on their screens which will not be the same as yours. The next window lets you Adjust the White Point. Just set it to "Same as Hardware". And the next window lets you see what things looked like before, and after. If you are happy with the result, click on Finish and save your profile under a new name.

Great! That's all that out of the way. Go make some tea or coffee, you deserve it (and will need the caffeine to keep yourself awake whilst following all this technical stuff, no doubt).

What's next? – Your graphics tablet. Wondersome things, they are. I tend to say that the pen behaves like a retarded pencil, especially when you have one with a plastic nib (which is usually the default nib). But no worries, if you've never used a tablet before, or disregarded it as something you cannot possibly work with, try again – you will get used to it, and painting with a mouse is a recipe for wrist cramps. It just takes a bit



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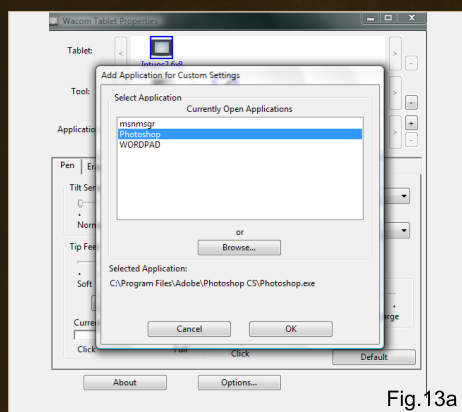


Fig.13a

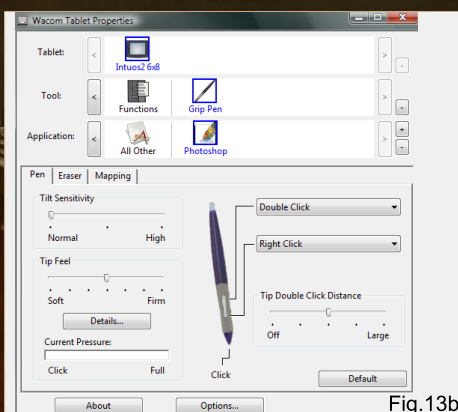


Fig.13b

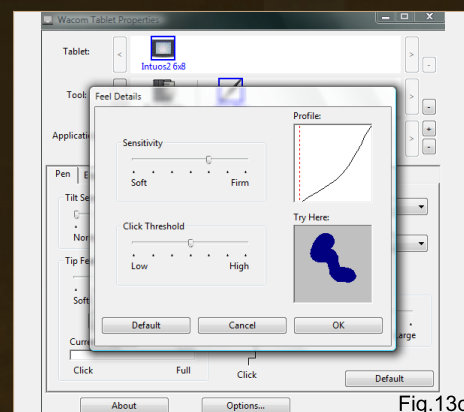


Fig.13c

of practice. You'll never want to see your mouse again after a while.

Wacom has many different tablets to choose from, so pick carefully. Yes, the Cintiq looks cool, but it still won't make you a better painter. And no, you don't need a massive sized tablet just because you have a massive screen. It also doesn't really matter if you have a widescreen monitor but not a widescreen format tablet. Whatever you've got, it will work.

So, you've got your tablet plugged in and your pen poised. Use the disk – if there was one – that came with your tablet and install the drivers. – Don't have the disk anymore? Go to the Wacom website and download your driver. Your tablet does work without one, but it will act like a mouse rather than a tablet, and that's not what we want here.

Open the driver for your tablet; you will find it in the Wacom folder in your Programmes folder (Startup > Programs...). My tablet setup menu may look different to yours, but the basics are the same (Fig.13). At the top it shows you the Tablet you've got, beneath that are the Tools, and beneath that the Applications. Select the Grip Pen in the Tools if it isn't already selected, and in Applications we have to add PS. To do this, click on the + (or on "Add" depending on your driver menu) next to the Application row. This will open another

small window that lets you select or browse your programmes (Fig.13a). Browse your folders for Photoshop – you will usually find this here: **Computer > C:\ > Program Files > Adobe > Photoshop > Photoshop**. Hit Open. Photoshop will now show as a path in the Selected Application at the bottom of the box. Click OK. – PS will now be listed in your Applications (Fig.13b).

To set up your tablet for PS, click on the Photoshop icon in your Applications. First up, make sure to set up your pen's Sensitivity or "Tip Feel" – I'd recommend setting it to something softer, rather than firm.

This will make it easier to paint, as you won't need to press down so hard on your tablet that you end up scratching the surface! These settings are different for everyone, so I cannot tell you more than that; play with it, see what you like best. For more options on that one, click the "Details" button. A new box will pop up where you can even try and scribble something, and

the driver will adjust the settings for you, though I find it's not always very accurate. The settings I normally use make the pen strokes seem stupidly soft (Fig.13c). When you are done with that, click OK to close the box. Staying with the Pen tab, you can also set up the buttons on your pen – there are dropdown menus for both the top and bottom one. I have a tendency to accidentally click the bottom button when I work, so I choose to disable it. However, a right-click is always useful, also when working in PS, so the top button I set to that (Fig.13d). Also make sure to set up the Eraser in the same way as the pen, in the Eraser tab. Once you're done with this, you could close the tablet driver Window without further ado. But – and there is always that niggling little but – checking all the other settings and adjusting them to your preference is something you may want to think about. Like having a look at the Mapping tab – this is quite important as it lets your tablet correspond to your screen, or portions of your screen, or even two screens (Fig.13e). The settings you see in the Fig.13e are the ones I recommend. Ticking

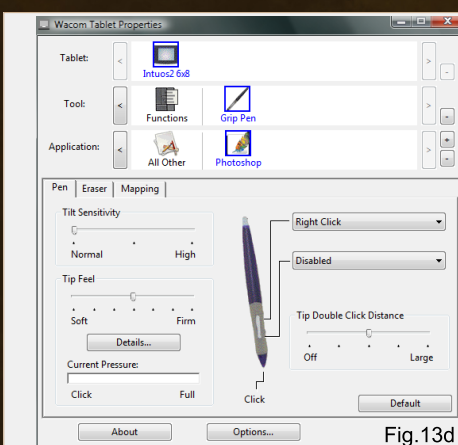


Fig.13d

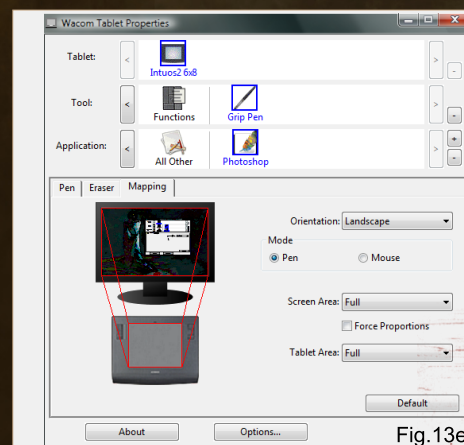


Fig.13e

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the "Force Proportions" box means your screen shape (widescreen, square, etc.) will force itself on the tablet surface, which usually results in parts of your tablet being cut off and thus rendered useless. And no, as said before, it doesn't matter if you have a widescreen but your tablet is square: a perfectly drawn circle will not suddenly become an ellipse on your screen if you don't force the proportions.

You're technically done now, and can close the driver window (you may have to apply the changes in certain cases first), but you could also set up your shortcut keys if your tablet has those. For mine, there isn't much setting up to do, rather a decision to be made if I want them activated. To do this, click on Functions in the Tool row, and select Photoshop in the Application row (Fig.13f). At the bottom you have two tabs, one for Tablet Menu, the other for the Pop-up Menu. Choose the Tablet Menu, and there you should be able to set up your shortcut keys. If you have an Intuos 2 that is smaller than A4 (like me), you won't see any shortcut keys printed on your tablet surface, but if you hover the pen along the top edge of the active surface you will notice some "keys" pop up in the top part on your screen going from 1 to 13. Newer tablet versions have actual keys on the tablet. These can be useful when you're working in PS as some major functions are

applied to these keys, and it saves you having to navigate through the menus. However, I never use my keys – force of habit. Someone buy me an Intuos 4 and I will.

Oh, and you can of course repeat all this for "All Other" applications, and add more programmes to the list, too. I find it useful to set the pen up for All Other as well, because I use my pen for everything, including browsing.

TIP: *When navigating with the pen – browsing or within Photoshop – you don't need to drag it over the tablet's surface and in repeated strokes at that, as though you're using a mouse. You can just hover with the pen over the tablet to move the cursor, or lift it up completely and set it down somewhere else to get your cursor there. And if you're wondering how to do a click or double-click without using the pen button, try tapping your pen on the tablet. Tapping once is a click, and tapping twice double-clicks. Ah, and I know this may seem like a stupid thing to say, but you can put your hand on the tablet like it is a piece of paper when handling the pen, even if it's a Cintiq (though you may want to wear a half-glove for that one to prevent hand- and fingerprints).*

Now that we've got the rather tedious stuff out of the way, let's head back over into Photoshop for a little while before I draw this chapter to a close.

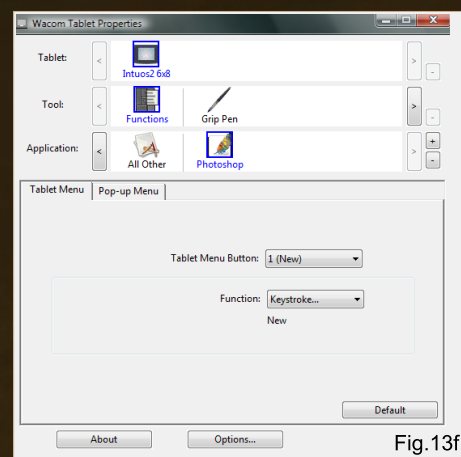


Fig.13f

originally wanted to explain some canvas settings here, but decided that it can wait until the next chapter. Not because it's not important, but because it would most probably bore the hell even out of myself right now. Besides, I'd rather give you something in closure that you can play around with until the next instalment: brushes, and how to use them.

Before we can play with brushes, we need to open a new file, and to do that we simply click on **File > New....** A box pops up showing the dimensions and other settings of the new file we are about to create. The Default Photoshop Size is rather small to work on, even when not really working on anything in particular, so click on the arrow next to the Preset and choose something else (Fig.14); Letter is a nice size for practicing on, or A4, or if you'd rather have it smaller 1024 by 768 pixels should be an option, too. There are some more settings, I know, but as said before we will ignore these for now. If your Background

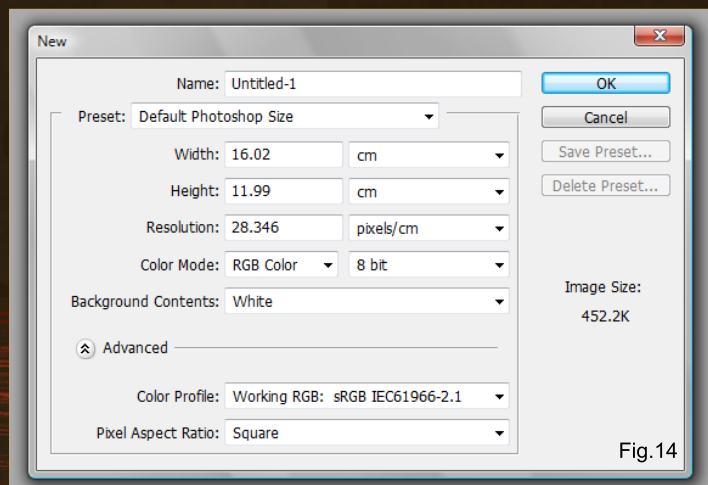


Fig.14

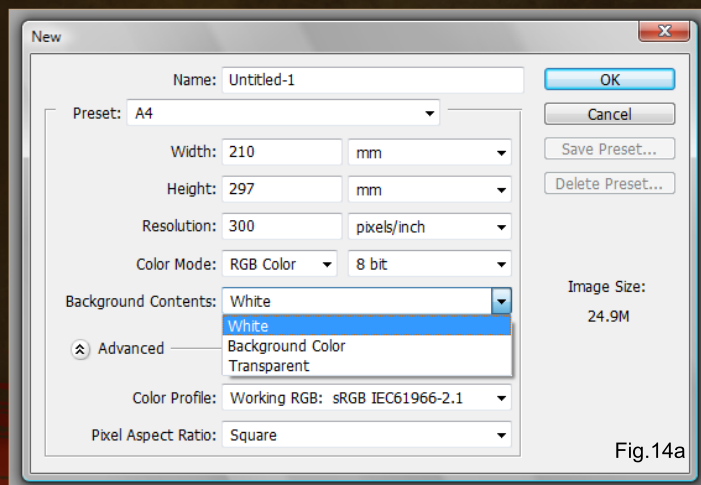


Fig.14a



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Contents are set to Transparent, you will want to change this by using the dropdown menu next to it (Fig.14a).

Now that we have our canvas ... Wait, a couple of things first to keep confusion away: The canvas will most likely be shown scaled to fit onto your screen, and you can change that by going to **View > Zoom In/Out** – there are shortcuts for this too, which are noted next to the actions and can save time. I will not mention every shortcut there is; you have eyes, you can read (Fig.15). And to choose or change the colour you are going to paint with, you can do two things: either just call up the Swatches Palette in your docking well and pick a colour from that (more on that in later chapters), or ... see the little squares at the bottom of your tools palette? The one on top is your foreground colour (that's the one your pen uses), the one behind it is the background colour. To exchange the two, click on the little double arrow. To change your painting colours, click on the foreground colour square and you get your Colour Picker. You can pick your shade in the square, and with the slider next to it you can move through the entire spectrum of colours (hues) available (Fig.16). When you've picked your colour, simply hit the OK button. Easy!

Right then, where was I? – We have our canvas, and colours, now we need brushes. Select the Paintbrush in your tools palette. Try scribbling something on the canvas – if it feels too hard, change your pen settings to something softer, and vice versa. And if you end up with a dotted scribble rather than an actual smooth line, this is due to the brush settings which we shall have a look at now. Bear with me here, it may seem a bit complex as I will try and explain everything, but isn't really.

To choose a brush you can do two things: you can either click the arrow next to the Brush in your Options bar (Fig.17), or right-click on your canvas and the Brushes palette will magically

appear floating on your Workspace. If you did the right-click thing and don't know how to get the Palette off your Workspace, try tapping your pen once on an empty spot on your Workspace. I love using this second method as it saves me having to move my hand off the canvas. Those of you with newer tablets than me are lucky, because you have the aforementioned preset buttons on yours.

Anyway, the Brushes palette! Once again, I will go into using this to full advantage in the next instalment, but for now I want to stick to the plain old round Paintbrush anyway, as it best shows all the things there are to know about Brush Settings. Now, there are lots of different settings for your brushes, and I will not go through all of them as many are quite self explanatory, and besides, where's the fun if you don't discover things for yourself? However, covering the ones that are most useful and most often used in painting, I will explain – in pictures. Because it's better to show than just to tell you, and you won't have to go searching for the corresponding figures this way [Grin].

After selecting a round brush, clicking on the Brushes tab in the docking well will pull up the Brush Settings:

The work has only just begun...

In next month's issue I will be showing you how to adjust Canvas settings, as well as the most widely used settings for scanning drawings and adjusting them to work further on them, all about the use of Layers, how to work with the Swatches and the Color Picker, how to choose the right colours and make them work, as well as how to create your own custom brushes and what you can do with them.

But right now, it's time for you to play with what you've learned so far. And when I say play, I mean play: just go wild with the Brush Settings and try everything. This will not only get you accustomed to each one of the settings, but

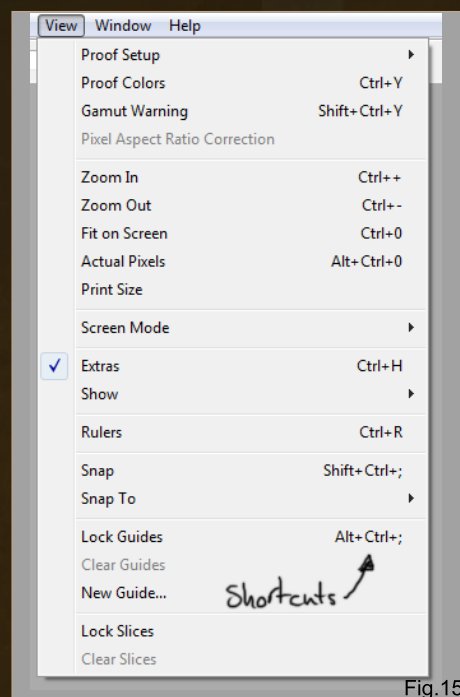


Fig.15

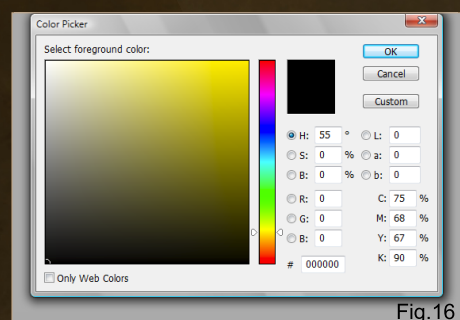


Fig.16

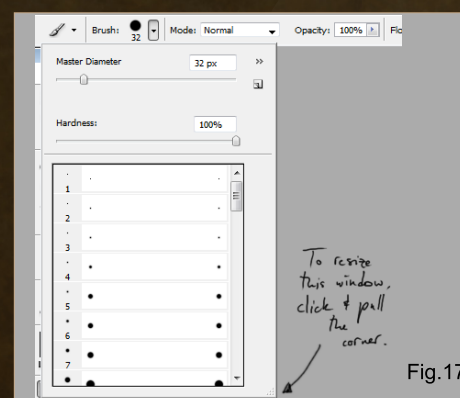
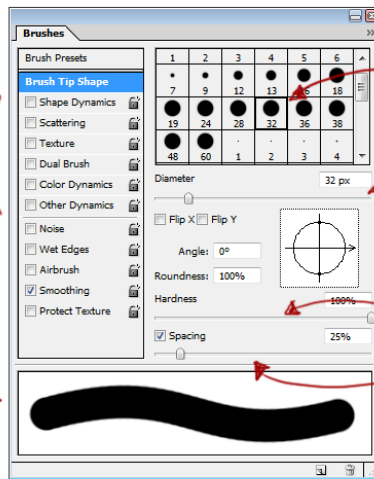


Fig.17

also get you used to your pen, which from now on will be your most treasured tool of all. It is magic, and you're on your way to making that magic happen now!

Fun settings that can be extremely useful for various things.

A preview of your selected brush and how it will behave if used.



Here is the brush you selected. You can of course select other currently loaded brushes here, too.

The size of your brush can be adjusted here.

These options here affect the shape of your selected brush in multiple ways.

The Hardness dictates if your brush has crisp edges (100%), or soft fuzzy edges (0%).

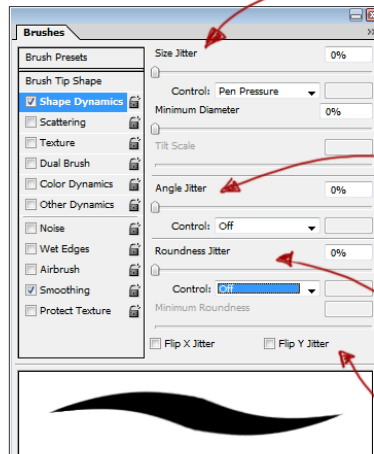
The Spacing - when ticked - allows you to space out the times of your brush making a mark on the canvas, with 0% being a seamless line.

The **Shape Dynamics** are a very useful setting:

They can create a tapered brush stroke, as well as various other things like change the roundness and angle of the brush.

NOTE:

All the settings can be used together, or separately, including the slider settings and drop down menus.



The Size Jitter controls the tapering of a brush. You can either set this manually with the slider for a more random result, or use the dropdown menu to choose something more controlled:

Fade - the brush stroke fades from original size to minimum size.

Pen Pressure - depending on the pressure you exert with your pen on the tablet, the size changes

Pen Tilt - depending on the tilt of your pen, the size changes

Stylus Wheel - only works if you have the Wacom Airbrush Pen, as this has a wheel.

The Angle Jitter comes in useful when you need variation in your brush strokes, especially when working with texture brushes. The slider again gives you a random result, while the dropdown provides the same controlled options as the Size Jitter, plus these gems:

Initial Direction - This keeps the brush static, and thus at the same angle it was at when you started making the stroke, no matter if you draw wavy lines or spirals. Can come in useful for certain things.

Direction - The genius among the settings. It changes the angle of your brush according to your brush strokes - If you make a turn with your pen, the brush will follow. This is extremely useful when painting embellishments with special shape brushes on anything that is not flat, like fabric, scimitar or katana blades, or anything else you can think of.

The Roundness Jitter is great on its own, or in combination with the Angle Jitter. It basically squashes your brush, and this can be useful to create the illusion of lets say polka dots on a table top - they don't look round unless you look at them straight on. The slider once more gives you random results, while the drop down menu is the very same as the one for the Size Jitter.

Flip X and Flip Y Jitter are fun - when ticked they randomly rotate your

Other Dynamics are - despite a name that seems like an afterthought - probably the most important settings. Without them, you would have a hard time doing pretty much anything. They are the turpentine of digital paint, letting you dilute your colours and create layered washes.

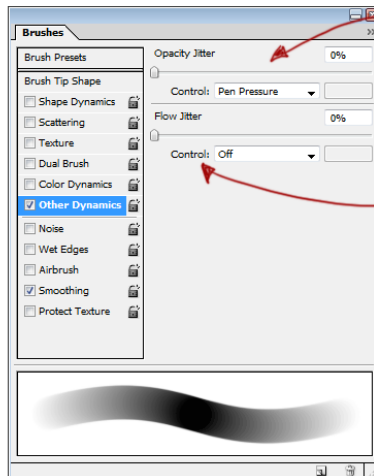
NOTE:

You can also set both Opacity and Flow manually in the Options Bar:



These come in useful when you want to use the Size Jitter, for example, on Pen Pressure, but also want the Opacity or Flow lowered at a constant level.

I often even combine this with the Opacity and Flow Jitter settings for even finer layers of colour that still show some variation.



The Opacity Jitter controls the opacity of your brush, or the transparency if you will.

Setting this to Pen Pressure is the in and out of digital painting, as it lets you control how much paint you want on your canvas at any given point in time, although the slider option can give you some funky results too and can be useful for certain things.

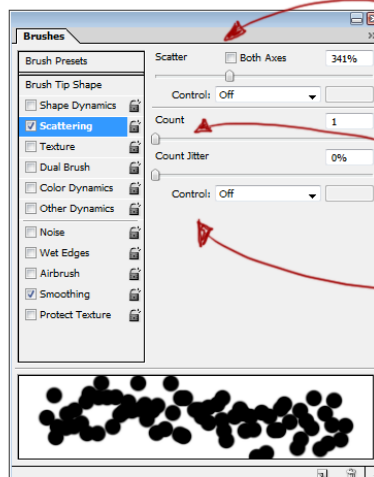
The Flow Jitter is almost the same as the Opacity Jitter, but in essence controls the flow of the paint from your brush. If on, it is a bit denser than the Opacity Jitter - try it for yourself, you will see what I mean. Once again, the drop down menu gives you the same options as before, and I usually set it to Pen Pressure.

NOTE:

Combining these settings with the Size Jitter can make things a little difficult to control, especially if all settings are set to react on Pen Pressure. You will only get transparent thin lines, and full colour thick lines.

That's where the manual Opacity and Flow settings come in very useful...

Scattering is great for quite a few things, from creating star fields to leaves on trees to freckles and textures.



Scatter lets you set the main action of the brush, either by using the slider, or the drop down menu which will give you the same options as with the previously discussed settings, or both.

Ticking Both Axes will make the brush stroke appear more linear and controlled, which can be useful for certain things.

The Count refers to the brush count - in effect, how many brush specks you see on the canvas. Upping the Count lets the scatter increase in density. This can be useful for painting the base of dense foliage or give an area just an hint of a texture while getting good coverage.

The Count Jitter only works if you choose to up the Count. It varies the count of brush specks on your canvas, either at random with the slider, or in a more controlled way with drop down menu.



Chapter 02

Canvas Settings, Scanning Drawings, Swatches, Colour Pickers,
Colour Theory, Layers and Custom Brushes!

**FREE
RESOURCES**



You can see the free brushes
in the resources folder that
accompanies this ebook.

Beginner's Guide to Digital Painting Chapter 2

Beginners Guide to Digital Painting – Chapter 2

Software Used: Photoshop

Introduction

Please forgive me for skipping any kind of “motivational speech” and jumping straight into the deep end: What we will be looking at in this chapter of the series will be a mix of more technical (sorry, we won't be able to get around this) and some artistic stuff, so I hope you've got used to your graphics tablet and had a snoop around Photoshop's Workspace in my absence to better familiarize yourself with everything.

We'll be going through Canvas Settings, how to optimize scanned drawings and sketches, use of the Layers, Colors and some basics on Color Theory, as well as using the Swatches and Color Picker, and some more fun stuff regarding Brushes, namely making your own brush sets. All this should gear you up for the next step in the digital painting evolution, and we can actually start painting.

So, how about we just get started with the chores, so we can get to the fun parts a bit quicker?

Traditional Digitization, Transparency Settings and Triadic Tonal Values ... (because it sounds good!)

Let's start with something that is a hugely important part to digital painting, in more than one way: Canvas Settings and preparing scanned sketches for work in PS. The latter I found important to include, because most people start their artistic path on paper, and many – even after years of digital painting – still prefer to get their ideas down on paper before beginning work in Photoshop.

Note: From now on I will assume that you know how to navigate, click, double-click, right-click,

and hold and drag things with your pen. Usually in PS, to use a tool you have to click, or click and hold while dragging the tool tip over the canvas. I don't know what settings you have chosen for your Pen, so all of this is up to you to know.

Last month we briefly brushed over opening new canvases, so let's go back there and look at it in a more in-depth fashion.

After choosing File > New, you are confronted with the now familiar Canvas Settings box (Fig.01). We covered the Preset dropdown, and I would assume the **Name** option is self-explanatory. You don't have to name your file yet though if you don't know what to call it; you can wait until you save it for the first time.

Then there is **Width** and **Height** – also quite self explanatory. You can manually change the size of your canvas there. The dropdowns next to them give you a choice of doing this in pixels, inches, centimeters, millimeters, points and picas. Let's say you know you want to paint something that is 60 by 40cm, you just set it to cm and then type in 60 and 40. I personally prefer choosing pixels here, because I know how big or small a canvas size in pixels will be, and what I like to work on.

The next one is the **Resolution**. The Photoshop Standard is 72 pixels/inch (28.346 pixels/cm) – or ppi for short. You may have

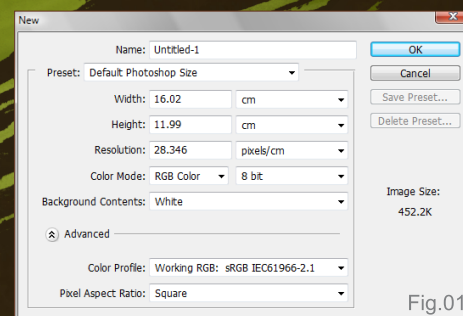


Fig.01

heard of something being referred to as dpi as well, which stands for Dots Per Inch, and generally refers to prints and is the more widely used term for this setting. So, to put this into context, 72dpi means there are 72 dots in one square inch of canvas. 72dpi is the standard resolution for images shown online – it loads fast, but still is good quality to be viewed on a screen. However, even though you paint on a screen, and most likely your images will mainly be viewed on a screen, here is something to consider:

If you were to print a painting with a 72dpi setting, the quality would be questionable, especially when printing large. Most magazines and books ask for images at 300dpi – which is the most widely-used setting for print. The image will look a lot smoother and clearer, as there is much more density in the image, more information per inch – 300 dots compared to 72. This also affects the memory needed to process such an image in PS, and to save it. Remember, the bigger a canvas in pixels as well as dpi, the more information is stored in it.

So, how big should a canvas be in pixels to be good to work on? – I cannot tell you, as it solely depends on the computer power you happen to have at your disposal. But what I can tell you is this: Anything under 2000 pixels is almost useless, unless you just want to do a speed painting or sketch that will not be used for anything but viewing on a screen. In digital painting, the phrase “bigger is better” for once is true. My preferred canvas size starts at 6000



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pixels. This – at 300dpi – gives you a decent print size as well, especially if you want poster sized prints. Why not smaller? Let's say your canvas is 2000 pixels in Height, at 300dpi, the actual print size of that is only one fourth of what you see on the screen (24% to be obnoxiously precise, if 2000 pixels are 100%). Another reason is, you can zoom into your image while painting to work on small details without having to endure a pixelated view (that's when you can see lots of colored squares on your image rather than smooth transitions), as 100% will be *quite* big.

If this was all a bit confusing, it will become clear as we go along through these Workshops. So no worries – just nod and smile. It will make me happy [Grin].

So, set your Resolution to 300 pixels per inch. – If it kills your computer, 150 pixels are also acceptable, just not if you are working for a magazine or on illustrations for a book.

The **Color Mode** simply gives you options in what mode you want to work – RGB, CMYK, Grayscale or Lab Color. Unless you are specifically working for print, in which case CMYK *may* be required, leave it on RGB. The mode can be changed at a later stage as well.

Also, you have a choice here of working in 8 bit or 16 bit mode. What does that mean? 8 and 16 bit refers to how many colors (or color gradients) you will have in an image. 8 bit means you have 256 shades of Red, 256 of Green, and 256 of Blue, which gives you – 256 x 256 x 256 – exactly 16.8 million possible colors. Quite something, hey?! Not that the human eye could actually see all these colors, but that's beside the point. This is the standard for a JPG image. Now, 16 bit ... you may

have figured already, gives you even more possible colors to work with. Namely, 281 trillion! Yep, you read that right. – You may wonder what the point in this is, if you cannot even really see all the 16.8 million of an 8 bit image. – The point becomes apparent when you edit the image, especially when working with gradients and levels. Sometimes you may have changed the levels, and later on aren't quite happy with it and want to change it back manually using the Levels Adjustment, and all you get is weird blocks of color all over that don't seem to be blended at all, especially in the darker color range if working in 8 bit mode. At 16 bit, this doesn't happen. Again, it's your choice what you want to do here, as 16 bit raises the size of your image file and your computer may not be able to handle it.

