



ELEMENTS

DIGITAL PAINTING TUTORIAL SERIES : VOLUME ONE

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EYES

Chapter 01 : By Richard Tilbury

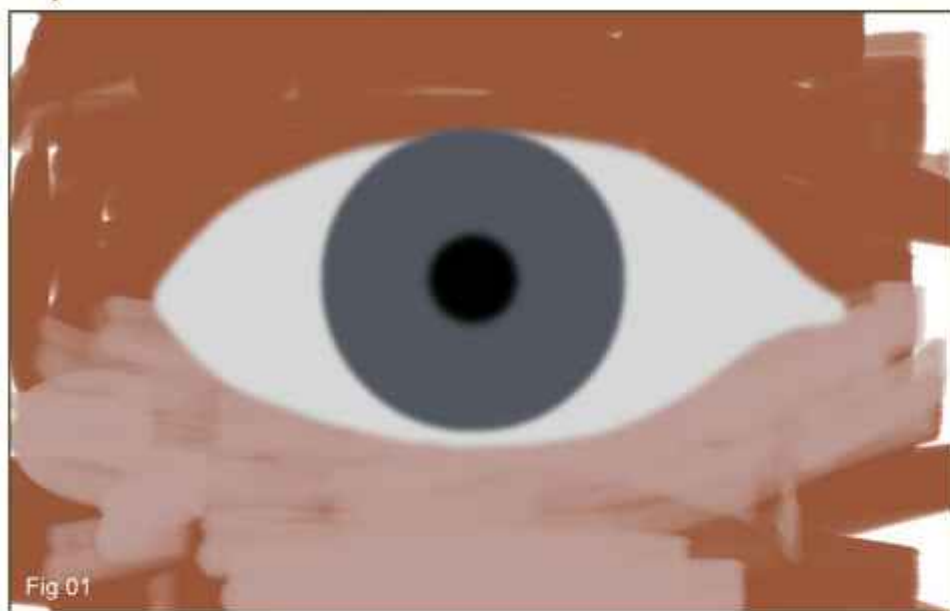


Fig 01



Fig 02



Fig 03

Digital Painting: Eyes

This month I will be painting a human eye. The first thing to do is gather as many reference pictures as you can including a mirror :) You will notice that all eyes are unique in both colour and shape and that the skin will vary in every image. Lighting also plays a key role in determining how reflective the lens looks alongside the as well as the skin itself.

Step 1

Once you have enough reference at hand start by deciding on a light source and then putting down some very rough shapes and colours using a standard chalk brush. In Fig 1 you can see that I have laid down a basic template to build on. I created the skin tones on a single layer and then added the white of the eye (or sclera), the iris and pupil all on separate layers. I added some gaussian blur to the three eye layers to avoid any sharp lines. It is good practice to keep these layers intact for now to ease the process of making any colour alterations as we progress.

Step 2

In Fig 2 I have added some provisional detail to the eye on the same layer as the iris – just a few random squiggles that emanate outwards from the pupil as well as a darker outline. You can also use the smudge tool to soften the edge of the iris as well as destroy the perfect symmetry. I added an extra layer on which I painted in some more flesh tones to soften the image. In fig.3 you can see some of the darker paint strokes that define the eye lid as well as some pinker shades that run around the sclera. There are also some lighter accents that help form the bottom lid. Try and vary the colours across your painting but keeping them within a similar tonal range. You can select pale reds through to yellows, browns and even some cooler blueish tones. Remember that variety is key to creating a convincing look.



Fig 04

Step 3

In fig 4 I have refined the corner of the eye where the eyeball curves inward and have softened the surrounding skin area. More crucially I have added a new Shadows layer set to multiply and painted in some grey / brown tones under the eyebrow and top of the eye itself to help refine the form.



Fig 05

Step 4

I then created a new layer to add in the eyelashes using a fine airbrush as seen in Fig 5. I also painted in some greyish tones under the upper lid to denote some shadows which are also being cast across the top of the eye. You will notice that I have also used the smudge tool to add an inconsistent edge to the iris as well as painting in some small blood vessels and subtle pink tones towards the corners of the eye. One other layer has been added to inject some light into the eye. Here I have used a pale blue and green colour and made some random shapes around the pupil and then set the blending mode to screen which helps bring it more to life.

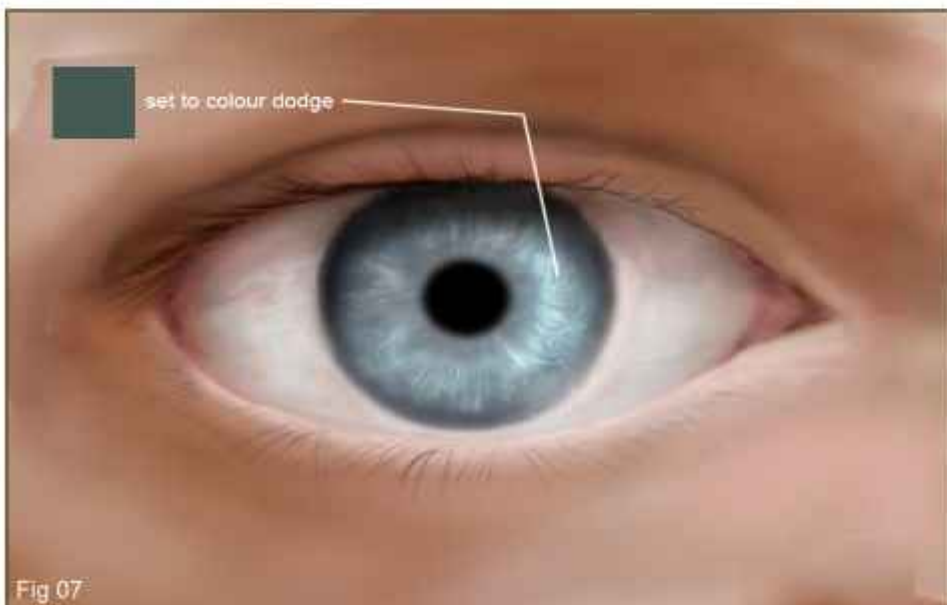


Fig 07

Step 5

To further enhance the eye I selected a dull green and on a new layer set to colour dodge, painted a random shape covering most of the lower right side of the iris to create some highlights as seen in Fig 6.



Fig 07

Step 6

The one vital aspect still missing from the image is a reflective highlight across the cornea. This will add a necessary touch and breathe life into the image. This is done using a pure white on a new layer with the opacity turned down to around 80%. It is up to you where you paint the highlight and the type of shape you choose as it is very subjective anyway. I have chosen a window shape using some sharp lines to describe a framework and faded the edges somewhat (Fig 7). Reserve a pure white only for a small section of the highlight. I have also painted in some small highlights in the corner of the eye and along the bottom lid. At this stage it may be a good idea to flatten the painting if you are happy with things.



Fig 08

Step 7

We are almost finished now apart from some subtle colour overlays which will be used to improve the skin tones. In Fig 8 you can see that I have masked out the actual eye and then on a new layer applied a gradient across the image from corner to corner using a pale pink and yellow. I then repeated this process but this time using a much greyer denomination of the previous colours as seen in Fig 9.

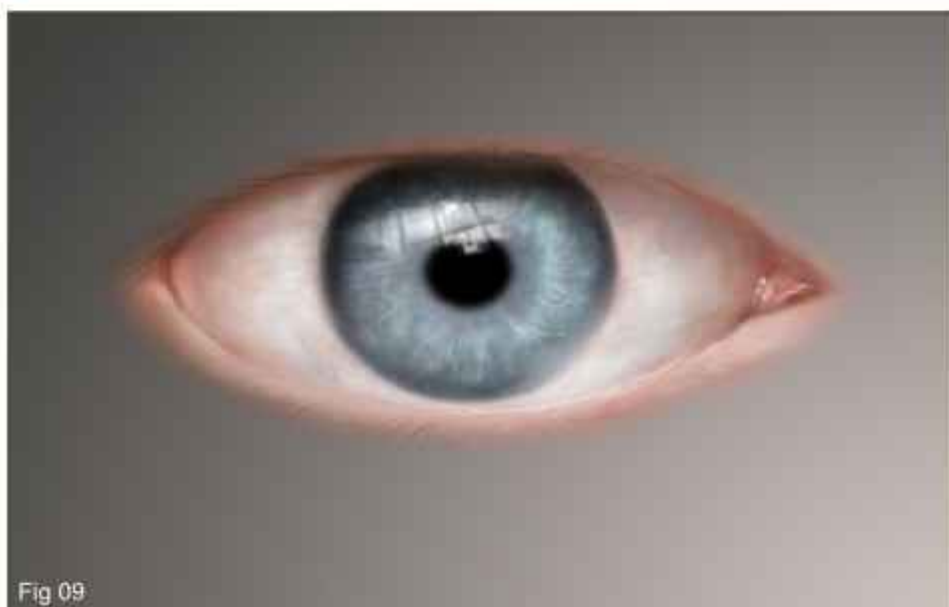


Fig 09

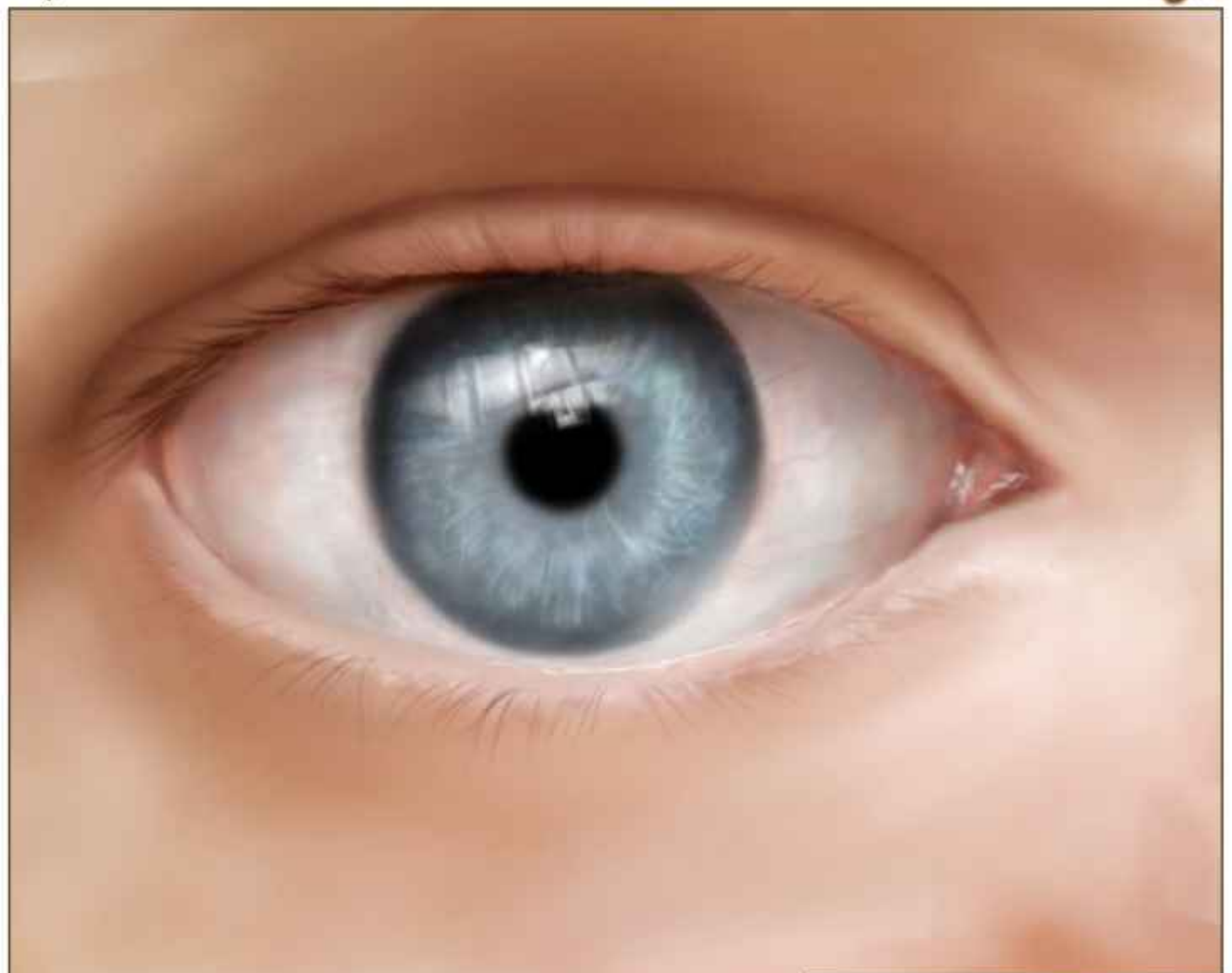


Fig 10

Set the blending mode of both these layers to soft light at 100% opacity and see the results in Fig 10 compared to Fig 7. The tones are now much warmer and the shading softer.

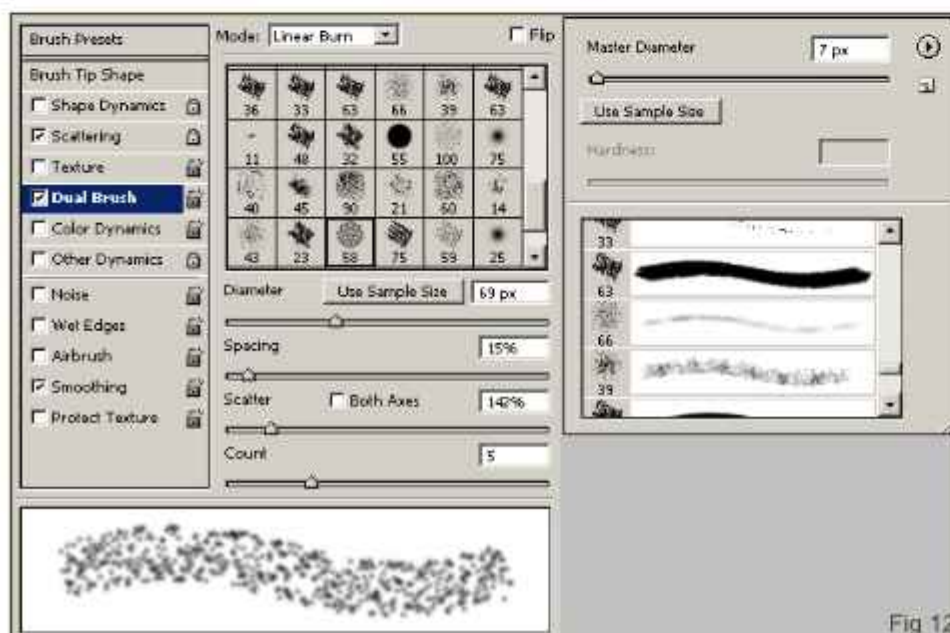
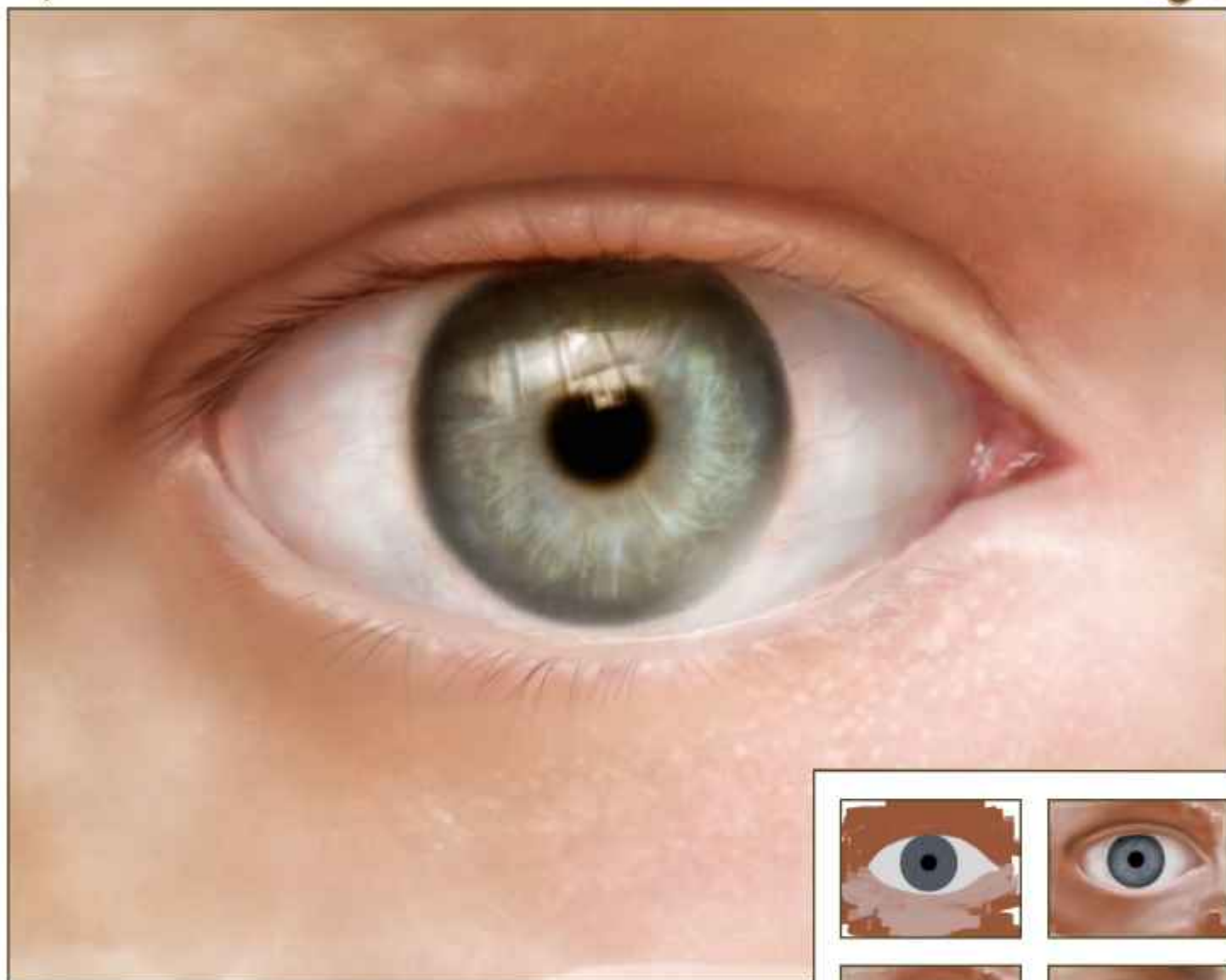


Fig 12



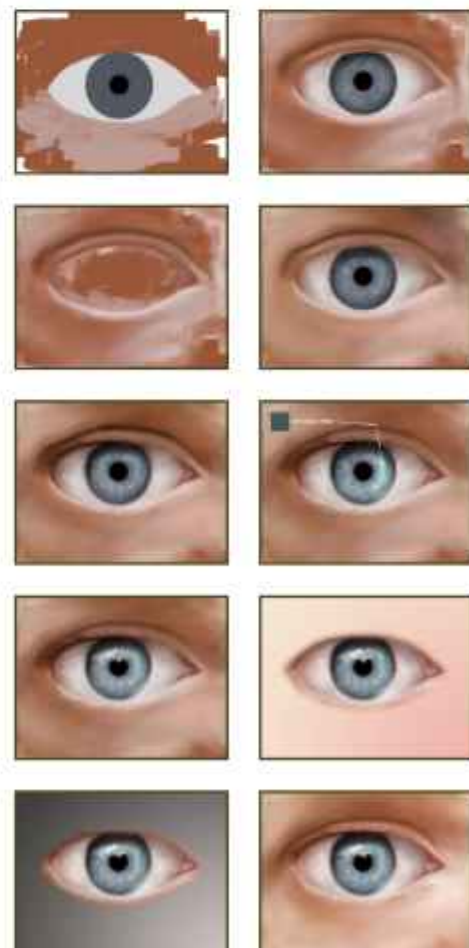
Fig 11



Step 8

One last thing which we can do is use a spatter brush with a little scattering to help break up the skin tones and show some highlights around the pores. You can either do this on a new layer or paint onto the flattened version. Select a spatter brush and reduce the size down to between 7 and 12 and begin painting in lighter marks below the bottom lid to create a textured surface (Fig 11). You can also increase the scattering from within the brushes palette to paint in some varied tones which are just visible above the eye area. I used a standard dry brush to begin with and combined this with the dual brush function and some scattering for this area (Fig 12). To finish of the image I added one final layer using a pinky purple colour (171,112,126) set to overlay which just increases the redness around the eye to suggest the blood vessels just beneath the surface. Then using the circular marquee tool with some feathering I altered the colour of the eye through, Image-Adjustments- Hue/Saturation. I increased the hue slider to create some brown around the pupil and gave the eye a more green grey colour. The final result can be seen in Fig 13.