Then you can choose your **Background Contents**, and as mentioned in the last chapter, avoid Transparent. Choosing White gives you logically a white canvas, and choosing Background Color will give you whatever color is currently your background color (remember the little colored squares at the bottom of your Tools Palette?). But whatever you choose, you can change this once the canvas is open, too.

Under the Advanced section you can even set the **Color Profile** if you want it to be different from the one PS uses as its default profile – the one you set up last time – and change the **Pixel Aspect Ratio**, but that one I never use, and quite frankly don't know much about other than when it comes to printing. So I am sure there is someone far more qualified than I to talk about that. We'll just stick to Square, which doesn't mean you end up with a square canvas, but that the shape you see is the shape you get.

Now we've got our canvas settings set to what we want (Fig.01a), we can even **Save Preset** so it'll be faster to call it up again next time you want a new canvas of the same size; it's quite useful when you know you have to paint several pictures of the same dimensions.

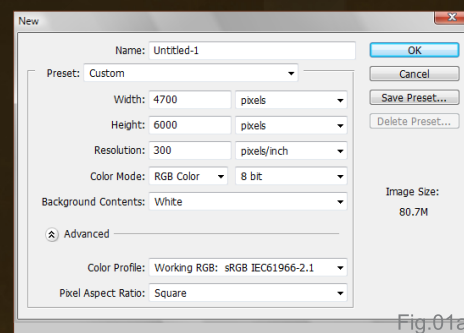


Fig.01a

Empty canvases can be daunting, and even as you progress through the years will always remain a challenge. A good one, one may hope, but a challenge nonetheless. That's probably why simple pieces of paper seem more welcoming to fresh ideas, as they are so much more familiar, as is the feel of a pencil in your hand. With time, you may become more accustomed and able to also throw down your ideas on a PS canvas, but let's stick with paper for a second. You've got a nice sketch or drawing that you would like to work on in Photoshop, so what do you do? You have three options:

- If your sketch is the same size or smaller than the active area of your tablet, you could simply lift the protective cover of your tablet, shove the sketch under it, and trace it with your pen. Here you'll just have to make sure that you make your canvas Fit To Screen in View in the main menu, as otherwise you'll be busy for a while trying to match the position of your sketch with the position of your canvas in PS. It may also be advisable to do this on a new Layer on your canvas – more to that in a few paragraphs
- Another way, and usually the more traditional one, would be to scan your drawing. If you just want the drawing as a sketch reference for a painting in which you will not see the line drawing anymore, scanning it at a relatively low resolution and quality is just fine. If however you want to keep the original lines showing through the painting, it would be good to scan the drawing at 300dpi. I'm afraid I am not able to

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explain to you how to set up your scanners, as they are all different – and I don't even have one at the moment

So what do you do if you're in my shoes and really don't want to try tracing with your tablet? You grab a digital camera and snap a picture of your drawing! Make sure to do this in daylight, by laying your drawing on a flat surface (floor is usually good) while standing over it without throwing any shadows on the paper. You may also want to zoom in a bit, as this tends to eliminate the slightly warped appearance of the paper – it's a stupidity of the lens to do this. The photo option is not so good if you want to keep the lines of your drawing visible in the painting, unless you happen to own a state-of-the-art high end camera, but hey ... that's how it goes



Fig.02

If you've chosen to do one of the latter two, and have your drawing sitting on your PS Workspace (**Fig.02**), then what next?

The first thing I want to do is crop the photo, so I can get rid of everything else but the drawing. To do this, choose the Crop Tool.  Simply place the tool's tip down in one corner and drag it into the opposite corner of the area you wish to keep (**Fig.03a**). Everything that will be discarded should you choose to apply the action should be grayed out – you can even set the

color and transparency of this Shield in your options bar. Don't worry if it's not quite right, as the selection can be adjusted – in height, width and even rotation. You see the little squares on all four corners and in the centre of each line (**Fig.03b**)? Hover over one of these squares and you should get a double arrow showing you in which direction you can pull or push the selection line. Once your pen touches the tablet, you can do that, just be gentle with it, as an accidental double-click would apply the crop. And if your drawing looks not quite straight, you can adjust it by rotating the selection in the desired direction: hover your pen outside of the selection at any of the corners – you should see a curved double arrow appear – on the corners, you can change the size of the crop diagonally. Once you are happy with your crop selection, either double-click on the image, click the tick symbol (Commit current crop operation) in the options bar, or select a different tool and Photoshop will ask you if you want to apply the selection (**Fig.03c**).

In many cases, a scanned or photographed image may look too dark or too light, or simply somewhat washed out like mine, and we want to adjust that. If it is far too light or dark, you may want to scan or photograph the drawing again, as even Photoshop cannot fix everything!



Fig.03a



Fig.03b



Go to Image > Adjustments > Levels and this will open your **Levels** adjustment window (Fig.04). I find this to be the best choice for initial adjustment, as it doesn't just go lighter or darker, but lets you adjust the midtones as well – midtones are the colors in between the brightest and darkest present in your image.

As you can see, you can either adjust things with sliders, or manually by entering values. Looking at the **Input Levels**, the slider on the left works on the darkness contrast of dark colors, the one on the right on the contrast of your light colors, and the one in the middle adjusts the midtones – sliding it left makes everything lighter, and right darker. Try it!

The two at the bottom, the **Output Levels**, practically overlay your image with white or black, washing it out (Fig.04a). Good for certain thing, but I rarely use that option. But by all means, please play around with it.

Oh, and if you can't see anything happening on your image, check if **Preview** is ticked!

The **Channel** dropdown menu at the top lets you choose to adjust all colors at once, or



Fig.03c

Red, Green and Blue (hence RGB) separately. The results of doing it separately can be quite something, so make sure to have a go at that, too.

This is the basic use of the Levels adjustment, and if you're happy with what you've got, hit OK. If you don't want to adjust anything after all, simply press Cancel. You can also save the adjustments, and call them up again later by

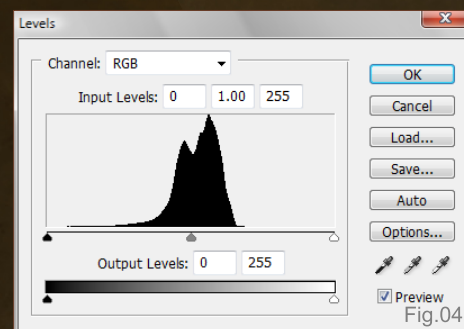


Fig.04

clicking Load.... When I save these kind of things, I tend to do so in the folder I've made for the image – I'm one of those nerds who organizes everything separately, one folder per new painting ... works a treat though, as I don't have to wade through hundreds of images to find what I am looking for.

Anyhow, there's also the **Auto** option, which I found never quite works out right. Try it ... you'll see. And then there is the **Options...** button, which I tend to find quite useful. It is a bit more refined than simply using the Auto option. I won't explain though what you would need to do there, as it would get way too long, so just play around and see what happens when you change the settings. Learning by doing (and screwing up) is still the best way to

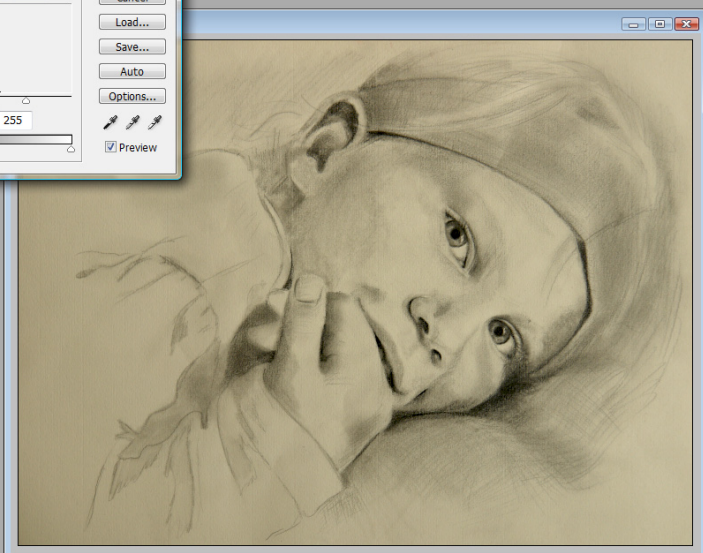
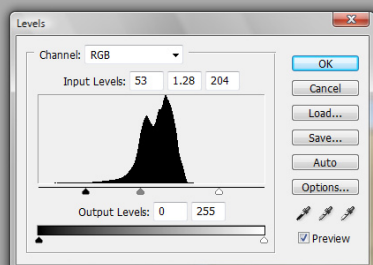


Fig.04a

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learn when it comes to Photoshop. And please don't through your pen at me for saying that, even though that may have been the standard answer to all your questions every time you tried to ask something.

You may also wonder what the little pipettes are for in the bottom right: they set your (from left to right) Black Point, Grey Point and White Point, and I've found them to be highly annoying. To use them, click on one, and then click with it on your image. When setting your Black Point – the darkest shade in your picture – do not click on anything that's light or you'll end up with a fully black image, and vice versa for the White Point picker. The results of using them, to me, seem far too stark. It may work for actual line drawings, but as I don't do line drawings they are not for me. But maybe you find it great to work with them, so please do if you want to. When you're done, apply the adjustments (Fig.04b).

If you just want to use the drawing as a reference sketch for your painting, this usually is enough to let you go on your way. But if you want a really clean drawing or line art, you may well need to work more on it; for example,



removing potential dust particles that happened to have a party on your scanner bed. For this there are two tools that can prove useful: the Clone Stamp Tool  and the Healing Brush Tool. 

The **Clone Stamp Tool** does as it says: it clones things. So let's say you have a small dust spec or smudge on your drawing where it should be pure white paper, select the Clone

Stamp to cover it up. The Clone Stamp uses the same brushes as the Paintbrush, so you can actually select any brush and size, and even apply some other settings to the brush tip as well. For covering up smudges, however, I recommend the round brush tip with Hardness set to 80%, and Opacity set to Pen Pressure. To actually use your Clone Stamp, hover over an area of pure white paper, press the Alt key on your keyboard, and then set your brush down. Keep holding the Alt key down, and drag your brush over your tablet to the spot where you want to remove the smudge. Release the Alt key. Now just paint over the smudge – you will see that the paper from the unaffected area will be cloned onto the smudge. It's pretty cool (Fig.05). If you have more than one smudge on your drawing, and want to keep cloning the white paper onto the various spots, a simple way to do this without having to do the whole Alt key thing again is to un-tick the Aligned option in the options bar before you hit the Alt key for the first time ☒ Aligned. Un-ticking this box lets you clone the same area you selected for cloning everywhere on the drawing. Ticking the Align box will move your selection spot wherever you go on your drawing, keeping the distance between selection spot and tool tip "aligned".





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The **Healing Brush Tool** works pretty much the same way. The only difference with this tool is it doesn't clone anything; it heals – magically adjusting the color of the affected area to its surroundings, as long as the pre-selected spot is clean as well. Try it! This is also a good tool to use when there is a lot of color variation in your drawing, and none of the colors match the spot you need to clean up.

At this point you may feel that some of your sketch lines need darkening, or the white surrounding them needs lightening. This is where the Burn Tool and Dodge Tool come in useful. You can find them in your Tools Palette, and usually the **Dodge Tool** is the default tool here – it lightens things. To choose the **Burn Tool** to darken stuff instead, simply click and hold the Dodge Tool and a small menu will pop up that lets you choose a different tool of the same category (**Fig.06**). Any tool in the palette with an arrow in the bottom right corner is one of those tools that have options.

Again, the Burn and Dodge Tool – more sophisticated in the newest Photoshop version, and not recommended for use on anything other than black and white images in older ones – work with the brush tips and their settings. You can adjust the Exposure (intensity) of the Burn and Dodge Tool in the options bar, as well as their Range, that's whether you want to burn or dodge the Highlights, Midtones or Shadows of what you are working on in a dropdown menu next to the Exposure (**Fig.06a**).

For darkening line art, it's best to choose a relatively small brush tip (round, with medium Hardness and Opacity at Pen Pressure), setting the Exposure to about 25-30%, and using the Shadows option from the dropdown menu,

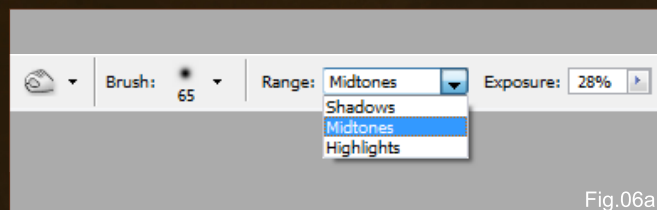


Fig.06a

as this will specifically target the dark lines. Then simply use the Burn Tool like a brush, retracing the lines of your drawing (**Fig.06b**). Keep working on the drawing with Dodge and Burn until you are happy with the result. In some cases this may still not be quite enough to ensure a great quality outcome, and then I'd actually recommend tracing the drawing in Photoshop to get cleaner line art results, and this you may want to do on a new Layer.

Layers are probably the best thing since cherry flavored lollipops that make your tongue turn bright red. To explain what they are and what they do, or can do, it's best to compare them to transparent overhead projector sheets. You can draw on them, write on them, paint on them, even make them different colors and change how they affect the layers below them, but they will never touch your original canvas until you tell them to. This makes them extremely useful for when you want to try something but aren't sure if it's going to work.

So let's have a look at the Layers tab. To see anything there, you need to have a picture open, so I'll stick with my photographed drawing for now. To make things easier to understand here, I think it's best I just go through all the little icons that are available in this palette, and we take it from there.

At the top of the Layer Palette, there are these icons:

• Lock Transparent Pixels

When you have painted something on a layer, clicking this icon locks all the pixels of the layer that have nothing on them, effectively stopping you from painting over the edges of what you've already drawn.

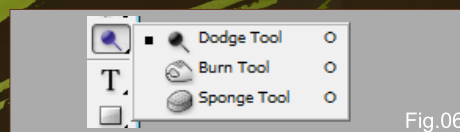


Fig.06

This is very useful when you need to texture something specific and don't want the texture spill over onto the rest of the painting

• Lock Image Pixels

This locks up the entire Layer, so that you cannot paint on it anymore. At all! You can, however, still move the layer around on your canvas

• Lock Position

This locks the layer into position, and thus won't allow you to move it around. But, you can still paint on it

• Lock All

Does exactly what it says on the label: It will lock everything on the layer, you can't move it, and neither can you paint on it anymore

At the bottom of the Layers palette, there are the following icons:

• Add a Layer Style

This is the same thing as going to Layer > Layer Style – and lets you add some nice little effects to what you've got on your layer. This mainly comes in useful in designs and typography. I wouldn't recommend using this all that much when painting, as it is usually blatantly visible that you've used a default effect rather than painted it

• Add Layer Mask

These are very useful for Photo Manipulation. I've never used them in a painting. Layer Masks are simple: obviously they mask things, as in whatever is behind the mask you cannot see. If you moved a photo onto another photo, but only want parts of the new photo visible, you can apply a Layer Mask and then, using your

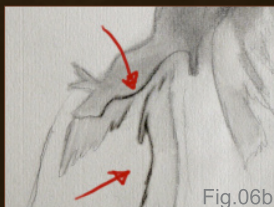


Fig.06b

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Paintbrush and the color black, paint over everything you want to be hidden behind the mask (it will only hide the new photo parts, not the ones from any other pictures you have layered there). Painting over it with white again reveals what was hidden. To make something semi-transparent, choose a shade of grey to paint with instead. The original photo doesn't get touched by doing this, and you can delete the Layer Mask at any time should you wish. Layer Masks do *not* work on empty layers

• Create a New Set

This adds a folder to your layers, into which you can move layers. Let's say you have ten layers, three of them are for your sky, three for your landscape, and four for your character; you can organize your sky, landscape and character layers into folders, and thus making everything look a bit more organized. It also gives you the option to hide the entire group of layers from view with one click, rather than having to hide every single one separately

• Create new Fill or Adjustment Layer

This offers you the same options as you get by going to Image > Adjustments, but with a twist: instead of having to apply the changes (in Levels or Contrast or Color Balance, etc.) directly to the image, it keeps them on a separate layer, so should you not be happy with them anymore at a later stage you can just remove them instead of having to start over. You can also add a new Adjustment Layer by going to Layer > New Adjustment Layer – a very handy thing!

• Create a new Layer

Take a wild guess ... You can also create a new Layer by going to Layer > Create New Layer, or by simply using the shortcut, which I tend to do. Much faster!

• Delete Layer

Pretty self-explanatory again, I would think

By the way, you can move layers around in the palette, just by holding them and moving them up or down. In the same manner, you can drag layers into the recycle bin (to the Delete Layer icon).

Now, let's have a look at the few dropdown menus and sliders in the palette:

• **Opacity and Fill** – These are pretty much the same as the options of the same name in your Brushes Palette: lowering the percentage makes the layer it's applied to appear more transparent. This is great when painting translucent fabrics, adding subtle textures, adding depth to hair and foliage, painting water, fog, ghosts you name it! There is never any need to actually paint something translucent, all you need to do is turn down the opacity of the layer

• And then there is the dropdown that has no name (I call it **layer options**), and by default reads Normal. This one is great, too, as it gives you lots of options for you to choose how your layer appears or interacts with the rest of your painting. There is not one option in there that doesn't have any uses, and some are more subtle than others. So my suggestion to you is this: Open a picture in PS, a photo or painting – anything that doesn't just have black and white in it – then add a new layer and scribble something on it in a few different colors. Anything. Doesn't matter. Then methodically go through the Layer Options and see what each one does, and how it can be adjusted further by using the Opacity and Fill sliders

What else? The icons next to the layers ...

• Layer Visibility

This shows you if a layer is visible or not. You can click on the icon to make a layer invisible

• Active Layer

This icon only shows next to the layer you are currently working on. To choose a different layer to work on, simply click the layer you want to work on

• Link Layers

Clicking on the empty squares next to the Layer Visibility icon in layers that you are not currently working on makes this icon appear, which means that the layer you are working on and this one are now linked, and for example can be moved or transformed together

Images with layers cannot be saved as JPGs, as well as some other file formats. By default, PS will save them as PSDs – and if you plan on continuing work on your painting after saving, I recommend saving as PSD – layers or no layers – as this is the highest quality you can save in. So what if you want to save it as a JPG, to show it online? You will need to **Flatten** the image. Just go to the main menu Layer > Flatten Image. This collapses all layers into one, the Background (which is your canvas).

If you want to reduce the size of your painting in terms of memory used, or just want to make away with some of the many layers you were working on and are now happy with, you can merge layers without flattening the entire picture. You have two options here: Let's say you have some invisible layers on your canvas, because you haven't finished work on them yet but they were obstructing your view while working on some other layers that you are now finished with and want to merge, you can go to Layer > **Merge Visible**. If all of your layers are visible, and you still want to merge some, you need to link the layers

you want to merge, and then go to Layer > **Merge Linked**.

Note: You can only link or merge layers that are next to each other. If you link two that have one in between them you don't want to link, that unlinked layer will be moved above or below the ones you are linking. Layers always merge into the layer that is currently the active layer.

Right, with this out of the way, I think it's time to move on to something that will get you

closer to actually painting something. Those of you reading this who already know how to paint can skip this whole part and go right to the end of this article, or almost the end; those of you who have no clue how to use colors, or anything to do with colors, please stay on and I promise I'll try not to make it boring.

Basic Color Theory

Colors are lovely things. Not only do they make stuff look colorful, but they also give us signals. We apply certain colors to certain emotions or events – red is passion as well as danger, black is grief or hatred, white is purity, blue denotes peace, yellow is a warning, while green is envy as well as no danger, or go. We learned that the sky is blue, the grass is green, the sun yellow, wood is brown, and roses are red. Or are they...?

The most common thing I've seen with beginners is that they apply colors as they know them, rather than how they actually see them. And seeing colors properly needs practice. Or maybe the translation from seeing to applying needs practice, I'm not quite sure.

I won't bore you with everything there is to know about color theory, as I find that once you understand the basics you're good to go on your own way with it, and will learn by applying what you've learned.

I think everybody knows the **Primary Colors**. They are Red, Yellow and Blue (**Fig.07**). Mixing these get you three other colors: Orange, Green and Purple (**Fig.07a**). They are known as the **Secondary Colors**. Mix these again with their neighbors, and you get the **Tertiary Colors** (**Fig.07b**). The 12 colors you now have are the ones present in the color wheel. Black and white are not technically seen as colors, and I generally discourage people from using them in painting as they make things look flat and lifeless.

So the colors you have in the Color Wheel are called **hues** – them and everything in between, the full on saturated colors of the spectrum. Colors also have temperatures, and are measured in Degrees Kelvin. However, this goes a bit too far for this, and I'll just say Orange is the warmest hue, and blue the coolest.

Now, the Color Wheel doesn't just look nice, it's also useful for choosing your colors. Why?

Because the way the colors are arranged around the wheel has a purpose. Let's try it with this example: light and dark, or black and white, are opposites. Pretty obvious! The same applies to the colors on the wheel. Pick a color, and the one you find opposite is, well, its opposite – or **Complimentary Color** (**Fig.07c**). Let's say you want to paint a sunny winter landscape, which colors would you choose? If the sunlight has a yellowish warm tint, the shadows would be the opposite: bluish purple. You can also reverse this for very cold light. What about a scene by a fire? The red orange glow of the flames would cast greenish blue shadows.

So there is your very basic color theory. To refine this a bit more, let's see what else there is, in a nutshell. Color schemes are not just comprised of complimentary colors, and if we used just them for painting, we'd get very bored very soon. The next step up from that would be the **Split Complimentary** (**Fig.07d**), where you take two complimentary

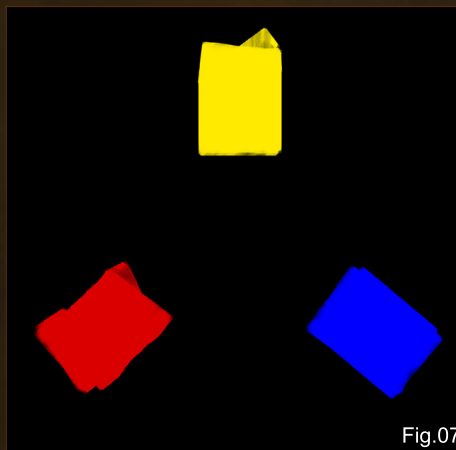


Fig.07

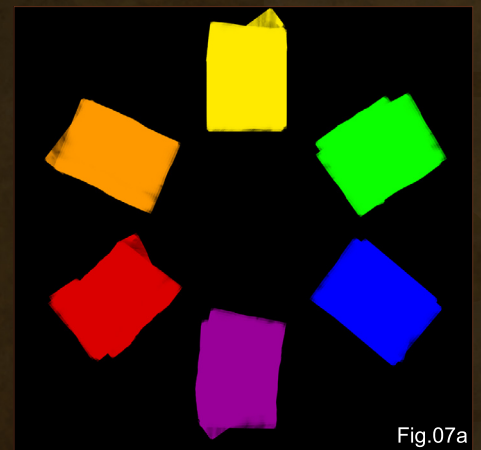


Fig.07a

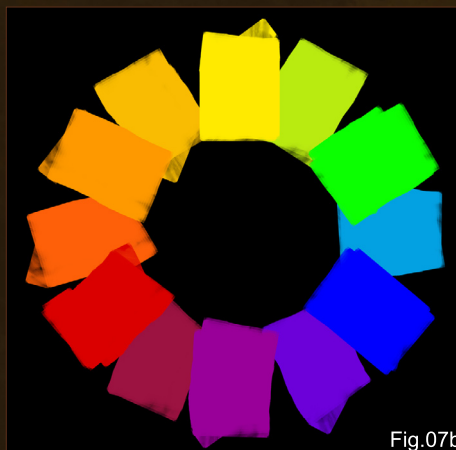


Fig.07b

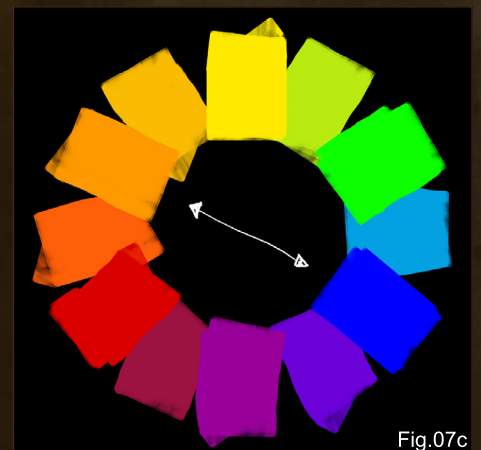


Fig.07c

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colors but split one of them up. You instantly get more color variation. Then there are **Triadic Colors (Fig.07e)** – a nice even triangle on the color wheel. There's also **Tetradic Colors (Fig.07f)**, a perfect square, and the **Clash Colors (Fig.07g)**, which use two complimentary colors with one that sits in the middle of them, creating a squished triangle on the wheel.

Obviously these are all quite drastic color matches, and not too well suited for all types of paintings. But knowing about these is a good start, as they will pave the way to understanding how colors work together, or not.

The more subtle color schemes are those that could be classed as limited color palettes and give you seemingly infinite possibilities. Colors are chosen from just one side of the spectrum, and maybe have a couple of subtle complementaries thrown in to “pop” the main colors and let the image come to life (**Fig.07h**).

So what about tints and shades? – A **tint** is generally referred to as a color that has white added to it, while a **shade** is a color that has black added to it. However, unless you're painting walls, I've not really heard of anything referred to as a tint. Shade is the more widely used term for darkening or lightening a hue.

Another thing you may want to try regarding colors is to see them for what they are. There is a famous scene in the film *Girl with a Pearl Earring* where master painter, Johannes Vermeer asks his maid to tell him what color the clouds are. She answers with “White”. After a short pause, she retracts that statement and names several colors which are present in clouds. In short, in

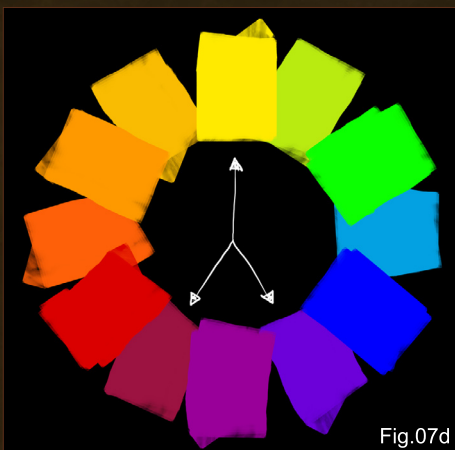


Fig.07d

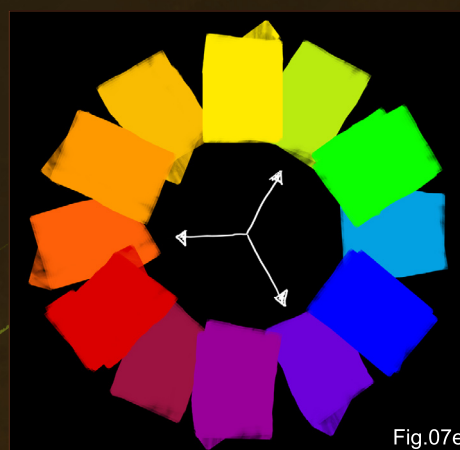


Fig.07e

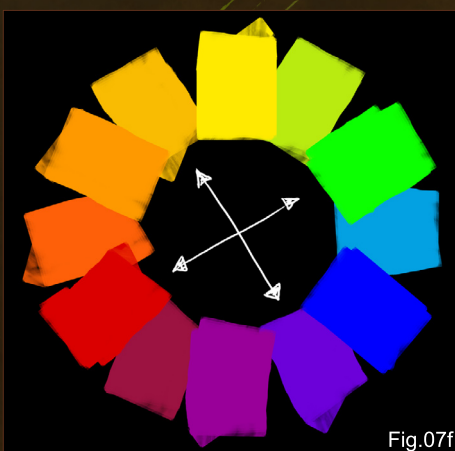


Fig.07f



Fig.07g

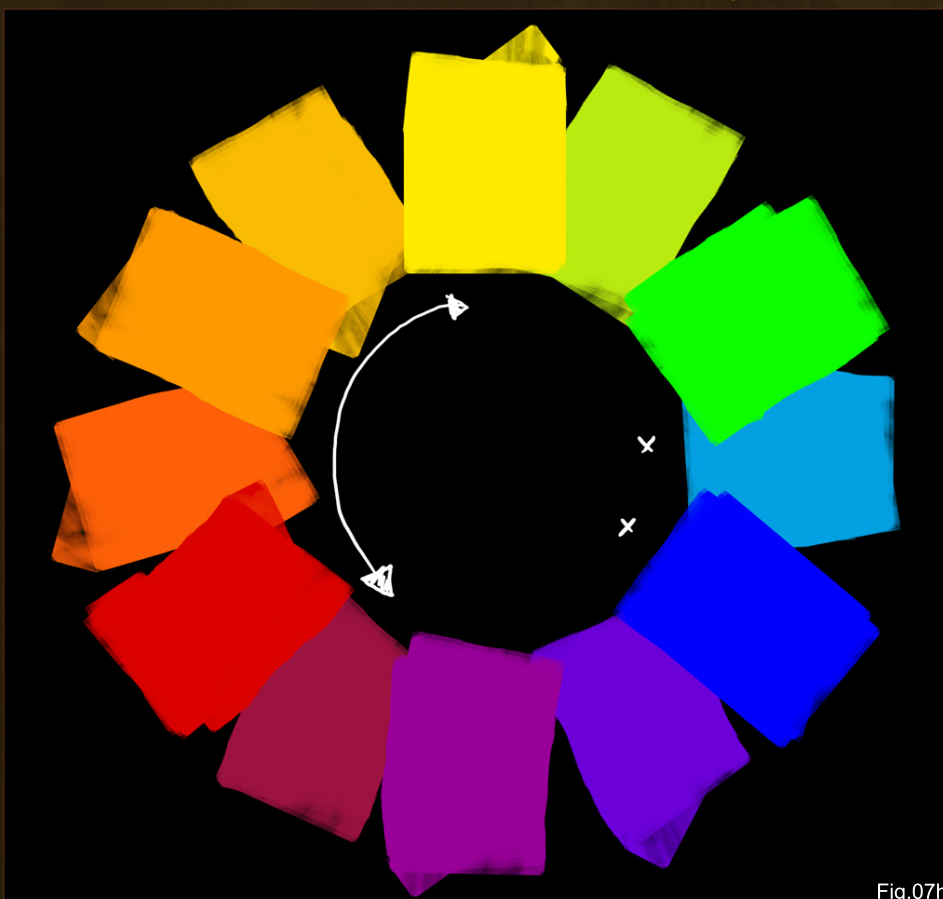


Fig.07h



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nature you rarely find any pure colors, especially as light and shadows have a great part to play in it, too. During a sunny day, your lawn will look very green, but also has variations of yellow and

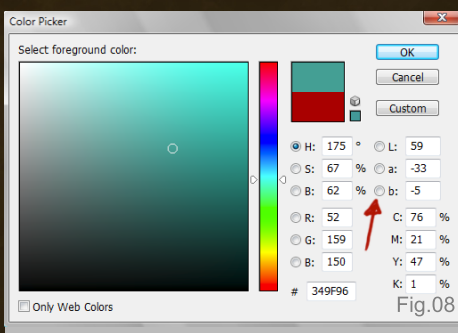
brown in it. At night, under a full moon, that same lawn will appear a deep blue green, with deep brown and hints of bright blue where the moonlight reflects off the surface. So when you think a flower is red or a cloud just grey, look again. Try to find the other colors that compose the whole.

If you have some trouble with all this, or simply are aching for a fully working Color Wheel that lets you play around and discover colors in a fun way, I recommend this website: <http://www.colorjack.com/sphere> – there you can not only go through all the “formulas” I’ve just mentioned, and see how they look, but also apply certain medical eye conditions to the color spectrum for some interesting results, as well as choose between RYB and RGB modes. And to top it off, you apparently can export your chosen colors as Swatches for Photoshop and some other programs. I’ve tried it and it didn’t work, but if it does for you, that’s great. If not, you can always take a screenshot of the page (Ctrl + Print Screen), then open a new canvas in PS and paste (Edit > Paste) the image you’ve just captured from your screen onto the new canvas. Flatten it, save it and then pick your colors from that as you paint.

Which brings me to the next topic: Picking colors. Literally!

Color Picking

To pick colors from an image – like I’ve suggested with the screenshot of the Color Wheel – just choose the **Eyedropper Tool** from the tool palette, and just pick the color you want from an image. The options bar has

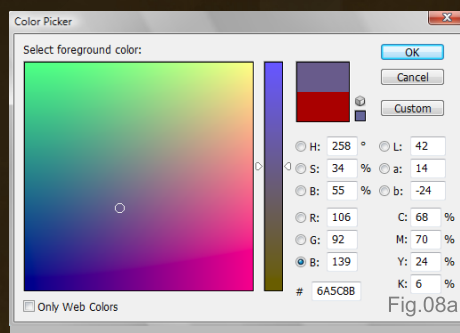


a little dropdown to adjust what your Eyedropper Tool does. You can either get a Point Sample, which means it just picks up one pixel’s color, a 3 by 3 Average, which means it gives you the average color from three adjacent pixels, or a 5 by 5 Average, which does the same as a previous, just with a wider range. I tend to keep mine on the Point Sample. You can also pick two colors by just swapping the background and foreground squares (hitting X on your keyboard to do that is a timesaving shortcut).

Another way of picking colors is of course with the Spectrum Color Picker we briefly covered in the last tutorial chapter. Open it by clicking on the foreground or background color squares, and choose your colors. You may be wondering what the little round tick boxes do next to the Spectrum Slider (Fig.08). Go on, tick one. Any one! – They give you a different choice in colors, pretty much like the website I linked earlier. It’s fun! And it’s quite helpful if you want to paint in a limited or controlled color palette (Fig.08a). To get your normal spectrum back, just tick the one labeled H.

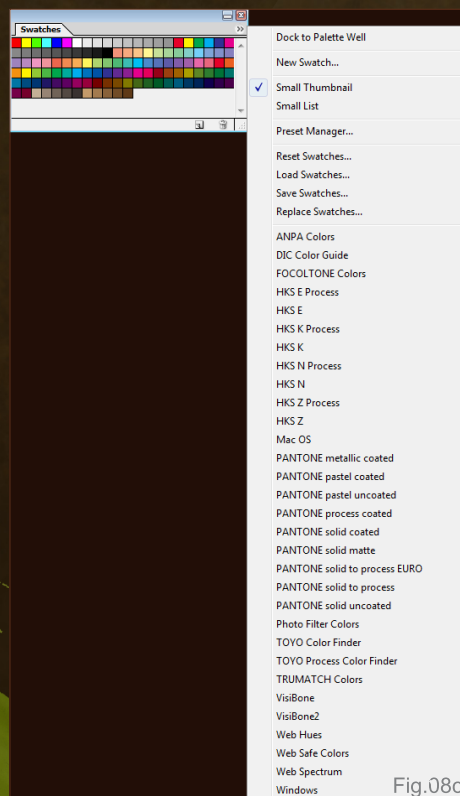
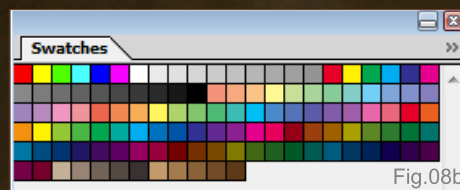
This color picker is nice, but also a bit annoying, as it does not stay open while you paint. My suggestion here is to pick your colors before you start painting, and paint them onto a small canvas which you can then save as an image to pick colors from.

Or you could use the **Swatches**. Let’s open the Swatch palette and see what we’ve got there (Fig.08b). Not much other than lots of color squares, and a small arrow in the top right corner. If you click on that arrow, you will be



presented with a rather long menu (Fig.08c). Most of it is self-explanatory, like Load and Save, and the list at the bottom are different color modes and profiles that you can load as swatches. They all have a purpose, but I’ve never found them all that enticing to use.

In the bottom right corner are two icons, both of which we know from the Layers palette: “Create New” and “Delete”. This opens up some options here: You can create your personal swatches. If you want to start with a clean palette, delete



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all the swatches currently in it – one by one, I'm afraid – by clicking on the Delete icon repeatedly. To create a new swatch, you need to first pick a color in the Spectrum Color Picker or from a picture, and then click on the Create New icon – this creates a new swatch from the current foreground color. Once you have all the colors you want in your swatches, save them so you can call them up whenever you want.

I am not sure if the newer PS versions have this feature, but Corel Painter X lets you create a swatch set from an image – in one go – essentially picking all the colors present in a photo or illustration and turning them into swatches. Very useful and time saving!

When working with the swatches, it may be useful for you to keep the palette open on your Workspace, rather than docking it to the Docking Well.



Fig.10



Fig.10a

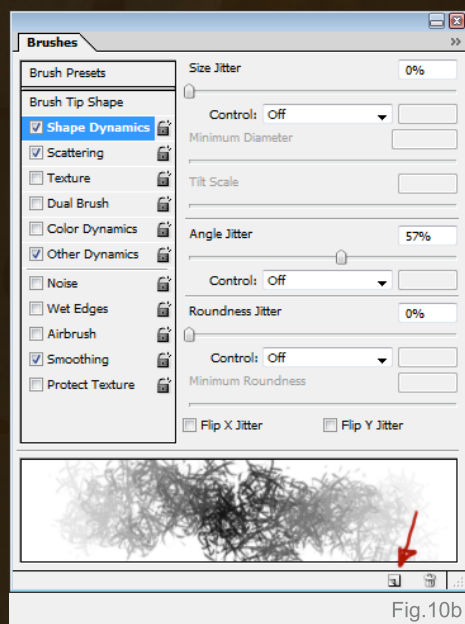


Fig.10b

Great! Now that you've heard all this stuff, let's bring our focus back to something fun. Brushes! Custom brushes to be precise.

Custom Brushes

You may have noticed while playing with the brushes in the last chapter that there are lots of different brush sets to choose from. If not, you can find them like

this: Open a canvas and select your Paintbrush. Open the Brushes to choose your brush – and you will find that small arrow in the top right corner (Fig.09). Clicking on that gives you a menu again, with a list of your brush sets. To open one of them, you can either click on the brush set, and PS will ask you if you want to replace the existing one with the new one, or append it. Make your choice. You can also just click on Load and your browser window will pop up, letting you browse through your brush sets that way. If you have downloaded a brush set from the internet, or one came with a CD in a magazine, you can load that brush set with the Load option only, as the list only shows brush sets that are currently saved in Photoshop's Preset Brushes folder. Of course you can move new brush sets into that folder prior to opening PS: Program Files > Adobe > Photoshop > Presets > Brushes.

Now back to Custom Brushes.

Making your own brushes and brush sets is really easy. You can turn virtually anything into a brush, from scribbles to photos and scanned textures, fabrics or dead insects if you like.

To start a completely new brush set, you need to delete all the brushes that are currently loaded in your palette. – No, not the brush sets

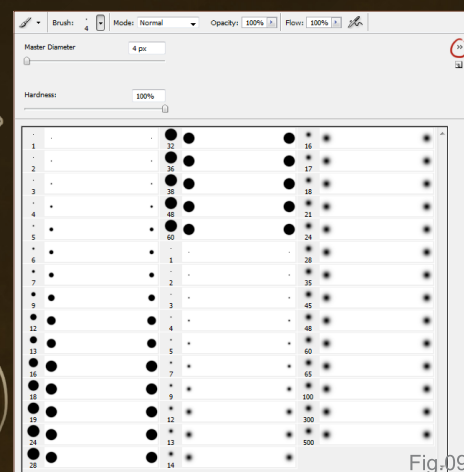


Fig.09

in your Photoshop folder! Sadly there is no fast way to go about doing this. You need to right-click on every single brush and choose Delete. Once you've done this, you can start making your brushes.

The best way I have found to go about it is to convert whatever you want to turn into a brush to grayscale (Image > Adjustments > Desaturate) first. Brushes by themselves cannot tell if something is in color or not, and will only work with whatever colors you have set as your foreground and background colors. Plus, converting an image to grayscale gives you a good chance to adjust it for optimised brush usage. If you are using a photo of some cracked cement, for example, to turn into a brush, you may want to soften the edges of the photo slightly (paint over them with pure white with a soft brush), so that when you use the brush it will not have a rectangular photo shape.

Let's see ... here's something I've scribbled (Fig.10). I like it as it is, as I think (no, I actually know) that it will make a useful brush. If you wanted to, you could overlay this with some more textures, or add bits and pieces to it. Next, I make sure to make it very close crop, using the Cropping Tool. This makes sure that the brush created won't have any excess empty space surrounding it. To create the new brush, just go



to Edit > **Create Brush Preset...** and there it is (**Fig.10a**). You can now use it like any other brush, and change its settings as you wish in your Brush palette. You can even save it with new settings, for example if you want it to rotate and scatter, just click on the "Create New" icon (**Fig.10b**) and a new brush will be created, settings included. Great, hey?!

Once you have created your personal brush set, you will want to save it. Just open up your

Brushes again and call up the menu, and click on **Save Brushes**. This will not overwrite anything you already have – PS knows that something has changed and will let you rename the brush set every time you save one.

Notes: When using Vista, it will not allow you to save brush sets in the Brushes folder, for some extremely stupid reason (unless it's just my computer being stupid?). You can save your new brush set in any folder you want, and also

call it up again from that folder, or once saved move the brushes into the Preset Brushes folder.

Also something to remember is that older versions of Photoshop may not be able to work with brushes that were made in newer versions, especially not when you have anything below CS. Another thing is that the biggest size an image can be turned into a brush is 2500 by 2500 pixels. I'm not sure if this has changed



in higher PS versions, so my apologies if this is inaccurate.

Because I know it can be a bit hard to figure out which brushes may be very useful for painting, and which may not be, I've created a brush set for you with the basic brushes most often used in painting. Over the next four installments I shall add new brushes with every article, depending on what we'll be working on at the

time. To download your free brushes with this tutorial simply click on the **Free Resources** icon.

In Closure

Let me just say that if you've come this far, I'd urge you to stay on and wait for the follow-up chapters, as next month we'll actually be starting to sketch and paint, look at composition and perspective, and useful tools to help you draw

architectural things. For now, however, I really need a break ... Would anyone care to make me a coffee?

**FREE
RESOURCES**



You can see the free brushes in the resources folder that accompanies this ebook.



**FREE
RESOURCES**



You can see the free brushes
in the resources folder that
accompanies this ebook.

Chapter 03

Composition Rules, Sketching and Perspective,
Understanding Light and Blocking-In

Software Used: Photoshop

Introduction

Sometimes it seems strange that so much technical knowledge is needed to even begin being creative in Photoshop. We've learned a lot in the last two workshops, and if you are still here now, reading this, then I can already tell you that you have the dedication it takes to make something truly great out of this!

As promised last month, we'll be starting to paint this time. However, even this will require some background information that I find impossible to ignore. So let's get on with it.

Of Fibonacci, Forms and Freedom

Fibo-*who?* – Fibonacci, nickname of Leonardo Pisano, born around 1124 in Pisa, Italy, and the “greatest mathematician of the middle ages”. I’m pretty sure you have heard of the Fibonacci sequence – a sequence of numbers that he introduced to the Western World – which also

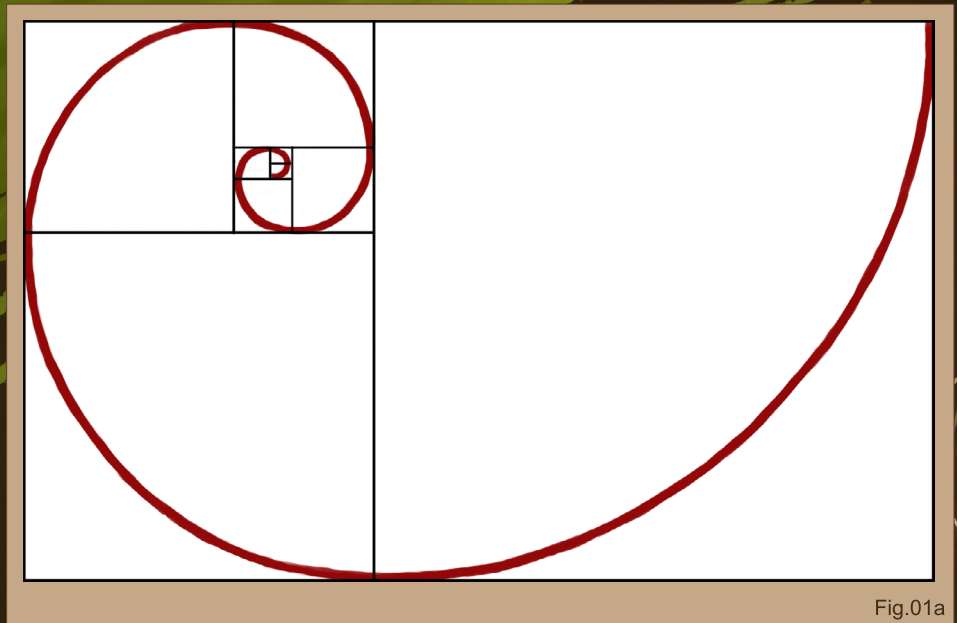


Fig.01a

featured in the film, "The Da Vinci Code": 0-1-1-2-3-5-8-13-21-34-55-86...

You may wonder what this – or even mathematics – has to do with art? You'd be surprised. Here it goes:

The Fibonacci sequence – also coined the “God Number” – is present in many biological settings; this means flowers, trees, seedpods, arrangement of leaves on a stem, and even in the hierarchy of a honeybee colony. You may not be painting many bee colonies in your time

as an artist, but when it comes to flowers and such things, it can be useful to know that flowers' petals and seed arrangements (this is especially visible in sunflowers) adhere to the Fibonacci sequence. The only flowers you will find in nature have a petal arrangement of two adjacent numbers of the sequence, such as eight petals going in one direction, and 13 in the other, beneath the first.

Now you may think that this is sort of useful to know, but kind of boring, as your audience will most probably not count every flower petal in your pictures. And you'd be right, to a point. But I had to start approaching this subject somewhere now, didn't I?

This sequence is also known as the “Golden Sections” (**Fig.01**), which in turn can be translated into the Fibonacci spiral (**Fig.01a**), and can be found in nature as well (even though it’s a less substantiated claim), like in the spiral of shells and the curve of waves. – It is perfection: mathematics revealing the beauty we see and create as artists.

If you are still not convinced that this has anything to do with painting, then think again. Why do we like something when we see

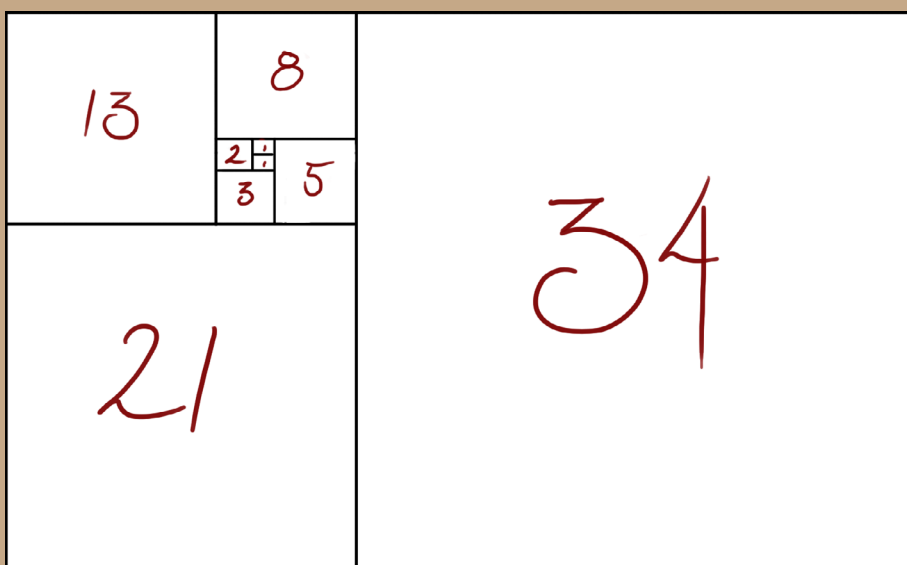


Fig.01



it? – Because it appeals to us. And I am not talking hot babes here, although they certainly have their merits as well. What I mean is the composition of a painting. How often have you looked at a painting and thought to yourself that you love how it all works together or that you simply love it, but don't know why? This is most probably due to the fact that the painting adheres to the Golden Sections. Superimposing the Fibonacci spiral onto some of my paintings (so no copyrights are broken), you can see it works out, even with the ones that have the main subject in the centre (Fig.01b).

When you start sketching an idea, you don't have to keep the spiral in mind. But when you feel something is off somehow, superimpose the spiral and you'll most likely very quickly find out why. Funnily enough, most seasoned artists automatically stick to this recipe, without ever touching the Spiral. Convinced now? [Winks]

Sketching!

So, let's look at sketching something then. There are several ways of going about doing that digitally, but if you'd rather do your sketches on paper, please feel free to do so.



Fig.01b

Some artists find it useful to begin an idea with a thumbnail sketch, which is a very small sized sketch simply showing the very basic composition and colors. Doing this on such a small scale saves time, and as you can see the entire canvas on your screen makes it easier for you to take in the whole composition and

adjust things where necessary. For these kinds of sketches, all you need is a small canvas (something around 300 pixels is a good size – I'm just doing it larger for the purpose of this article) and a basic round hard-edged brush. Forget about details, just splash the paint on the canvas, and you may end up with something like what you can see here in Fig.02.



Fig.02

So we have a landscape, looking pretty much like a desert, with some mountains and some kind of structure. Seems good enough to me, so let's stick with this one, shall we?

If this is not your idea of sketching, and prefer line drawings before you even want to consider colors, that's not a problem either. Here, too, you may want to start with a smaller canvas, although not quite as small as the one of the thumbnail sketch – 1000 pixels at either side should suffice – which can later be resized.

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Chapter 3

You can of course open up a new canvas that straight away has the size you want to paint at, and simply have the canvas "Fit on Screen" (View > Fit On Screen) so you can see all of it.

I personally dislike sketching on a white canvas, for two reasons: too bright, and also, I never start a painting on a white background, as white has the tendency to make your colors appear flatter and lighter than they actually are. The same goes for black, by the way. So for a line sketch, I like to use either a neutral color as the background – preferably one that I want to appear in the painting. You can either choose one before opening a new canvas, as discussed in the last chapter, or open a white canvas and then choose your color. You can apply it to the background by using the Paint Bucket Tool, which you find with the Gradient Tool in the tools palette (Fig.03).

Once you've done this, add a new layer to the canvas and name it "Sketch". This will now be the layer that we sketch on, and that, if you've chosen to start on a small canvas, can later be dragged onto a bigger canvas and transformed for painting.

Pick your Paintbrush, and a small round Brush Tip. I like setting my Size Jitter and Opacity

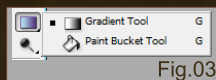


Fig.03

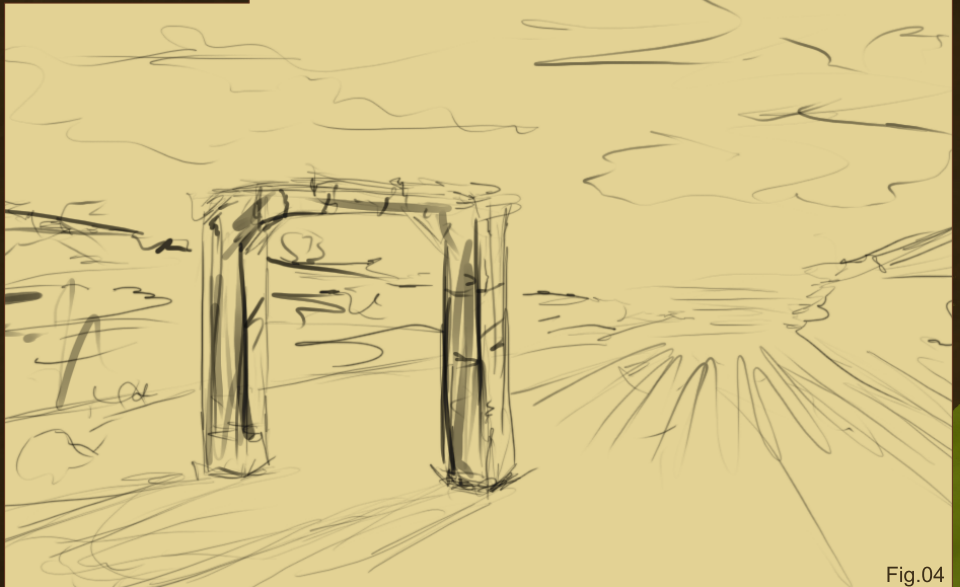


Fig.04

to Pen Pressure, so you may want to try this, too. Choose a dark color (black or dark brown, perhaps?) and you are ready to go. My result can be seen here in Fig.04.

Not very neat, is it? – It doesn't have to be. Let's see about the composition now and apply the Fibonacci spiral – you can find it available for download at the end of this workshop as a conveniently layered PSD file; simply click on the Free Resources icon to download. Kind of works, right (Fig.04a)?

If it isn't totally spot on, don't worry about it, but if it is totally off you may want to reconsider your composition and perhaps change a few things around. Totally central alignment of the elements in your painting only really works for certain styles of illustration, or more design-oriented images.

By the way, if you have trouble with sketching things freehand, don't hesitate to use references to look at – it really helps. There are several good websites out there that offer free stock images if you don't have any photos that you have taken or can take yourself. Just please stay away from anything that is not labeled clearly as stock or royalty free; people can get mad when their pictures are used without their permission.

Now you may want to clean up the sketch a bit, especially if you've added an architectural structure, as I have in mine. Why? Because most architectural structures have straight lines, and adhere to perspective. Perspective is important even for landscapes, so you may want to consider doing what I am about to show you now.



Fig.04a



Perspective

You will have seen perspective in action before, without even noticing it, because it's always been there. When you were standing in a street, looking down it, or even up to the tops of the skyscrapers – the street, or skyscrapers, seem to get narrower the further away they get from where you are standing, and the lines of buildings seem to be at an angle, too. This is because they all run towards an invisible “vanishing point” at the horizon – or two, or three, or as many as you can think of. Let me give you a simple example of the famous cube.

In **Fig.05** we have a square – a flat one – as if we are looking directly at it, perfectly centered. Let's add some depth, and the square turns into a cube (**Fig.05a**). However, this one has no real perspective; there is no vanishing point (or maybe it's just too far away for us to notice), it's just three-dimensional. Now, in **Fig.05b**, the very same cube is drawn with a vanishing point in mind. Instantly looks more realistic, right?

Eyeballing perspective works to a point, but is never quite accurate as our eyes love to play tricks on us. That's where perspective grids come in very handy, as they show us every line, every angle we need to know about.

In newer Photoshop versions you have something called the Perspective Grid Tool,

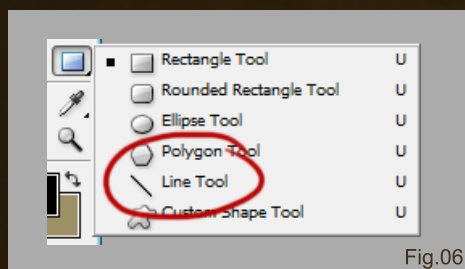


Fig.06



Fig.06a

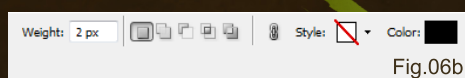


Fig.06b

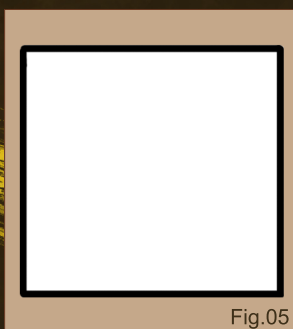


Fig.05

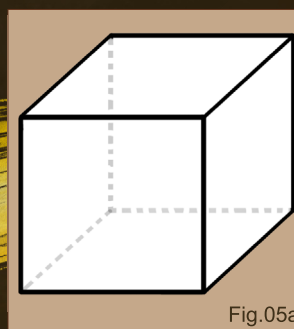


Fig.05a

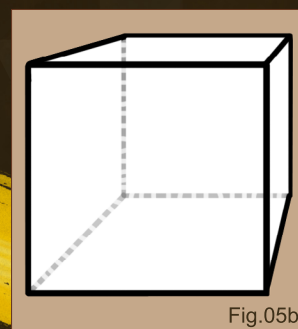


Fig.05b

and I've heard it can be useful for some things, but not for everything. I don't have this Tool in my Photoshop version, so unfortunately I cannot explain its proper use here. I am sure though, that if you Google this tool, you will find quite a few resources regarding its use.

In our case right now, however, let's be old-school and draw our own perspective grids. Besides, if you work on paper this is your only option anyway!

Before we start with this, I guess I'd better explain how to draw perfectly straight lines in Photoshop, as without them it's pointless to draw a perspective grid. You have two options; both are time-efficient and easy to use. One of them will also be useful later on, when you actually paint, so please don't dismiss this outright if you feel it takes a nanosecond longer to do that the first.

There is no need to add a new layer to the canvas for the first method, as new layers will automatically be created with it. Select a color that will stand out well from your sketch and background. Now select the Line Tool. You will find it under the Rectangle Tool (**Fig.06**), or, if you cannot be bothered to wait for the mini menu to pop up, just click the Rectangle Tool and go to your Options Bar, where you can select the Line Tool (**Fig.06a**). The Line Tool does what it says: draws straight lines. You can change the line width and color in the Options Bar (**Fig.06b**), and depending on the size of your canvas, you may want to adjust this to something easily visible when your canvas is set to “Fit on Screen”. If you made the first line

and cannot see it – if your canvas is zoomed out from its original size this happens a lot, because the stroke made is just too thin to be seen at that size – simply adjust your line width.

For the second method add a new layer to your canvas before you do anything else, and then choose the Paintbrush instead. Select the standard Hard Round Brush Tip for this, and make sure any kind of special settings are switched off, even the Size and Opacity Jitter. Make it small, as you don't want big fat lines covering your canvas.

To use the Paintbrush to make perfectly straight lines, you need to put your pen down on the canvas where you want the line to start, and then press and hold the Shift key on your keyboard while you draw the line. This works for horizontal or vertical lines. To draw straight diagonal lines, as you would need to for the grid, put the pen down on your starting point, and press and hold the Shift key while lifting the pen off the canvas and putting it back down where you want the line to end – the diagonal line will draw itself! For some fun, you can even continue to hold the Shift key and just dot your pen around on the canvas for lots of angled lines, or zigzag patterns – whatever takes your fancy!

Note: What I have found is that it's easier to draw freehand diagonals with the Line Tool, especially when you have to be precise, as you can see where the line will go before you commit it to the canvas. If you need precise vertical, horizontal, or 45-degree angled lines, simply press and hold your Shift key after you've

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set your pen down on the canvas – the Line Tool will do the rest for you, depending on the direction you drag it into.

There are two types of perspective grids that come in useful for various things: the four-plane perspective, and the two- (or multiple) point perspective. These are probably not the official names for them, in which case I hope I will be forgiven, but this describes them pretty well anyway. In any case, I'll show you both.

Two-Point Perspective

The two-point perspective is the easier one to draw, and also a very simple method of determining the perspective of architectural structures in a picture, so let's start with that one.

First, draw a straight line where your horizon would be (just in case you don't know what that is, it's the imagined line where the sky touches the ground). That's all – just draw that line. Now we have to determine where the vanishing point – or points – would be. The vanishing point is a point at the horizon that all lines run to. And it's not always just one. In my example, there are two (Fig.07).