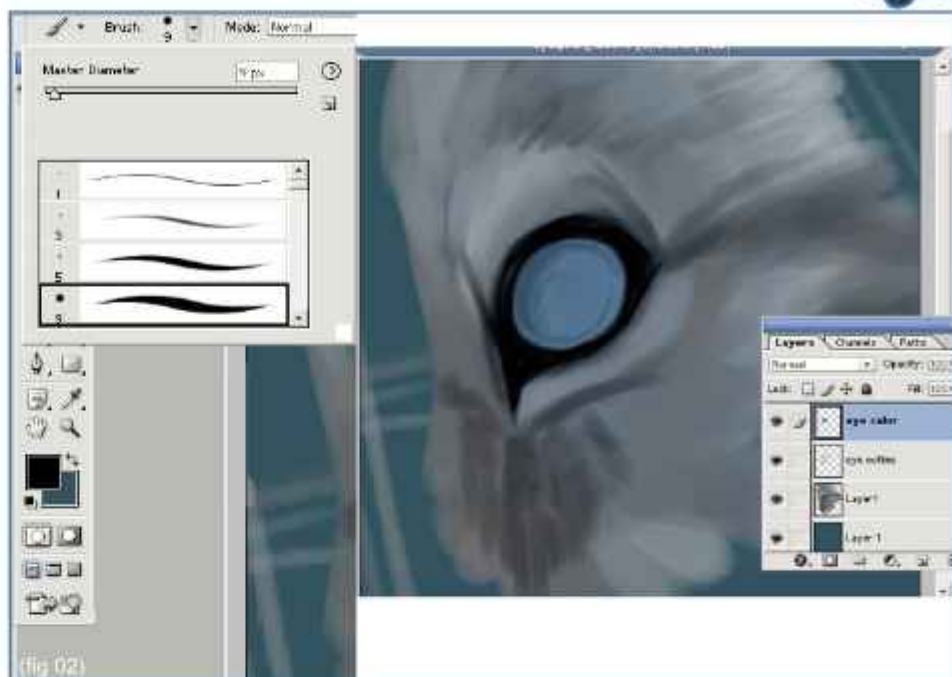
Richard Pilbury



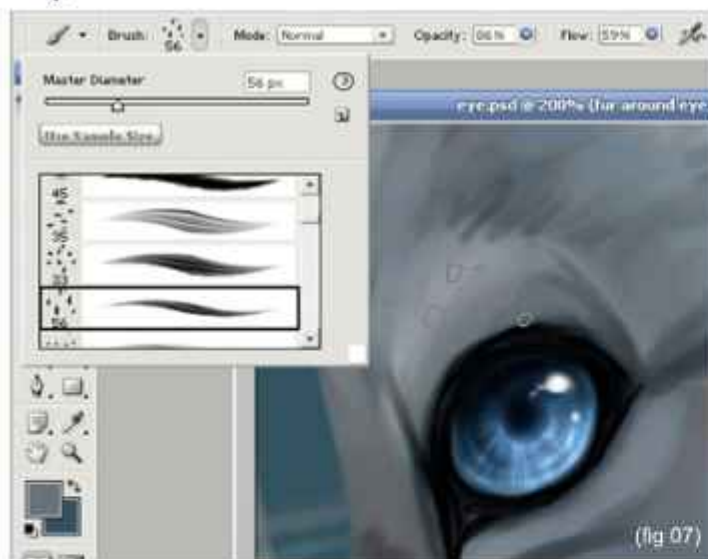


EYES

Chapter 02 : By Stephanie R. Loftis



Eyes - We're going to start off with a picture I have drawn in Open Canvas and open it up in Photoshop. The coloured part (including the eye) is all on one layer and the green background is on a separate one. He's got a little bit of detail in his fur, this helps me tell where to put shadows/ highlights and I have some pre made clumps of fur. On separate layers use a brush to colour the eyelids and the inside of the eye. I then started adding in some shadows with a darker blue colour, still on the eye colour layer. Make a new layer for the eye colour and eye outline (fig 01). The brushes I'm going to use have an Opacity set at about 60 (fig 02). Then I took the smudge tool and I blended in the colours (fig 03). I am a user of the dodge and burn tools, burn in some more shadow and separate the eye into little segments like a star shape. (fig 04). Do the same thing with the highlights tool as you pretty much did with the burn tool. (fig 05). Note: Burn - set on midtone opacity 50% more or less depending on what I want) Dodge - Highlight 50% more or less. You can also start adding shine into the eyelids. I made a separate layer to add a shine in the eye and to colour in the top of the eye with black. (Just coloured in black and smudged it until it covered where I wanted it to). (fig 06) Go back to the eye colour layer and add dodge / burn more until satisfied.



(fig 07)



(fig 08)



(fig 09)



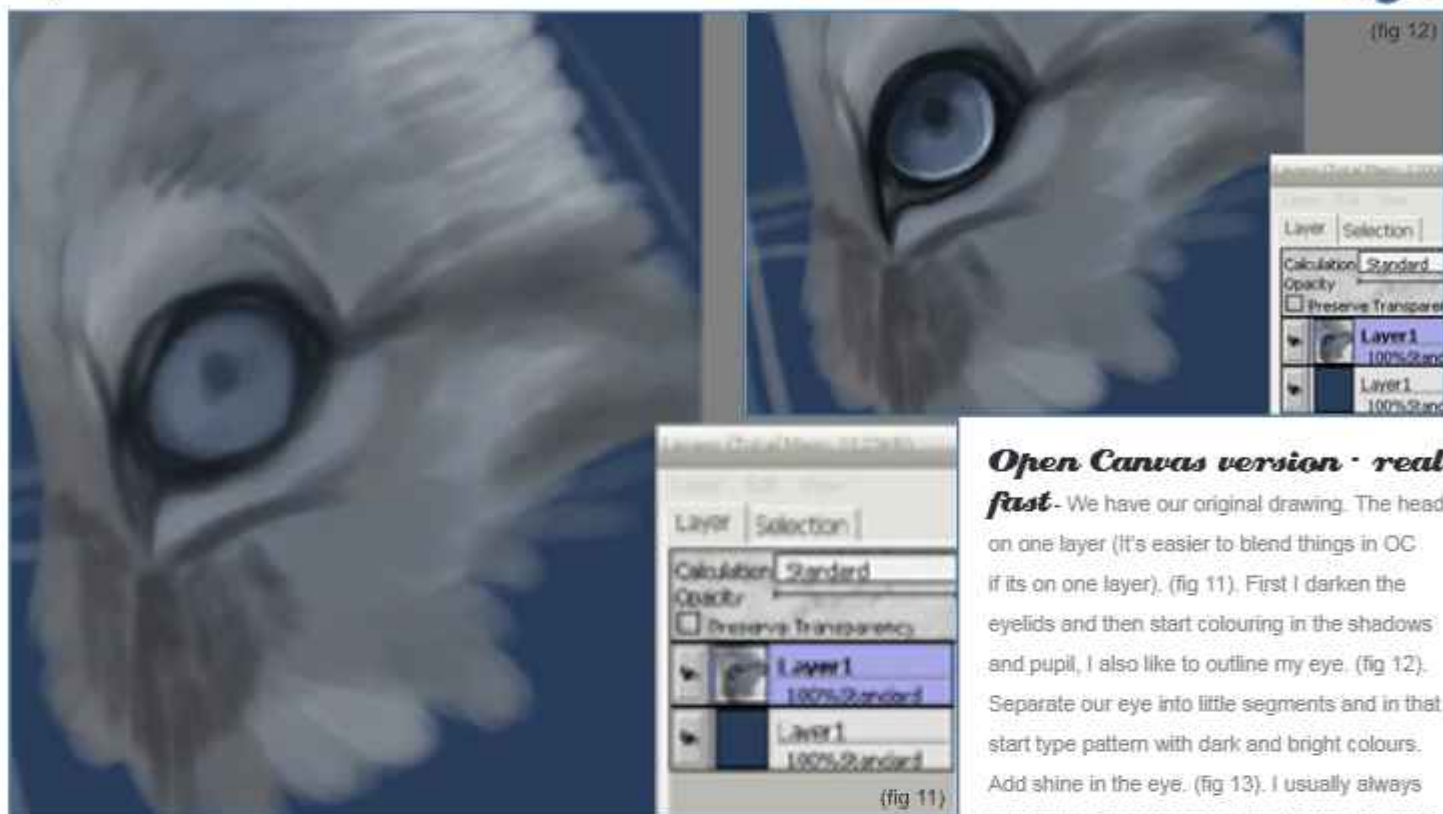
(fig 10a)

Fur Around The Eye - One of my problems with colouring in Photoshop when I first started was getting the eye to look blended in with the head and look like it belonged there and not like it was just a 2D floating object. The problem is, when creating a picture I normally have a separate layer of fur and then a "fur around the eye" layer... so you have to make sure both layers blend with each other. (Later on I might just merge all the head and eye layers but right now they would be separate). (fig 07) I have my home-made fur brushes. Ignore the opacity, usually I have it set at about 60%... 80% tends to be strong. (fig 08) Then we create

a new layer for the fur around the eye, I start filling in those shadows with a darker colour. (fig 09). Skip ahead - I have filled in most of the fur around the eye using various colours. Once you have finished with your fur you can shrink it down and get something beautiful like this (fig 10a). The colours are off a bit because this picture was saved as a .jpeg while the rest were print screened but it is the same picture. (fig 10b)



(fig 10b)



Open Canvas version - real fast

We have our original drawing. The head on one layer (it's easier to blend things in OC if its on one layer). (fig 11). First I darken the eyelids and then start colouring in the shadows and pupil, I also like to outline my eye. (fig 12). Separate our eye into little segments and in that start type pattern with dark and bright colours. Add shine in the eye. (fig 13). I usually always take it into Photoshop and burn/dodge the heck out of my eyes to make it brighter. I don't like to use the ones in Open Canvas. Also draw the fur around the eye, it's easier in Open Canvas because it is all on the same layer it blends. You just have to make sure not to colour anything of importance. (fig 14)





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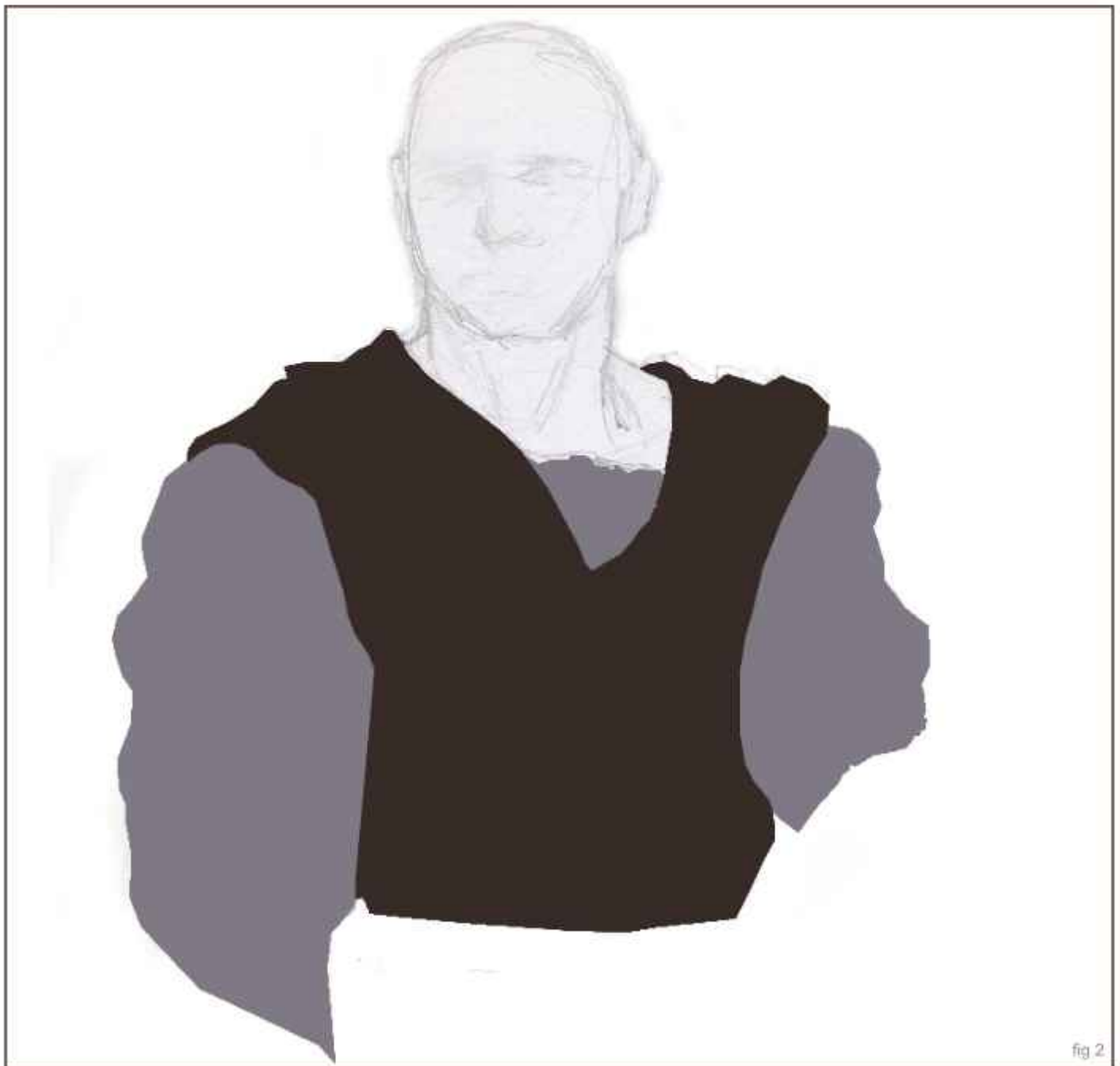
FABRIC

Chapter 03 : By Richard Tilbury



Painting worn leather and cloth

Step 1 - For this tutorial I decided to paint an example of worn leather armour and weathered cloth in the form of a character outfit. So the first stage was to do a sketch of a soldier and scan him in (Fig 1). I cleaned up the image a little and then blocked in the main areas of the armour and the cloth (Fig 2). Whenever I begin a painting I often use the polygonal lasso tool and make selection groups of the key areas (in this case the clothing) so that I can easily go back at any point and make quick changes to specific sections. With this done I often begin blocking in the general lighting which is probably the most important aspect in the whole process





Step 2 - The first step is to make two new layers which I call highlights (set to Soft Light blending mode) and shadows which is set to multiply. In the case of the cloth I selected a dull purple colour to start off (R127 G121 B133) and for the shadow layer I used a darker version of this (R45 G44 B47). I then imagined the light source being somewhere behind the character to the upper left and so began roughing in the darker areas using a standard airbrush (Fig 3). In order to add a further dimension to the sleeves I then used the same airbrush but with various diameters set to a pure white to block in the highlights across the arms (Fig 4). You can see by looking at Fig 1 that I had drawn in a strap across the soldier's chest as well as dividing the armour and so with the arms at a reasonable stage it is good to start working on this area as we want to work on the image as a whole and not get carried away with isolated details. With this in mind the next thing to do is begin creating the armour simply by working on the shadows and highlights layers using white and a darker version of the brown as before and gradually sculpting out the form (Fig 5). You will also notice that I have altered the colour of the cloth to make it greener and refined the shadows somewhat.



fig 3



fig 5



fig 4



Step 3 - We now have the basis of our image which essentially breaks down into 3 categories : (a) Main colour blocks (b) Shadows (c) Highlights. These layers are probably the most crucial of all in that they create the overall impression of form and provide the eye with the key information to reading the image. The rest of the tutorial will involve refining what we already have and painting in additional detail.

Step 4 - Now it is time to start ageing the clothing and begin overlaying some dirt layers. So on a new layer set to normal mode, select a standard airbrush and alter the presets so that it uses a dual brush function with some scattering similar to Fig 6. You can experiment with these settings to find a suitable solution but when you apply a muddy brown colour with differing brush diameters you end up with a result similar to that seen in the image. This will constitute the first dirt layer but you will find that you may need to make a few in order to create a convincing look. Therefore on another new layer I added some more variation using a slightly richer brown and set to Soft light. You can see in Fig 7 where I have randomly painted the marks (set to normal mode here to make them more apparent) The last dirt layer which I set to overlay mode at 80% opacity

uses a predominantly muddy green colour to add further variation to the leather as well as a little red to represent some blood across one of the arms and upper left side of the chest (Fig 8). With one final layer set to Soft light using

some warm brown tones scattered across the clothing that just about completes the detail and with the lighting layers switched back on we end up with an image similar to Fig 9.



Fig 6



Fig 7



Fig 9

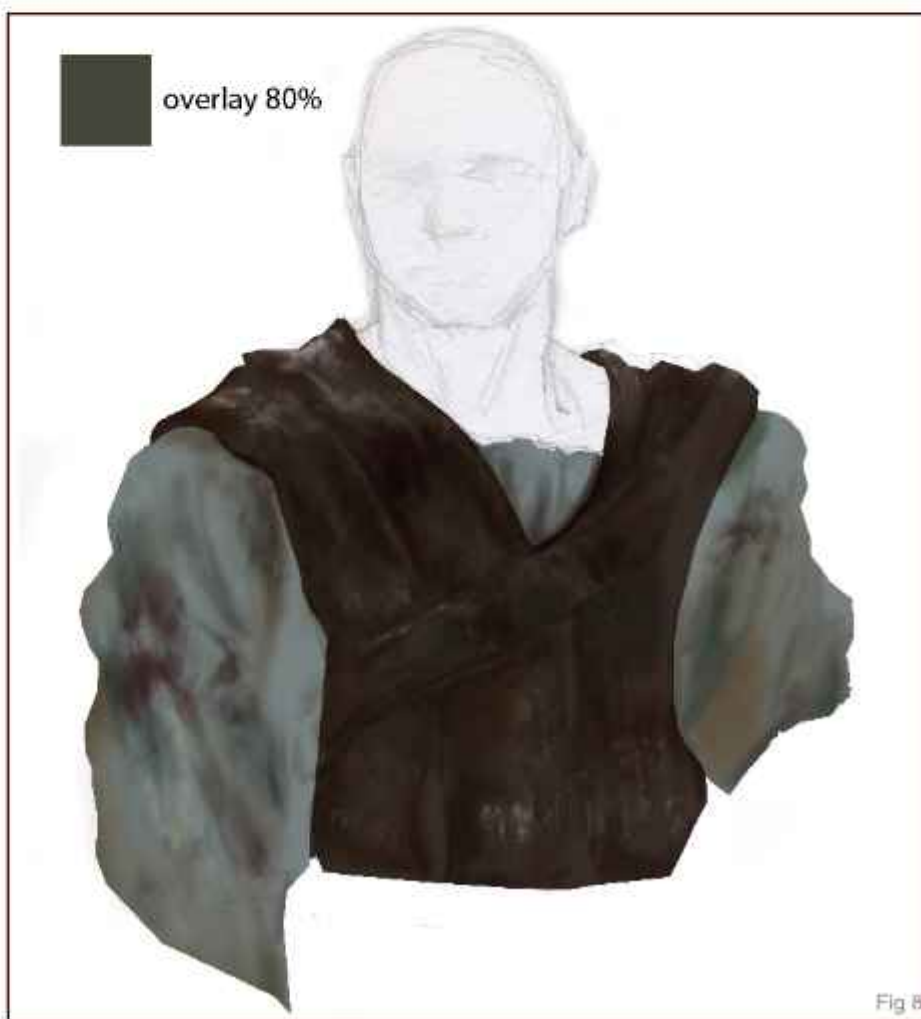


Fig 8



Step 5 - Just to polish the image a little further I added a new layer directly above the original sketch and set it to multiply and filled it with a pale brown which still revealed the original pencil beneath and then I simply used an eraser to flesh out the highlights across our characters face (Fig 10). One finishing touch are the extra highlights placed across the shoulders and a few enhancements to the arms which about concludes the tutorial.



Tutorial by :

Richard Tilbury



FABRIC

Chapter 04 : By Natascha Rooesli



Introduction

First of all, there are two different approaches to painting fabrics. If what you want is to achieve a realistic look, there is no escape from using references. In this case, I would advise against using a photograph, since they sometimes trick the eye. Besides, you learn more painting from real life – even when it comes to fabrics. Instead, use something you have handy which consists of the texture and fabric you want to work with. When you've located a suitable item, place it on the table next to you. (At this point I should add that, if your personal preference is painting from photos, this is of course fine too). This time around, I would like to introduce you to a different way of painting fabrics or clothing. It's the way I normally work, and it's a bit more intuitive and semi-realistic than other methods. The technique in question demands a certain level of imagination, as well as a basic understanding of gravity and of how folds work.

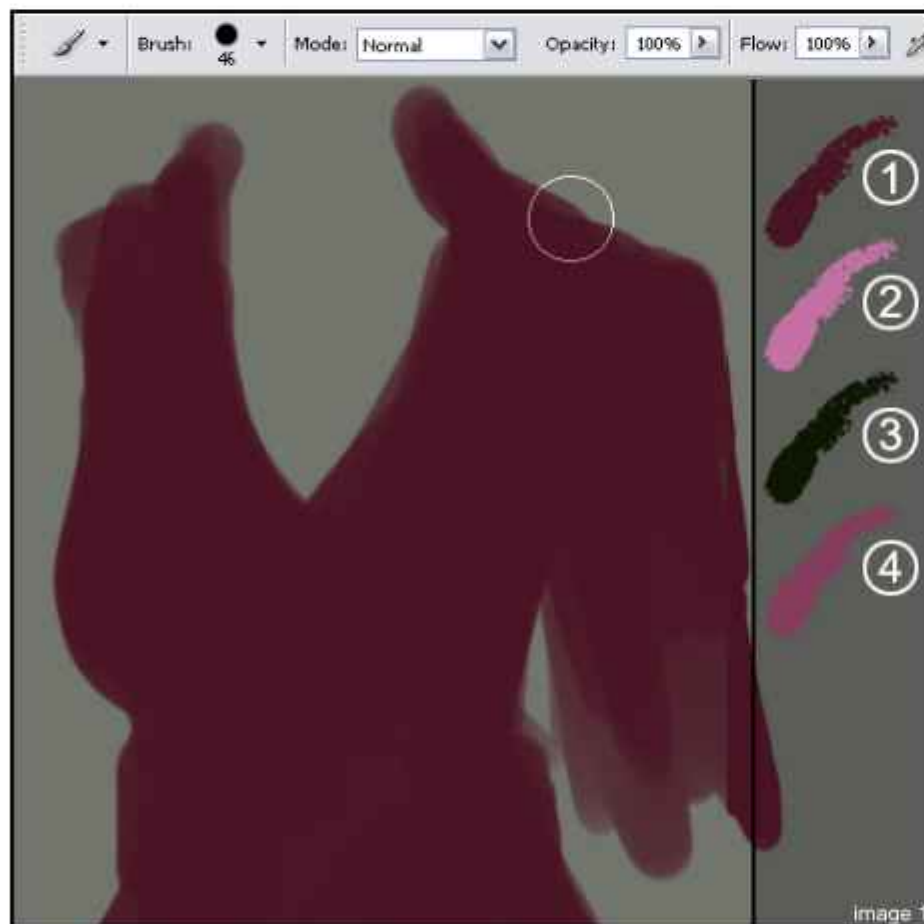
Folds in general

Most people tend to make the mistake to paint folds in straight lines without any interaction of themselves. Folds depend on a great amount of all different kinds of influences. Gravity, of course, to name just the most obvious one but also on the shape underneath, the thickness of the material or the movement/direction of the element underneath. Folds interact. They might go on top of each other, break, curve or create little wrinkles much like skin, as a matter of fact (grab your wrist, push the skin towards your hand and then bend the wrist in order to have your hand point at you to create some basic skin folds). Folds get pushed together if you bend your arm, or get pulled together at a place where there is a button sewn on. Folds do have a tendency to follow a certain direction but there is always that one little rebellious fold that goes the other way which actually creates the realistic feel to a fabric or surface. Make it a habit to study folds whenever you can. If

you are sitting in a restaurant, try to make out what causes folds to look different and try to memorize that.

Step 1: Create a colour scheme and decide on a fabric.

We plan on painting an asian-influenced silk dress today. The first thing you should do is settle on a colour scheme. In cases such as this, I normally work with four different colors: a base colour; a shadow colour (pick the ambient colour – in this case the background – then make it much more saturated and darker); a highlight colour (in this case a much lighter and less saturated shade of the base colour); and a colour which is somewhere between highlight and base colour. You can see the colours I'm using in the right hand column of the examples below, numbered from 1 to 4. It's a good idea to have your colours in a separate layer, so that you can go back to them and pick if necessary.



Step 2: Lay down a rough shape

Brush: Normal hard edged, Spacing 10%, Flow and Size Jitter set to pen pressure, check smoothing. With my beloved hard edged brush, I start laying down a rough shape of the dress, using colour #1. Looks quite ugly huh? Well, no worries, it's not going to stay like that! (Image 1)



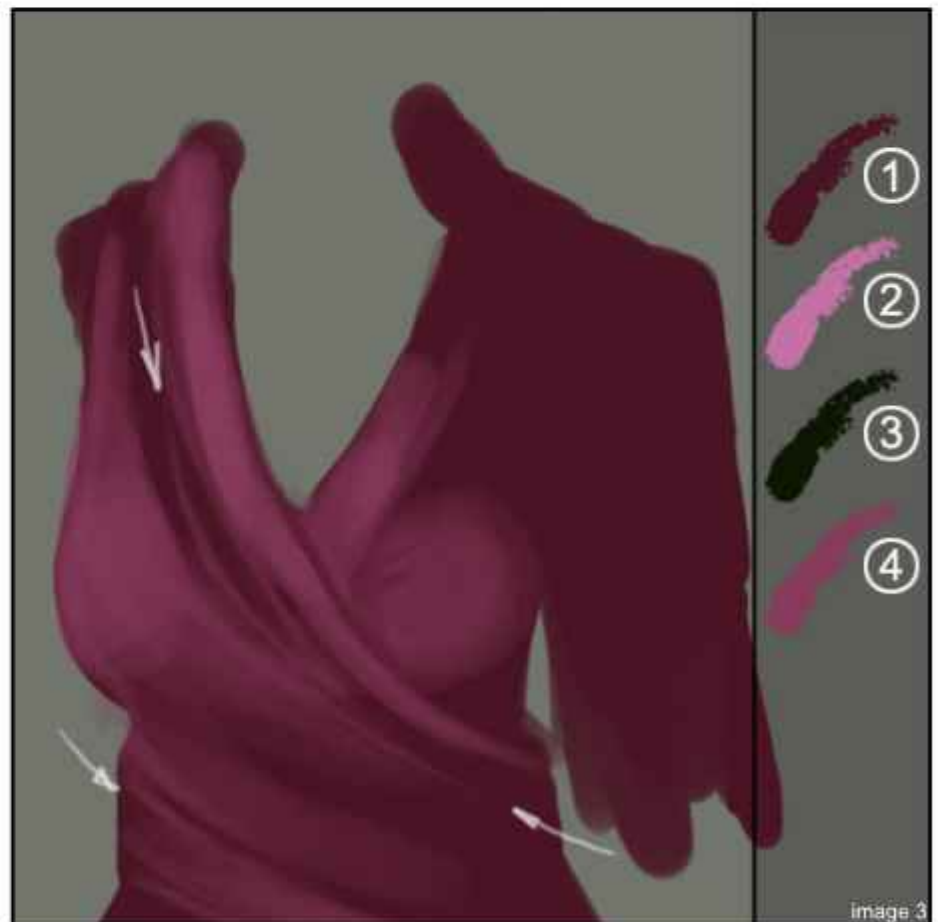
Step 3: Starting to feel the forms underneath

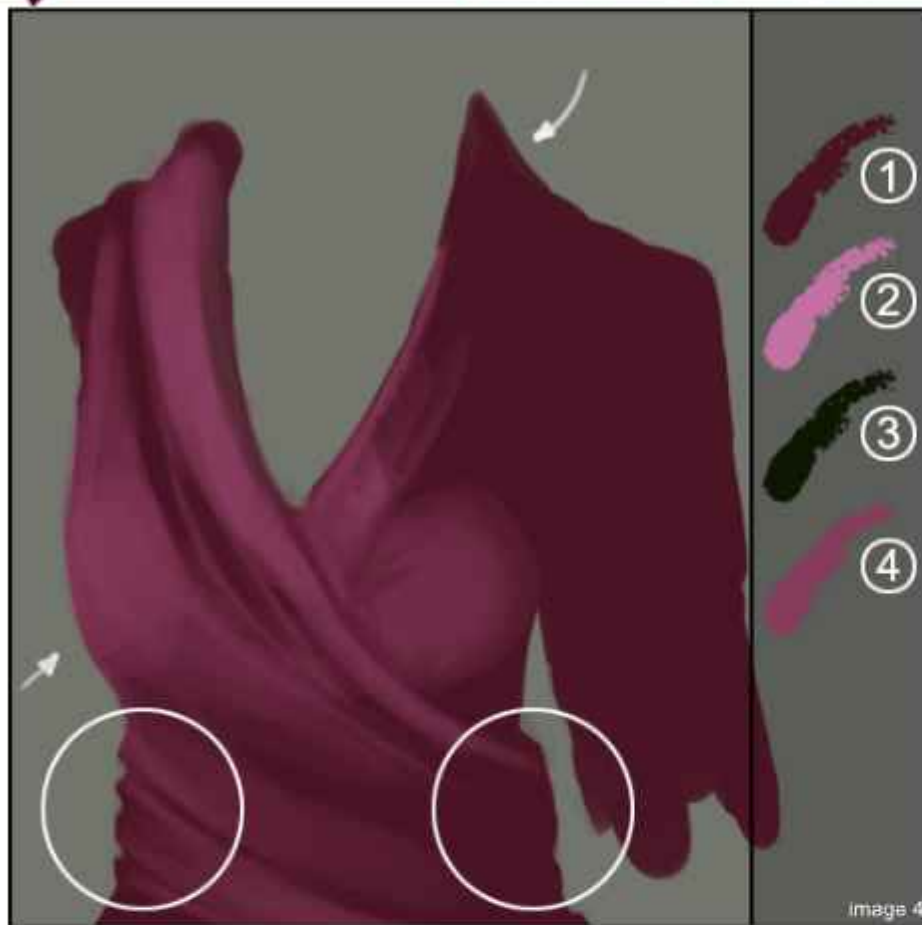
Using colour #4, I'm beginning to search out the forms underneath (chest, bones), and to give shape to some general flow and fold ideas. As always in painting, it is of critical importance that you decide where your light is coming from. In this case, I settled on a top frontal light source which is slightly to the left. Vary your pressure while working on those folds. Don't use the same pressure all over. Press down harder on the higher areas, and let it fade in areas that lie deeper. Let the folds find their form – you can always make this on a separate layer, and delete and start over if it doesn't turn out like you wanted. The shapes should still be quite rough at this stage, which basically helps us by adding shades of colour number #4 to work with in the next step. If you find it hard to control pen pressure manually, you can lower the flow to 50%. Still with me? It'll get more interesting soon. (Image 2)



Step 4: Color picking

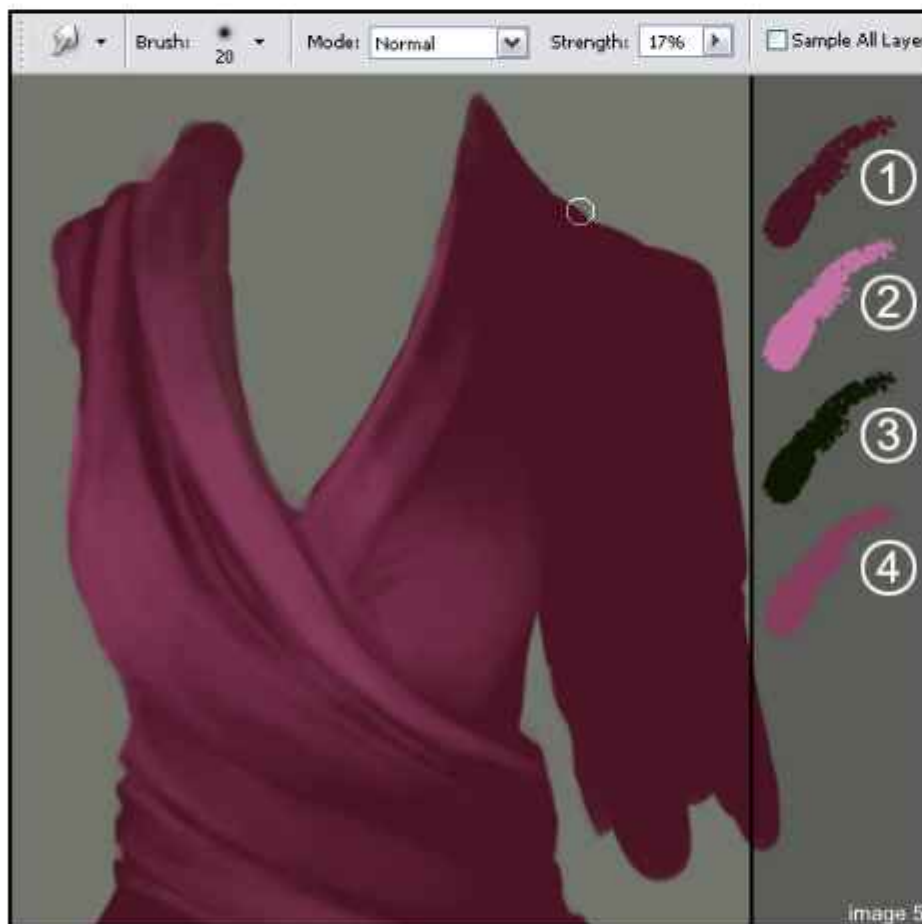
Now that I have a VERY rough idea, I start picking colours from all the shades I created. I try to find folds and work on them some more. Deepen lower/shadowy/darker parts in between folds, and slowly blend colours together. It still looks quite strange, doesn't it? Have patience, though, we're getting there! (Image 3)





Step 5: Correcting the shape

It's important that you have a good shape to work from. Just pick the background colour and correct folds and outlines. Basically, it's a matter of cleaning the rough shape you made in the second step. (Take a look at the waist area to see some minor changes). (Image 4)



Step 6: Smudging and blending

Fabrics contain a great number of edges and folds, some of which are smooth, while others are more rough/harsh. In order to smooth some of them out, we use the smudge tool (just make ABSOLUTELY sure you don't overuse it). To be honest with you – it all looks a bit too smudgy in this step, but since we'll work things over again with the normal brush, it doesn't really matter for now (Image 5).



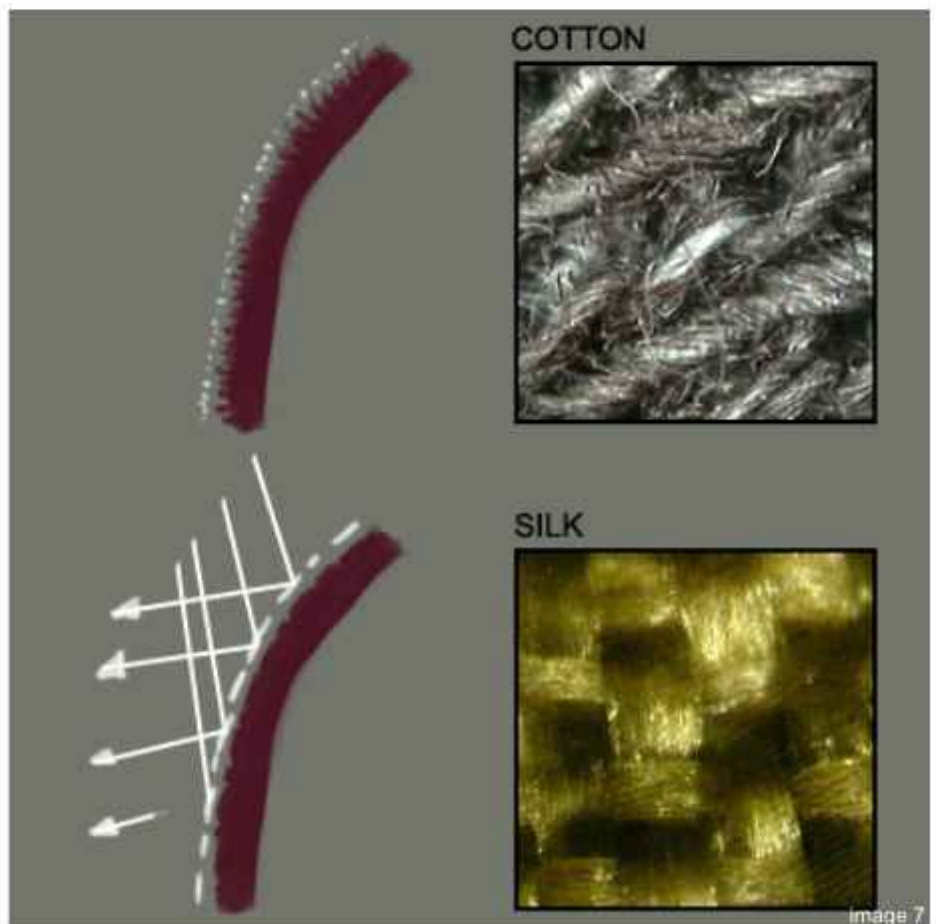
Step 7: Shadows

Up to this point, we've only used two different colours (keep your hands off the highlights for now). It's time to add some shadows to the somewhat monochromatic form we have now. Use colour #3 to deepen some of the inbetween fold sections. Just like last time, vary your pen pressure in between folds. Deeper value = deeper shadow/fold, lighter value = shallower fold. Also, don't use the shadow color everywhere, but reserve it for the darkest and deepest folds. As you can see, I didn't use a lot of the shadow color. Don't forget the seams (like where the sleeves are attached). Notice how the whole mess is slowly coming together? With the current colour combinations and no harsh highlights, the fabric looks like stretch or some sort of soft cotton. We could actually settle down with those colours and refine from here. However, our plan was to paint silk, right? Right (image 6).



Step 8: Highlights

Here come the highlights. If you want to understand how to paint different fabrics, you need to know what actually causes them to be different. The fabric we had in the previous step didn't have any highlights because the surface was of a different type than silk, and it had more texture. The clothing in step 7 didn't create any specular (reflected) light at all. Silk, on the other hand, is very smooth to the touch, and its surface is flatter. The smoother a surface is, the more light is reflected. (image 7) Let's assume what we have in Step 7 is cotton. Due to the fact that cotton reveals a very rugged surface under a microscope, light doesn't have enough smooth surface to bounce off directly and instead bounces off in all different kind of directions which creates a dull effect.





Silk on the other hand reveals smooth threads, which the light can bounce off directly into the viewers eye. This effect is what creates the bright specular effect. Now that I've bored you with a bit of theory - it's on to the practice! This is a somewhat difficult step to explain. But, as always, make sure you still remember

where you placed your light source. Start with a big brush and grab color #2. Once more, make sure you vary the value of the color by pressing down more or less depending on the angle and height relative to your light source. Make some crazy brush stroke and try to see if you can create a look that works for you.



elements **Fabric**

Besides adding the actual highlights, I'm also color picking all over the place and refining shadows. A little trick is to first create a bigger shadow area, then pick a lighter color again before painting a smaller fold in between (you can see this on the leftmost side of the left collar part). In general, silk doesn't have many folds. It's a smooth and thin material, which in this case is quite tightly stretched over the body. The fabric looks much more like silk now, don't you think? (image 7)

Step 9: Ornaments and embroidering

You can add an unlimited amount of detail to fabrics. In this case, I settled on some asian-influenced imprints. I picked a new color (a slightly yellower and brighter shade than the main color) and started painting in some leaves and random patterns. This is quite a delicate procedure. Embroiderings and patterns need to follow the body, and since they are imprinted on the silk, they also need to follow the same light and shadow physics. If you just paint everything in the same color, it will look flat and unconvincing. You can paint over shadows for now, but don't forget to erase those parts later. To further add to the effect, I changed the color I used for the leaves to a brighter and more saturated hue, and I revisited the patterns on the parts with the most highlights (on the edges of the collar and on the highest part of her chest). It's hardly noticeable, but it adds to the overall feel. If you don't have the patience to paint textures yourself, you can always create a brush from some random flowers you painted and use it on a separate layer on top of everything. Set it to screen (or try out different layer modes) and brush off the parts that go over shadows. To refine those, it is always good to paint over them and only use the brush as base (image 8).



Step 10: More refining and embroidering

First of all, I refined some of the edges around the waist/belt to make it look more like some stiff asian asymmetric belt. I added some trimming to the collar and a different pattern to the left side. The fact that I used those lines helped me to further accentuate the shape under the clothing. This is a little trick I like to use quite often. Note how the lines are brighter on top of the folds, and how they almost vanish into the shadows. Also pay attention to how the line follows the fold and note its "ups and downs." Once more, I used only the pen pressure to create highlighted and duller areas on those little lines. (image 9)

Step 11: Finishing touches

Color picking here and there, I corrected some more details. I blended colors better and deepened some shadows. Even though silk is very smooth, it bothers me if something looks too "rendered", or as in this case, a bit "rubbery". You could go over the fabric with a speckled brush and create the feel of textures manually, while using darker colors in the highlighted areas and brighter colors in the shadowy ones. There is, however, a quick and dirty method: I created a layer on top of everything and filled it with a neutral gray (128,128,128). Use the Add noise Filter on that layer (Filter -> Noise -> add Noise) with the settings to "uniform" (don't click monochromatic) and a high amount of grain. After this, set the layer mode to overlay and reduce its opacity until it looks nice. Voilà! (image 10)

Project Overview by :

Natascha Roeoesli

www.tascha.ch



image 9



image 10



FIRE & SMOKE

Chapter 05 : By Richard Tilbury



Fire and Smoke

This month sees us tackling the subject of fire and smoke, another rather tricky element to deal with. The main problem with this topic is that both fire and smoke are very ethereal in essence and have no tangible form and can be neither touched nor examined. As they do not have any real volume to speak of it is hard to set any concrete rules as to how they should look. Similar to last month's tutorial on water, fire and smoke are also dependant on a number of factors that are interrelated. The colour of smoke depends entirely on what is burning and the shape it adopts relates to the intensity of the fire and off course weather conditions as does fire. For the purpose of this tutorial I am going to keep the actual fire reasonably small and concentrate on the smoke aspect.