To now draw a grid without any problems, all you have to do is put your pen down on the vanishing point and draw lines sticking out at various angles from this point, like sunrays, both above and below the horizon line (Fig.07a). They don't all have to be at the same distance from each other – draw as many or as little as you like.

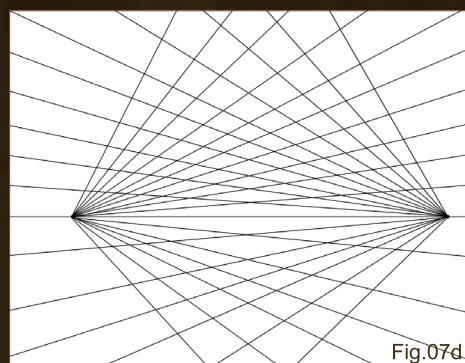


Fig.07d

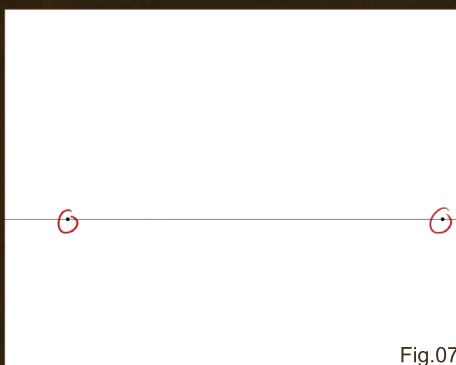


Fig.07

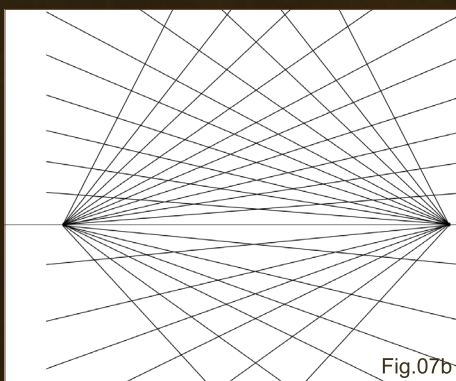


Fig.07b

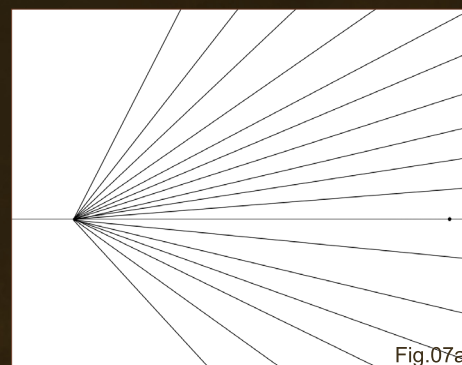


Fig.07a

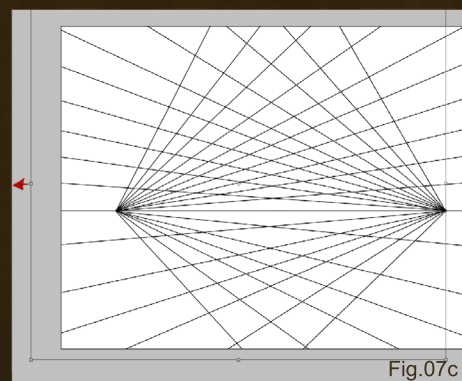


Fig.07c

If you now look at your Layers palette, you will see lots of new layers that are called "Shape". Link all the Shape layers (but not with your Background layer!) and go to Merge Linked. You now have one layer with all your lines on it. Next up, go to Layer > Duplicate Layer and then check your Layers palette again: two layers with the same thing on them. Select one of these two layers – really doesn't matter which one – and then select the Move Tool , not just because you may need it in a minute but also because if you keep the Line Tool you will not be able to do what we are about to do: transform the layer.

So, once you've got your Move Tool, go to Edit > Transform > Flip Horizontal, and your second layer will flip itself around. If it looks just right, leave it where it is. If it doesn't, you can move it with the Move Tool to where you want it, making sure that the horizon line on both your grid layers line up (Fig.07b).

If you need to make one of the two layers longer to fit better on your picture, you can do this by going back into Edit, but instead of Transform you select Free Transform. Remember that only the active layer will be affected, so select

the layer you want to transform first. In Free Transform, you get the same box around your layer as you got with the Crop Tool: you can rotate it by its corners, or stretch and squish it by its mid-line dots. For this one, I suggest you simply grab one of the mid-line dots on the side and pull on it (Fig.07c) until you reach the desired size. Apply the transformation by either hitting the tick mark icon in your Options Bar, by double-clicking your image, or by selecting a different tool. If you want, you can now merge the two grid layers. And there's your finished perspective grid (Fig.07d). You could of course continue drawing lines all around the vanishing points if you need them. This one would be, as said, for a single structure.

Four-Plane Perspective

Now for the four-plane perspective. This one only uses one vanishing point (although two can be used as well, to make it really confusing). This is great for painting rooms within a building, or whole cityscapes, or even landscapes...

You can start out in two ways: either by determining the vanishing point (on an imagined horizon line), or by drawing a rectangle or



square (like the back wall of a room). When doing the latter you have more freedom regarding the grid we are about to draw (**Fig.08**).

The first option of placing a vanishing point anywhere on the canvas would continue with drawing a big X on the canvas, with the lines crossing through the vanishing point, and then adding the square or rectangle, with the corners

touching the lines. This gives you a centered perspective and isn't always that dynamic in terms of composition.

Anyway, let's stick with the one I've started here. We draw four lines, one through each corner of the rectangle, starting at the vanishing point (**Fig.08a**). Now keep drawing lines that radiate out from the vanishing point, one side at a time, until your canvas is full (**Fig.08b**).

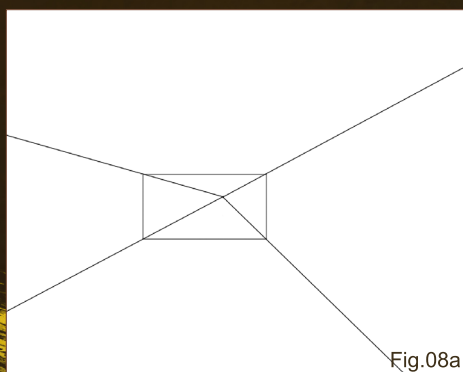


Fig.08a

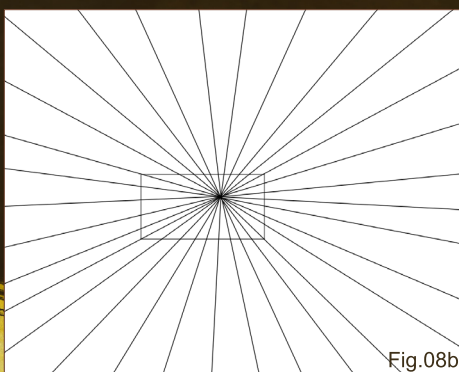


Fig.08b

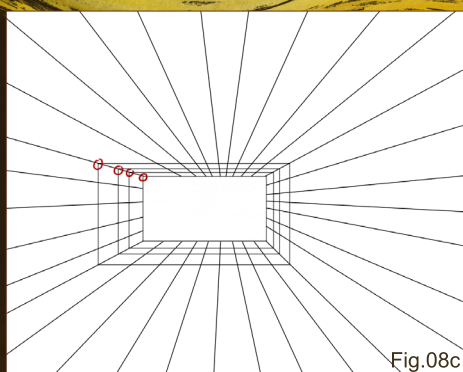


Fig.08c

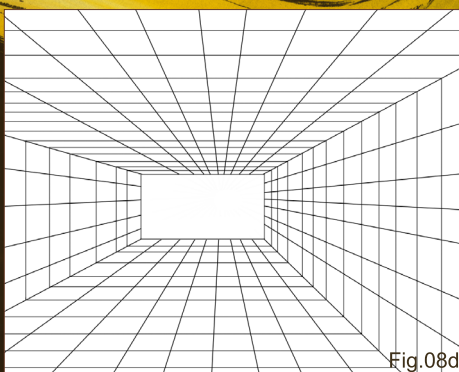


Fig.08d

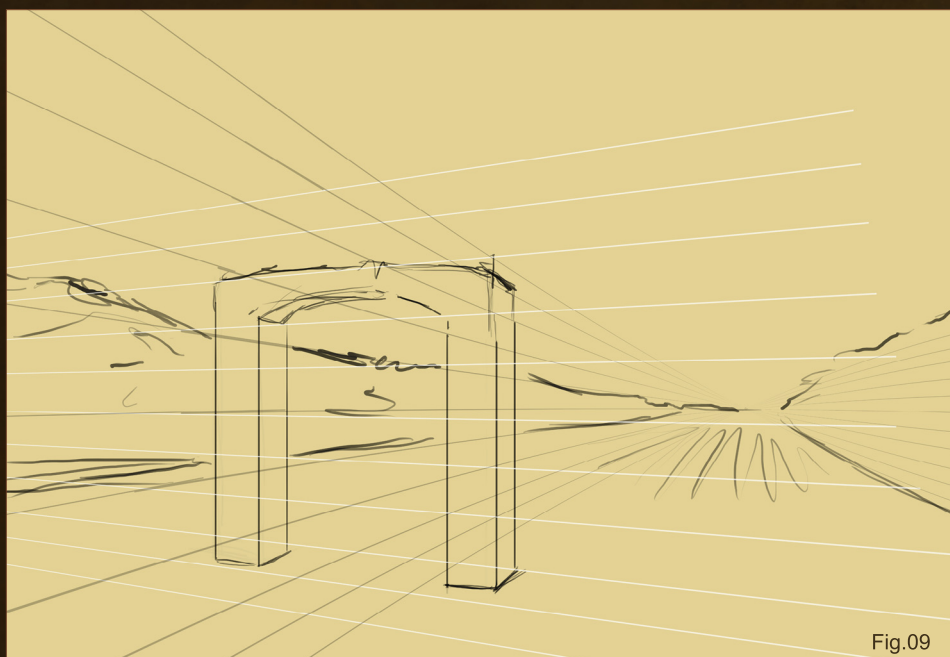


Fig.09

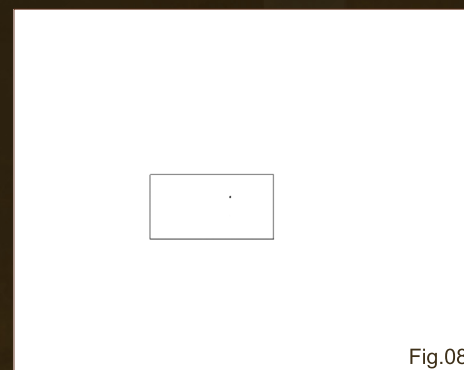


Fig.08

You can erase everything that is within the square, but don't have to. I just find it easier, especially when drawing a room. Next up, draw the vertical and horizontal lines – in essence, bigger and bigger rectangles around your original one, with the corners always touching the same lines as the original rectangle (**Fig.08c**). I suggest drawing the complete rectangle before starting on the next one, as this keeps the corners matching up. The finished result should look like a “mesh room” (**Fig.08d**).

If you've worked on multiple layers for this, or layers were created, you may want to merge all the layers into one to reduce your file size, as well as make it easier to remove the grid later or to adjust its opacity – something that comes in useful when painting and sketching, as those lines can be distracting (for this, I suggest to Merge Visible, after making the Background layer and any other layers you do not want to merge with the grid invisible).

Note: Remember that all vertical lines remain vertical, no matter what your perspective is ... unless you happen to be drawing the leaning tower of Pisa, that is.

Now try and apply a perspective grid to your sketch, according to what you've drawn. In my case it's a bit on the complicated side, as I need a mix of perspective grids for the landscape and the structure, with one of my vanishing points way off the canvas to the left. And yes, it confuses the heck even out of me! But it works (I think) (**Fig.09**).

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You can now refine your sketch according to the grid. I choose only to refine my structure, as the other stuff isn't really bound to straight lines.

When it comes to architectural structures, it is vital to stick to the grid, as otherwise you might end up with something that even MC Escher would be jealous of: totally warped geometry. Think of a structure in 3D, rather than 2D, as demonstrated earlier with the cube. If you are good at working with 3D programs, by all means feel free to make a simple or even detailed model of whatever structure you want in your painting, and add it onto your canvas either as a reference "sketch" or to paint over later. If you are really bad at drawing buildings, or even simple three-dimensional elements, try out Google SketchUp; it's easy to use (it has a video walkthrough when you first start up the program), isn't very big, and also free. If you use something like this just make sure to adjust the perspective of your painting to the perspective of your structure, or else you'll end up with something truly wonky.

Blocking-In!

We are now ready to add the first layer of color. This stage is called "blocking in", as all we'll do is roughly lay the colors down on the canvas in blocks.

The best brushes to use for this are the Hard Round Paintbrush, an even-edged textured brush, or a square brush (either smooth or textured) with

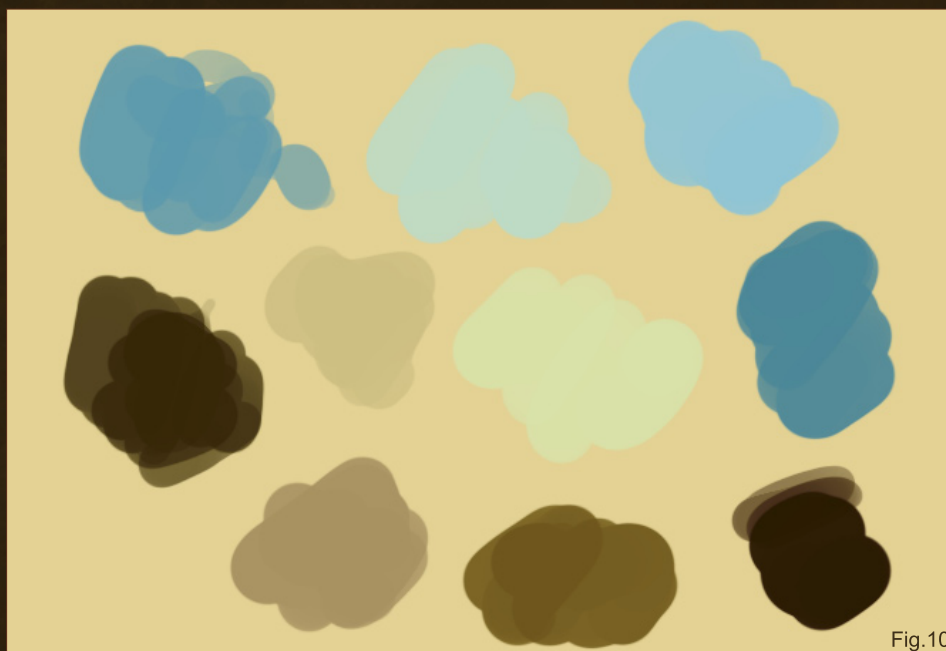


Fig.10

the Size Jitter off, and Opacity Jitter on. You can find a few brushes like this for download at the end of this workshop – simply click on the Free Resources icon again to download them.

Note: *Never (ever!) paint on your sketch layer! Rather paint beneath it, either on your Background layer or on a layer you add beneath the sketch layer. When working on the base of your painting, starting with a landscape or scene, there is no real need to add a new layer, but you may feel more comfortable with it so the choice is yours. I just urge you to not add a new layer for every single object in your painting, as this often ends up with a painting looking very "cut and paste", because the different objects don't really interact with each other.*

If you did a thumbnail sketch, pick the colors from that with your Eyedropper Tool. If you didn't, I suggest you compile a color scheme by picking colors and painting them on a separate canvas (Fig.10), or turning every color you choose into a new swatch (I prefer the first two methods, as I don't work with the Swatches in my usual painting workflow).

Consider your Light Sources

Something to consider when you start blocking in your painting is where the light would be

coming from, and perhaps even whether there will be a second or third light source in the picture, like candles, or a fire, or a lamp? You may have noticed that in my little thumbnail sketch I've already thought about it. But when just starting out, light and shadow can seem very daunting. So let's look at it with a simple example.

Here's a shape, a circle (Fig.11) – nice and flat. To turn this circle into a sphere, it needs light and shadow. Imagine this circle is sitting in the sun in a desert, at around mid-afternoon (Fig.11a); the light would touch it only on one side, casting the other into shadow and also making the new sphere cast a shadow on the ground (Fig.11b).

But what if that one light source is a spotlight, like a desk lamp, and there is not much else in terms of ambient light? Things would change a bit then, as a spotlight is a directional light source casting a single beam (Fig.11c), and according to that the light area would look a bit different, as well as the shadows (Fig.11d).



Fig.11



Fig.11a



Fig.11b



Fig.11c

How about if that sphere sat outside somewhere at night, under a full moon, with a small fire going to keep it nice and cozy (**Fig.11e**)? Both the moon and the fire are light sources, but the fire is much closer than the moon is to the sphere, and so the fire becomes the primary light source casting some warm glowing light and more or less fuzzy shadows. The moon cannot possibly compete with this, but still has an influence on the sphere with a very light and ghostly hint of a glow, but not much in terms of shadows (**Fig.11f**). If the

moon were the setting sun, the shadows from that light source would be much stronger – it is the sun after all – and overlapping with the ones from the fire. And if there are many different light sources casting an ambient light, there wouldn't be much in terms of shadows, just hints here and there where the light doesn't reach.

Taking all this into consideration, we determine our light source for the painting and start blocking in the colors. I want the sun to shine from somewhere on the right, near the horizon, and so cast my shadows accordingly. For the structure I add a new layer, because it will be easier later to work on it without disturbing the landscape (**Fig.12**).



Fig.11d

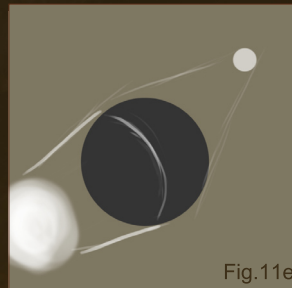


Fig.11e

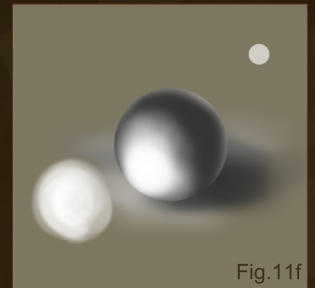


Fig.11f



Fig.12

Instantly, we achieve depth, adding form to the shapes.

We continue refining the scene, ignoring small details for now – you want to get the feel of

the image right first before possibly wasting time on details that later may not work. Start using slightly smaller brushes, and maybe even change the Opacity and Flow manually in the Options Bar to layer our colors like washes, which will automatically make everything blend to a certain degree (**Fig.12a**).

By the way, if you make a mistake simply go into your History palette and either click on the Delete icon (the little trash can at the bottom), or click and drag the steps onto the icon. You can delete multiple steps at once by selecting any one step in the list, and then drag it and the ones below it into the bin – the ones below the selected step will follow automatically. Just make sure to never delete the very top step in your palette, as it will revert the image to its previously saved stage. If you decide that deleting the steps wasn't a good decision after all, you can reverse it by going to Edit > Undo Delete States. This however



Fig.12a

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will only work if you haven't done anything new to your picture yet. The moment you make just a single new brushstroke, the chance of recovering the deleted steps is gone ... Forever. Really!

Note: If you feel fine about using colors straight away, I'd suggest not adding a layer to your canvas but to just fill it with a color that would be a good base for the painting, and then take it from there with broad, rough brushstrokes that you will then refine over the course of the painting. Use the same brushes for this as suggested for blocking in a line sketch.

Stepping back in time...

And last but oh so definitely not least, I need to seriously backtrack all the way to the first chapter of this series for a second, before brining this installment to a close, and rectify something that was brought to my attention by the lovely Lica Rodriguez on deviantART (<http://jlr-lica.deviantart.com>), who was kind enough to point this out to me: Turning colors in images (like photos) into Swatches is possible in Photoshop CS, and this is how you do it:

Open an image/photo – I'm using a picture I took here in South Africa as an example because the color range is rather nice (**Fig.13**). Go to Image > Mode > Indexed Color. A pop-up box will come up (**Fig.13a**) that gives us a few options. The default settings won't do, so here we go to change that: Set the Palette to Local (Perceptual),



Fig.13

change the Colors to whatever number of colors you want. 256 will be the most you can get, and will obviously give you the broadest range of shades. So I'll stick with that. In the drop-down menu of Forced, select None, and uncheck Transparency. Then set your Dither to None, too (**Fig.13b**). Hit OK.

Now, go back into Image > Mode, and select Color Table – another box will pop up showing you your Swatches (**Fig.13c**). Save them. Now you can Load the new set from your Swatches palette menu (click on the small arrows in the top right corner to see the menu), and away you go!

learned this time has stuck. It was quite a lot to digest, but you can always go back and check it up again.

Next time we will be looking at coloring a monochrome painting or sketch, adding to and changing things in a painting, applying different blending methods, as well as using photos – either directly or as brushes in our work. And this is where the freedom of digital painting will truly start ...

FREE RESOURCES



You can see the free brushes in the resources folder that accompanies this ebook.

Conclusion

With this I shall leave you until next chapter, hoping that at least a little bit of what we've

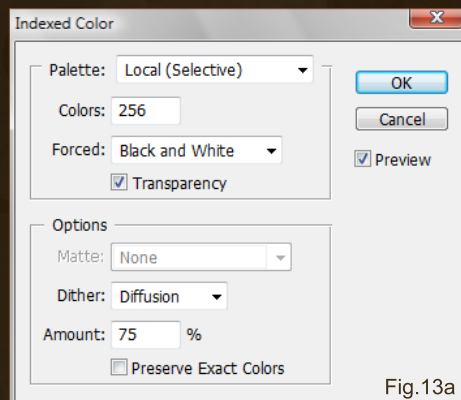


Fig.13a

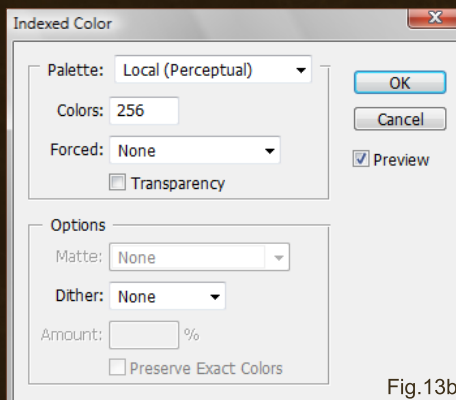


Fig.13b

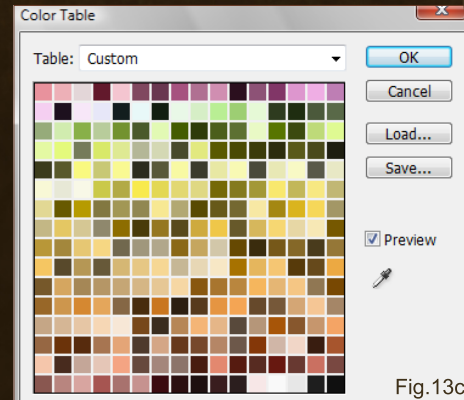


Fig.13c



Chapter 04

Colouring from Greyscale, Colours beyond Blocking-In,
Blending Methods and Using Photos

**FREE
RESOURCES**



You can see the free brushes
in the resources folder that
accompanies this ebook.



Colouring from Greyscale, Colours beyond Blocking-In, Blending Methods and Using Photos - Chapter 4

Software Used: Photoshop

Introduction

This month, let's take a small U-turn and look at another way of starting a painting, as well as at how to color a scanned drawing. We will get back on track afterwards, and continue where we left off, checking out how to really work with colors and make colors work for *you*, different blending methods, adding things to your painting and changing them around if necessary, and using photos directly in your painting (as often done in matte painting).

From Idea to Reality

Color theory, as we saw, can be a very complex, especially when you've not quite got the hang of it and colors still seem like aliens to you; aliens that torture and frustrate you because they simply don't want to work together, no matter what you try. And there goes the painting – a perfectly good one – right out of the window. If only there was a way to do it in a monochromatic color scheme (which most people find easier to work with as it keeps things quite literally black and white) and then make the colors magically appear...

Well, there is!

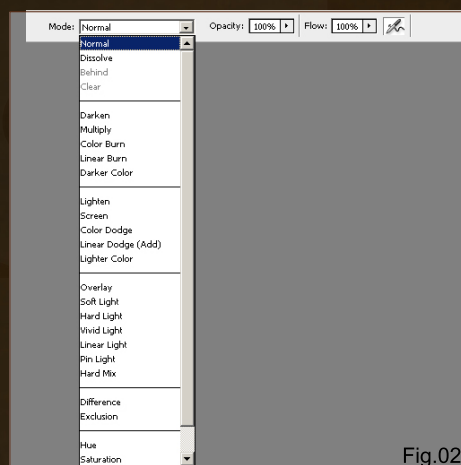


Fig.02



Fig.01

Painting in Grayscale

Let's assume you're really good at shading in black and white (like with charcoal or graphite), and would prefer to start your paintings like that because it's easier for you and lets you concentrate purely on what you're painting or drawing, rather than having to keep color theory in mind at the same time. You would do exactly that, using the same brushes and methods we discussed in the last issue, only you'd do it all in black and white.

Note: You can open a new canvas in Grayscale mode, and you can also change your canvas's mode once open from RGB to Grayscale by going to *Edit > Mode > Grayscale*. This setting is not needed to draw or paint in black and white; it reduces the file size. You can of course switch your canvas to Grayscale Mode if you like – this can be reversed at any time in *Edit > Mode*, but if you intend to color your painting, I'd recommend leaving it as it is on RGB from the start.

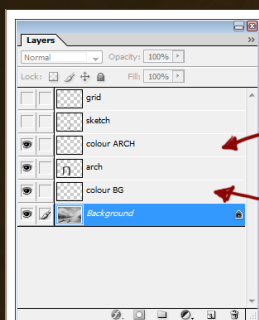
Let's have a look at what we've got (Fig.01). This is simply a desaturated version of the painting we started in the last chapter. To

desaturate a color picture (for whatever reason), just go to *Image > Adjustments > Desaturate*. After doing that, you may have to adjust the Levels slightly, as certain color combinations give you a very dull and muddy grey, washed-out appearance.

The painting is of course still in its early stages, but it will get the point across. In essence, you can finish a painting to the tiniest detail in grayscale, and then do what I'm about to show you...

There are in fact several methods to coloring a black and white image; however, I've found this one to be the most adjustable and thus usable one:

Once you've selected your Paintbrush, change the Mode of your brush – you can do that in the options bar, next to the manual Opacity and Flow settings (Fig.02). The modes that I would suggest are Color (gives you the most true-to-reality color – great for the first layer), Multiply (makes colors darker), Overlay (makes dark colors darker and light ones lighter, while also making them more intense), and Screen (makes colors very bright).



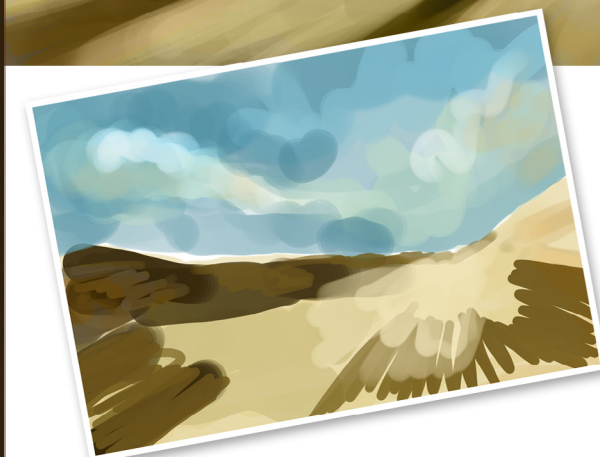
new layers for
both the
arch and the
background for
ease of colouring

Fig.02a

This only works if you do not add additional layers to your painting, but paint the color directly onto your existing layers. If you want to add a new layer to your painting for this, you need to set the new layer's mode to Color, rather than the brush's! If you already have several layers in your image, add a new layer on top of each one of those layers if you want to keep the layers intact. Simply select a layer, and then add a new one. It will automatically be added on top of the selected layer (Fig.02a).

Working with layers here makes it a little more complicated, but might be useful if you think you'd rather play it safe.

So you've got your brush – a biggish, Hard Round one would be good, you've got your Brush Mode set to Color, and you've added your new layer(s). Now choose your colors and paint.



The actual
colour layer

Fig.03

If you're using layers, make sure to keep them separate, as in, don't paint the blue of the sky on the layer that was added on top of the arch, for example (Fig.03).

If you're using layers for the coloring, be careful not to draw over things we want to color on a different layer. In essence, this is a bit like a grown-up coloring book exercise: don't go over the lines! This is easier when not using extra layers, as you can apply the Lock Transparent Pixels function in your Layers Palette for your layers (like the arch).



Fig.03a

Because of the monochrome painting shining through the color layers, there is no need to really think about shadows and highlights at this point. To add some darker or lighter color variations, simply switch your Brush Mode to Multiply, Overlay or Screen, and continue painting, lowering the Opacity of your brush at your leisure. This, again, doesn't work when using extra layers and you'll have to add even more layers with their modes set to Multiply, Overlay or Screen (Fig.03a).

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If you're not happy with the overall color variations, highlights and shadows that you can achieve with this method, you can just add another layer right on top of all your other layers, switch the Brush Mode to Normal, and paint over the areas you want to adjust (**Fig.03b**). You can also merge each of the grayscale layers with its color counterpart, and then continue painting in color in Normal Mode (with or without additional layers).

This same method can be used with color scanned drawings, especially if you would like to keep the line art. You can also do the following with scanned drawings – and this is great if you want to just use the drawing as a sketch that won't be seen in the final picture:

Duplicate the Background Layer by going to Layers > Duplicate Layer – you should now have two layers on your canvas: the Background layer and a layer called Background Copy (**Fig.04**). Now select the Background layer again, go to Select > All, and then go to Edit > Clear. This will clear the Background layer of the drawing and instead fill it with whatever color you have set as your background color (**Fig.04a**). Deselect the canvas (Select > Deselect). Next, select the Background Copy layer again in your Layers Palette, and set it to Multiply in the dropdown menu. You should now be able to see through your drawing onto the background (**Fig.04b**).