Step 1 - The first step is to get rid of the white background and put in a gradient that blends from a pale to a mid grey with the lightest area being the sky (Fig01).



Step 2 - I decided to place the fire at the base of the image so as to provide plenty of room for the smoke. I chose a near white to represent the centre of the fire and blended this with a pale orange to show the flames (Fig02). What also helps the intensity is duplicating the white section and selfing to an Overlay mode on a separate layer which is what I did here. To create the sensation of movement apply a Gaussian Blur in order that the lines are not too sharp or alternatively you could use the smudge tool.





fig 5

Step 4 - We now have both the fire and smoke in the picture but they somehow feel a little unrelated. The way to connect the two is by using a pale orange colour in some of the smoke which will serve to echo the warmth of the fire and unify the image. In Fig04 you can see the effect of this on a new layer set to overlay.

Step 5 - We began this tutorial with a gradient so as to very vaguely suggest a land mass and sky as a background but now we have the fire in place it looks as if it is floating in a void somewhat. To rectify this we are going to increase the contrast of the gradient and add some rough brush work at the base to help "root" the flames (Fig05). The background can remain hazy as it will contribute towards the sensation of a smoke screen. On the smoke layer I also added some definition to the shapes using a smaller brush and emphasized the orange glow. You will also notice that the fire is now more intense due to an additional layer set to overlay which you can see in Fig06. The flames can be seen in normal mode in the upper half of the picture.

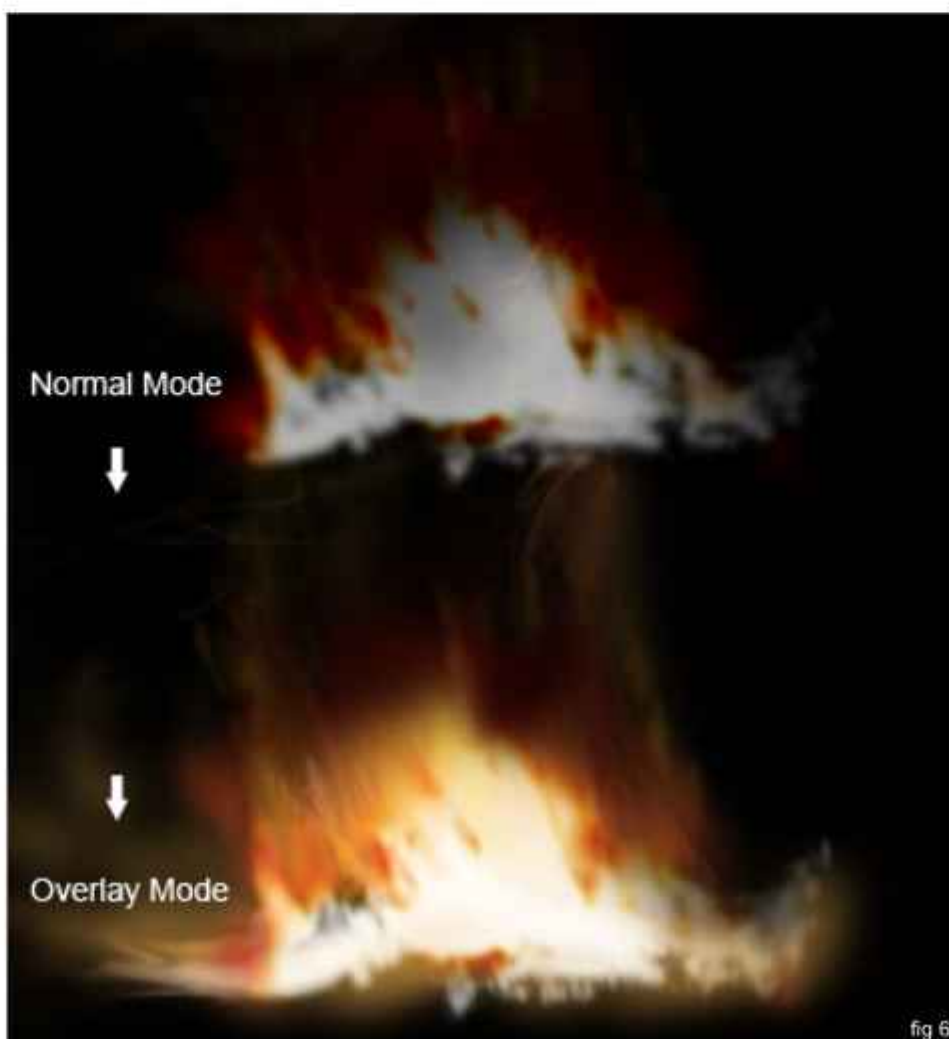


fig 6



fig 7



fig 8

Step 6 - Fig07 shows a further enhancement to the smoke and in this image I have given the plume some more volume by darkening the left side more and creating some more defined shadows on the right. The idea here is to paint in a small scale level of detail across much of the smoke which shows the tiny cloud patterns it adopts but at the same time define some larger shapes and forms where the main shadows and highlights fall.

Step 7 - The smoke started off as grey colour but now it is time to add some warmth to it, not because grey is wrong but rather just as a personal preference. This is done by simply adjusting the colour balance of the layer more towards yellow and red. To suggest that some of the flames are leaping upward inside the smoke I have enhanced the orange glow on the left and also painted in some more distant smoke in the upper right drifting across the sky (Fig08).

Step 8 - The main components are already in place and from now on it is a process of refinement and adding more detail. I am reasonably happy with the glow on the underside of the smoke but it does at present lack a little definition unlike the right side and so I have added more detail here. I also wished to exaggerate the thickness of the smoke and so have added a new layer which is set to multiply and uses a mid grey brown to increase the darkness of the shadows (Fig09).



fig 9



element *Fire and Smoke*

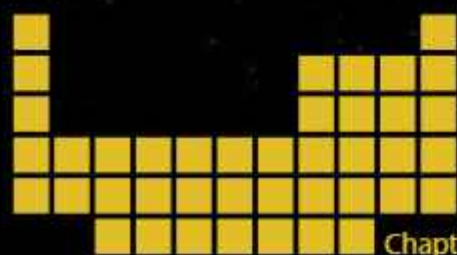
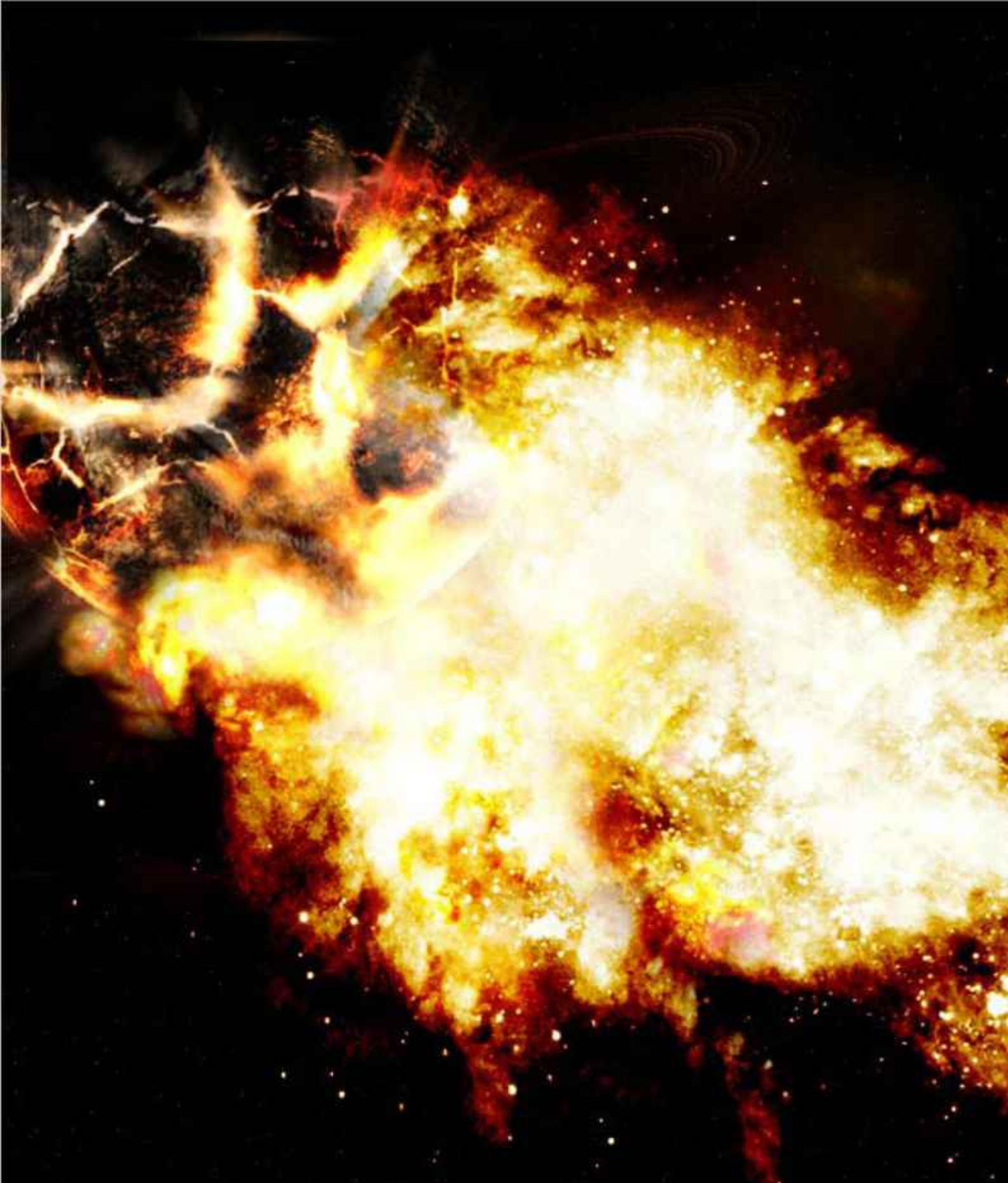
In response to this I have also added another layer which I have named "Highlights" and set to normal mode. Here I have painted in lighter accents across the right side to reflect the sunlight filtering in from the right corner, also adding some more drama and contrast.

That about concludes this tutorial and hopefully it will help you paint your own versions of the subject. There are a few changes that could further improve the picture: such as integrating the flames better with the smoke and painting in some finer details in the plume but most of the crucial stages have been covered I think. You can see the final version below.

Tutorial by

Richard Tilbury





FIERY EXPLOSION

Chapter 06 : By Alyn Hunter



Fiery Explosion

This Tutorial will teach you how to create a fire effect that I stumbled across whilst making an image. It's fairly simple and requires only basic knowledge of blending modes. This will work if your using Photoshop 6 upwards. So, in we go.

Step 1

First of all ensure you have a black background, as the end result does vary quite considerably depending on the choice of colour used. You will need to brush out a fiery shape with a white brush set to 100% thickness. Having some debris flying around randomly does help add to the effect as sparks. Also having some pre-made brushes will help you. But to give you a rough example, check image



Image 1



image 2

Step 2

The next step is still simple, duplicate you initial brushed fire shape layer, and set a new layer to "overlay". Then, hit ctrl+u, and check "colourize", using the following settings: Hue = 35, Saturation = 25 (default), Lightness = -50. This should give you a similar effect to image 2.



Step 3

Another simple step is to just duplicate your overlay layer and set it to colour burn as you can see in image 3:

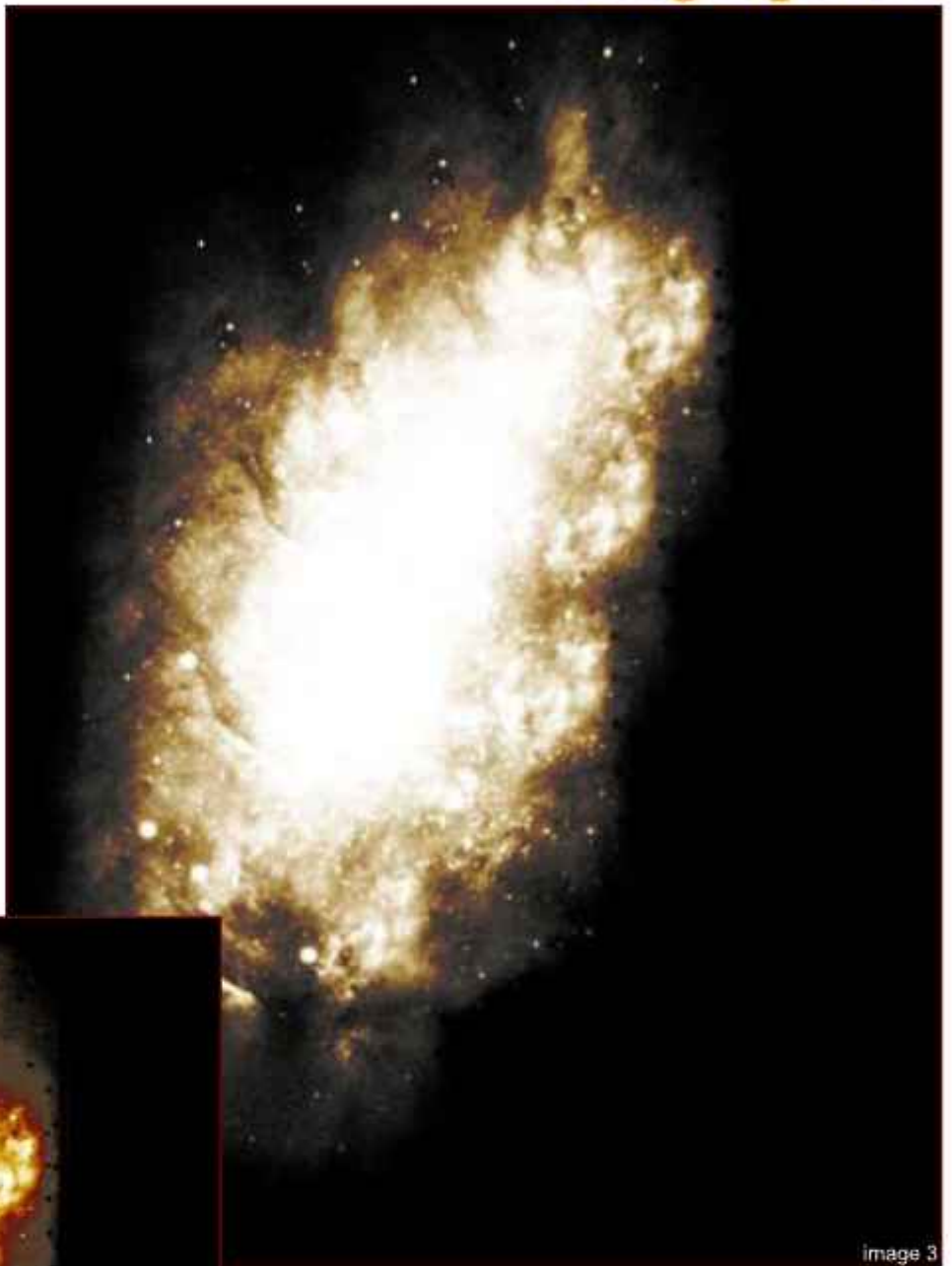


image 3

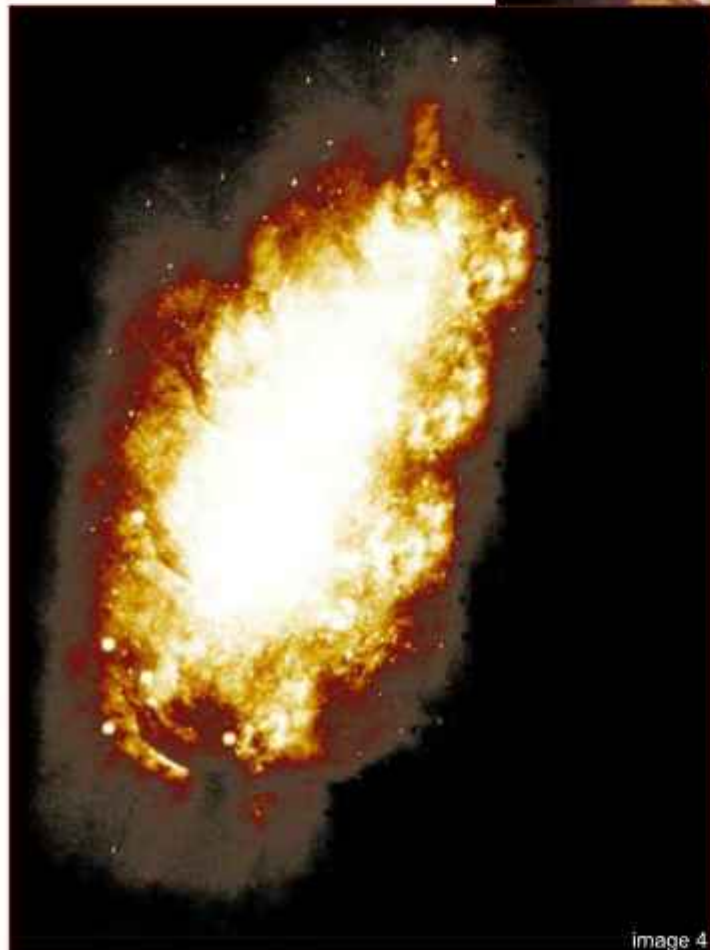


image 4

Step 4

In this step we will be going over what we've done before. So follow steps 2 and steps 3 through one more time, duplicating your layer; overlay, hue; duplicate, burn, new set, merge down etc. Just follow 2 and 3 again with this new layer and all is well. Hopefully you should achieve this messy object, which is all you want really as seen in image 4. The following step will show you the finished product! Now you could leave it there, if you want to (merge all layers, except black layer, and set to hard light), however I continued. Since the effect can be enhanced. Create a layer set using the folder icon at the bottom of the layers box. In the correct order, put the three layers you have into the set. Select the set, and hit "ctrl+E" thus making one new layer.



Step 5

Set your final layer to "hardlight" and that's pretty much it, the mess vanishes, and you have yourself a nifty explosion. It works well for space effects, impact scenes etc. (image 5). To give an example of how you may use it, check image 6, a snippet of the "Goodbye" remix image I'm working on.

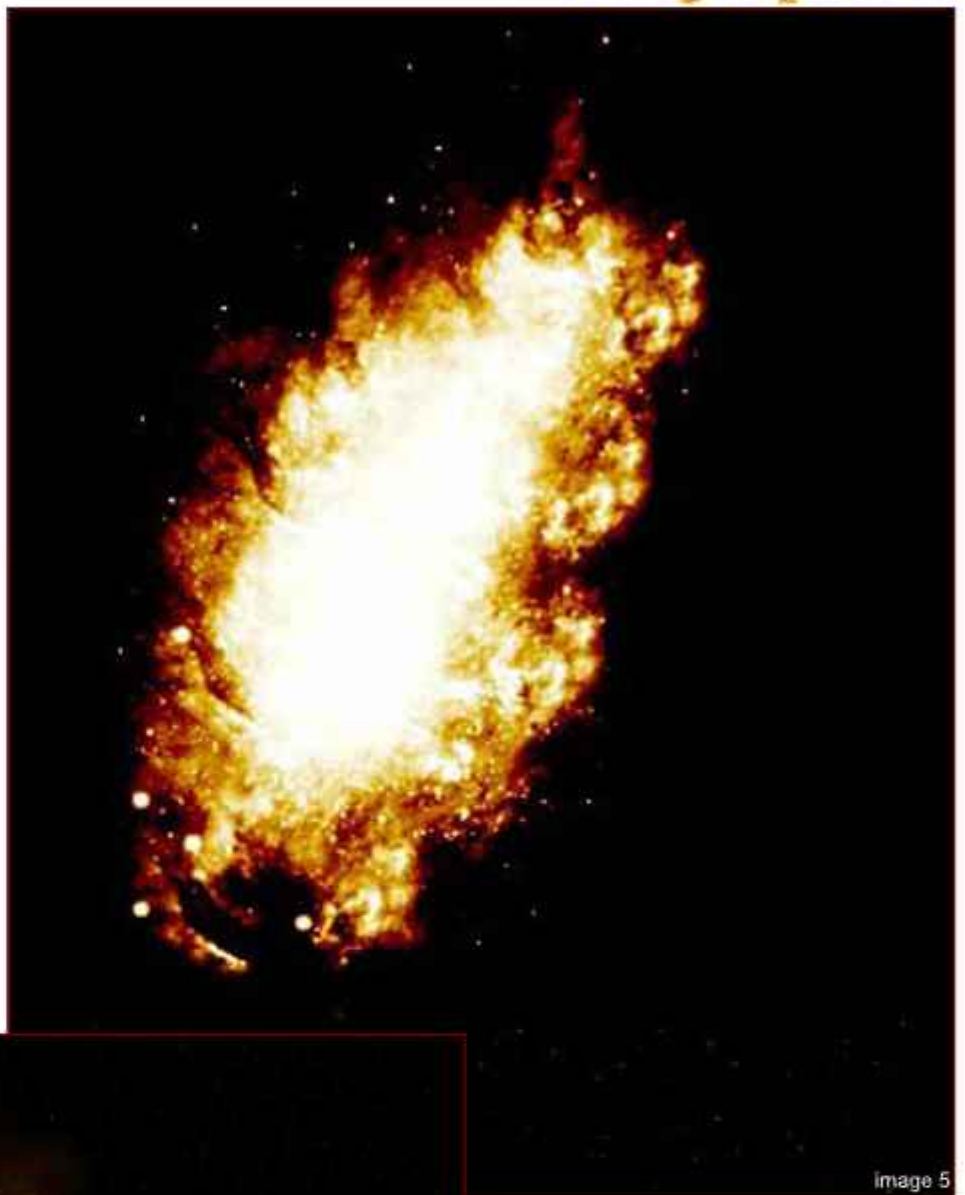


Image 5



Image 6

Alyn Hunter

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FIRE & SMOKE

Chapter 07 : By Daniel LuVisi



Introduction – Hello and welcome to my Fire and Smoke Tutorial! This one is pretty easy and should be able to be finished within minutes if you get used to it enough. In this tutorial, I will show you how to paint fire, embers, add glow, and how to render smoke. Now the tutorial this will be referring to will be the image of the Beast head, not the full "Fire on Black" image, that's just to show how I progress. Now let's begin!

Step 1 – (image 1) First, you want to create a character. What breathes fire? Well a lot of fantasy creatures could, even hobbits! But what really breathes fire are those creepy creatures that lay on the bottom of the planet: dragons, Balrogs, Demons, Lucifer, Dark Angels, Hydras and etc. I could go on and on but it's up to you, as the artist to discover what you want to range fire from its dangerous mouth, hands, back or face. In this image, I have a creature I created a while ago, who is actually a good creature but



Image 1



image 2

I'm going to turn into a villain. Now all set aside the design of the creature, you can see inside his mouth is an orange glow. We start this by bringing up a soft brush from our brush selector and turning the Opacity down to a low 15-20 %. Once you have the bright orange, you're going to want to turn the settings on the brush to Overlay. Softly go over the spot of the creature's mouth until you have nice warmth to its cover. After that, you will want to darken the orange a bit so you don't get too harsh of a glow on the next step. So bring it down to a mild orange and reset your settings on the brush to Screen, repeat and go over until you have something similar to my image, or to your taste.

Step 2 – (image 2) This step is pretty easy, it's just creating it's overlapping glow from the heat. Turn the brush up again a higher orange and set the settings on the brush to Normal, but 10% opacity. Once you have that done, just damply go over the edges of the creatures (body part) so it seems as those the fire is sticking out, or at least its heat glow.



Step 3 – (image 3) Now you're going to want to darken that spot in the centre of your main focal point on the fire. To do this, you're going to again change the colour of your orange, going for a warmer tone now. Something a bit bolder than before, and set the opacity to 5% and settings to Multiply, go over the small part with a soft brush again till it's a deeper orange/red. Once you have that done, you're going to want to use the Smudge Tool, with its strength to 60%, and start to bring the warmer orange upwards towards the red colour. Make sure it blends in smoothly; you don't want harsh strokes, because fire is obviously very smooth and ethereal. Use reference shots of fire if you have any.



image 4

Step 4 – (image 4) Once you have these colours blended in, you're going to use the Dodge Tool. For this part, the most important key note to take here is **DO NOT GO OVERBOARD**. There is a reason why people don't suggest using the dodge tool at time, because so many novice Photoshop artists abuse it to no end. Change the opacity from its harsh strength to 20% and make sure it's set to highlight and not Shadows or Mid tones (important). Once that is all done and set, you can start to ignite this fire within the inside. Start out by dodging some blobs into it, smudge those and blend, then go over it a little more with a smaller brush.



Step 5 - (image 5) Now that you have your basic fire, which is barely detailed at this point, you can go over it again with an Overlay soft brush with a dark red. Make sure the opacity is very low, I'd even say go with 5% or 10%. That's all really for this step, just make sure you don't go too overboard and wash out the orange.



Image 5



image 6

Step 6 - (image 6) Now with step 6 you're going to start to paint in some jumping flames. This is up to you as the artist; I can't teach you much here rather than use references! They always help, but what I can offer is some tips on fire. Usually the inner flames consist of solid smooth strokes, rising upwards. Sometimes they curl and other times they buckle and bend, it's usually the harder, fiercer fire that bends.



Step 7 – (image 7) Another easy part! Feel lucky, this part is small. Basically this only step is just adding lighting to the upper and side ridges of the creature's mouth with a warm yellow, easy huh?



image 7



image 8

Step 8 – (image 8) This is where you start to detail the fire some more by adding yellows and oranges to the mixture. Once you have your colours laid out in front of you, you'll want to blend them some more, then repeat the step by going over and detailing it again. Turn on the Pen Pressure (Brush Controls, Other Dynamics, Control: Pen Pressure) and go softly over it with a soft small brush.



Step 9 – (image 9) Now you'll add a glow of light around the main fire attraction. Another easy step, just pick a high bright orange, with it leading off with a yellow, and turn it to Screen, Opacity 20% and go over it all with a soft brush. Nothing too much, again.



image 9



image 10



image 11

Step 10 & 11 – (image 10 and 11) Here we will add some heat waves to the fire. You're going to use the Magic Lasso tool and draw a line, like in the image, around the left side of his mouth (our left), once you have your shape you can let it connect. Then right click it, and go to Layer Via Copy. After you have done this, go to Filters (which I never use, but this one looks good), then go to Distort, then to Ripple. Set the Ripple to something that fits your want, nothing too powerful but enough to give it that blurry look. After you have that, lower the opacity on that layer to about 50, so it moulds in with the rest of it but still distorts.



Step 12 – (image 12) The finished result of that, rippling doesn't over do it or take over too much.



image 12



image 13

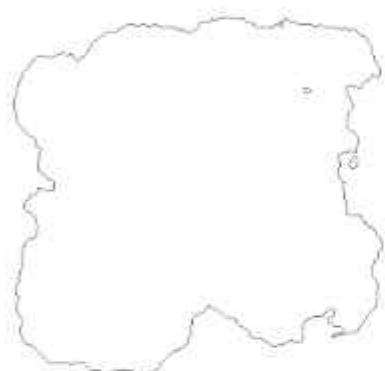


image 14

Step 13 & 14 – (image 13 and 14) Here we're going to add embers to the picture, again and again, a very easy part. This just involves adding specs of oranges and reds around the picture on a new layer. Once you have your certain amount, go to Layer > Layer Style>Outer Glow. In those Options; you can mess around with the size of the glow, the opacity of it and etc. Make sure the colour is a bright orange, red or a yellow.



Smoke - Step 1 (smoke 1) - Here we go with the smoke. Now this is my first time teaching smoke, so I'll try to make it easy. Here's a new way I did it, I thought I would experiment with my own brushes. Make a new canvas, and with a size 1 hard brush, just draw a blob like I did. With that done, then go to Edit>Define Brush Preset, and voila! Rename it to Smoke Brush, and it should save automatically and also turn it into the brush.



smoke 1



smoke 2



smoke 3

Smoke - Step 2 (smoke 2) With your custom brush now, turn the opacity down to 40% and just mess with it on a new Canvas. Go for some grey colours and just do whatever you want! Even turn on pen pressure for some more fun! Ok! But now no more fun, back to painting! On the image, make it a new layer on top of the fire, and lower the opacity to 20%. Remember this is your base layer so all you have to do is just go over it softly, you can always erase it and not worry about the rest.

Smoke - Step 3 (smoke 3) This is where you'll start to lighten the smoke, which is an easy step. Duplicate the layer by going to Layer>Duplicate Layer. After that, lower the opacity of the layer in the Layer Tools to 25-30%. Then set the layer to screen to add more volume to it. After this, merge the two layers together as one.



Smoke-Step 4 (smoke 4) Since smoke is kind of transparent, you're going to be able to see the lighting from the fire popping through. Grab your custom smoke brush again and change its colour to a mild orange. Make sure your opacity is low (just to make the record, when doing smoke, make sure the opacity is ALWAYS low) and start to dab the orange softly onto the smoke layer. You should be able to make the smoke turn from a pasty white, to a white-orange mist.



Smoke-Step 5 (smoke 5) This part I started to cut around the smoke, breaking it down so it doesn't get too thick. I used my custom smoke tool as an eraser and started to slowly just itch away at the smoke. You should turn down the flow and opacity at 45% when erasing, and just dab at it. Don't put in hard strokes and totally deplete the smoke.



Smoke - Step 6 (smoke 6) Almost done! Again with the adding volume to it, rework your spots with a very low opacity Smoke brush, just add mists, little pockets of dry smoke leaving his mouth.



smoke 6

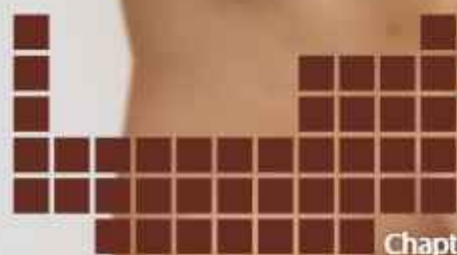


smoke 7

Smoke - Step 7 (smoke 7) Now your final step. A quick way to end it off! All that has to be done here is a repeat of Step 5, just to clean it up again. But one more thing, in the heat waves, to give it more effect, add some thin lines of fire rippling through. This can be achieved with a size 3 hard brush on pen pressure, and just make some nice thin orange lines riding the heat waves. And there you have it! Done

Daniel LuVisi

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FLESH WOUNDS

Chapter 08 : By Richard Tilbury



This month's tutorial will conclude the series by finishing with flesh wounds as the subject. As last month's dealt with skin I will use that as a starting point and paint a wound over the image to save time. As usual I did a search for as much reference material as I could muster and decided to have a go at painting a deep laceration across the chest area as though our character had been struck by a sword. Whilst looking through the reference pictures I noticed how the numerous shades of red that surround a wound. Not only do you have the very dark red of the puncture and thicker blood but the skin around it also appears more red as blood gathers under the surface of the skin. As it clots it also appears darker and so you end up with a varying tonal range dependant on the area.

Step 1

The first stage is to decide on where the laceration will be (the chest in this case). On a new layer I painted in two slashes using one of the standard hard round airbrushes with various widths and using a dark red (R53,G13,B10) as seen in Fig.1. This will determine the actual cut and utilise the darkest colour. Because I am attempting to paint a wound inflicted by a sword it is important not to make the wound too big. A blade is relatively thin and so even though a stab/slash may be deep, the puncture may in fact appear quite small on the skin. The bleeding around it will eventually help determine the extent of the damage – after all a small shallow cut will bleed far less than the severing of an artery for example.

Step 2

On another new layer set to Soft Light and using a slightly lighter shade of red (R88,G33,B35) I began adding some redness around the cuts to help relate them better with the skin. You can see in Fig.2 that the marks are quite rough at this stage and a few around the left cut use a standard chalk brush to add some randomness to the marks.

Fig01



Fig02





Fig03

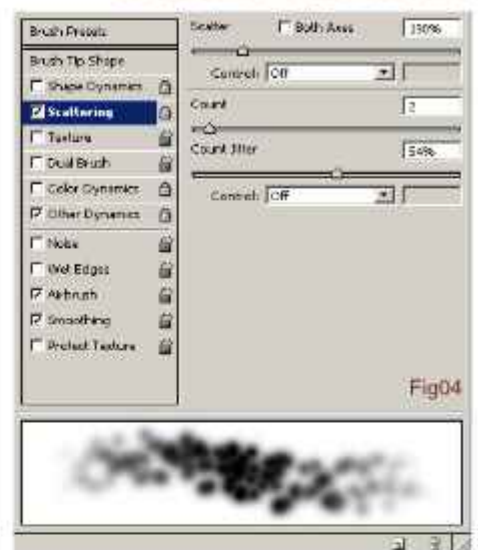


Fig04

Step 3

The next step is to further elaborate on this by adding another layer, this time using a slightly different shade of red (R72,G7B,16) but again set to Soft Light (Fig.3). This layer will help describe the spattering of the blood from a deep incision and to help this I have added some scattering to the brush settings as seen in Fig.4. You will notice that I have also painted in some downward strokes to show that the blood has run down from the wound and dripped onto the abdomen as well as spattering the chin slightly.

Step 4

Now onto perhaps the principal layer which I decided to call "Drips". This is set at the standard Normal blending mode and is done using the brightest hue so far (R97,G12,B11). This layer is the one in which we see the most obvious detail and drips and in Fig. 5 you can see what it contributes with all the other layers switched off.

Fig05





Step 5

One final layer is required to add in the finishing touches before we flatten the image and make any necessary refinements. This shall be the highlights layer and will include the very small but vital touches that show the reflective and wet quality of the blood. It is very easy to exaggerate this aspect of the image so beware! Use a colour that is slightly paler than the principal tone (in this case R169,G114,B93) and add a faint line along the upper edge of the cut to help denote the depth and show where the light catches it. In Fig.6 you can see the before and after effects of this layer. In the bottom half we see a few tiny highlights on the fresh blood inside the cuts as well as the highlight along the top edges. These are only very subtle differences but they do add a much needed touch.

Step 6

When we switch all these layers on we end up with something similar to Fig.7. Some further adjustments I made was to turn the opacity of the drips layer down to 70% as well as tweaking the highlights around the right cut slightly.

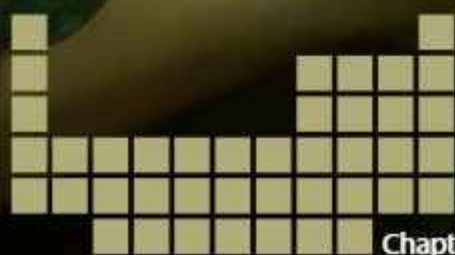


Well this concludes the elements series which has proved to be an interesting and useful experience. A number of the subjects covered over the last year or so have been new to me and so each has provided a different challenge in their own right. I hope that you have enjoyed following them as much as I have enjoyed making them, and maybe even learnt something along the way.

Many thanks,

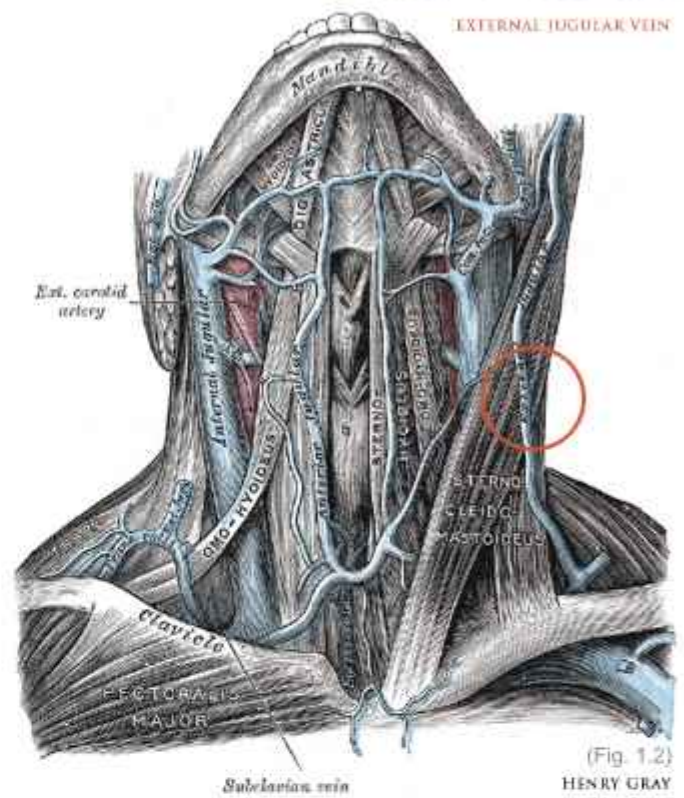
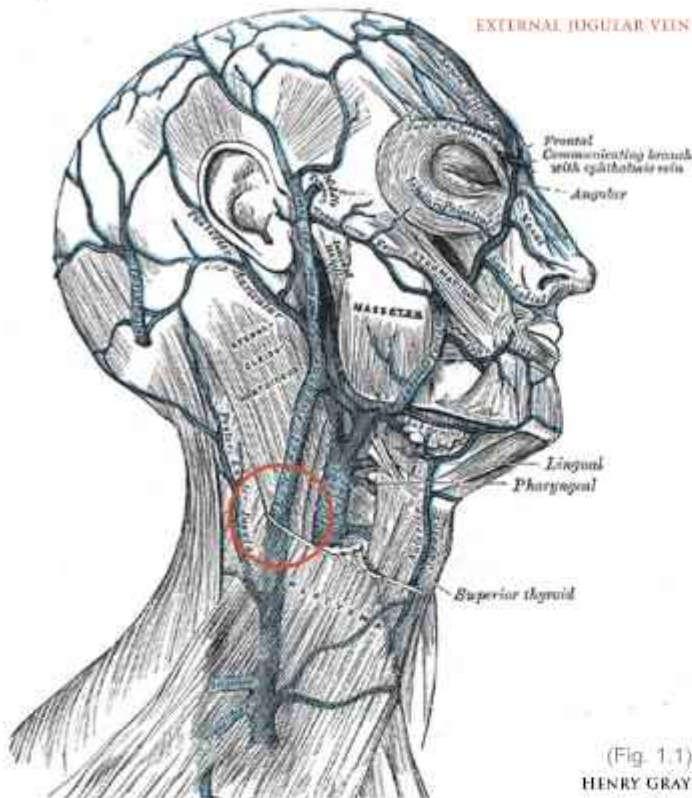
Richard Tilbury

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FLESH WOUNDS

Chapter 09 : By Benita Winckler



Introduction

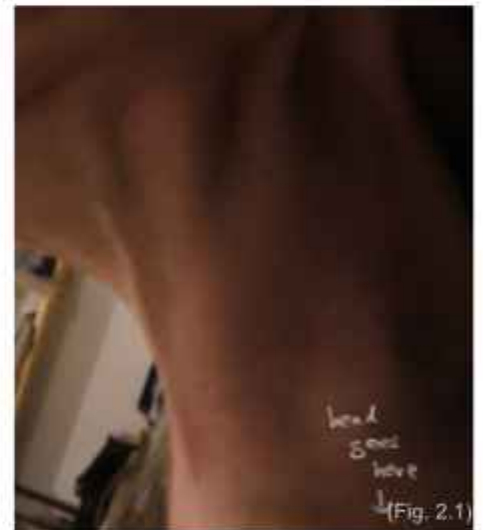
When I heard about this topic my first thoughts were; Ummm... wounds. This sounds like an unidentifiable topic to spend my time with. Giving it a bit more thought I suddenly noticed that this could be a nice excuse to paint a vampire lady. So in this tutorial we will use Photoshop to develop the image of a lady who just got bitten by, well: a vampire.

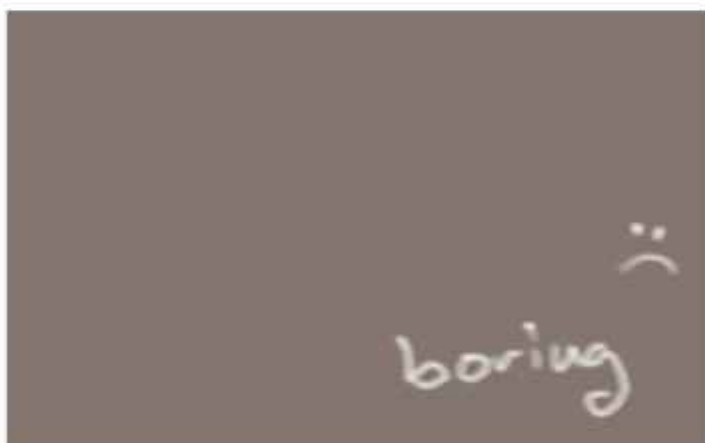
Concept and Inspiration

A nice new project should start with an inspiring idea. Thinking about vampires I knew that in the end this image will look mainly dark with her pearly white skin being lit by a hidden light source accentuating the bow of her neck. Red hues dominating the image and some small touches of turquoise as a complementary colour contrast in the centre of interest. The bite wound unobtrusive, maybe something you might notice rather on second glance. With her pose conveying most of the feeling - not the blood.