Now you can paint beneath the scanned drawing without losing it, add layers beneath it if you want to, and generally



Fig.03b

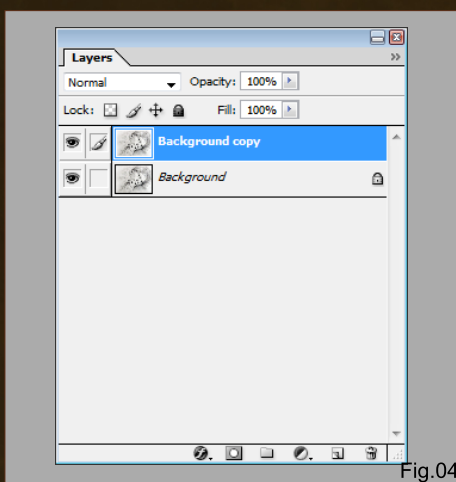


Fig.04

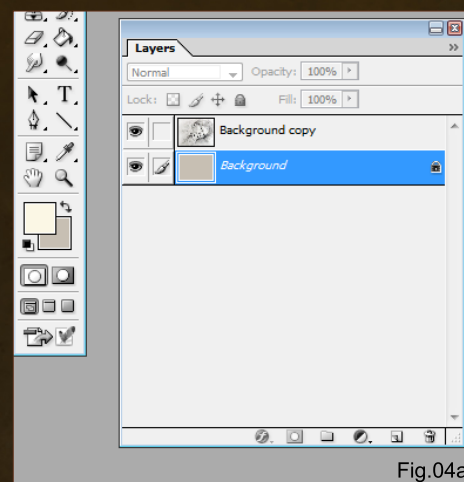


Fig.04a

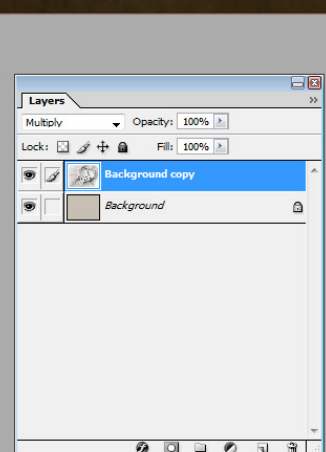
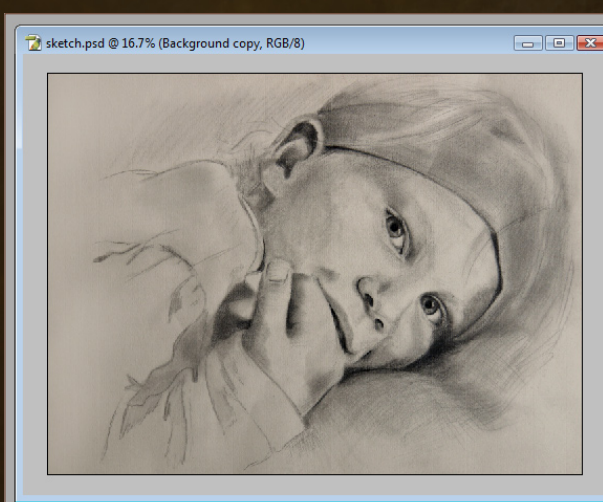


Fig.04b



Fig.04c

do anything you'd normally do with any other digitally created layer (**Fig.04c**).

With this covered, let's head back to where we left off last month.

Painting with Colors

Believe me when I say that I hated painting with colors for quite some time. I just couldn't make them work for me; couldn't get things to look right; couldn't get them to look real, radiant,



iridescent ... Everything had about as much flair as a dull plastic tub!

In the first stages of your painting, that is OK. You want to lay down the basic colors, or even the colors that will be a good base to shine through the ones you later want to add. But at some point, you will have to add color variations, lest you want to end up with the aforementioned plastic tub look, which seems to be a common thing and is due to just choosing lighter and darker shades from the same hue – or worse even, black and white for shadows and highlights.

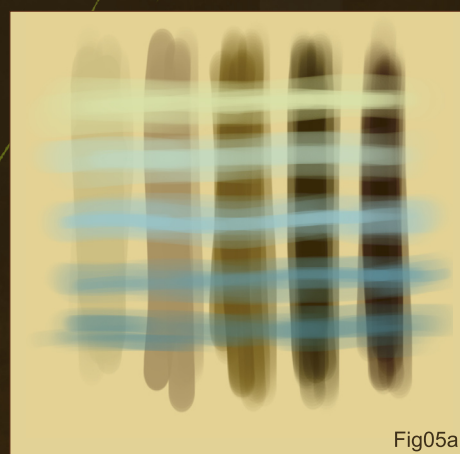
So, what's the best way to address that? – Yes, you do need an eye for colors, and be it just an eye that can tell which two different blues work together, and which don't. Without that, it will be very hard to learn working with colors, as you can only learn so much.

A good way to choose further colors for your painting is to pick the main colors off the painting and paint them in blobs or stripes on a new, small canvas. It works best if you have the colors going from light to dark, or dark to light



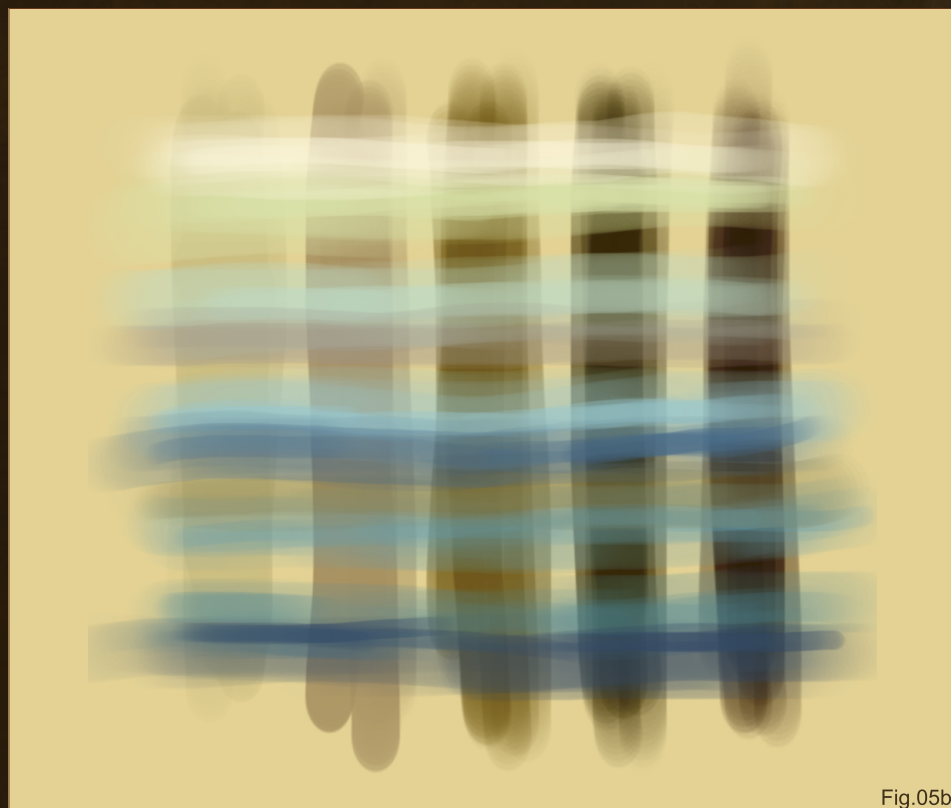
(Fig.05). You may have done this already before you started your painting, and if you have, just open that little image of colors and see where we are going with this.

In this case we have a limited color palette, which is a bit harder to get to look iridescent simply for the lack of “available” colors. Imagine it like having only a set number of paint tubs available; there is only so much you can do with them. The first thing you can do is mix the existing colors to get new hues and shades. Try this by using your Paintbrush and at low Opacity paint with one color over the others (Fig.05a).



You may have noticed this effect when you were blocking in your painting – make use of it and use the colors that appear by picking them off the canvas. You can also add some similar hues into the mix, broadening the palette while still retaining a limited one (Fig.05b). You can do this with any color combination, and see if it works. For fun, you can also pick two random colors, and try and see if you can make them “link” by adding the needed colors in between the two. You can get some really wild but working color schemes that way.

As said before, if it helps you, use references for colors as well, like photos of sky and clouds, deserts and stone structures – whatever you need. Try to avoid picking the colors directly off the photos, though. Sure, it would be easy enough and spare you having to look for the right colors yourself, but if you do that, you'll never learn to do it by yourself. Your eyes will never adjust to seeing colors for what they really are, and where they appear – often in the most unlikely places. Also, zoom in on a photograph on your computer to 300 or 400%. You'll see that what looked like skin color when zoomed out will suddenly be a myriad of different colored pixels – the different colors that make up the skin color in that small part of the photo. If you were to pick a color from the photo, you'd pick one of the many, and later wonder why it still doesn't look quite right, and often still very flat.

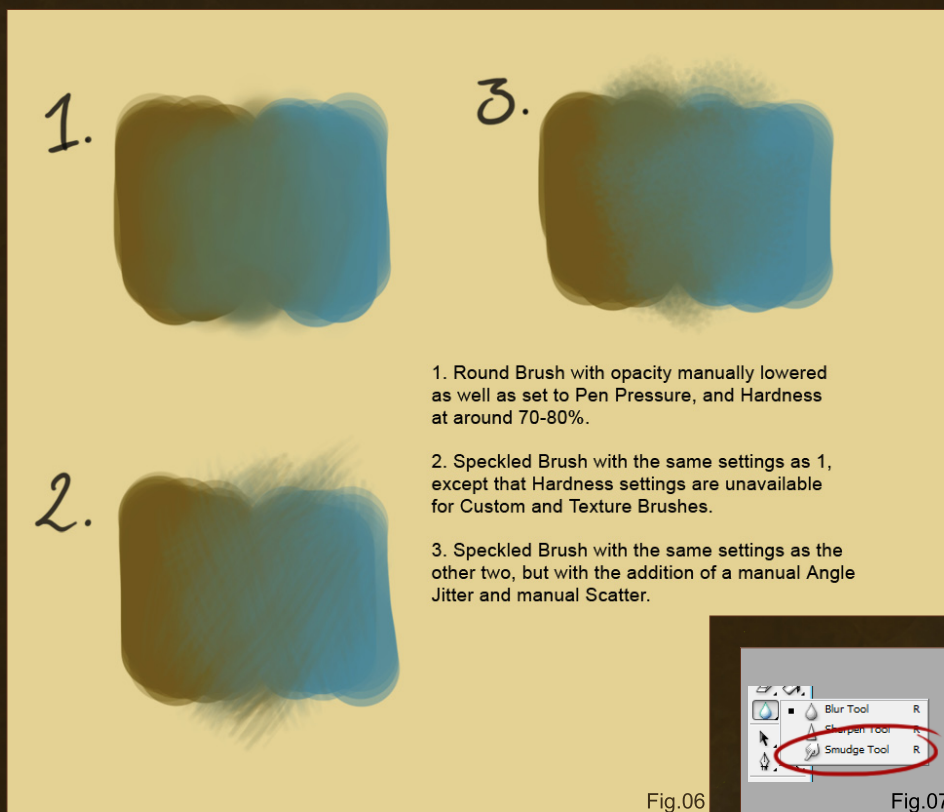


I cannot stress enough how important it is for any painter to learn to see colors, and learn to know what happens when you mix them. Of course, this is a much more vital part in traditional art than it is in digital, but still saves you a lot of trial and error when painting on the computer. It may take some time, but it's worth it. Promise! Just think about it: how great would it be to be able to just paint something, without having to look at references or using help to choose your colors?

So let's get back to the painting once again, and continue refining it, adding more colors and cleaning up some of the mess we've made. I personally like to mainly stick to the round Paintbrush at this stage still, occasionally using some custom brushes to achieve a good amount of texture foundation, with lowered Opacity, as well as having the brush's Opacity Jitter set to Pen Pressure. I just like the wash effect I can achieve with these settings, layering the colors and giving the whole image a more translucent look. If this is not for you, and you prefer solid colors, go ahead! That's great, too.

In both cases, you may want to learn how to blend the colors without making them all muddy and having your shapes lose form – something that easily happens if you blend too vigorously; things become blurry and undefined.

You can either blend with your brush as previously shown, simply by lowering the Opacity sufficiently, and maybe even making the brush a



little bit softer. Not too soft though, as otherwise you'd again end up with blurred mud. You can also change your Brush Tip to a textured brush, or a speckled one, to avoid making it too smooth. Also, rather than just blending with the two colors you want to blend, pick some shades from the canvas that have already been blended – it will give you a better transition (Fig.06).

Another way to blend would be to use the Smudge Tool, which you can find under the Blur Tool (Fig.07). Now, this tool has a very bad reputation – I personally hate it with a passion when it's overused, and overused it is more

often than not – but it can do some good, too. When used with the wrong (or should I say “default”?) settings, it simply pushes the paint around on the canvas, creating something akin to a smudgy batik effect (Fig.07a). Sure, there are some things this is good for, like certain types of clouds, but to make it blend colors properly, we need to change the settings as well as the Brush Tip it uses. I like to use a speckled tip, or otherwise textured and ragged. Next, I apply the following Brush Settings:

The Shape Dynamics are manually set to Angle Jitter with the slider, while all other Shape Dynamics options are off. Scattering is also manually adjusted – to as little or much as I want or need to get a certain result, so play around with this – and Other Dynamics is set to Pen Pressure. These settings give you a result that is much more appealing, while at the same time adding some texture to your work (Fig.07b).

To show some of the process, here are two screen recordings I made while working on the next stage of the painting. They show roughly 40



Fig.07a

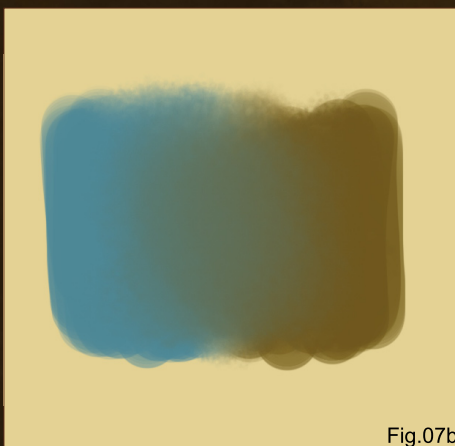


Fig.07b



minutes of work each, shown at 6x their original speed, as this shows the progress much better and also clamps down on file size (**Movie.01 – 02**).

Reviewing and Making Adjustments

After some hours of work, we're ready to review what we've done, in a manner of speaking (**Fig.08**). First of all, I want to adjust the Levels of the painting, as I realize the colors don't quite have the impact I want them to have. Yet! You don't have to do this now, or at all, or can do it whenever you like – the choice is yours.

At this point, it may be a good idea to flip the canvas horizontally, to give you a fresh view on things. This is most important for portraits or general figure paintings, but also helpful for landscapes and cityscapes, too. It can show you where your elements may need some adjustment. As for the composition, this usually works just one way, not the other, as more often than not a composition was put together in a specific way to draw the viewer's eye to certain elements within the painting. Therefore, when flipped, the composition is best left alone. To flip (mirror) the canvas, simply go to Image > Rotate



Fig.08



Fig.08a



Movie.01



Movie.02

Canvas > Flip Canvas Horizontal; depending on your computer and image size, this may take a moment.

I decide to resize the arch to make it a bit bigger. I do this by selecting the layer it's on, and then go to Edit > Free Transform. This will make a box appear around the arch, much

like the box we know from the Cropping Tool (**Fig.08a**). To keep the aspect ratio of your arch – meaning that it will resize all sides the same way – you need to click the little Link icon between the Height and Width in your options bar (**Fig.08b**). Now you can either click inside the Height or Width field and enter a percentage manually, or use your arrow keys to up or down

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the percentage (Fig.08c). Or, simply click the corners of the box and pull or push them to the desired size (Fig.08d).

You can also push and pull on the sides, but this messes with the aspect ratio of the item to be resized. You can also rotate the selection by clicking outside of the corners and turning the box – just like with the Crop Tool. Here you can also adjust the perspective of objects, in case you need to. So it's handy to have the perspective grid layer visible while doing this. You can switch between different Transform Modes while transforming (just go into Edit > Transform to do that). Once you're happy with what you've got, click the tick mark in the options bar, or double-click outside your canvas to apply the transformation.

Flip the canvas back to its original state. If you do something like this to an object that casts shadows, those shadows will have to be adjusted accordingly. In my case, the shadows of the arch are painted on the background, which means I either need to re-paint them, or simply transform them, too. To do this, I select them (well, one at a time) with the Lasso Tool (Fig.08e) by drawing a nice big circle around them – you don't just want to select the shadows

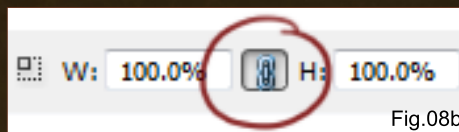


Fig.08b

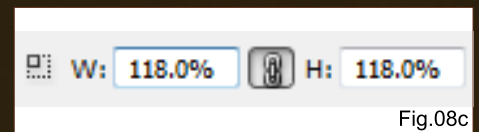


Fig.08c

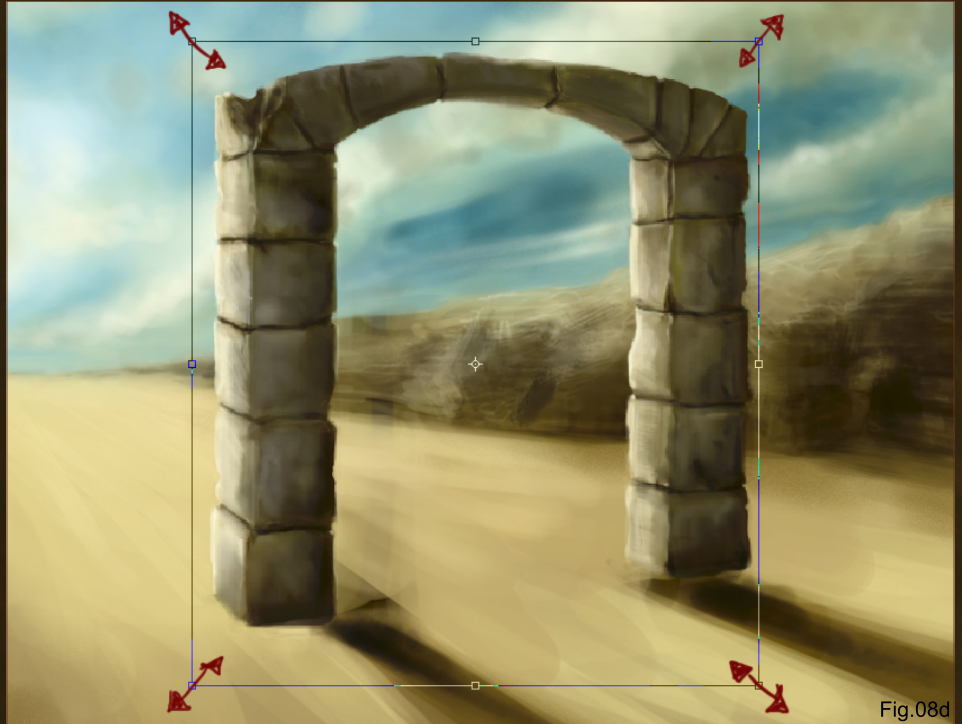


Fig.08d

themselves, but some of the sand as well. Then we go to Edit > Copy, or simply press Ctrl + C, to copy the selection. Then we paste it by either going to Edit > Paste, or by pressing Ctrl + V. This will paste the selection in the same spot you selected it from. Now you can move and transform it the same way as any layer.

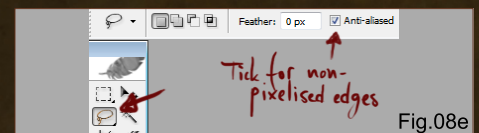


Fig.08e

Sometimes the perspective needs to be changed, and this can be done with either Edit > Transform > Perspective, or Edit > Transform > Skew. Afterwards, erase the hard edges that may be visible of the selection to blend it with the rest, and if necessary paint a little over them where it doesn't quite work. Now go into your Layers Palette and merge the selections with the Background Layer (or whatever layer they should be merged with).

Looking at it a bit longer (in fact stepping away from it for a night), I feel that the whole picture is too open. Sure, it works, but not for what I have in mind. Too much sky, not enough looming rock faces. So I add to them by simply painting over the background. The sky itself needs to be darker, too, and so I paint over that, as well. After an hour of adjustment, we have what you see in Fig.08f.



Fig.08f



Fig.09

Note: By the way, if you are getting tired of zooming in and out all the time, especially when working on a small area to see what it looks like as a whole, you can try this little trick: Go to Window > Arrange > New Window for...

It will open your painting a second time in a new window – this is not a copy, but a clone. If you paint on one, the same brushstrokes will simultaneously appear on the other. Closing one closes the other. So be careful! In any case, you can zoom out of one of your painting windows now, while zooming in on the one you're working on, and see what effect your efforts have on the one you zoomed out. It's pretty cool!

Now, landscapes are nice to look at, but in this one, you may have already noticed that something is definitely missing; something to grab your attention and make you want to look at it more closely.

As mentioned at some point in the last workshop, I consciously laid out the landscape like this, as I have plans, namely to add a figure

into the painting. And if you remember the overlaid Fibonacci Spiral, you will already know where I want the figure to be, and there really is no other place to put one but sitting on top of the arch.

Adding a Character

So, let's add another layer to the painting to sketch the figure. I want it to be a girl, mainly because girls get away with wearing dresses – long flowing dresses at that – which is exactly what I want. If you need references for this, feel free to use them. I had my husband take some photos of me to help me with the pose, as I generally like to have a point of reference for poses I've not drawn before (foreshortening and perspective can be a real pain when it comes to people). Please forgive me for not showing the photos, I'd just like to retain a little bit of dignity...

In any case, just as before, we'll grab the round Paintbrush and sketch the figure on the new layer (Fig.09). I've changed the sketch to white

simply for the benefit of seeing it better here, but I will have it in black once I start working on the colors. You can see I let the dress trail around the arch and off into the distance, which will help draw the viewer's eye from the figure and arch into the distance, to take in the entire scene. It is not necessary to do this, as other elements (or a different composition) can achieve the same thing.

To paint the girl, we add more layers beneath the sketch layer – one beneath the arch layer for the girl and the parts of the dress that are behind the arch, and another one above the arch layer for the dress tendrils – and proceed as we did before with the Hard Round Paintbrush to block in the first few colors.

Here, again, you can choose your color palette before starting to paint. At the first try, I had given her a red/orange/pink dress, because usually this pops the color scheme quite nicely, but in this case it was too much, too distracting,

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and I went with white instead. Now, white is one of those colors – even though it strictly speaking is not a color – that can be hard to get right. Using pure white never works other than for gleaming, punctuated highlights, and even then has to be used with care. To get a white that works well, mix in some surrounding colors of the painting, which in this case is browns and ochre greens, and some blues as well. Her skin tone will mainly be different shades of browns, with some yellow and possibly purple thrown in for good measure (**Movie.03**).

Something you may want to bear in mind when painting people – or objects with a curved surface – is to adjust your brushstrokes to those curves. Rather than making straight strokes, try and follow the curve of an arm or jaw line or fabric fold. It will instantly add form to it.

Reviewing the Painting Once More

We are at a stage now where we can once again review the painting. To get to this stage may take you anything from several hours to several days, depending on your practice.

And it takes just that: practice. If you feel annoyed that you can only work at a slow speed, keep at it, practice, and you will get faster the more intuitive the work becomes. Just don't give up. If you feel yourself getting tired of working on the same painting for days or even weeks, maybe start another one, and when you get tired of that, go back to the one you were working on previously. Find ways to make it interesting, but try and finish your work, as only then you can properly see how much you've learned from one painting to the next. Besides, it feels great to look at a finished painting and be able to say, "I did that!"

While looking the painting over, I still feel something isn't quite right yet, and after stepping away from it for a few hours (always a good thing to do when you feel stuck – go grab a coffee with a friend, or cook or clean) I



Movie.03



Fig.10

realize that it's still the colors that seem a tad too cheerful for my taste, or rather, the purpose of the painting. So I adjust them once more, and also adjust the crop of the scene, which gives me what you see in **Fig.10**.

Note: For details and small things in paintings, using the round Paintbrush with Size Jitter, as well as Opacity Jitter switched to Pen Pressure, is very handy. Sufficiently reducing the Opacity and Flow manually is also helpful, as it will save

you blending too much with the Smudge Tool. I like seeing the texture of brushstrokes, as this gives a painting personality, and with it, a distinct style. Your style!

The "Yucky Stage"

We are far from finished, but this shouldn't deter us. The point the painting is at right now I call the "yucky stage". Everything is there and discernable, but looks kind of crappy. I greatly dislike that stage, because it is so easy to just



Fig.11

give up here and say that it's not worth it. It's frustrating and annoying. You had this great vision in your head, but what you've done so far simply doesn't match up.

Well, as said, we're not done yet. It's cool to change things as you go along, and it's also great to stick to what you've started with. Sometimes paintings need to develop as they are being worked on – and that appears to be the case here. I certainly didn't plan to make that many overhauls, especially not for a workshop, seeing that it can be a bit confusing. Alas, here we are. Maybe it's not all that bad after all, as it shows how versatile Photoshop can be.

This stage is also the one where you can consider using photos in your work. Why now, and not later, is simple: later, it will be quite



Fig.12

hard to work them properly into your painting, or so I found out the first time I did it. (This is the second time, in case you wonder!) Any earlier than this, and there may not be enough definition to a painting yet to see if or how something may work out.

Adding a Sky Photo

I'm not a matte painter and simply haven't got the expertise to properly work a photo into a painting. Also, it doesn't work with my style. These are things to consider when considering working with photos, or not. So I will simply

use a photo of storm clouds I took recently (Fig.11) to add some more interest to the sky, and maybe work out some cloud formations and depth that way.

Bear in mind that this is something that can also be done by just adding various gradients or layers with different colors painted on them to the picture. However, I was asked to demonstrate adding a photo, so here we go: We open the photo we want to use. I already know I want it turned so it's upside down, so I do that right now (Image > Rotate Canvas > 180°). If you don't know yet, that's fine, because you can do that once it's on the painting.

Using the Move Tool, move it over to the painting. In this case, the best thing to do is to put it over the Background (Fig.12). This whole thing would be really easy if I had painted the cliffs on a separate layer, as I could have simply placed the photo between the background and the cliffs, and thus concealing the edges of the photo without much work. However, I only have a background that has everything on it.

To see what I am doing in the next step, I adjust the Mode of the photo layer in the Layers Palette – usually Overlay or Soft Light works



Fig.12a



Fig.12b

a treat – until I can see through it onto the background of the painting. If necessary we can also lower the Opacity a bit.

We can now resize the photo to fit onto the part of the painting we want it on, and we do this by going to Edit > Free Transform. Being able to see through the photo helps me here to see where the cliff edges are, and I need to place and resize the photo so the trees will not be visible later (Fig.12a).

Once I am happy with the placement, I apply the transformation. And now the fun starts!

Keeping the opacity semi-transparent, we pick the Eraser Tool , choose a round and 70% hard Paintbrush, set its Opacity and Flow to Pen Pressure, but leave the Size Jitter switched off. We now can erase all the parts of the photo that go over the cliff edges, and also what sticks out over the horizon line.

Having the bottom edge of the photo exactly touch the horizon line gives the impression that it's pasted on, which is not desirable. You want the photo to blend in with the surroundings.

Zoom in to erase near the edges of things, if you need or want to do that. I choose to keep parts of the photo overlapping with the cliffs, as it lets the colors from the photo spill over to the rocks (Fig.12b). It doesn't matter if it's not all that neat, as everything can be blended in later with the help of the Smudge Tool, as well as being overpainted.

Play around with the settings here, as well as with the colors and lightness/darkness using Variations or Levels – it's amazing how these can affect the outcome! In this case, I decide to duplicate the later and desaturate it. The desaturated layer I set to Normal Mode with 40% Opacity, while the original layer stays on Soft Light, but with only 87% Opacity. I then

move the desaturated layer beneath the Soft Light layer (Fig.12c). Now we can see we still have some erasing to do, but mainly for the desaturated layer, as I still want the Soft Light layer to overlap.

As the original sky is shining through considerably, I smooth it out with a color I pick from the original sky, so the photo cloud formations are more visible. You can make those pop out even more by adding some



Fig.12c



lighter colors where the clouds of the photos are – on the background layer, *not* on the photo (Fig.12d).

Note: As photos often have some kind of grain to them, especially when resized, they need to be edited to blend into a painting better. What I've found is that the Median Filter is very useful for this. You can find it under Filters > Noise > Median. Use a low setting to retain shapes, but get rid of the grain. It will give the photo a somewhat painted and slightly smudgy look. Depending on what you want or need, it can be left as is, or overpainted to give it some more painted definition.

Happy with the result, at least for now, we can choose to leave the layers as they are, or – if you find it slows down Photoshop because the image is getting too big because of all the layers – we can merge them with the background. For the moment, I decide not to merge them, but probably will once I want to work more on the background and overpaint bits and pieces here and there in the sky. For now though, we can turn our attention back to the girl.

Back to the Character

The dress still needs some work, and as the colors of the overall picture have changed, we should work some of those colors into the girl's dress as well – namely the seemingly green-turquoise tint we have floating around all over the place (Fig.13).

Pick it from the canvas, and add it in some selected spots. It looks pretty neat to see it popping up here and there, and it also ties everything together (Fig.13a).

With our color palette adjusted, let's smooth out the fabric tendrils and folds of the dress, though not too much, as we want to keep some kind of texture in there. Very smooth fabric often looks plastic, and simply wouldn't work here. Even when painting shiny silk – this



Fig.12d



Fig.13



Fig.13a



Fig.13b

one I imagine to be soft cotton or maybe raw chiffon – a certain amount of texture has to be retained to make it believable, and to avoid it looking plastic. We do the same with some of the cliffs in the background, to get rid of the very obvious brush marks that are telltale signs of "I used a speckled brush in Photoshop!" Hints of

brushstrokes are cool; obvious unrendered ones are not, when a painting is overall smoothly rendered (Fig.13b).