Investigation

Of the subject, studies & reference materials. To become acquainted with an unfamiliar subject it's best to do extensive research and collect as much information about it as possible. In this case, I also needed to know where to place the vampire marks accordingly. Since the Arterial Carotis - which would have been my favourite choice (thinking as a vampire here) - runs deep under the surface, we'll have to come up with a visually more appealing solution. I suppose our vampire wouldn't mind if he was asked to nibble at her Vena Jugularis Externa instead. Figure 1.1 and 1.2 are showing some anatomy illustrations of Henry Gray. The red circle marks the place where the wounds will be placed. The information I got this way was a good start but I needed to see things for myself. So I did some studies of me hanging headfirst, (getting a red face and a slight headache) to see where this vein goes (Fig. 2.1) and (Fig. 2.2).





Now that I knew where to put the bite I could move on to the next issue: blood on pale skin. Google provided me with some errr... unpleasant images so I closed the page in a rush and started thinking about approaching the subject in a different way. After paying our refrigerator a visit I decided to go the "Heinz way" - Tastefulness guaranteed (Fig. 3). In #1 you can see not only that one of my beloved fingernails broke lately, but how the shadow is causing the colours to fade, making the originally red ketchup spot look like some undefined dark area. But even without the colour – would this same hand be seen in another context, one could immediately read the dark spot as blood. Looking at #2, note how the viscous and shine through substance is lit by the sunlight in the room. The colours are bright and lots of shiny little light reflections indicate that this is a wet surface. Also note: The areas where the fluid film is thick are of a richer colour than the areas with only a thin film. Here the lucid skin can be seen through the covering fluid, resulting in a mix of colours and a much lighter appearance. And although we have to take this visual information with some freedom of interpretation (since real blood looks a bit different from ketchup of course), overall the image did suit our needs.

4. Line art

Now that the research part is done we can start with our image. Figure 4 shows the rough beginning of the line art. I also like to sketch right ahead with colours but this time I found some analytical lines to be helpful to get the perspective of her face and neck right.

5. Colouring WIP

These days I consider ultra clean backgrounds boring to work with, so I start the painting process with some messy brushwork in the background to give the image some life and make it my own (Fig. 5).



After some more brush strokes to suggest the lighting on the character and it looks like this (Fig. 6). In this early stage I like to work with simple hard edged brushes since they offer a lot of control about the form that needs to be defined. One of Photoshop's standard brushes (Airbrush Pen Opacity Flow) is a good choice for this purpose. As you can see, the line art is still there on top of the painting on a separate layer. The lines in the upper part of the image suggest what will be thick tapestry in the end. Once the image has progressed a little more, this layer will be merged with the background layer. One nice aspect of Digital Painting is: Colours are for free! One can be just as self-indulgent as one want (Fig. 7). In Figure 8 we see that there have been some slight changes. To give the image more believability I decided to show her in a swoon - eyes closed, slumping down, the head supported by a cushion. And although I have spent a good amount of time to study the pose of the left hand, it had to be removed in order to keep the focus on the other hand which is touching her chest and therewith is an important storytelling element. (If you are losing blood your heart will beat faster).



Fig 10a



Fig 10b



Fig09



Figure 9: Working on the whole image, I darkened the background so that her white neck would become more prominent. I wanted it to look as if someone would hold up a small light, like a candle for example. Note the intense green-blue tone on her neck where the bite will be placed and how the lace on her shoulder leads the view to the area of her heart. A bit more painting on the overall image - introducing even more green hues as a colour contrast to the red of the wound - and we are halfway ready to start working on the vampire marks. But before we go there, let me show you a quick example of how value can influence our perception. In the left image of figure 10 I have chosen a dark red hue to paint some bloodstains on the corner of her mouth. Compare this image with the one on the right side and note how the left image gives the impression of a wound rather than just some bloodstains. These dark spots create much more contrast, than the ones on the right side. Hence they make for a more dramatic look. The lighter red spots in the right image could of course be mistaken for signs of bad table manners, or smudged lipstick instead of bloodstains. But they look far less dramatic. One can see the skin beneath the fluid and it appears to be intact. Looking at the left image again, it could just be dried blood since there are no obvious light reflections; but there could also be a deep cut or something – we don't know, the colours are too dark to be at ease. (Fig. 10).



Let's look at the vampire bite: Figure 11 shows a close-up of her neck. Everything is prepared to add the gory little details which will tell the story. Figure 12: First I added the external jugular vein and some dark greenish hues in the area around it. If you have ever knocked your leg at some obstacle – this is the look we want to achieve here. I'm using a soft edged brush with the opacity linked to pen pressure and change the brush size while I'm working. If the underlying form is well defined you will have no problems applying these low-opacity extra shades of green. In the next step we want to add some hints which might suggest that the dark visit just happened. To do this we need a little more red and some fresh marks in her skin. Figure 13 shows the result. Now we are nearly done. In figure 14 you can see that I made the two marks of his teeth even darker to increase the contrast to the skin. And since skin has some sort of thickness too, I painted the borders of the wounds slightly embossed using a light pink colour. Some extra blood drops trickling down her neck casting the tiniest shadow, some minuscule light reflections and the image is finished (fig. 15).



Fig14



6. Conclusion

There are a variety of things one could have done in a different way than shown here. But at least the following basic principles will stay the same: Be a good observer of the things around you. If a subject is new to you, do research.

Soon you will get a feeling for it. Another thing:

Show your work to friends or co-workers and ask how they perceive your image. Sometimes this can bring up that one missing "thing" you were looking for but couldn't see. I hope you did find this walk-through a little useful. If you

have any questions or feedback, you can

contact me via email.

Benita Winckler

More work from this artist can be found at

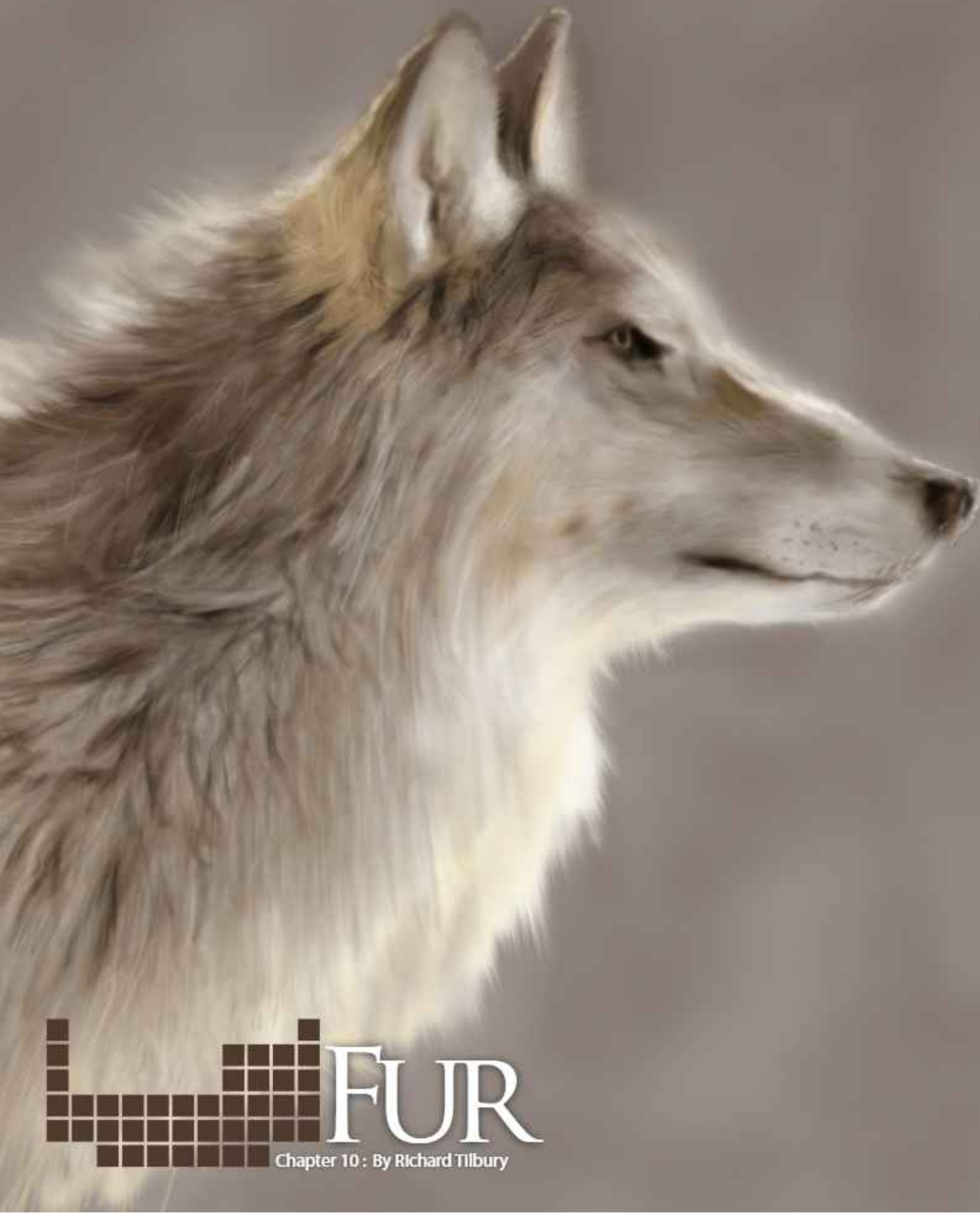
www.dunkelgold.de

And contact them via:

benita@dunkelgold.de



Fig15



FUR

Chapter 10 : By Richard Tilbury



Digital Painting: Fur

This month I will be attempting to paint fur and for this exercise I will be using a wolf as a context to create the image in order that it makes more sense and does not appear simply as a semi-abstract picture. Before starting I searched the internet for various reference images and photos in order that I could create a convincing representation of fur. When you begin to look at the subject you realise how varied it actually is, not only from animal to animal but also the types of fur evident on a single creature such as a wolf. When I began researching the subject I soon noticed how wolves vary in colour and how their fur changes in length across their bodies. For example the fur around their legs is quite short and looks almost matted similar to a bear, and yet around the shoulders it is longer and more shaggy in appearance.



Step 1

Once you have enough reference at hand it is time to make a start and I did so by filling in the background colour with a non-descript warm grey over which I created my drawing layer with a simple outline of the wolf (Fig01). I always like to get rid of the white early on and any tertiary colour is suitable really but this is only a personal preference.

Step 2

On a new layer start to paint in the key colours which compose mainly of warm browns and yellows in this instance. As there will be no definitive shadows and highlights I have sketched in everything on one layer. In Fig02 you will notice that I have made some rough marks below the shoulder to denote some of the thicker fur that appears darker beneath the surface similar to a husky. I have used a paler colour along the edges to show where the light manages to show through and basically painted in the main areas. You will also notice that the brush marks also roughly follow the direction that the fur has grown as indicated by the arrows.



fig 03



Step 3

The next stage involves using a custom brush in conjunction with the smudge tool so that the edges may be softened somewhat and create the appearance of numerous strands of hair. In Fig03 you can see the shape of the brush in the upper left corner along with the marks it produces and in fig04 you can see the settings which are simple enough. Notice that the spacing is turned down in order that the brush leaves uninterrupted lines when used. With the brush size set quite small select the smudge tool and start dragging outwards from the edges – you may wish to alter the strength on the toolbar to around 55%. You can see how this has made a difference in the latest version. I have also used a standard airbrush set to between 1 and 3 pixels wide and added in some more hairs to help blend the sections. Remember that you do not really need to illustrate every hair strand but rather just a few here and there to suggest the illusion of fur. In the case of the head I have painted in some lighter areas using various tonal ranges and omitted any real detail. I placed a few random lines around the neck line to help blend the head and body and suggest some longer fur but did not labour on this. The eye, nose and mouth areas have been darkened to help the overall impression but you can see that the picture is much improved from just a minimal amount of detail.

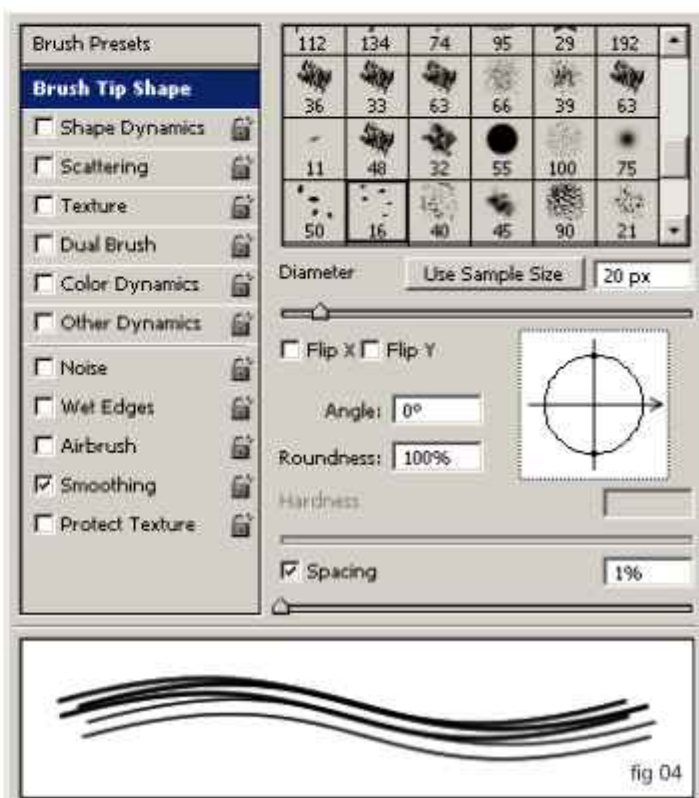


fig 04



fig 05

Step 4

So far I have tried to create the impression of fur using tonal ranges; a small amount of smudging and with as little attention to painting actual hairs as possible. What I have essentially aimed for is as good a general impression with as much economy as I can muster so that I have a clear target for finishing the picture – something that hopefully has been apparent throughout this series. Now that I have established the key areas I will begin the process of refinement. In Fig05 I have used the same airbrush as in the previous section to paint in a series of fine strokes that help blend the various tonal passages and show actual strands of fur. These

range from the neck to the top of the back and follow the rough direction of the body but be mindful to draw in random directions too in order to add a natural feel. You can see particularly on the shoulder area that the dark sections flow towards the back as well as the chest and some of the lighter hairs on the neck are almost at right angles to the general flow.

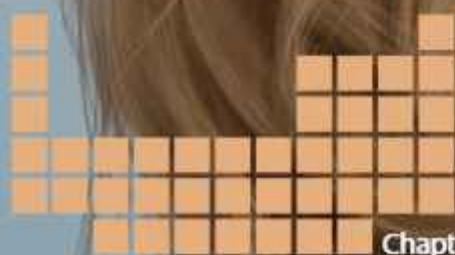
Step 5

We now reach the final phase of the tutorial which proceeds along the same lines. I have added in more fine strokes as well as a few that are a bit wider to resemble some clumps of fur. Remember to vary your strokes in direction and

width as well as the colour. So for example in darker areas add in some lighter strokes and vice versa. In the final version you will notice that I have left rougher and wider strokes along the shoulder to portray the thicker fur and kept the finer strokes to areas towards the outer edges and head. The crucial thing to remember is randomness! The last areas to be completed were the eyes, a few facial details and the highlight around the ears.

Richard Filbury

More work from this artist can be found in 3D Creative and 2D Artist magazines each month.



HAIR

Chapter 06 : By Shane Madden



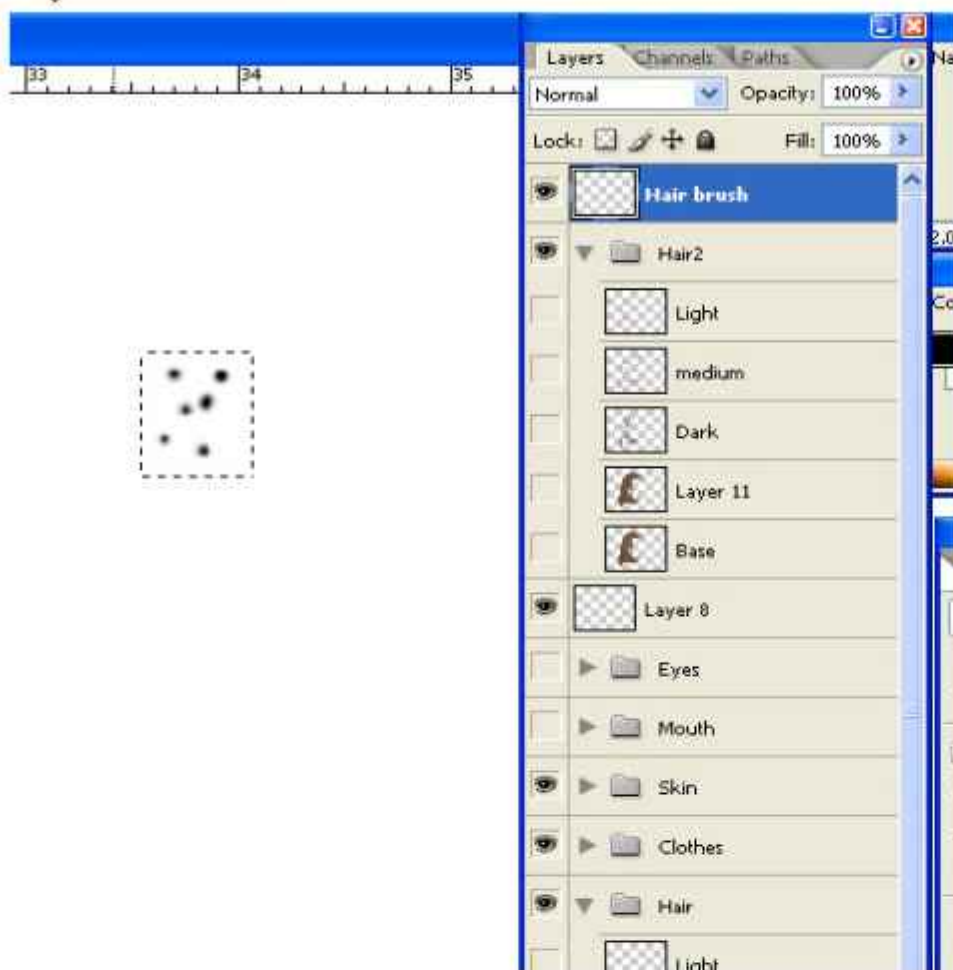
In this tutorial we are going to look at rendering hair in Photoshop. As always there are a hundred and one ways to paint hair, here is just my way of doing it and hopefully it will help spur some people on if they get stuck. I have a traditional media background so most of my techniques and thought patterns come from years of using non digital media, which I've transferred over to the computer. Working digital just allows me to repair my mistakes faster.

That being said, I try to render effects and not use tools like smudge, because there is now ctrl-z when working with traditional media and when working commercially you need to keep the artwork as clean as possible. I want to take a minute to talk about my set-up specifically using a Wacom tablet. Without one you're going to have a very hard time following with this tutorial. Personally I only have a 6x9 intuos2, and it serves my needs plenty. You can probably pick up an older one pretty cheap these days. If you're at all serious about working digitally you need to have one in your arsenal. It won't make your work better... but it will make it easier and faster!! I think of it as just another paintbrush, another tool of the trade. Here are a few things to keep in mind about hair before we start rendering. Hair is never straight, no matter how hard people try to straighten they're hair! Be sensitive to the undulating patterns of the hair whether it is really curly or generally "straight". Hair comes in many different colours. Black hair should never be rendered as black. Add a colour to it like red or blue to either warm it up or cool it down. Also blonde is never yellow. Use light browns instead and adjust the tint, shade and hue accordingly. Hair is 3 dimensional. That is not to say that we are not going to render each hair with highlights and shadows, but the whole bulk of the hair should have lots of depth. Hair tends to move in shapes and tends to stick together. Don't try to render every single hair. Hair can be rendered realistically strand by strand. But, you will drive yourself bananas doing it and if you are working commercially, you will waste time and money on an effect you can get by easier ways. Don't fight your tools, use

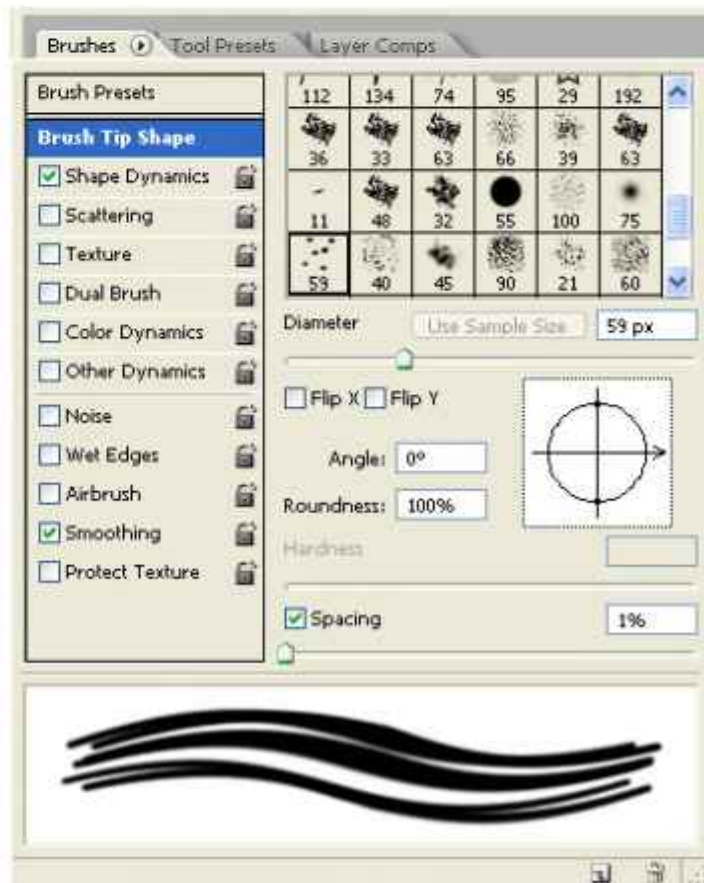
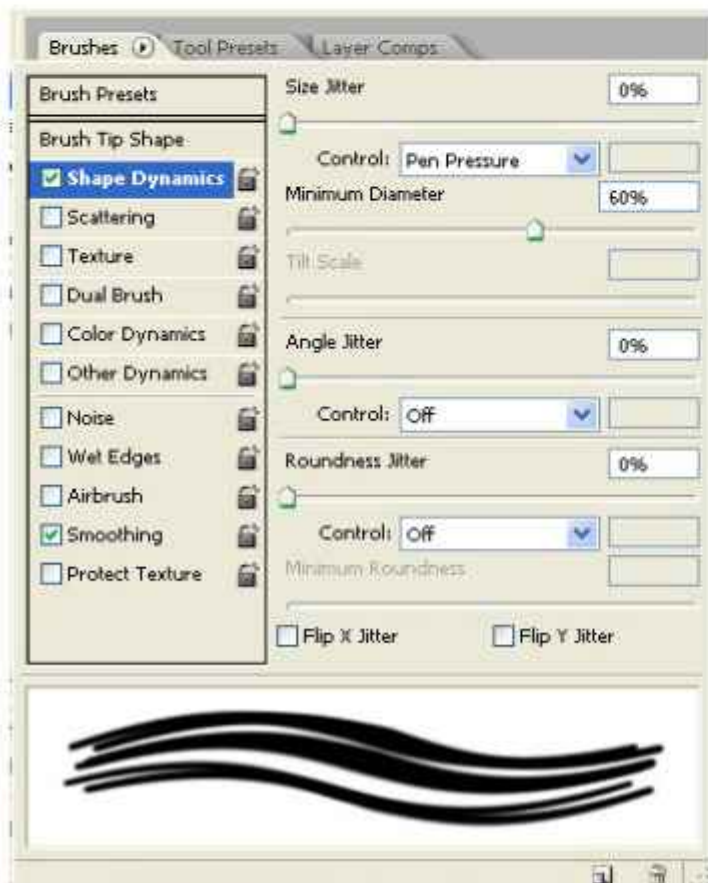


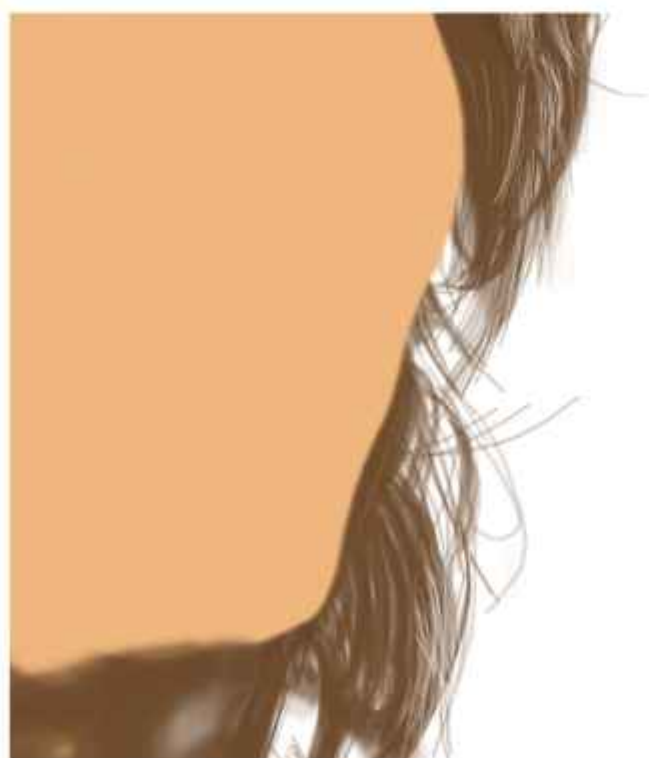
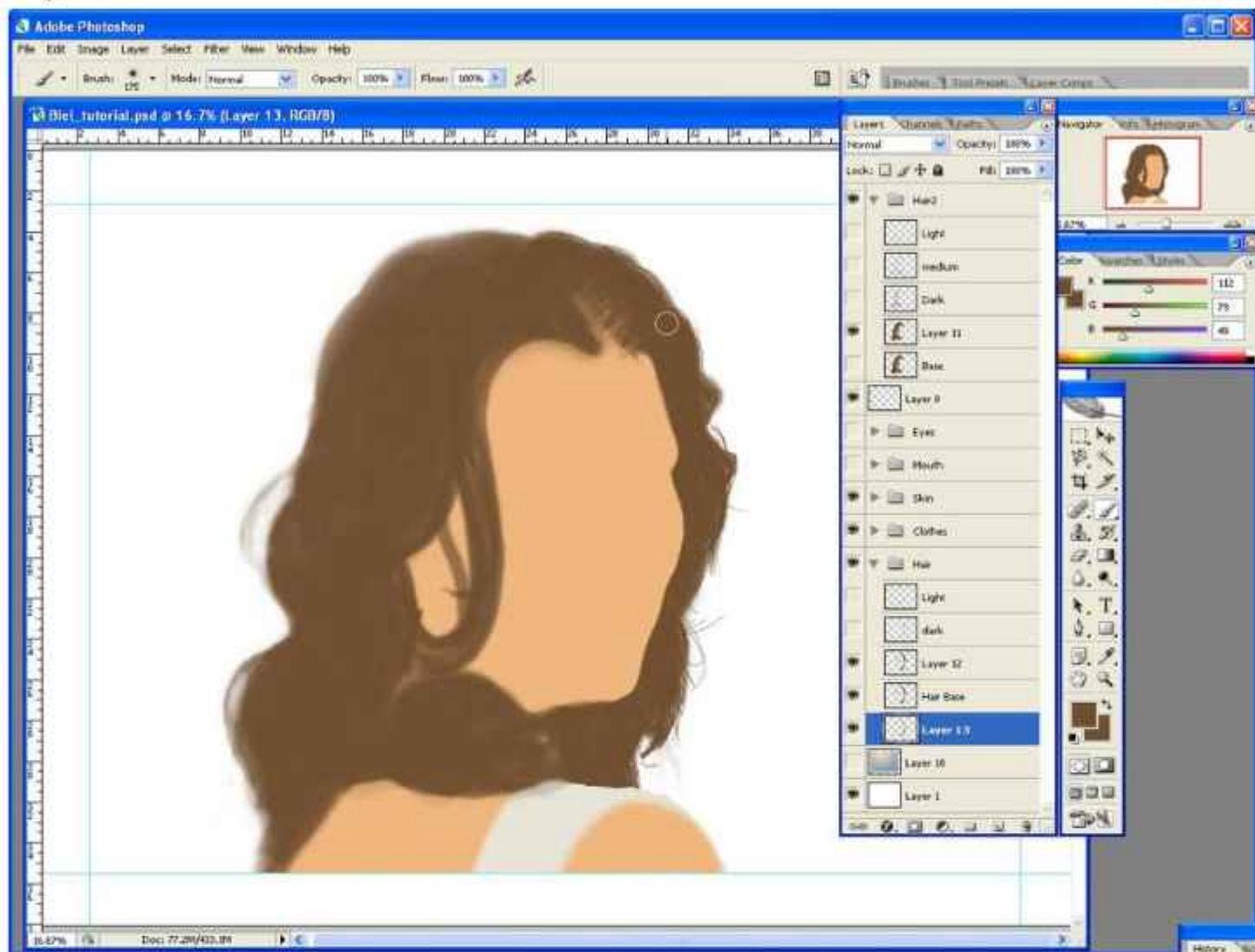
them to your advantage. Reference, reference, reference... I can't stress this enough. Never try to make things up as you go. Always base it on something real. Hair is real, it reacts certain ways. You need to at the very least be sensitive to that. Ok, where do we start? First of I like to create some custom brushes. These will help make life easier when rendering rather than going strand by strand. We do this by adding a new layer, which we will call "Hair Brush". Next we take our normal circular brush, add a bit of feather to it to soften the edge, and make some dots of the appropriate scale for the hair in your image. Then we make a selection around all of the dots. Next we go to the Edit menu and select Define Brush Preset and name the brush. Personally I like to repeat these steps a couple times in order to have a variety of brushes to make the hair more random. Before using the brushes we need to make sure a few settings are selected. First thing, because we are using a tablet I would prefer my pressure to not control the size of the brush so I take off the size jitter. For the Minimum Diameter, Sometimes I take it off completely or sometimes I control it just to add some randomness and sensitivity to my strokes. Under the Brush Tip Shape menu I change the Spacing to zero. This causes my brush to make the strands of hair rather than lots of points.



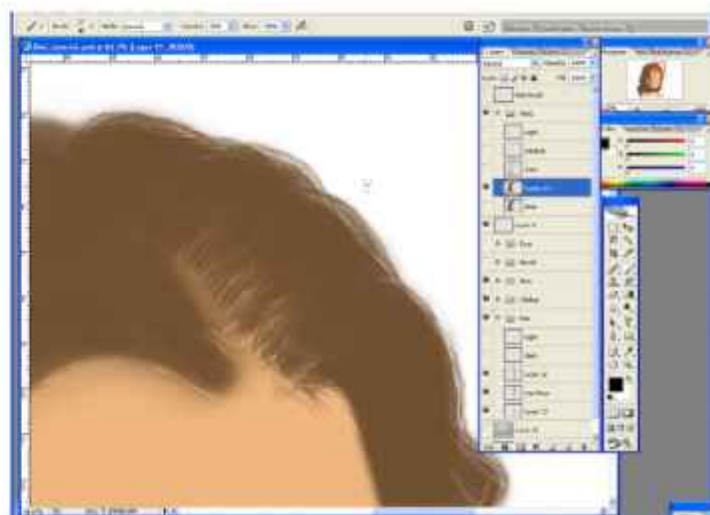


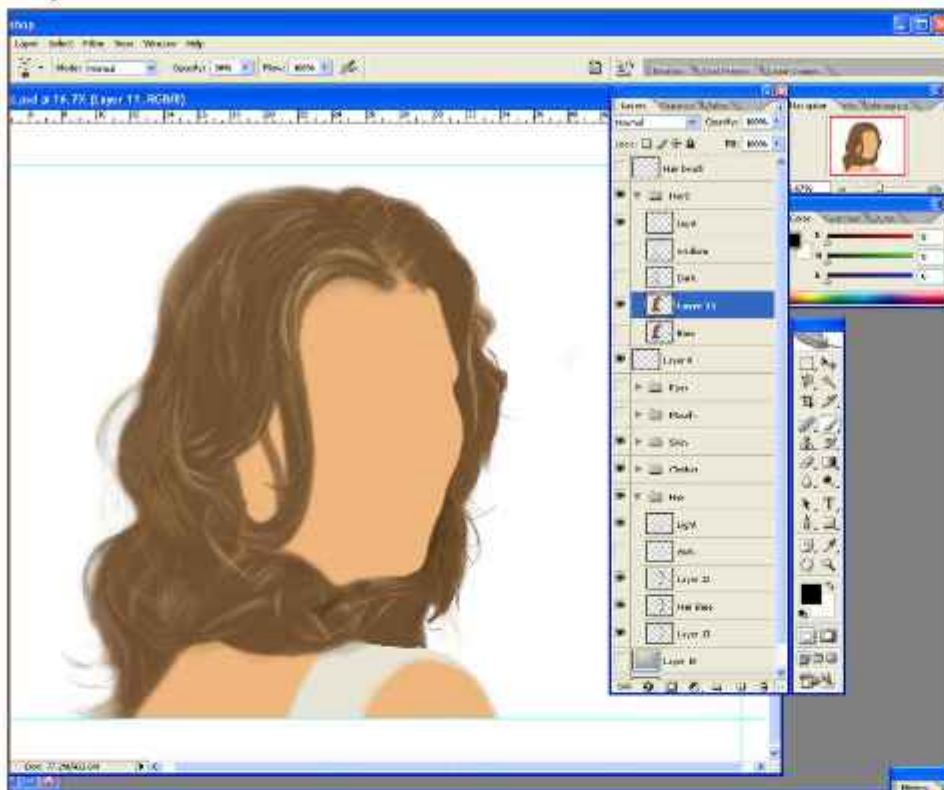
Ok, so now all of our brushes are set up and we can start Painting. First off I like to start with a mid tone and paint the whole area and define the silhouette, then push and pull the forms from that shape. I select my mid tone colour; in this case brown, and begin to rough in the colour. Personally I like to double up on layers one in-front of the skin and one behind, that way I can adjust the 2 separately and not have to be careful when painting behind the face, which gives me more fluid movements and lines.



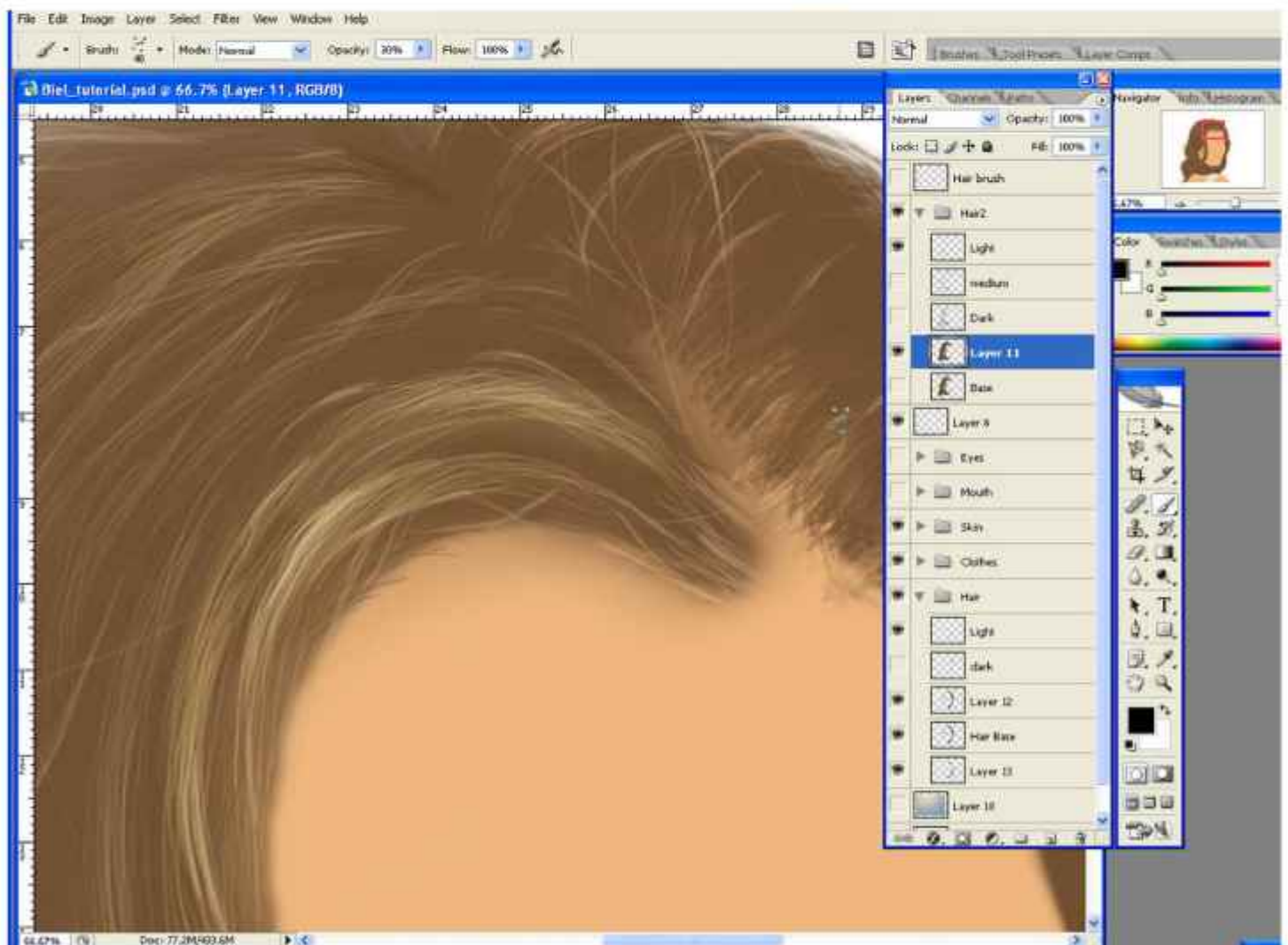


Once you've started to get the rough shape in, we then go back in with the eraser tool and bring back some of the details along the edges and where the hair meets the scalp. Unless the person has bangs, you must pay particular attention to this area. No hard edges. Try to keep this area as soft as possible.





So now we have a blob of brown on the persons head. We need to start to bring up form. I like to start with the hi-lights first. The only thing that I would suggest is to make separate layers for both hi-lights and darks, on top of your mid-tone layer with the highlights being on the very top. Reason being, shadows never cross over light areas. Use the custom brushes that you created to create the hi-lights. Hi-lights are what really define the colour of the hair, but use them sparingly; too much makes the hair look very unnatural. We want to let the eye create strands without us having to render them. A few strands drawn in with a single point Brush will give a touch more realism. I like to use an opacity of around 30% and just build up the colour without getting too strong too quick. Always keep in mind the shape and direction in which the hair is falling. This will govern the direction and flow of your brush strokes.