So what's next? I'd say we just keep painting for now. We've covered all the things we need to know about building up an image, and to go

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on to the next step, our picture needs to be as refined as you want it to be. Therefore, I'll finish this installment off with a few screenshots of the progress the image is making (Fig.14a – d).

In Closure

This certainly was a lot to take in all in one go, but I hope you've enjoyed seeing a painting take shape – in pictures and videos – and learnt a bit about what can be done (and undone) when something doesn't quite work out from the start.

The next chapter will bring us closer to finalizing a painting, and with it, we'll be looking at some nifty tools that come in very useful for all sorts of things, such as the Quick Mask, Extraction and Liquify Tools and Filters. We'll also be learning about using **custom photo texture brushes** in our work to give it that extra little kick!



Fig.14a



Fig.14b

And talking of brushes, you can download the small set I have made for this chapter with some of the brushes I used this time around (click on the **Free Resources** icon). I'm sure you can find a use for them, too!

**FREE
RESOURCES**



You can see the free brushes in the resources folder that accompanies this ebook.



Fig.14c



Fig.14d

**FREE
RESOURCES**



You can see the free brushes
in the resources folder that
accompanies this ebook.

Chapter 05

Quick Masks, Using the Wand Tool, Liquify Filter uses, Layer
Masks – and Painting!



Chapter 5 - Photo Textures, Quick Masks, Using the Wand Tool, Liquify Filter uses, Layer Masks - and Painting!

Software Used: Photoshop

Introduction

We've done so much over the past few months that some of you may probably ask, "What more is there to learn?!" Sure, what we've covered is more than enough to get us by, but there is *always* more. Never, ever believe you're done learning. The moment we stop learning and developing what we already know, we start to stagnate, and to stagnate in art means to ... just disappear.

In this chapter, we'll have a look at utilizing photos as custom brushes to add some cool realistic textures into a painting, and we'll also be looking at some tools that help us isolate and extract elements from images, the Layer Masks, and the rather fun Liquify Filter.

So, let's jump right back into the deep end and continue where we left off in the last chapter!

Fun with Photos and Filters

We've learnt that photos can be useful, as they are in the last installment, but there is another way of working with them that I personally find more appealing (maybe because I just can't "do" photos in paintings and because I like to be able to change as much as I can about things I add): using photographic texture brushes.

Texture Brushes

They are brushes made from photos – and how to make your own brushes we covered in the second chapter of this workshop, so you shouldn't have any problems making your own at this point, either from your own hand-drawn textures or photos, or from royalty free images you download from the internet (3DTotal has released a free texture and reference library filled with royalty free photos which is worth a look: <http://freetextures.3dtotal.com>). There



Fig.01

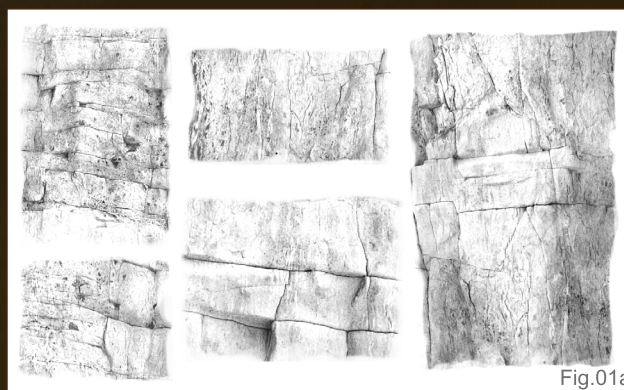


Fig.01a



Fig.02

are also websites out there that offer pre-made royalty free texture brushes, but the ones I've encountered so far have left a lot to be desired. But hey, that doesn't mean there aren't any out there that you may like – I'm just *very* picky!

In this case, we need some marble, stone and rock texture to add a bit more realism, as well as texture to the cliffs and the archway. Of course, the textures can be handpainted onto the picture, but texture brushes make the job a lot easier and less time-consuming, and this technique is a widely used practice.

Here's a photo I got from CGTextures.com (Fig.01). This one we'll be using for the cliffs. I've turned it into several brushes (Fig.01a) ready to be used. Of course, one brush would

be perfectly fine, but to get a less "patterned" texture, several brushes are best as they won't form an obvious repeat in the texture.

So let's add a new layer over the cliffs. This is very important as you will want to be able to adjust the textures to your liking, and this works best on a separate layer. For once, no brush settings are required – just don't un-tick the Spacing. The texture has to remain upright, so no Angle Jitter for variation of texture needs to be applied, although a minimal jitter set manually might be beneficial. Do away with the Opacity Jitter as well – both manual and Pen Pressure – as we won't be painting, but stamping. That's right; just like with a normal stamp.

We start on one side of the picture – if it's the side closest to the viewer, make sure the brush is nice and big, as the cliffs are bigger here. If it's the side furthest away from us, make the brush small. Keeping the brush at one size throughout would give you a texture that doesn't adhere to the perspective of the image. So manually change the size a few times the further you go along the cliff walls. Also, instead of one, you may want to add more layers as you go along, if you are really meticulous, so you can erase overlapping parts from the different rock faces. Layers are necessary here because it is almost impossible to not go over the edges of things in some places, and you will want to erase those bits without destroying other parts of the texture. Another thing is to rotate the brush here and there to get the angle you need to work with your perspective – especially when using brushes like these that have lines in them. This is very important! It's OK if it's not spot-on, as the texture won't be quite that obvious later on (Fig.02).

When we're done, we merge the texture layers and set to erasing the bits that go over the cliff edges (Round Brush, Opacity to Pen Pressure, Size Jitter off), then make the Eraser brush really soft and also manually reduce the Opacity, as we're about to tune down the texture the towards the horizon (Fig.03). Sometimes it helps to reduce the Opacity of the layer while erasing to better see where the edges are that you don't want to go over with your Eraser.



Fig.05



Fig.03



Fig.04

We can now set the layer mode to Overlay or Soft Light, depending on what works best, and reduce the Opacity as needed, if needed. Sometimes you may need to Duplicate the layer to get a better result, or you may want to change the color of the texture in some parts (to do that, Lock Transparent Pixels and paint over the texture where you want – don't forget to Unlock Transparent Pixels afterwards) (Fig.04).

It looks quite promising already, and we'll be doing some tweaking to it all later.

Note: Just like with adding photos into paintings, it may be beneficial to apply the Median Filter to make it work better with your painting style. Not too much though, as you will want to be able to see the texture for what it is.

For now though we repeat the whole procedure for the other side (Fig.05), and then move onto the archway. This one I want to look a bit like marble. I'd already made some marble brushes from photos from CGTextures.com a while ago for another painting, so I'll be reusing them here



Fig.06

with a couple of stone textures thrown in for good measure (Fig.06).

It's the same procedure as with the rock faces, so we'd better get to work. Again, remember the perspective, and this time also the fact that it's separate marble blocks, so the texture won't extend from one block to the next. The final result is worth it (Fig.07).

With all the stone textures done we can have a look at the ground. It is sand, which doesn't really need texturing all that much, but a little bit of texture would be nice to compliment the well-



Fig.07

textured rock faces and archway. For this I won't be looking at sand photos, but water images. Of course sand images work too, but something about this particular water image (Fig.08) – again from CGTextures.com – struck me as great for this use. This shows again that, if you want textures, you don't need to look for specific images – anything can be used to texture virtually anything. Just use your imagination!



Fig.08

We make a brush again for this, as using the photo as is would be a bit too crass. This time, no modification is necessary, as I want the whole photo for my texture. Of course, we

could cut up the image again and use separate brushes to texture the ground, but it isn't really needed here. We just add a new layer over the background, stamp the brush on it once, and then transform it in size and perspective to match the painting. We erase, as before, all those areas that stick out over the ground, set the layer to Soft Light or Overlay, apply the Median Filter, and there we have it (Fig.09).



Fig.09

Note: Merge layers that you are done working on to reduce the file size. Just bear in mind that layers which have been set to any other Mode than Normal cannot be merged on their own without losing the Mode setting they are in. Also, they cannot be merged with another semi-transparent layer, even if that layer is set to Normal. The results are never quite the same. Try it and you'll see what I mean. Merging texture layers with objects such as the arch or the background works, so do it if you feel that Photoshop is lagging.



So what's next? Maybe you wish to add some detail or embellishment to the dress. How about some embroidery or brocade? Lace, maybe?

One way of adding any of the before-mentioned to fabric is to once again paint it by hand. This is a very time consuming process, and may not be to your liking. Another way of doing it is to draw a pattern on a separate document, and then convert it into a brush to be used in the same way as we've used the brushes before.

You could also use photos of lace and such to convert into brushes. When making continuous brushes – such as for lace borders – make sure the pattern you are using can be “stitched”, meaning that the ends of the pattern match up. Then simply set your brush settings so the spacing of the brush is in keeping with the length of the lace segments (Fig.10). This is not necessary for a repeat pattern that uses a standalone image (Fig.10a).

In this case, let's have a look at adding brocade all over the dress. There are two ways of doing this after adding a new layer. You can either set your brush to rotate manually and hope for the best (Fig.11), or you can stamp your brush once on the new layer and then keep duplicating the layer and transforming the pattern to your liking – it's much more controlled this way. The procedure is

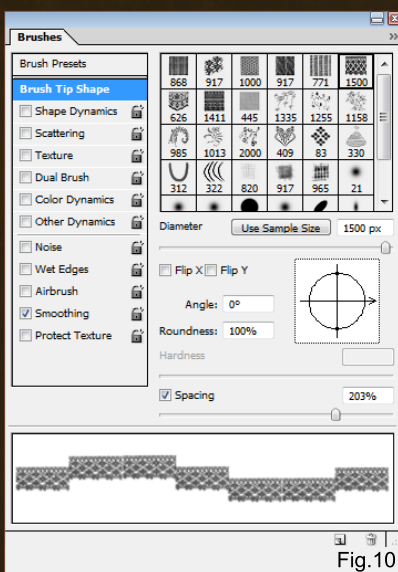


Fig.10



Fig.10a

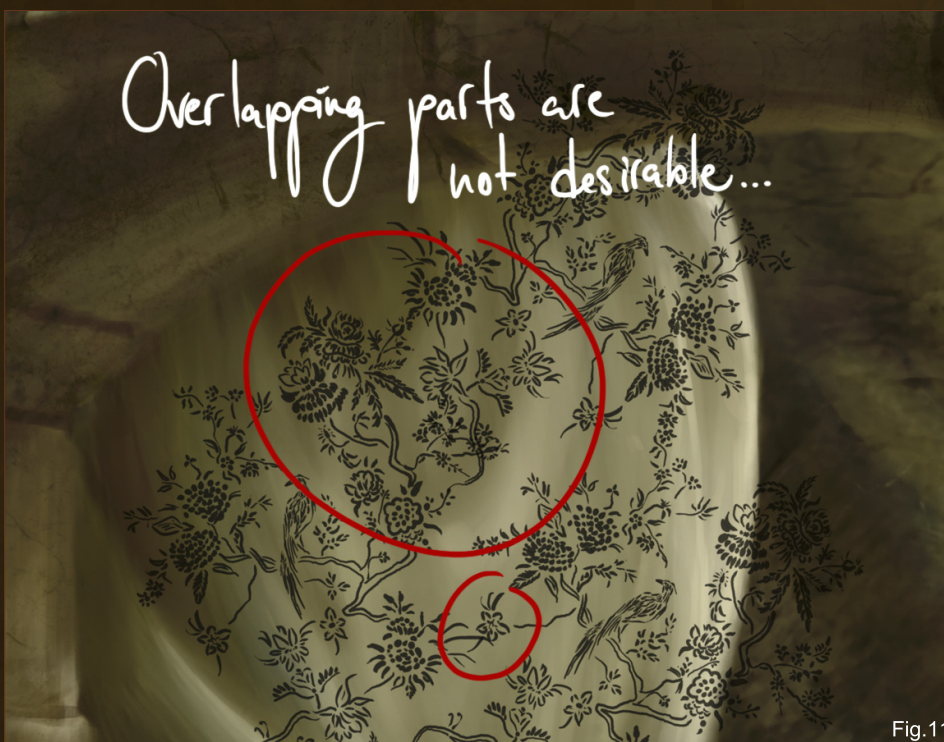


Fig.11



Fig.11a

the same as it was with the rock faces, only this time we are dealing with fabric folds. Where the fabric overlaps, make sure the pattern doesn't spill from one side to the other. Erase those bits that do spill over, but don't for now erase the bits that go over the outside edges of the dress (Fig.11a). Merge all the pattern layers. Now we are done with this, the fun begins!

The Liquify Filter

Right now the pattern is flat, looking as if projected onto the dress rather than being part of it. To make it look like it is part of it we need



Fig.12

to make it curve and twist with the folds and flow of the dress. This can be easily done with the Liquify Filter – you can find it under Filter > Liquify.

This filter is almost a program all by itself, and you can do some seriously fun stuff with it. For now though, let's just concentrate on the task at hand. As the painting is rather big, but we only want to liquefy a small portion of it, the

best thing to do is to select the area we want to liquefy using the Marquee Tool. Make sure to get all parts of the pattern into your selection, and also that you have selected the layer the pattern is on. Now open the Liquify Filter (Fig.12).

You can see in Fig.12 what settings I've selected for this part. The Brush size depends on how big or small a part you need to liquefy,



Fig.12a

so change it when and if necessary. This brush is not quite like a paintbrush, and we won't be doing any painting with it; we'll be using it like we'd use our fingers to mould clay or push putty into window frames, with short strokes, pushing the pattern into or over the folds (Fig.12a). Sometimes it is a bit hard to see where you're pushing your pattern, but that's OK because you can repeat the Liquify process a few times until you're happy with the result (Fig.12b).

And now you see the reason why it is important to leave the pattern spilling over the edges for this: because it can get pulled quite a bit, and if it were already erased you'd end up with gaps around the edges.



Fig.12b

Note: The Liquify Filter can be used for all sorts of things, from molding fabric patterns to adjusting facial features on your character. And as said, you can do some really funky – and also creepy – stuff with it. The Forward Warp Tool we've been using here is probably the least psychedelic one. Try out the others – it's especially funny on portrait photos!

We can now erase the bits going over the edges and adjust the Opacity and mode of the pattern to our liking. We can of course also change the color by painting over it (Lock Transparent Pixels) and apply the Median Filter if necessary (**Fig.13**).

With all these textures done, we're really close to finishing the painting. The rest is detailing, like adding shadows: the cliffs and archway are already casting shadows on the ground; the dress tendrils, however, are not. We should rectify that now. Make sure to keep the light source in mind, and how far the tendrils are off the ground (**Fig.14**). According to that, we paint the shadows on the ground – preferably on another layer so they can be modified more easily without destroying the ground texture (**Fig.14a**).

Right, that's done then!



Fig.13

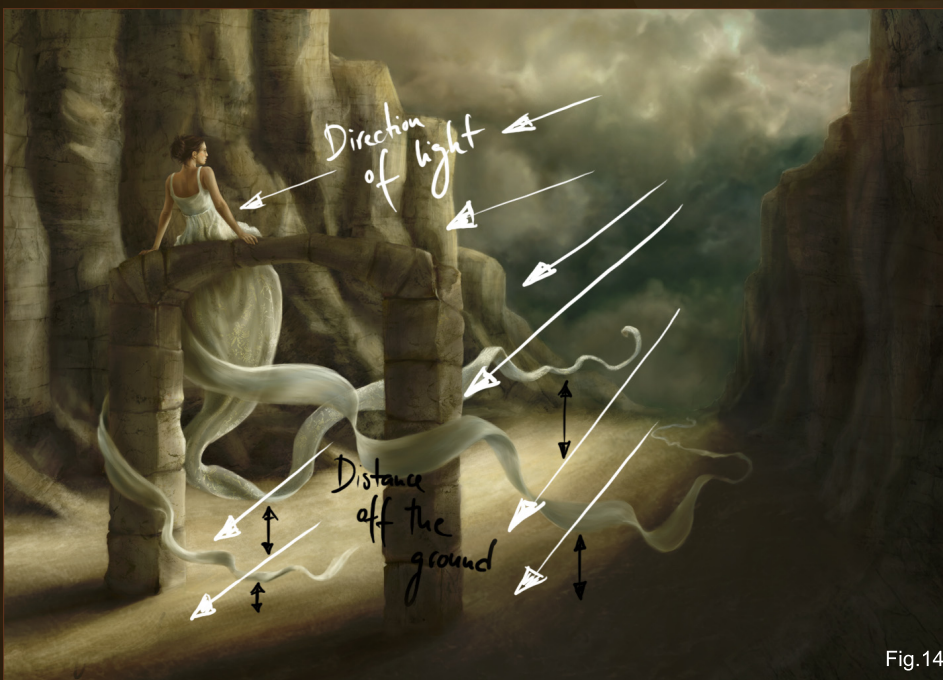


Fig.14



Fig.14a

Photo Manipulation and Matte Painting

We will have to leave the painting for a while now, as I would like to go through some other things that have nothing much to do with this, mainly for those of you who want to try their hand at photo manipulation, or matte painting.

When looking at really well-done photo manipulations, you'll sometimes wonder how they did it. And besides that, how did they manage to cut out all those small bits and



pieces that must have been from several different photos, and manage to make them work so well together? There's no trace of the tell tale "cut and paste" halo (an obvious edge that is either too harsh or too soft around the individually cut and pasted items), and no difference in color either, which one would expect from objects coming from several different photos.

Well, we're about to find out. The techniques are surprisingly simple, though they do take their share of time to get perfectly right, even for a seasoned artist.

It may be interesting for some of you to know that I actually started with photo manipulation, back in 1998 with Photoshop 5, on a wee-laptop with a shoddy mouse. It was all very rudimentary, but I think it paved the way for me to go into painting. Already having gotten to know many of the tools was really helpful. Anyway, let's see what my brain can still call up from back then ... using the tools of today.

So, here's a photo that I took in Rome of the ruins of the Temple of Saturn at the Forum Romanum (Fig.15). We want the structure, but we don't want the background. Now, once again, there are several ways of cutting an object (or person, for that matter) out of a photo. None of these will be quicker than others; it's just a matter of preference.

We could duplicate the layer, clear the background, and then use the Eraser to erase everything but what we want to keep. This



Fig.17



Fig.15

is probably the most widely-used method. The brush to use for this would be the default round brush, with Hardness set to something between 90 and 100%, slightly softer for things such as feathers or hair.

The Quick Mask Tool

Another way would be to use the Quick Mask Tool.  The icon on the left is your normal mode, the one we're in right now. Clicking the icon on the right enables the Quick Mask mode. When it is on, it will tell you so in the title bar of your image. By double-clicking the icon on the right we get a small window pop up (Fig.16). Here we can change the masking color, as well as decide if we want that color to indicate the masked areas or the selected areas (areas we want to keep). I tend to like the default settings, so let's stick with them.

In essence, this tool is like a very controllable and versatile selection tool. It works with the Brush and Eraser in the same way we'd use the Brush and Eraser while painting. All the brush settings are functional, though I would advise to not set the Brush to Size Jitter or Opacity

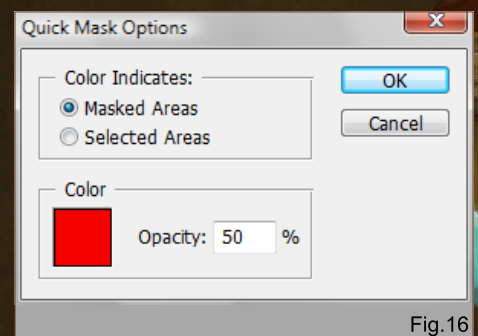


Fig.16

Jitter for the most part, as the Opacity Jitter can be deceiving in this case. It may look like you have covered an area you want to mask completely, but in fact you haven't – it just isn't visible enough. I personally prefer this over the previously mentioned erasing method because you aren't erasing anything, you're simply masking something off and can then choosing to copy or cut out whatever you've masked. The original picture remains unharmed.

So let's try this:

Select a Brush with a size that works for your photo, and just start to cover the areas you want to keep or mask off, depending on your previous selection (Fig.17). I find it easier to first of all

mask off the big areas before getting into the nitty-gritty. Take your time with this; you want it to be as precise as you can possibly get it (Fig.17a).

Once we're done with masking everything, we click on the left Quick Mask icon again to get out of Quick Mask mode. Now our selection should be visible (Fig.17b). Now we can copy the selection, and paste it onto a new canvas, or into a picture we are working on (Fig.17c).

Most of the time it will need some post work, which could be anything from erasing parts that weren't that well masked earlier, color correction, light and shadow correction, the softening of edges, and so on, to make it work with your picture.

The Wand Tool

Another way of cutting pieces out of a photo is using the Wand Tool.  When selected, we



Fig.17a



Fig.17b



Fig.17c

get several options in our options bar (Fig.18). This tool works nicely for clean block colors, but is a lot trickier to use on photos and also doesn't give an all too desirable result. It works by selecting pixels of the same color or color range, depending on the Tolerance. The default Tolerance of 32 is pretty good, but still not good enough for most things.

To use the tool, just hover over your image and then click the image where you want to select something. If you want to select more, hover over the next part you want to select and right-click on it. A small menu pops up (Fig.18a) where you can choose to do several things, most of which are self-explanatory. It's actually best if you try them all to see what they actually do, or don't do. Some of them work when you right-click on an area that hasn't been selected yet (like Add to Selection); others (like Grow, Subtract or Similar) on areas that have already been selected. Feather is something that lets you soften the edges of your selection, almost like a gradual selection (from transparent to

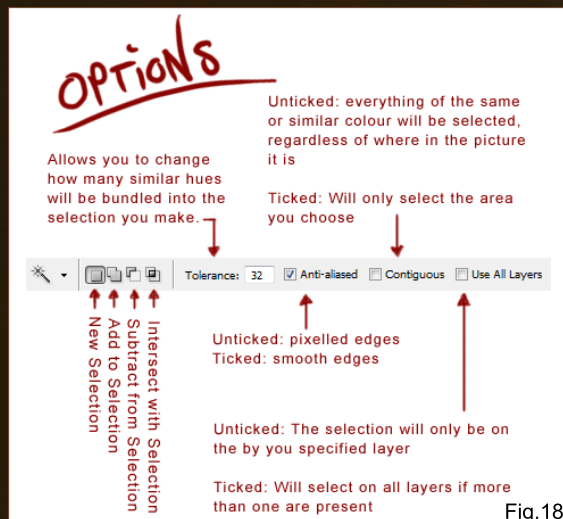


Fig.18

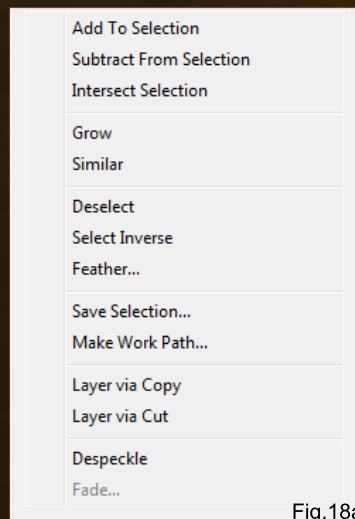


Fig.18a

solid), and you can choose the radius of the feathering. You can also change the Tolerance in-between selecting different areas of a picture.

When you're done selecting things you can copy or cut your selection (or Inverse your selection – Select > Inverse – before cutting or copying, depending on whether you've been selecting bits you don't want to keep, or not), and paste it onto your picture.

The Extract Tool

And then there is yet another way of extracting something from a photo: with the Extract Filter. You can find it under Filter > Extract. Just like the Liquify Filter, this is a bit like a program in its own right (Fig.19).

To work with it, simply select the size of your Brush and choose if you want it to be smart highlighting or not, and then trace around the edges of the object you want to extract from the picture, making sure that they are covered (Fig.19a). Then select the Paint Bucket Tool and click on the inside of the highlighted area. If your whole picture goes blue, there's

a gap in the highlighted line – try to find it, fix it, and fill it again with the Paint Bucket Tool (Fig.19b). Once it is filled you can choose to preview your selection. If you are happy with it, hit the OK button and your selection will be extracted (Fig.19c). This may need some post work as well, and just because it looks like a faster method of extracting something, it isn't,



Fig.19

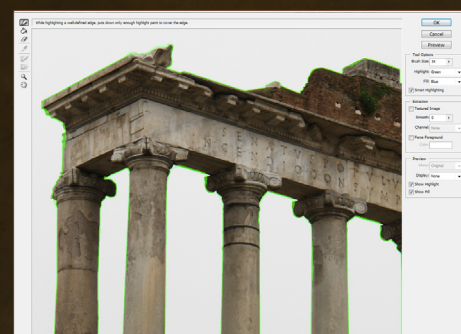


Fig.19a

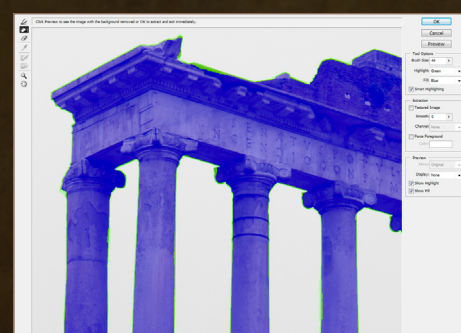


Fig.19b



Fig.19c

really. Precision and patience are still needed when using this.

Note: Something to bear in mind when working with photos is to use images that are similar in light and color. It is much easier then to make everything look "together", and you can change the colors and lighting in the post-production stage.

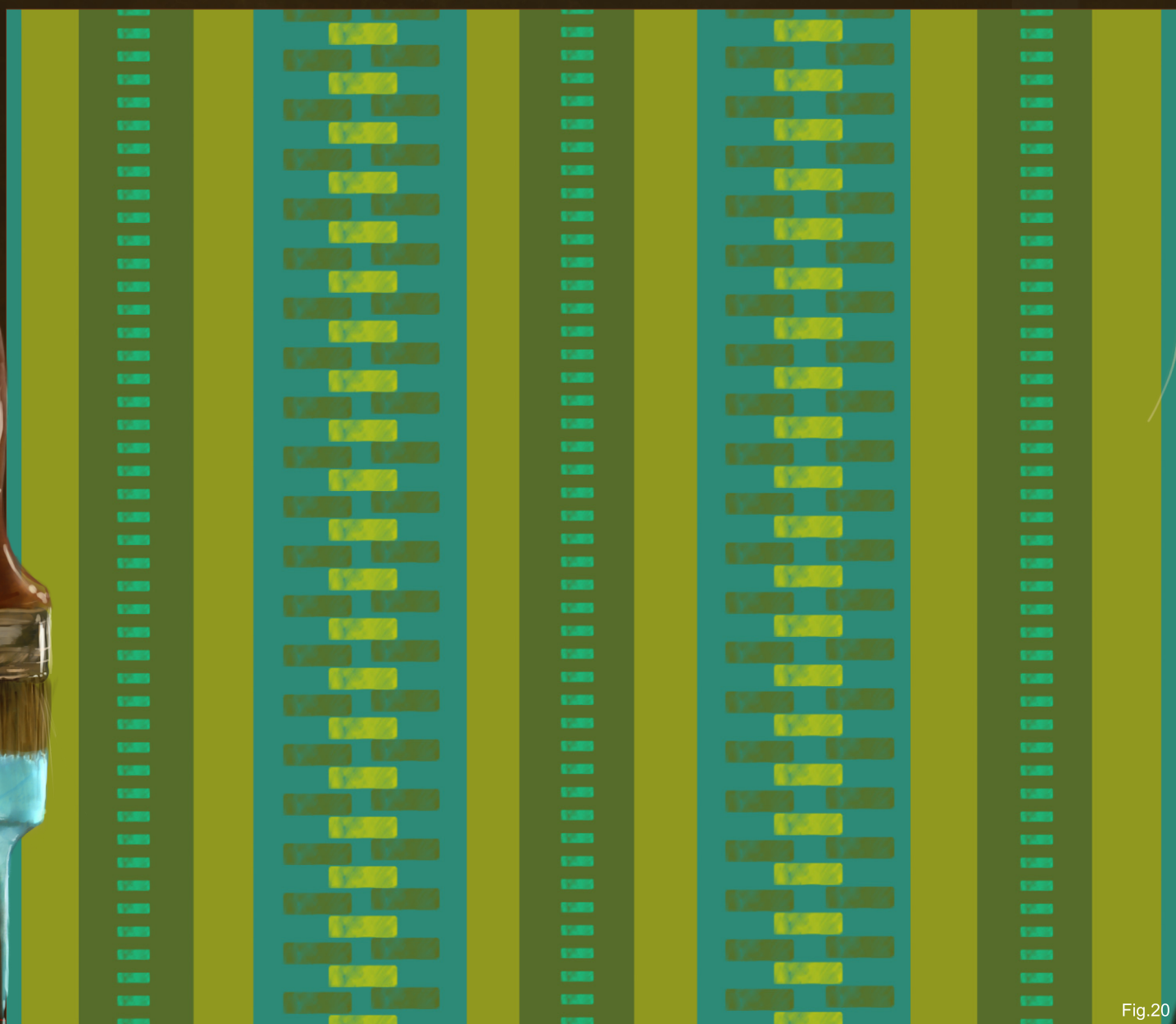


Fig.20

Layer Masks

There is another tool that can be very useful for photo manipulation. Let's assume you want to add glass into your picture – be that a glass or just glass, like windows and the like. Glass is generally transparent, which means that whatever is behind it shows through it. The same goes for liquid, or a glass with liquid in it. Sounds tricky, right? – Not quite!

The best method (that I've found) is to use the Layer Mask for tasks like this. You can find this tool at the bottom of your layers palette, and it lets you control the level of transparency much more easily than, let's say, the Eraser would.