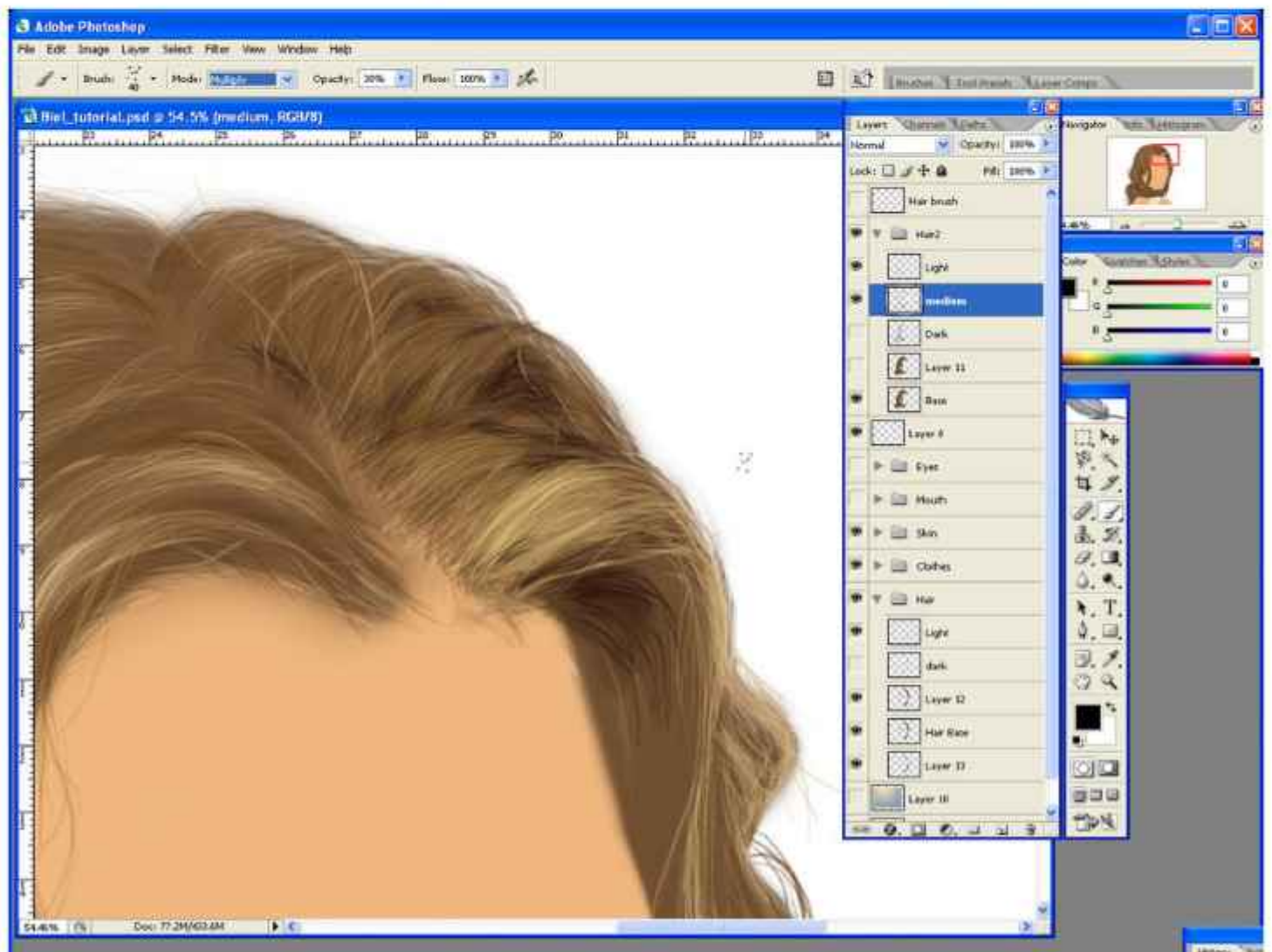


Try not to make hair go anything close to 90% across the existing hair, this looks unnatural. Also be mindful that the hair is growing out of the head and isn't just sitting on top. Here is a detail of the hi-lights so you can see the build-up and the use of a few errant strands. I like to build up a couple mid tones just to give myself more to go on with the direction and shape of the hair. Still working pretty loose here.



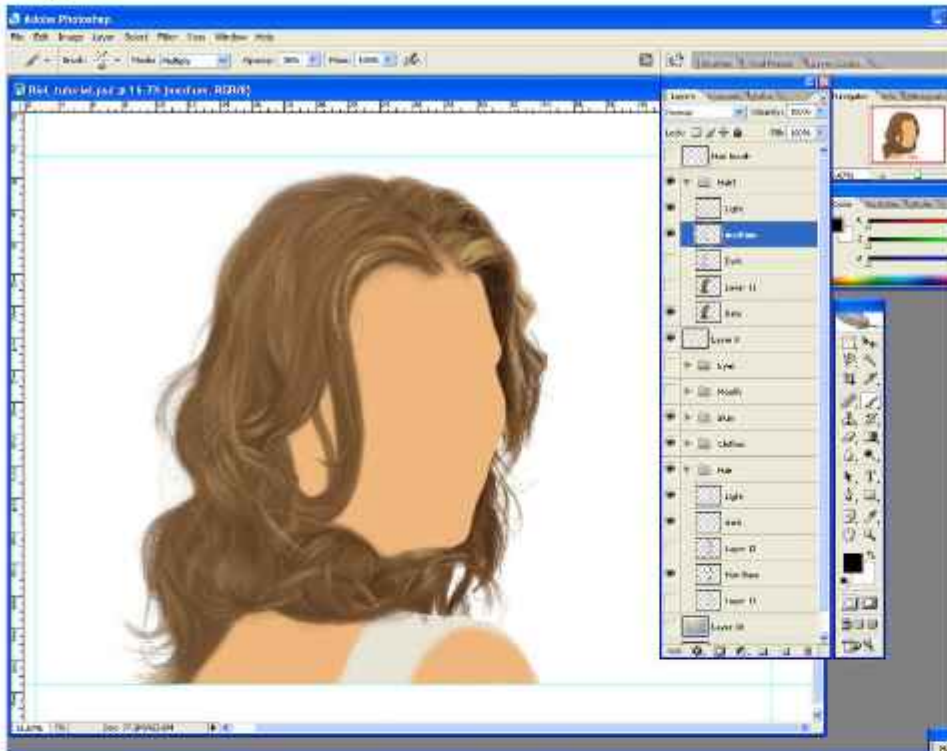


Next order of business is to add the darks. This is what really gives us our hair definition. Again I start of with a dark colour set to around 30 % opacity and build in the darks. If I want to create an area with a lot of depth, I will add a dark right next to a light. When a dark meets a light area to make an edge or focus, the dark gets darker and the light gets lighter. For now, I will keep my Mode set to normal instead of multiply. Later I will change it, but for now I don't want to get too dark too quick.

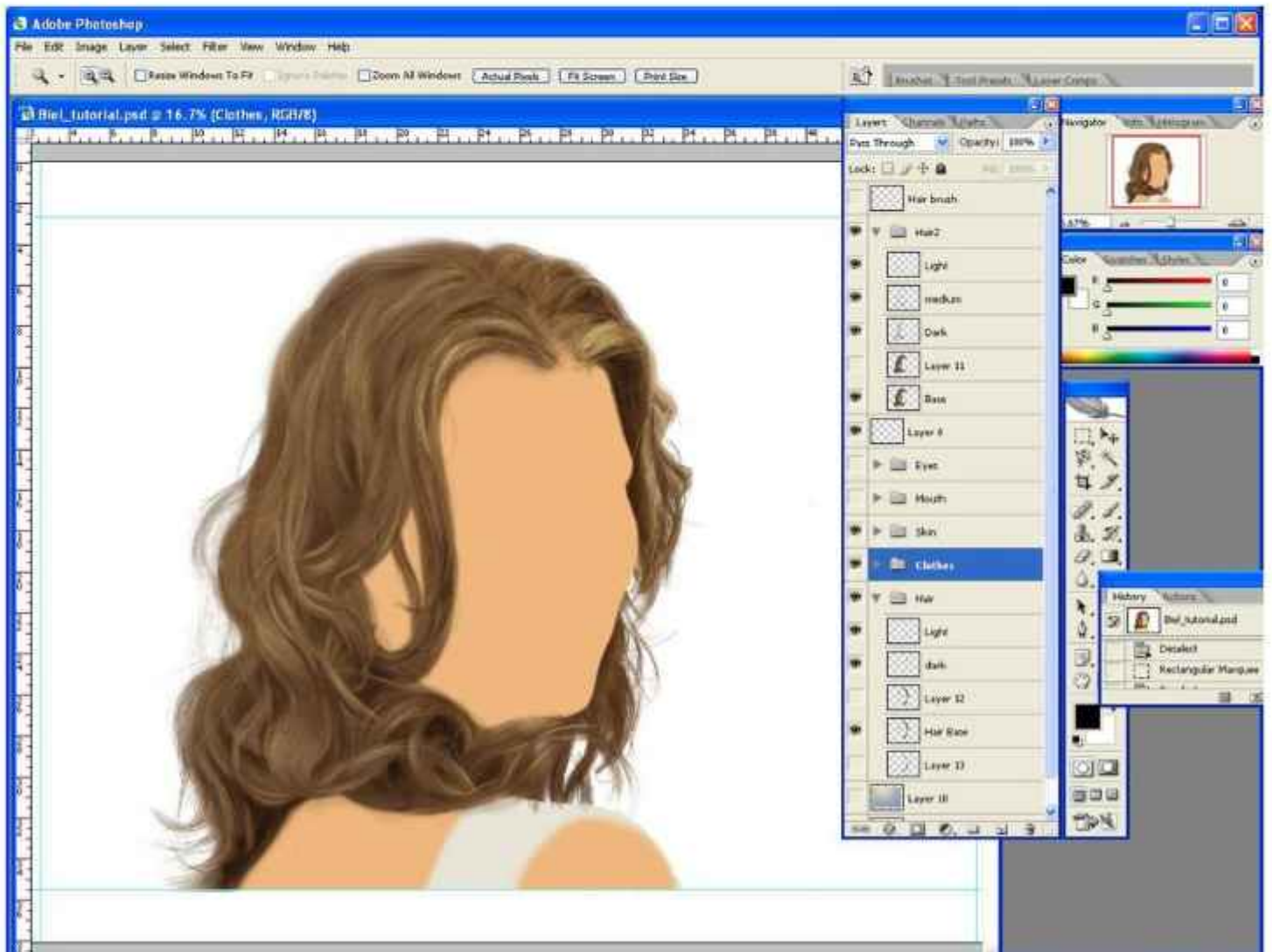


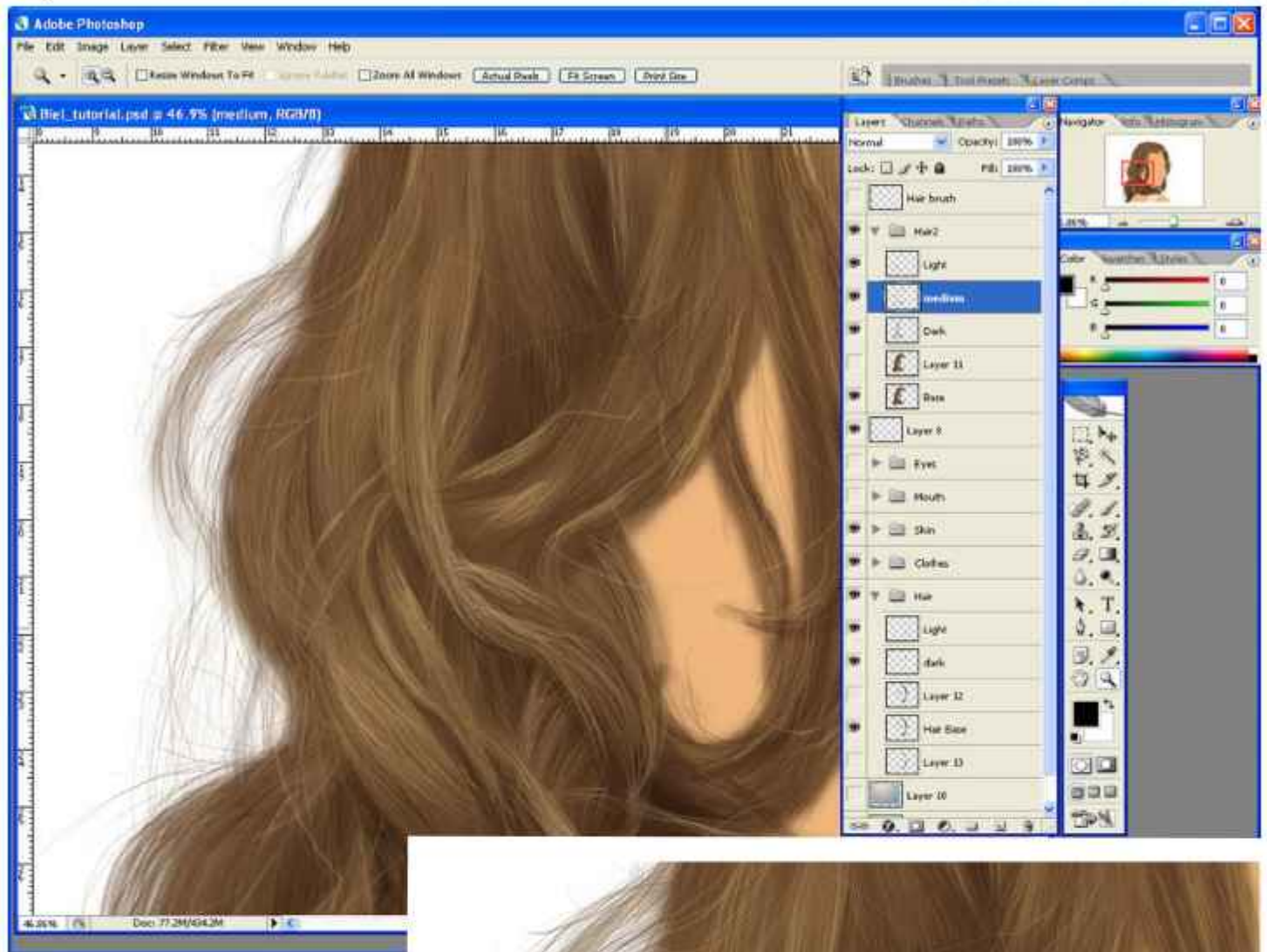


element Hair



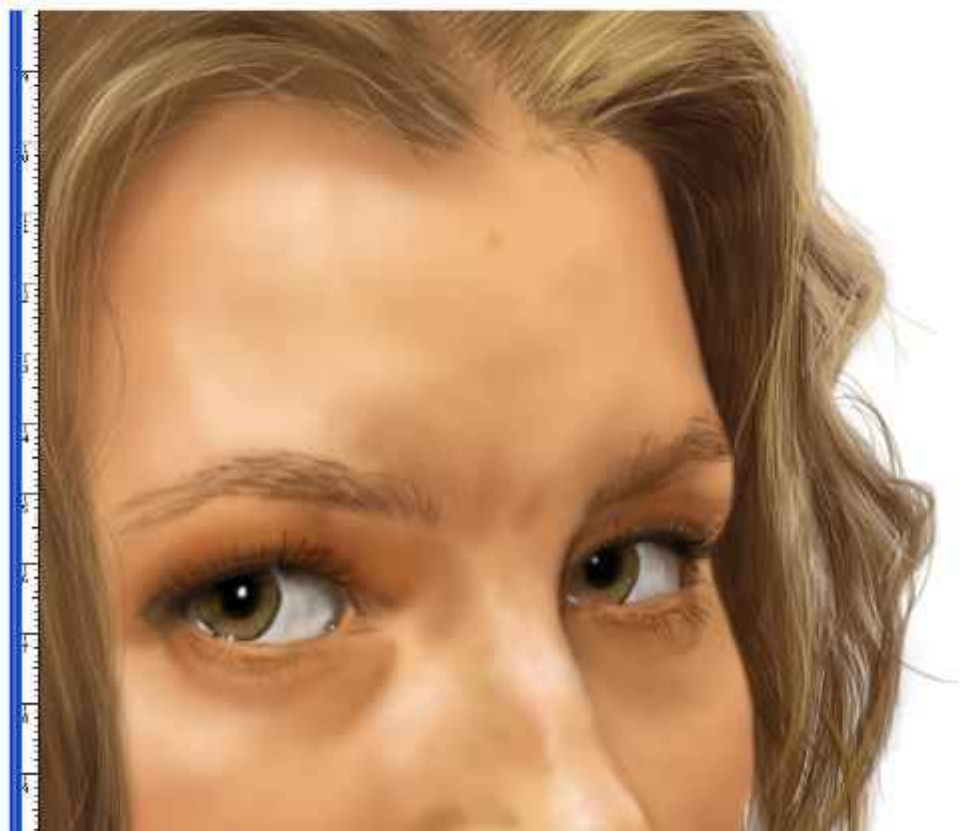
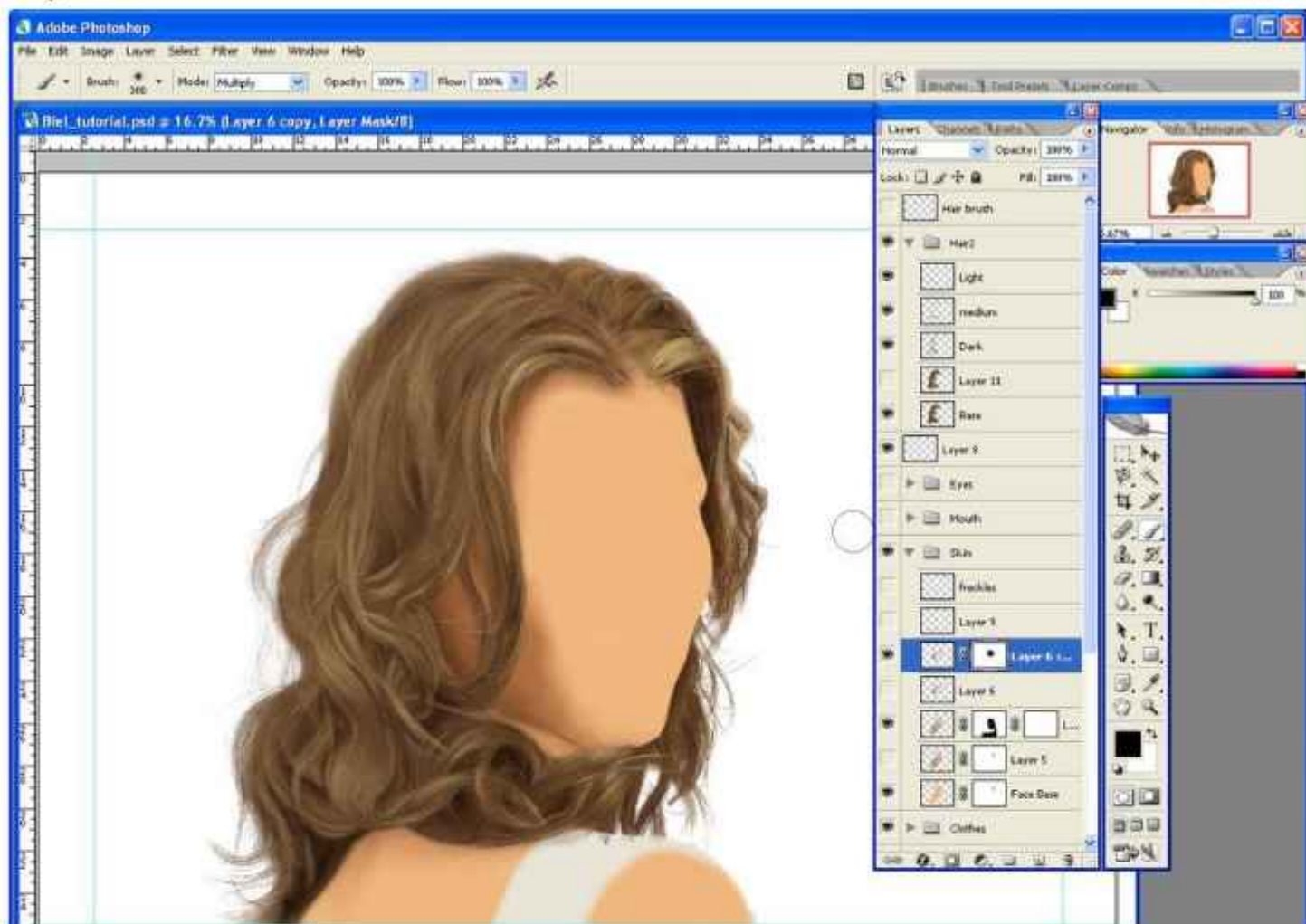
I continue building up the darks, now you can really start to see the forms of the hair starting to take shape. If you were mindful to keep this layer under the hi-light layer you will be able to take advantage of the over-lapping of lights and darks adding even more randomness to the hair. This is where it really gets interesting. Now I switch over to my point brush with a full feather fade on it. I change my opacity to around 10-15% and I start painting in the really dark areas. This is where I change my Mode to Multiply if I paint on my dark layer it will really bring out dark strands and add even more depth to the darkness rather than just blocking in a solid colour.





Details of the layering using multiply can be seen above also. Now we start to add the finishing touches to the hair itself, mostly around the outside edges. We can add to the realism by adding some wisps of hair along the edge and also cutting back in with our eraser tool, using one of our "Hair Brush" tips. I like to use a low opacity and keep the edge looking fuzzy, adding a softness to the hair.





And voila! A full head of hair, but we are not done yet. There are some other things that we need to address to really add to this piece. First off be mindful that hair casts shadows. On itself, and on the face. Also we want to keep the edge where the hair meets the face really soft, no harsh colour changes over changes in value. The colour of the hair should reflect into the shadow cast onto the face also. Next thing to keep in mind is the eyebrows. Mimic the colour used in the hair to do the eyebrows. Unless you're going for the look of a bad dye job you need to match the eyebrows accordingly. Also keep in mind the direction of the hair growth, and keep them light and soft, don't fall into the trap of over rendering it, you don't want them to stick out. Eyelashes aren't a big deal to match specially since a lot of the time they are covered in make-up. They always tend to be really dark also. And that's it! Simple as that. I hoped this helps out anyone that's been struggling with



hair. Hair has the ability to really set your work apart. Remember when adding a background, try to pick a colour that accentuates the hair and doesn't distract from all the time you spend on the details, especially the edge. Just like the old story of Sampson, the strength is in the hair! If you have any questions, comments, things I overlooked or even suggestions on how to do things even easier, please feel free to email me! Enjoy!

Shane Madden

More work from this artist can be found at www.shanemaddendesign.com and contact them via: shane@shanemaddendesign.com