Essentially it's a bit like those blackboard toys you can get everywhere that are filled with black goop that you can push around to reveal rainbow colors underneath! Or, if you're from my generation, we used to do it with wax pastels – one layer of color, and then another layer of pure black on top.

We'd use a scraper to get the black off and reveal the color, if we were good kids. (If we were bad kids, we'd use mum's baking palette knife.) We can do the same thing in Photoshop with the Layer Masks. Of course, the Eraser would work as well to reveal something that is beneath another solid layer, but using the Layer

Mask gives you more control, and it's easier to revert and undo any mistakes.

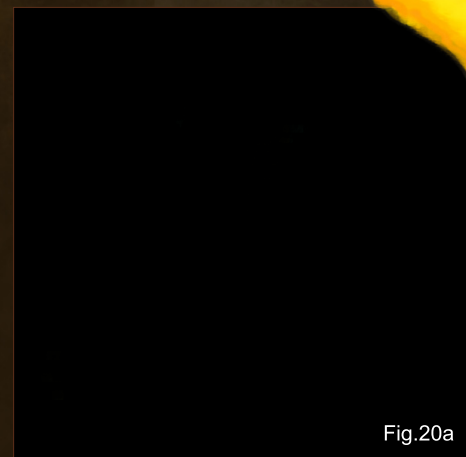


Fig.20a

So, let's play:

Here is a canvas with some random color blobs on it (**Fig.20**). And here is a solid black layer that I added on top of the colors (**Fig.20a**). We click on the Layer Mask icon in the layers palette – make sure your solid color layer is selected when you do this.

You will notice that the little color squares in your tools palette are black and white now. This is because the Layer Masks work with black and white – and any shade of gray in-between – to give you the choice of making something as opaque or transparent as you like.

Select a Brush. You can adjust its settings to your liking and to what works best for the work at hand. We will be painting over the solid color layer to mask it. Using black to paint with essentially unmask whatever is behind the layer; using white masks it. In other words, using black will make things behind the layer visible; white does the opposite. Using any shade of gray in-between achieves varying transparency of the mask, no matter what color the layer is you are using the mask on. Easy! Let's try it (**Fig.21**).

When actually masking glass or transparent liquid, precision is again vital; take your time with it and the result is well worth it.

You can also delete the Layer Mask if you are not happy with it, or just don't want to use it in the end. To do this, drag just the Layer Mask (**Fig.21a**) into the bin in your layers palette – it will ask you if you would like to “apply mask to layer before removing”, and

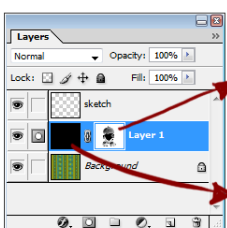


Fig.21a

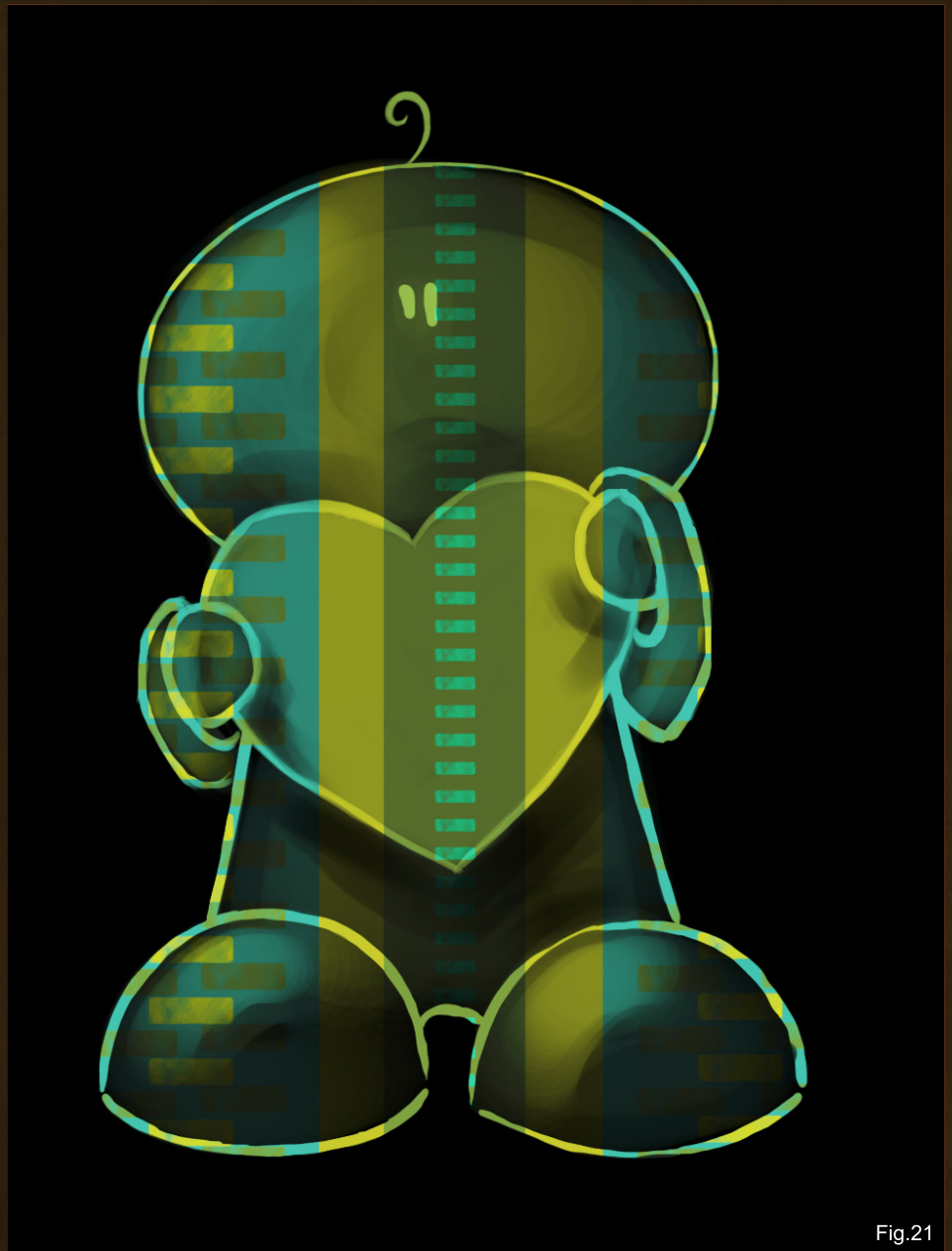


Fig.21

if you don't want to do that, click Discard. If you want to, click Apply, and what was the mask will be imprinted on the actual layer. You can also do this by going to Layer > Remove Layer Mask > Discard/Apply.

By the way, you can still work on the layer itself under the mask if you select the layer itself.

Right, I believe that is it for this chapter!

In Closing...

Next month we'll be looking at the last installment of this series, and with it at the

finishing touches to the painting we started. We'll be covering some more textures, color and in-depth Levels adjustments, a few more filters, and ways to save your picture for internet use as well as print and other media uses.

**FREE
RESOURCES**



You can see the free brushes in the resources folder that accompanies this ebook.

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Chapter 06

The Final Part: Finishing Touches, Filters, the
Unsharpen Mask and Saving your Work

Chapter 6 - The Final Part: Finishing Touches, Filters, the Unsharpen Mask and Saving your Work

Software Used: Photoshop

Introduction

As we are now drawing this six-part tutorial series to a close, we will be adding the final touches to our piece in this final installment. I'm almost sad to see the end of it, as I've rather enjoyed digging through Photoshop and all its quirks and treasure troves, and making it a little more accessible to those who thought "PS" stood for "Post Script" ...

We'll be looking at adding additional lighting and overall textures, how to achieve different kinds of blurs to indicate motion or a focal blur, how to adjust or even change the overall color palette and intensity, and saving the picture for different purposes, like for print or the internet. All in all, this will be a rather short chapter, but no less important than the previous ones.

Happily ever after

Every painting is an adventure, akin to good old fairytales, so what's better than to end one on a good note? We've journeyed from sketchy beginnings to massive changes, battling with tools and forging alliances with filters to refining the elements, and now all that is left to do is to tweak those things that will give the painting that extra special kick!

So let's have a look what we've got so far (**Fig.01**): a painting that looks pretty finished. However, not having looked at it for some time,



Fig.02a



Fig.01



Fig.02

I can notice some flaws in mine that I wish to iron out before attacking the final steps. It really is good sometimes to put a painting aside for a few days, or even weeks. Seeing it with fresh eyes makes you more aware of your mistakes. In this case, I notice that the values are a bit confusing, namely with the arch against the cliff face backdrop.

Switching the image to grayscale (Duplicate image, Flatten, and then Desaturate) shows more clearly where the values are off (**Fig.02**), and we should address that. Just lightening the

parts of the cliff face a little does the trick, using the Brush Tool and picking color off the rocks. We will do the same with the arch, darkening it slightly in those places (**Fig.02a**). If we now check the values in grayscale again, we see it's less muddled (**Fig.02b**). There are still some parts that can use a value boost, but we will look at that in a minute, or else we'll end up over- and re-painting the whole picture.

Something that the painting is distinctly lacking is light. Sure, there are light and shadowed areas, but no actual, visible light – it's all very

murky right now. We determined a few chapters ago where the light source is and painted the shadows accordingly. So now let's actually add that light.

Instead of painting a sun, we will be painting the glow of the sun that has to be somewhere towards the top right of the image, clearly illuminating the left rock faces and the girl on the arch. As there are no harsh shadows though, there cannot be direct sunlight, but rather an indirect haze filtering through the clouds, strong enough to cast distinct shadows.

One of the ways to go about doing that is to add a new layer right on top of everything, and set it to Soft Light or Overlay. Picking a nice, bright yellow (Fig.03) and choosing a very Soft Round Brush with Opacity set to Pen Pressure and Size Jitter switched off, we gently paint over the areas that we want to have a glow

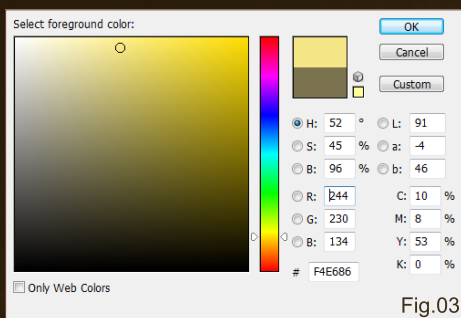


Fig.03



Fig.02b

(Fig.04 – 04a). Changing the hue slightly here and there works nicely to give the light some color variation, even if it isn't all that noticeable, and adjusting the Opacity of the layer also helps.

Once again, more and stronger light can and will be added later. I've found that once an image is finalized and all adjustments made, it can be beneficial to repeat this step to get much more vivid and visible results.



Fig.04

So what's next? Blurring

Looking at the scene, we have to assume that a wind is blowing, seeing that the dress tendrils are happily floating and curling in the air. This is all well and good, but maybe we should make this slightly more believable?

What happens when you take a photo of a fast moving object in low light conditions? – Exactly! You get a blur. This is often very undesirable for photos, but very useful for paintings as it lends them a touch of heightened realism. There are several ways of going about adding blurs, but for a Motion Blur the filter of the same name works wonderfully, if used with care.

The tendrils that we want to add some motion blur to would be mainly the central one, floating off into the distance. The first thing we need to do, before doing anything else, is merge the brocade pattern layer with the dress layer, if we haven't done so already. Sometimes, this is not



Fig.04a



Fig.05

possible for various reasons; if that is the case, the steps I'm about to explain will have to be repeated for the pattern layer. If that isn't done, we'd end up with a moving piece of fabric but a very static pattern!

We select the Lasso Tool and set its Feathering to something quite high; the reason being that if we don't, we'll get a definite break in the fabric where it goes from static to blurred, and that's not very pretty. Instead of the Lasso Tool, we can also use the Quick Mask with a very Soft Round Brush. It's all down to preference. In this case it's all very easy, as the tendrils that go over the arch are on a different layer than the one we need to blur, which means no painstaking selection process – we just select a nice and wide area around the tendril in question (Fig.05).

We then go to Filter > Blur > Motion Blur. A little box will pop up (Fig.05a). If Preview isn't ticked, tick it, because it will give you a real-time preview of the blur on the painting as you adjust it in the filter settings. If you cannot see anything in the small window but gray and white squares, drag its contents around until you see your layer. The Angle should be adjusted according to the direction of movement – we can do this by just turning the little wheel. And the slider at the bottom gives us control over the intensity of the blur. When we are happy with our selections, we hit OK.

Note: Sometimes it works out best if the layer that is to be blurred is duplicated prior to blurring, and only the duplicate is blurred, while the original remains clear. Adjusting the Opacity of both layers in that case can be beneficial,

and gives you a nice "clearly visible but moving" effect. A similar effect can be achieved by just using one layer, blurring it, and then going to Edit > Fade, to reduce the blur as much or as little as is desirable.

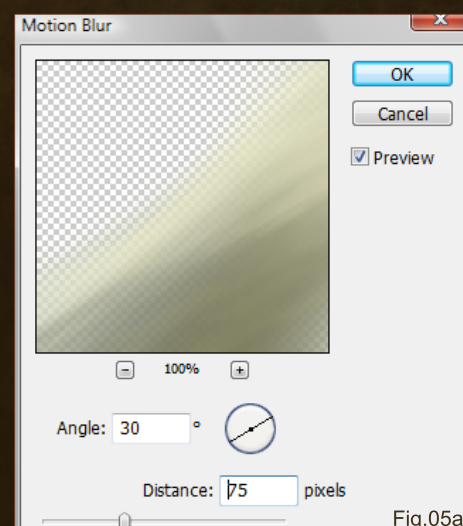


Fig.05a



We repeat this process with the other tendrils, as needed (**Fig.05b**).

Another blur filter that can come in useful sometimes – and again, if used with great care – is Gaussian Blur. It is not so good for indicating motion blur, as it simply diffuses whatever it is that's being blurred, rather than giving it a directional blur. It can be useful for focal blurring – like blurring parts of a person that are not meant to be in focus (especially long flowing hair and out of focus body parts), or the horizon line of landscapes. The latter, however, I have found to be too much most of the time, but that is personal preference so it doesn't mean you shouldn't be using it for that. The filter works the same way as Motion Blur, which means there is nothing much to explain or show. You can find Gaussian Blur in Filter > Blur > Gaussian Blur. Try it and see for yourself what effects can be achieved with it.

There is a set of other blur filters still, which I personally never use. Again, this doesn't mean you can't or shouldn't. Play around with them as see what the different blur filters do, and whether you like them or not. However, solely relying on filters to blur



Fig.05b

things for you is a bit of a copout in the grand scheme of things, so learning how to actually paint blurs is very useful.

Of course, there is also the Blur Tool (**Fig.06** - See the icon on the left ) , and used with the default Round (and Soft!) Brush it can be extremely useful for targeted blurring. I've found it to be very useful for making objects appear more part of a scene by blurring the object's edges ever so slightly. Again, not everything in a painting needs that treatment, as sometimes sharp edges is exactly what you want or need. Again, use it with care. Over-blurring something is not very nice!

With this now covered, we are ready to look at final adjustments.

Final Adjustments

Often, we realize after finishing a painting that maybe the contrast is not quite what we'd envisioned, or the colors aren't quite the way we wanted them. There's no need getting panicky or sad over that, as these things can be changed.

Before doing anything, let's just save the painting as it is, then duplicate the image (Image > Duplicate). This way we still have the original

version should we decide our tweaking didn't do much good and we want to start again without having to fully start over.

Note: Depending on what you want to do – whether it's adjust the overall contrast or colors, or just area or level specific things – you may or may not want to flatten the image. This is another reason why it's good to keep the original layered version somewhere safe, in case you aren't happy with it once it's been flattened, adjusted and saved. I've learned that the hard way, so this may just save you repeating my mistakes!

Before I flatten mine, I want to slightly adjust the Levels of the girl, as I feel she's a little too flat in contrast. As I've described the basic use of Levels in a previous chapter, I won't repeat it now (though I will go back to them in a second for some more interesting tweaking). In this case, I simply want to boost the basic Levels, using the sliders (**Fig.07**). Once that's done, I take a leap of faith and flatten the image (Layer > Flatten). Before doing this, checking that everything is in its right place, and there are no bits of texture sticking out anywhere where it shouldn't be, is vital! Trying to fix those things after an image has been flattened is definitely a lot harder, and also more time consuming.



Fig.07

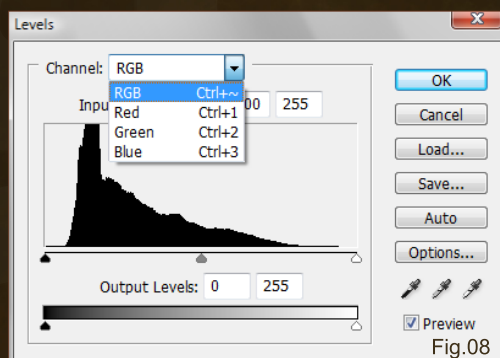


Fig.08

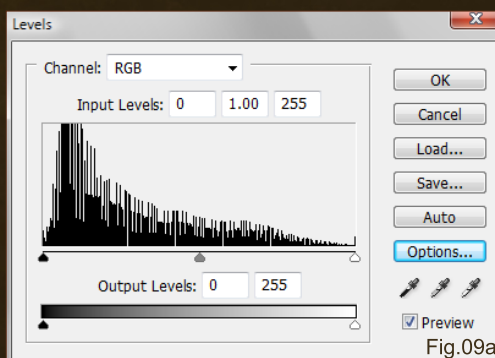


Fig.09a

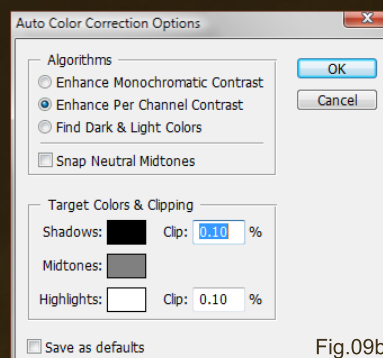


Fig.09b

The first thing I tend to do once I am at this stage is to see if changing the Levels will do any good to the painting. So let's have a closer look at some more options with this little tool (Fig.08).

Using the normal sliders often already gives us enough to play with. But there is more. In the Channel dropdown menu, we can choose to either change the Levels for RGB (Red, Green, and Blue) altogether or select one channel at a time and adjust it to our liking (Fig.08). And that isn't all. If you look at the buttons on the right, there is one called Options; if you click that, you get another box (Fig.09a – b).

Let's go through the settings one by one – they sound complex, but are really easy to understand.

Algorithms

Enhance Monochromatic Contrast – Auto Contrast Option: It adjusts all channels/colors identically, preserving the overall colors of the picture but enhancing the darks and lights (Fig.10a).

Enhance Per Channel Contrast - Auto Levels Option: This maximizes the tonal range in each channel separately, changing the colors quite drastically (Fig.10b).

Find Dark & Light Colors - Auto Colors Option: This one finds the lightest and darkest pixels in the image and uses them to up the contrast (Fig.10c).

Snap Neutral Midtones: Tick this if you want Photoshop to find a nearly neutral color in the image and adjust the midtone values accordingly.

Target Colors & Clipping

Clicking on the color swatches next to Shadows, Midtones and Highlights lets you change the colors of your Shadows, Midtones and Highlights. This is quite fun to do.



Fig.10a



Fig.10b



Fig.10c

Clip: These specify how much of the darkest (shadows) and lightest (highlights) Photoshop should ignore when identifying for the darkest and lightest pixels in an image. This is done so the highlights and shadows, when auto corrected, won't be too extreme.

And that's that! Once you click OK, the Levels can still be played with, as usual. There are – as always – no rules as to what goes and what doesn't; it's all down to personal taste.

Variations

With the Levels adjusted (**Fig.11**), I always like to see if perhaps the Variations can be played with. You can find those under Image > Adjustments > Variations (**Fig.12**). I've found them to be a brilliant way to adjust, or even totally change, a painting's overall colors. They are really quite self-explanatory as well; we can choose to adjust the Highlights, Midtones or Shadows, both in color as well as in lightness or darkness, and the slider gives us the option to have a drastic (coarse) change, or a subtle (fine) one. We can also change the Saturation of a picture. I'm personally rather fond of the bluish tint displayed in the bottom left corner, and so I play with adjusting that until it works for me



Fig.12a



Fig.11

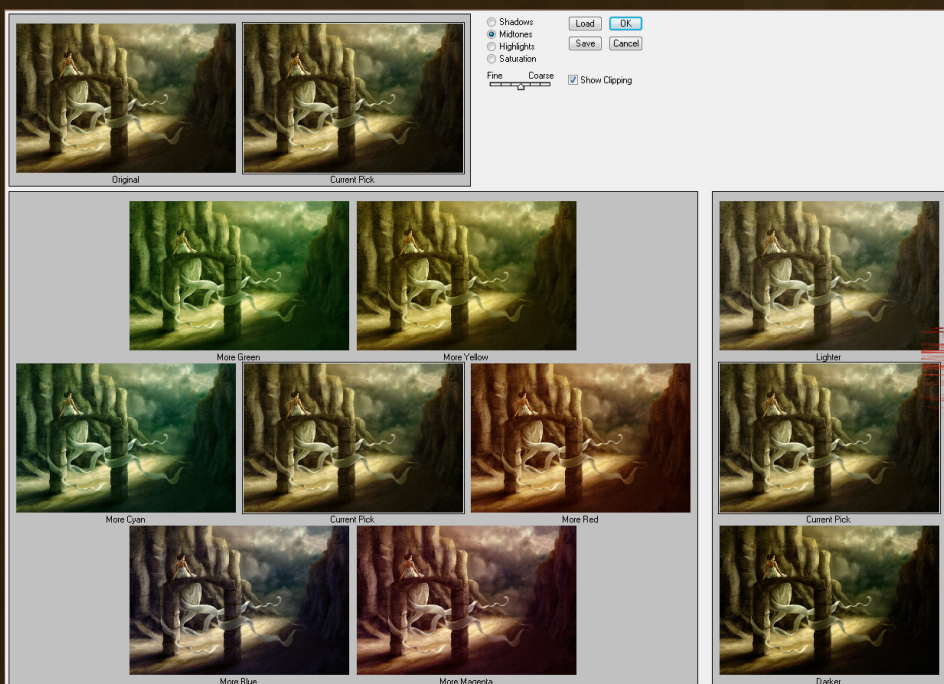


Fig.12

(**Fig.12a**). The warm yellows and browns are lovely to look at, but don't quite match the mood I have in mind after all.

and Absolute options give you either a more subtle result, or something more ... absolute. Play with it – great fun!

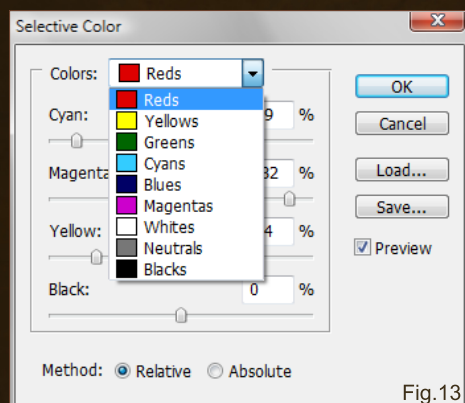


Fig.13

Selective Color

There are many more ways to adjust and change the colors in a finished piece. A very useful option is the Selective Color setting – Image > Adjustments > Selective Color – which lets you adjust colors with targeted precision (**Fig.13**). With the dropdown menu you can choose the color that you want to adjust, and with the sliders you adjust it. The Relative

Curves

There are also the Curves which can help adjust the color and tonal value of a picture. We get the Curves by going to Image > Adjustments > Curves (**Fig.14**). At first this box may look a bit confusing, but giving it a closer look it has many similarities with the Levels Adjustment box. The dropdown menu at the top gives us the choice between RGB, Red, Green and Blue. This

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Chapter 6

means we can adjust either all channels at once or each channel separately. If we are working in CMYK, it will of course give us the CMYK options.

The three eyedroppers at the bottom right are once again there to set the White Point, Gray Point (Midtones), and Black Point, if we wish. And then there is the diagonal line in the box. This line is what we want to play with. The top end of the line is our Highlights, the bottom one the Shadows, and the point right in the center is our Midtones. By moving the line or (imaginary) points on the line, we can change the color and/or values of an image. Try it! Often, just a minor adjustment of the curves is needed to get the desired results.

The two buttons  beneath the curves adjustment box let you adjust the curves by adding points, or draw your own curve. By default, the first button is clicked, and all we need to do to add points on the curve is click on the curvy line! Very easy!

What else? Color Balance

Color Balance is a nice little tool that – just like Variations – lets you adjust the colors of an image. It's one of the easiest tools to use, and to great effect. You can find it under Image > Adjustments > Color Balance (Fig.15). We can choose to adjust the Shadows, Midtones or Highlights, and using the sliders we do exactly that. Moving the sliders more to one color or the other changes

the color more towards the one we slide the slider to. Simple! Un-ticking Preserve Luminosity pretty much dulls down the colors of the image, and it's not always desirable.

Hue/Saturation

And then there is Hue/Saturation, which can also be found in Image > Adjustments > Hue/Saturation (Fig.16). This one is a little bit more complex, but once you get the hang of it, it's quite easy to use – just like everything else! What you need to bear in mind with this one is that no amount of screenshots can show you exactly how it works; you have to play with it yourself to see what it can do.

Keeping the Master setting from the dropdown, all we can do is change the Hue (Color), Saturation (intensity of Color) and Lightness (Shade) of the entire picture. Once we choose a color from the dropdown menu, we are presented with an entire new set of options to play with (Fig.16a). The top sliders keep their purpose, and do exactly what it says on the box. We can completely ignore the bottom sliders that are showing now if we wish to. However, those bottom sliders are quite neat, as we can adjust the range of the color we want to adjust and also slide through the entire spectrum, saving us having to use the drop down menu. Playtime!

Note: For more options and explanations regarding any of these tools, or in fact anything PS has on offer, you may want to check out the *Help* (shortcut: F1) that PS provides!

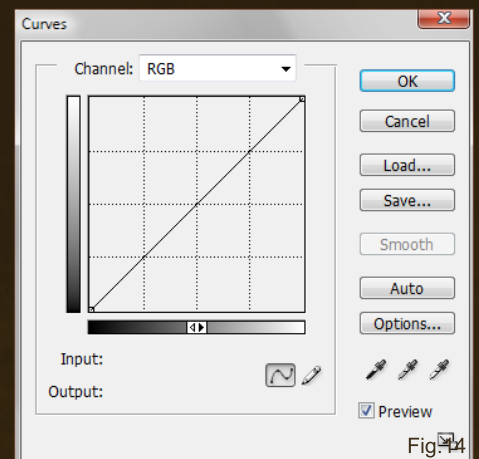


Fig.14

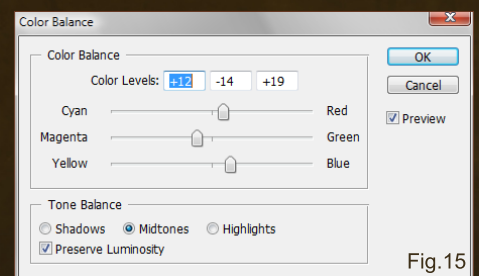


Fig.15

At this point we are essentially finished, but we can once again look at the lighting in our piece. With all the adjusting, the glow we had before may have gone, and the piece may have lost its sense of depth. To fix that, we do what we did before: We add a new layer, and choosing a light color (in this case blue as it won't enhance the yellow, but will balance it out) we paint the light in targeted areas – namely to peel the arch off the cliff face and give the horizon and distant cliffs an out-of-focus haze (Fig.17). We then set the light later to Pin Light and see if it works by adjusting the Opacity sufficiently.

If Pin Light doesn't work at all, Soft Light will do the trick. Using Overlay in this case would just

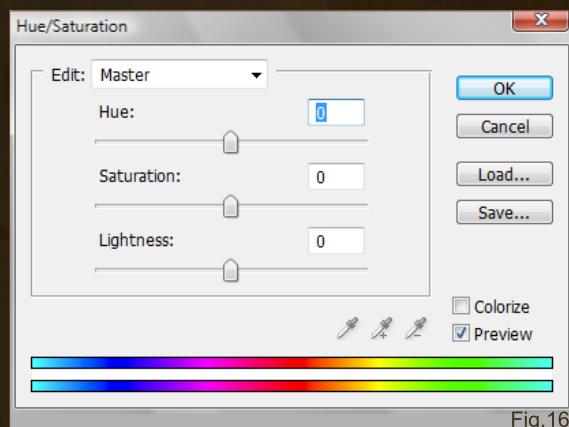


Fig.16

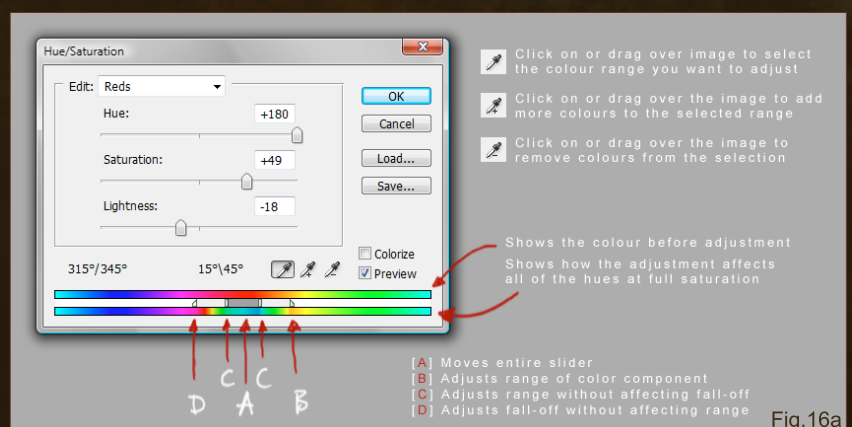


Fig.16a

make the colors much more intense, rather than softening them up a little. I also added some dark brown on the ground near the horizon to indicate some not-quite-so-strong shadows from the cliffs on the right. The image can be flattened once everything is as we'd like it to be (Fig.17a).

At this point, I suddenly realize that I am absolutely not happy with the dimensions of the canvas – it would look much better if it were a little wider still, to give the whole scene a slightly more panoramic effect. All good and well ... can be done! The only thing is that I have to go back to the layered version of the image for this, and with that lose all the work we've done to the image since flattening it ... Why? Because to extend the canvas to one side (the right in this case), without having to repaint that part or add painted bits to it, we need to be able to select the background with the Marquee Tool from the gap between the cliff faces in the distance to the far right edge of the original canvas after changing the canvas size, and then Transform it, pulling it to the right to cover the entire canvas again.

After repeating everything from adding ambient light to adjusting the Levels and Variations, the image looks slightly different than before. Instead of going with the previously



Fig.17a

adjusted colder palette, I've decided to keep the warmer green and yellow hue (Fig.17b).

Lesson learnt here: Leave a painting alone for a couple of days before rushing into any finalizing bits and bobs. It can save the extra work of doing it all over again!

Right, if we want to, we could now add some overall texture to the image. This usually works best when there is either no texture at all in a piece, or they are very subtle brushed textures. When you already have a load of textures, like in this

case, an overall texture may make the image look far too busy. However, I will still briefly go through the options:

Both photos and brushes can be used again for applying an overall texture. Photos should be a high resolution so pixelization will be kept to a minimum when the photo is transformed on the canvas to match the size of the canvas. You can use virtually any photo texture for this – from rusty metal and watercolor stains, to paper or canvas textures. The color in the photos may even lend an interesting effect to a painting, so the photos don't have to be in grayscale. Overlay and Soft Light are both options that that work really well for a texture layer.

Of course, we can also make a brush from a texture photo and stamp it onto a new layer onto the canvas, and then transform it to match the canvas size. Here we have some more options of locking transparent pixels and painting over the texture in different colors to get the desired effect, as well as lowering the Opacity, as before. Naturally, a texture can also be achieved by painting random brushstrokes onto a new layer, preferably with rough brushes like the speckled one. The possibilities are endless!



Fig.17b

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I won't apply a texture to my painting, as it has the right amount of textures already in it. More would simply overdo it.

Okay, that's it! We are done! We can save the image, grab a coffee and sit there for five minutes in quiet admiration of our handiwork ... or something along those lines. Of course, most of us are deep down quite narcissistic little critters who want nothing more than to show off what we've just managed to do. And don't give me, "No, I'm not!" – You'd not be human if that was the case! Anyway, I digress...

Showcasing your handiwork

Now, there are several ways to showcase your work. The first option would be the standard fine art approach of exhibiting in a gallery. For this, the work would have to be printed. Saving it for this purpose is really quite simple. We need to bear in mind that the bigger the file, the bigger the print can be done at a high quality.

But we also need to look at the file format in which to save our picture, as there are lossless and lossy formats. What that means is this: A lossless file format is a format that does not compress the pixels, but keeps everything as it is. Common lossless formats are PSD, PNG, and TIFF. Lossy formats on the other hand compress the pixels – meaning they reduce the general information stored in the painting to the effect that it will be smaller in file size, but also at not quite so high a quality, dumping pixels that it won't really need. This format is great for internet use as it loads fast and still looks very decent on any screen. JPG and GIF are lossy file formats (and GIF should be avoided unless you do pixel art, as a GIF only ever has 256 colors).

So, we now know that we should save our image as a PSD, PNG or TIFF to get a great print from it – this is especially the case when you know that your piece will be printed with the same methods as a fine art piece, or in magazines and books.

We go to File > Save As... and get our Save As window (Fig.18). We can give the image a name in the File name bar, and then choose our format in the Format dropdown menu. In the Save Options, we also get the choice to Save As a Copy, and in the Color Options we can decide if we want to keep the color profile we assigned to our picture, or not (Fig.18a). Most of the options only become available when saving something in a specific format, so don't worry if there isn't much you can tick or un-tick.

Once we hit Save we will get another box giving us more options – different options depending on the file format we are saving in. The default settings are the ones we want for saving an image for print, so we leave things as they are and hit OK.

Some of you may wonder why I'm not going into detail about all the options. Believe me, if I did it would be another chapter all unto itself! So I suggest you consult Adobe's online Help manual for a more detailed breakdown.

Note: *The default PSD file format PS uses when saving layered images is great, but unless a print place uses Photoshop or a similar program there may be difficulties in opening the file for print. So saving as a TIFF or PNG is usually the safer option. If unsure, ask at the place where you want to have the picture printed, or consult an online print studio's FAQ for help!*

We can use the same option of Save As to save the image as a JPG or GIF. Once we hit Save, upon selecting this file format we are presented with another box and more options, just like with the file formats before. This way of saving an image as a JPG is good for saving it for print or

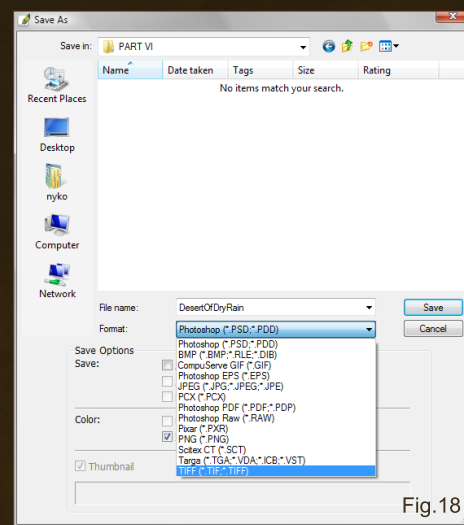


Fig.18

other large format displays, but not so much for use on the internet, as the compression is not ideal and the quality pretty shoddy. Don't ask me why, I really don't know.

So what can be done to save an image for use online?

First things first: we need to resize the image. Most people have screens no bigger than 17" – even though in the CG art scene, most professionals boast screens up to 30", or multiple screen displays. However, the majority of people who are browsing the web are not CG artists, and it is those people we need to keep in mind. Therefore, it is pretty pointless to display an image at its original size online. For starters, it wouldn't be possible to view the entire image without scrolling, and thus the impact the image could have if viewed in full is lost.

So for our image to not suffer this fate, we need to resize it to something reasonable – anything between 800 and 1600 pixels at the longest side. More would become too big. Usually, something around 1000 pixels at either side is a good size (and then we can show some small excerpts of a bigger resolution, close-ups, if you wish, so people can get an idea of what it looks like in more detail, and see all the little details).

We may want to duplicate the image before we continue, so we can be sure that we won't be

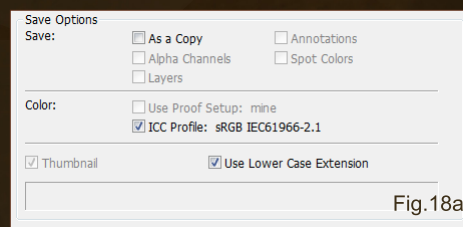


Fig.18a



screwing things up and accidentally overwrite the original file at any point in time.

We go to Image > Image Size (Fig.19).

To change the image size for web use, all we need to do is change the size in pixels, leaving everything else alone. When we're done, we hit OK.

Changing the image size to something significantly smaller always has the effect of "blurring" the image. This is because the information previously stored in a much higher amount of pixels has now been condensed to something a lot lower. To bring some sharpness back into the image we can use the Unsharp Mask. We can find it under Filter > Sharpen > Unsharp Mask (Fig.20). The default settings of this Filter actually give a pretty good result, but that should not stop you from playing around. Keeping the default settings for my painting, the difference is quite obvious between before applying the Unsharp Mask (Fig.20a) and after applying it (Fig.20b).

Sometimes, the Unsharp Mask makes certain parts too sharp, and those can be adjusted manually by using the Blur Tool (carefully!). Of course, the complete Unsharp Mask can be faded by going to Edit > Fade.

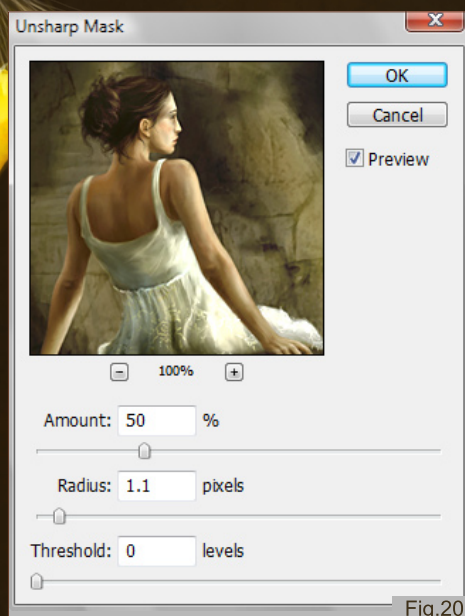


Fig.20

The size of the image in pixels.

The size of the image if printed.

Changing the Resolution will change the print size.

Unticking this lets you change the height and width separately.

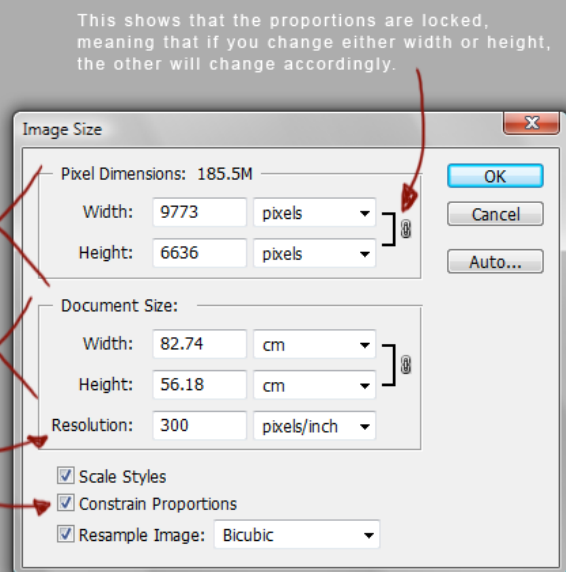


Fig.19

Now we are ready to save the image for internet use! We go to File > Save for Web... and a new window comes up (Fig.21). It will show us our image in the Optimized tab window. To check what the original looks like, simply click on the Original tab at the top, and it will change. The settings you see in the screenshot are my default settings for saving something for the web. The Quality can be changed by either entering a number manually, or by clicking on

the arrow and using the slider that pops up. The dropdown menu that says JPEG also offers GIF, PNG-8 (like GIF uses only 256 colors maximum), PNG-24 and WBMP (which is a black and white grain thing reminiscent of the first computer images ever made).

The Preset dropdown gives you a list of preset options, so you won't have to set and adjust them all yourself. Ticking



Fig.20a



Fig.20b

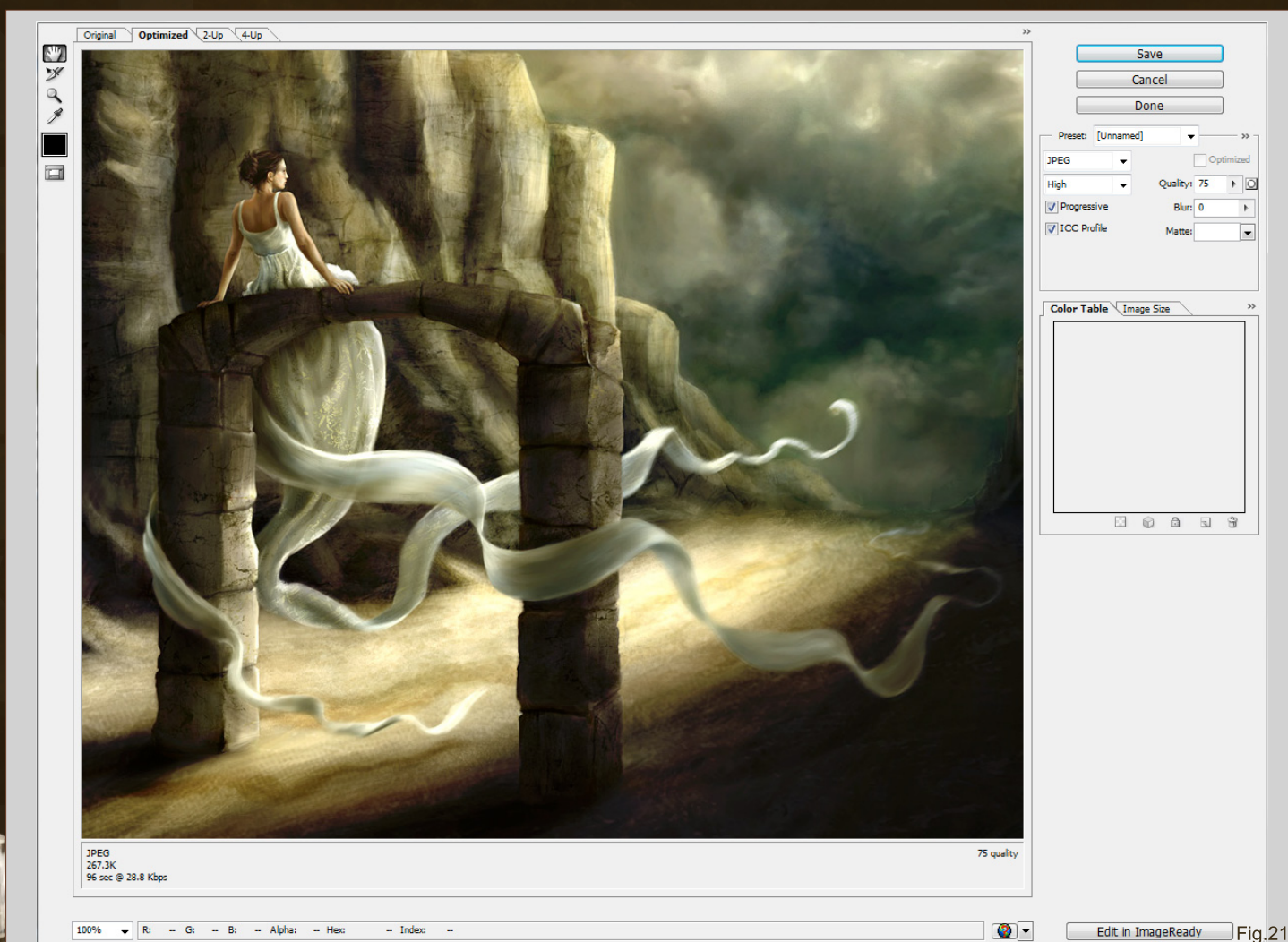


Fig.21

the ICC profile is good, as this keeps your image's Color Profile intact. And if you click on the Image Size tab next to the Color Table tab below the settings, you can even change the size of the image again. However, I found that changing it before saving this way gives you better results.

Once all settings are adjusted to our liking, we hit Save. A "Save Optimized As" window pops up, asking us to enter a file name, which we should do. It also asks us our Save as type preference – here the default setting is Image Only (*.jpg), which we should keep. The other settings are for website layouts and HTML code.

We hit Save again, and our image will be saved, optimised for web use.

And now we can show what we've done to anyone who wishes to see it...

In Closing

What marks the end for my work, putting all this information together in one colorful package, should only be the beginning of your journey making use of it. Enjoy it, live it, create!

Nykolai, signing off!

Nykolai Aleksander

For more from this artist visit
<http://www.admemento.com/>
 or contact
x@admemento.com







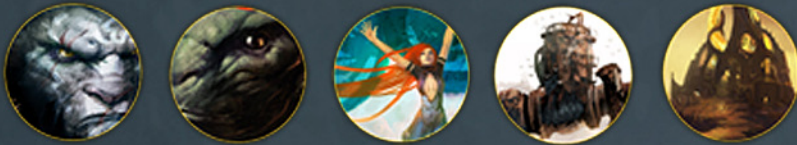
Custom Brushes

Digital Painting Tutorial Series EBook

Introduction:

The Custom Brushes eBook is a 72-page guide on how to create your very own set of custom brushes. We have asked industry professionals from the likes of Carlos Cabrera, Kim Taylor, Melanie Delon, Marc Brunet, Mike Corriero, Richard Tilbury, Brian Recktenwald, Mike Lim (aka Daarken), George Patsouras, Larla Ortiz and Ignacio Bazan Lazcano to create easy-to-follow guides/tutorials on how to create Custom Brushes. As well as giving expert tuition, some of the artists have also supplied their brushes and these can be downloaded at the beginning and end of the tutorials, where available.

This tutorial eBook also includes 84 free downloadable brushes.



- Chapter 01:** Creating a brush from scratch in Photoshop
- Chapter 02:** Using Photographs online to produce a custom brush
- Chapter 03:** Scanning in objects and turning them into a brush
- Chapter 04:** Chamber
- Chapter 05:** Creating your own set custom brushes
- Chapter 06:** Custom Brushes
- Chapter 07:** Skin brushes
- Chapter 08:** Custom Brushes
- Chapter 09:** Custom Brushes
- Chapter 10:** Old Woman
- Chapter 11:** Special Effects
- Chapter 12:** Artistic Hair & Skin Textured Brushes
- Chapter 13:** 'Save Us
- Chapter 14:** Custom Brushes

The artists featured are:

Mike Corriero,
Richard Tilbury,
Kim Taylor,
Carlos Cabrera,
Melanie Delon,
Marc Brunet,
Karla 'Icon' Ortiz,
Brian Recktenwald,
Daarken (Mike Lim),
George Patsouras &
Ignacio Bazán Lazcano



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SPACE PAINTING

Digital Painting Downloadable Tutorial eBook



This mammoth 161 page eBook is an extremely detailed exploration of the techniques and design approaches behind creating epic and lavish digital artwork relating to the theme of Space and Science Fiction. The series is divided into three main categories; Planets & Starfields, Transport and Environments and spans across 12 in depth chapters in total. The tutorials on offer cover a multitude of techniques and useful tips and tricks to painting all aspects of space and deals with the tools in Photoshop used to create such effects.

Tutorial by: C M Wong | Platform: Photoshop | Format: DOWNLOAD ONLY PDF | Pages: 161

Introduction

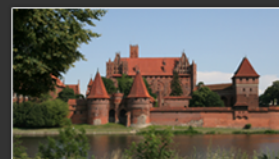
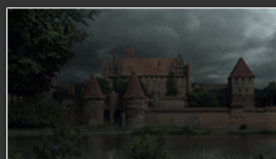
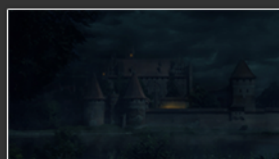
The Matte Painting eBook is a 39-page guide showing you, over 5 parts, the basics of Matte Painting, whilst also giving some more advanced techniques in the final chapter. We asked industry professional, Tiberius Viris to take an interesting photograph and to create an easy-to-follow set of tutorials about how to add varying conditions to this – or any other – scene.

This eBook is aimed at beginners, as well as those who already have some experience with matte painting – advanced knowledge of Photoshop is required in both cases. If you are not familiar with adjustment layers, layer masks or channels (RGB), you should read about these topics prior to starting this tutorial.

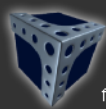


Matte Painting

Digital Painting Tutorial Ebook Series

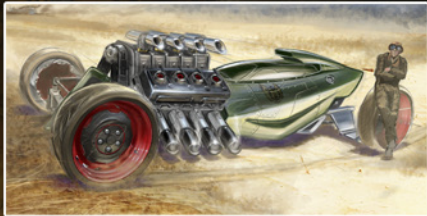
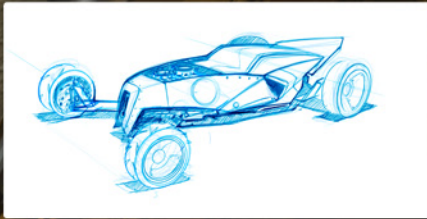
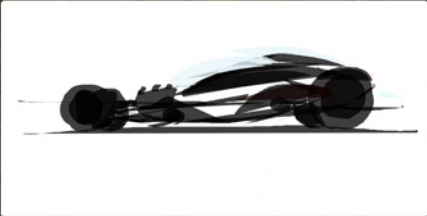
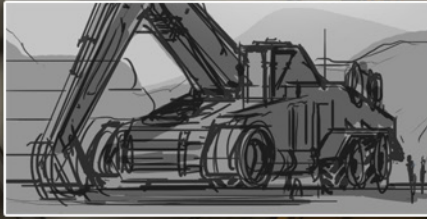
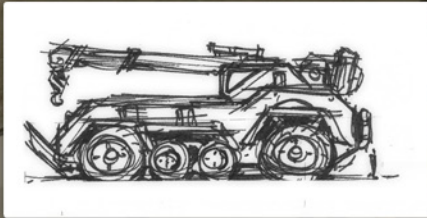


Chapter 1: Day to Night Chapter 2: Sunshine to Snow Chapter 3: Storm Chapter 4: Fire and Smoke Chapter 5: Tips and Tricks



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VEHICLE PAINTING

DIGITAL PAINTING TUTORIAL SERIES



This tutorial eBook will take an in-depth look into the process of designing vehicles, beginning with the concept stage and following through to a final design. We will cover sketching approaches used to evolve and refine an initial idea, and show the techniques used to produce a number of drawings, exploring a variety of designs. The tutorial will then move onto creating a finished design and placing the vehicle in a simple scene and addressing the issue of rendering the various materials that make up its construction. The importance of perspective will be explained before concluding with a chapter on adding design details and lighting effects.

Original Author: 3DTotal.com Ltd | Platform: Photoshop, Painter & Alchemy | Format: DOWNLOAD ONLY PDF



Speed Painting

digital painting tutorial series v1, v2 & v3



These 70+ page eBooks are a collection of "Speed Painting" tutorials which have been created by some of the top digital painters around today. The idea behind this tutorial series was for the artist to interpret a one-line descriptive brief (provided by us!), create a speed painting from it and then produce a tutorial showing and explaining each stage of production of the artwork. Some of the artists have also kindly created some unique brushes which can also be downloaded at the end of their Speed Painting tutorials.

Original Author: 3DTotal.com Ltd | Platform: Photoshop | Format: DOWNLOAD ONLY PDF

Digital Painting Tutorial EBook

Introduction:

The Painting Armour eBook is a 39-page guide on how to tackle the subject of painting convincing armour. The eBook specialises in creating Medieval, Roman and Samurai armour. We asked industry professional Mike Lim (aka Daarken) to create easy-to-follow guides/tutorials on how to paint these types of armour, and as well giving expert tuition, Mike Lim has also supplied the brushes that he used, which can be downloaded at the beginning and end of the tutorials.

Chapter 01: Medieval

Chapter 02: Roman

Chapter 03: Samurai

Painting Armour



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INTRODUCTION

This 50+ page ebook created by Mike Corriero for 3dtotal covers all areas of creature design, providing you with the necessary information to create your own unique concepts from scratch. Each lesson will touch upon a specific important aspect in what makes a great creature over just your average creature. Advice will also be given on what to stay away from, in order to steer clear of making a bad design or just a dull creature in general.

CONCEPT DESIGN

CREATURE

Chapter 01: Reference Library

Chapter 02: Creature Anatomy

Chapter 03: Bone Structure & Skin Texture

Chapter 04: Head Design, Eyes and Construction of the Mouth

Chapter 05: Body Structure, Body Variations, Hands & Feet

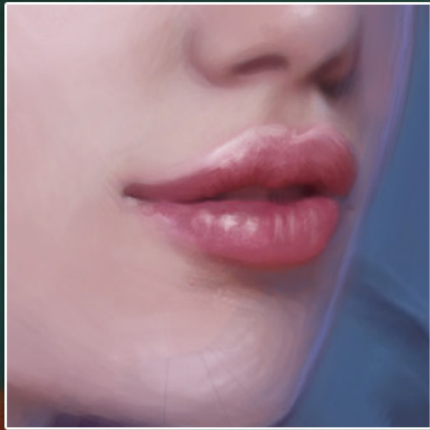
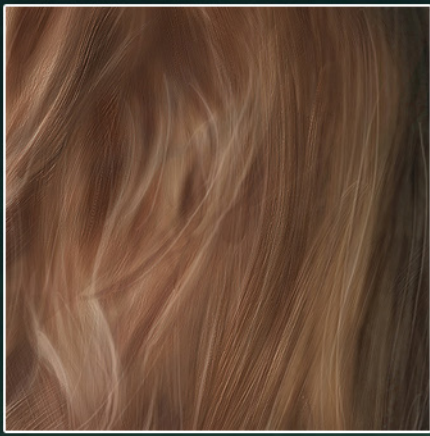
Chapter 06: Colours, Patterns and Final Renderings



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hair & face painting

DIGITAL PAINTING TUTORIAL SERIES EBOOK



The Hair & Face Painting eBook is a 51-page guide on how to paint wonderful looking hair, sumptuous lips, striking eyes, perfect noses and elegant ears. So if you're looking to achieve that extra level of realism in your character's face, or simply want to brush up on your knowledge of facial anatomy, then this eBook is just what you're looking for!

This tutorial eBook is aimed at intermediate to advanced level artists.

Original Author: 3DTotal.com Ltd | Platform: Photoshop | Format: DOWNLOAD ONLY PDF | Pages: 051

ELEMENTS

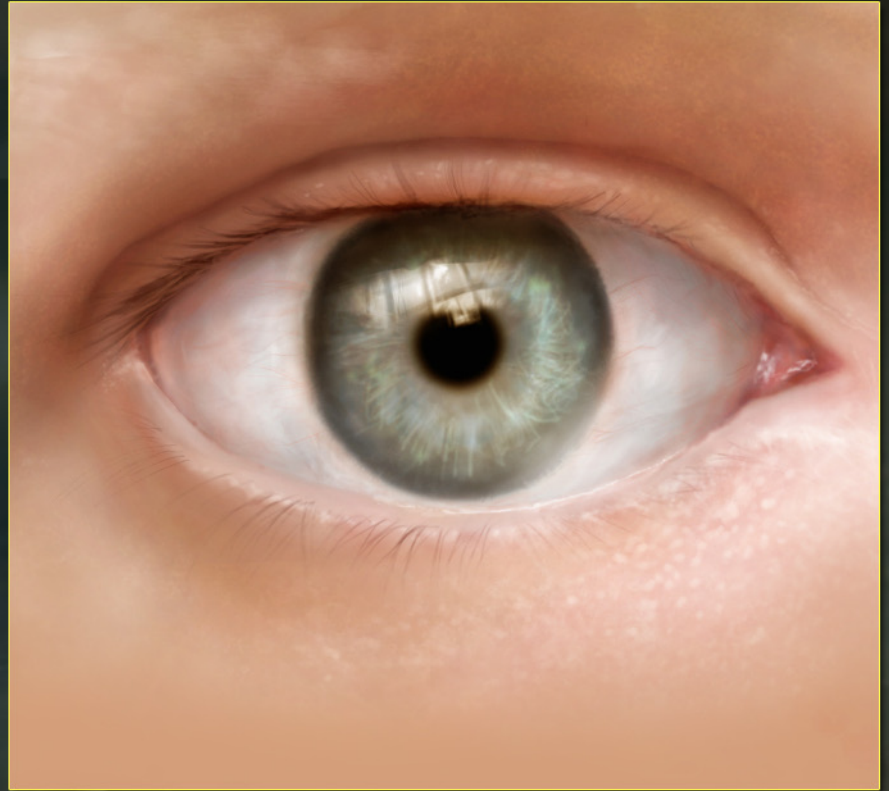
DIGITAL PAINTING DOWNLOADABLE EBOOK TUTORIAL SERIES

INTRODUCTION

The 'elements' series is a guide to 2D Digital painting and can be followed in most software packages supporting paintbrushes and layers.

In the first two E-Book volumes, we have chosen some of the most used aspects of digital painting, we cover such topics as painting eyes, fabric, fire & smoke, flesh wounds and fur & hair and asked 2 or 3 professional artists to cover a specific theme or 'element', resulting in 2 or 3 different styles and techniques which can be viewed side by side. With the help of such talented and experienced artist as Benita Winckler, Natascha Roeoesli, Richard Tilbury, Stephanie Loftis, Adonihs and Shane Madden.

Volume 3 of The 'Elements' series follows cartoon and comic artist, Carlos Cabrera, as he takes a basic scene, created by 3DTotal's in-house artist Richard Tilbury, and transforms them into five different weather conditions.



VOLUME 1

- Chapter 1: Painting Eyes
- Chapter 2: Painting Fabric
- Chapter 3: Painting Fire & Smoke
- Chapter 4: Painting Flesh Wounds
- Chapter 5: Painting Fur & Hair



VOLUME 2

- Chapter 1: Painting Rock & Stone
- Chapter 2: Painting Sky
- Chapter 3: Painting Skin
- Chapter 4: Painting Trees
- Chapter 5: Painting Water



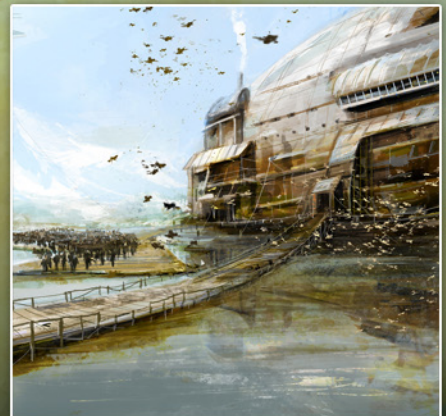
VOLUME 3

- Chapter 1: Sandstorm
- Chapter 2: Twister
- Chapter 3: Rainstorm
- Chapter 4: Snowstorm
- Chapter 5: Heatwave



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**85 FREE
BRUSHES**
Available with
this eBook

Custom Brushes v2



In the second volume of our Custom Brushes eBook series, we have asked six industry professionals, from the likes of Carlos Cabrera, Nykolai Aleksander and Roberto F. Castro to show us the techniques that they use to produce custom brushes. Spread over 48 pages and split into 6 chapters, we cover topics such as Fabrics & Lace, Leaves & Tree to Rock/Metal and Stone. Our artist will show you the importance of finding good reference images to base your brushes from, to knowing your subject matter.

Also Available in this series Custom Brushes V1

Original Author: 3DTotal.com Ltd | Platform: Photoshop | Format: DOWNLOAD ONLY PDF | Pages: 049